If you are in any doubt about the contents of this document you should consult your stockbroker, bank manager, legal adviser, accountant or other financial adviser.

UNITED COMPANY RUSAL LIMITED

a company with limited liability incorporated under the laws of Jersey,
whose registered office is at Whiteley Chambers, Don Street, St Helier JE4 9WG, Jersey,
registered under number 94939

PROSPECTUS

Published in connection with the admission to listing and trading on the Professional Segment of Euronext Paris of up to 768,068,182 global depositary shares (the "GDSs", which mean the global depositary shares evidenced by global depositary receipts except for the references to the Master GDS, which means a master global depositary receipt evidencing the GDSs), each representing 20 ordinary shares of United Company RUSAL Limited (the "Company"). This number represents the maximum number of GDSs that could be issued in representation of all the Shares issued and outstanding as of the Listing Date assuming exercise in full of the Over-allotment Option.

Trading of GDSs on Euronext Paris is expected to commence on or about January 27, 2010.

Visa from the *Autorité des marchés financiers*

Pursuant to Articles L. 412-1 and L. 621-8 of the *Code monétaire et financier* and to its General Regulation, including Articles 211-1 to 216-1 thereof, the *Autorité des marchés financiers* ("AMF") granted visa number 10-014 dated January 22, 2010 on this prospectus.

This prospectus has been prepared by the issuer and its signatory accepts the responsibility for its contents. In accordance with the provisions of Article L. 621-8-1-I of the *Code monétaire et financier*, the visa was granted after the AMF verified that the document was complete and comprehensible and that the information it contains was internally consistent. It does not imply that the AMF endorses the proposed transaction, nor that it has validated the accounting and financial information presented herein.

A copy of this document has been delivered to the registrar of companies in accordance with Article 5 of the Companies (General Provisions) (Jersey) Order 2002, and the registrar has given, and has not withdrawn, consent to its circulation.

It must be distinctly understood that, in giving this consent, the registrar of companies does not take any responsibility for the financial soundness of the Company or for the correctness of any statements made, or opinions expressed, with regard to it.

If you are in any doubt about any of the contents of this document you should consult your stockbroker, bank manager, legal adviser, accountant or other financial adviser.

Copies of this prospectus are available at the Company's offices and on its website (www.rusal.com), on the AMF's website (www.amf-france.org) and on request free of charge from the Company's investor relations department (19/F, Two International Finance Centre, 8 Finance Street, Central Hong Kong) and from the Joint Sponsors and Global Coordinators.

Joint Sponsors and Global Coordinators

Financial Adviser

NOTE TO THE PROSPECTUS

No public offering of the Shares or the GDSs will be conducted in France or in any other jurisdiction.

1. OVERVIEW

On December 24, 2009, the entire authorised and issued share capital of the Company was divided by 100 such that the par value of each ordinary share has evolved from US$1.00 each to US$0.01 each thereby increasing the number of authorised ordinary shares to 1,350,000 and the number of issued ordinary shares to 1,237,000. Simultanously with the admission to trading of the Company's shares on the main board of the Hong Kong Stock Exchange (as defined below), the issued share capital of the Company shall also increase to 13,526,070,806 as a result of (i) the issuance of new ordinary shares to the existing shareholders of the Company at the time of admission, by way of capitalization of certain amounts standing to the credit of the share premium account of the Company and (ii) the conversion of fee warrants described in section 10 "Debt Restructuring" of Chapter C below.

This prospectus (the "Prospectus") is published in connection with the admission of up to 768,068,182 GDSs, each representing 20 ordinary shares of the Company, with a par value of US$0.01 each (each, a "Share", and collectively, "Shares", and together with the GDSs, the "Securities"), to listing and trading ("Admission") on the Professional Segment of Euronext Paris ("Euronext Paris"). The Admission takes place concurrently with the primary listing of the Shares on the Main Board of the Stock Exchange of Hong Kong Limited (the "HKSE") (the "HK Listing"), based on a prospectus registered with the HKSE on December 30, 2009 (the "HK Prospectus"), as well as with a placing of Shares to certain eligible investors in Hong Kong (the "Hong Kong Placing") and an international private placing of the Shares and the GDSs to qualified investors (including French qualified investors) (the "International Placing", and together with the Hong Kong Placing, the "Global Offering"). In connection with the Global Offering, the Company has entered into an international placing agreement (the "International Placing Agreement") with the Joint Global Coordinators and the other Underwriters on January 22, 2010 which will become irrevocable as of the Listing Date unless terminated in accordance with its terms. In the Global Offering, the Company has offered 1,610,292,840 new Shares, with a nominal value of US$0.01 per Share, comprising new Shares in the form of Shares and in the form of GDSs, that may be increased to up to 1,835,292,840 new Shares in case of exercise in full of the over-allotment option described in the "Structure of the Global Offering" section of the HK Prospectus (the "Over-allotment Option").

Trading in the Shares on the HKSE will be limited to nominal board lots of 24,000 Shares.

The information contained in the Prospectus that was prepared on the basis of the approximate mid-point of the proposed offer price range (the "Offer Price range") have not been updated to reflect the final offer price (the "Offer Price") or exchange rates assumptions, except as specifically indicated herein.

Unless otherwise defined herein, capitalised terms shall have the meanings given thereto in the HK Prospectus.

2. NOTICES

2.1 General

This Prospectus is not published in connection with and does not constitute an offer of securities to the public by or on behalf of the Company.

The distribution of this document in certain jurisdictions may be restricted by law and therefore persons into whose possession this document comes should inform themselves of and observe any such restrictions.

2.2 France

Pursuant to Article 516-19 of the General Regulation of the AMF, an investor other than a qualified investor (as defined below), may not purchase the Company's GDSs on the Professional Segment of Euronext Paris unless such investor takes the initiative to do so and has been duly informed by the investment services provider about the characteristics of the Professional Segment.

This Prospectus is published solely in connection with the admission of the Company's GDSs to listing and trading on the Professional Segment of Euronext Paris.

No prospectus has been prepared in connection with the offering of the Securities to the public in France that has been approved by the AMF or by the competent authority of another State that is a contracting party to the Agreement on the European Economic Area and notified to the AMF; accordingly no Securities have been offered or sold nor will be offered or sold, directly or indirectly, to the public in France; this Prospectus or any other offering material relating to the Securities have not been released or distributed or caused to be released or distributed in connection with an offering or sale of the Securities to the public in France; such offers, sales and distributions have been and shall only be made in France to qualified investors (*investisseurs qualifiés*), as defined in Articles L. 411-2, D. 411-1 to D.411-3 of the French *Code monétaire et financier*. The direct or indirect distribution to the public in France of any so acquired Securities may be made only as provided by Articles L. 411-1 to L.411-4, L. 412-1 and L. 621-8 to L. 621-8-3 of the French *Code monétaire et financier* and applicable regulations thereunder.

3. STRUCTURE OF THE PROSPECTUS

This Prospectus was established pursuant to Articles 211-1 to 216-1 of the General Regulation of the AMF. Pursuant to Article 25 of Commission Regulation (EC) No. 809/2004 of April 29, 2004 (the "Prospectus Regulation"), this Prospectus is composed of the following parts in the following order:

1) this present Note to the Prospectus;

2) a table of contents;

3) the summary provided in Article 5(2) of Directive 2003/71/EC (the "Prospectus Directive"), articles L.412-1 of the French *Code monétaire et financier* and 212-8 of the General Regulation of the AMF;

4) risk factors relating to the Company, the Global Offering, the Company's Shares and the GDSs;

5) the other information required pursuant to Annex X of the Prospectus Regulation in accordance to which the Prospectus is drawn up by application of Articles 3 and 13 of the Prospectus Regulation, which appears in the following parts of the Prospectus:

   (i) Chapter C "Additional information", including:

      a. two Reports from KPMG on historical Financial Information in Appendix I to the HK Prospectus, which replace the Accountants' Report relating to the same information included in the HK Prospectus,

b. a report from KPMG on the unaudited pro forma statement of adjusted net assets and net tangible assets of the group (as set out in Part A of Appendix III of the HK Prospectus), and

c. a report from KPMG on the profit forecast information comprising the forecast of the consolidated net profit attributable to the equity holders of the Company (as set out in section "Financial Information – Profit Forecast" and Part A of Appendix IV "Profit Forecast" of the HK Prospectus) and the forecast earnings per Share after the estimated effect of the Global Offering (as set out in Part B of Appendix III "Unaudited Pro Forma Financial Information" of the HK Prospectus), for the year ending 31 December 2009; and

(ii) The HK Prospectus[1], except for:

a. the letter of the Joint Reporting Accountants in the Accountants' Report in Appendix I to the HK Prospectus relating to historical financial information,

b. the report from the Joint Reporting Accountants in Appendix III "Unaudited Pro Forma Financial Information" to the HK Prospectus,

c. the letter from the Joint Reporting Accountants in Appendix IV "Profit Forecast" to the HK Prospectus,

d. the letter from the Joint Sponsors in Appendix IV "Profit Forecast" to the HK Prospectus,

which have been prepared solely for the purpose of the HK Listing; and

6) the cross-reference list stipulated in Article 25.4 of the Prospectus Regulation presenting the information in the order stipulated in Annexes X and II of the Prospectus Regulation.

[1] On January 21, 2010, the Company issued a clarification announcement (the "Clarification Announcement") to clarify certain information about the Company in some of the statements included in the HK Prospectus. This Clarification Announcement is attached to this Prospectus as Exhibit 2.

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CHAPTER A
PROSPECTUS SUMMARY

Visa from the AMF No. 10-014 dated January 22, 2010

Important Disclaimer

This summary should be read as an introduction to the Prospectus. Any decision to invest in the securities described herein should be based on a complete review of the Prospectus.

When a legal claim relating to the information included in the Prospectus is filed before a court, the investor may, according to the national laws of the relevant European Union member States or parties to the European Economic Area agreement, be required to pay for the translation of the Prospectus prior to the commencement of the legal proceedings. The individuals who presented this summary, including, where relevant, its translation, and who have requested its notification within the meaning of Article 212-41 of the General Regulation of the AMF, are only liable if its contents are misleading, inaccurate or contradict the other sections of the Prospectus.

1 INFORMATION RELATING TO THE ISSUER OF THE UNDERLYING SHARES

The Company

United Company RUSAL Limited, incorporated in Jersey under the Jersey Companies Law, as a company with limited liability (the "Company")

Business Overview

United Company RUSAL Limited is the world's largest producer of aluminium, with a particular focus on the upstream segment of the industry — the production and sale of primary aluminium (including alloys and value-added products). Within its upstream business, the United Company RUSAL Limited Group is vertically integrated to a high degree, having secured supplies of bauxite and having the capacity to produce alumina in excess of its current requirements. The Group's core smelters are located in Siberia, Russia and benefit from access to low cost hydro generated electricity. This is a region where the Group is generally the principal consumer of electricity and there are few, if any, alternative sources of significant demand. The Group's scale, upstream focus and position on the cost curve provide a unique exposure to the aluminium industry, which in turn is highly levered to the economic cycle.

With the onset of the global economic downturn in the second half of 2008, some of the key end-user sectors for the aluminium industry (including automotive and transportation, construction and electrical engineering) suffered a sharp contraction of demand. This resulted in a surplus supply of aluminium in the market and a decline in the price of the metal and intermediate products such as alumina. In response, the Group reduced output at some of its older and higher-cost production facilities, as did many other leading companies in the industry globally, and restructured its debt as described in greater detail below. Output reduction measures have effectively balanced the Group in terms of its alumina requirements and have helped to optimise financial performance. According to CRU, the first quarter of 2009 marked the bottom of the aluminium industry cycle, in terms of demand for primary aluminium and prices. Since then, both measures have improved sharply.

As a result of the global economic downturn and the sharp decline in aluminium prices starting from September 2008 and continuing into the first half of 2009, as well as an increase in the Group's indebtedness in the first half of 2008, the Group experienced a liquidity shortage and breached covenants under most of its loan agreements. In late 2009, the Company and certain of its subsidiaries entered into a series of agreements that effected a comprehensive restructuring of the Group's indebtedness and other obligations. See "—Debt Restructuring" below.

The following table summarises the Group's debt by major class of creditor as at the date of the HK Prospectus, after the effective date of the debt restructuring agreements:

Creditors	**Principal amount of debt outstanding as at the date of the HK Prospectus (and after the debt restructuring has taken effect)**
International lenders	US$7.4 billion[(1)]
Russian and Kazakh lenders	US$2.1 billion
VEB	US$4.5 billion
Onexim	US$895 million[(2)]
Total	US$14.9 billion

Notes:
(1) Includes US$0.2 billion of contingent liabilities under payment instruments, including, without limitation, undrawn letters of credit.
(2) Does not include US$115 million that will be paid to Onexim from the net proceeds of the Global Offering. For further details, see "— Debt Restructuring — Key Components of Debt Restructuring — Onexim Restructuring" of the HK Prospectus.

As evidence of economic recovery emerges, the Group has retained the flexibility to re-start its mothballed capacity to take advantage of improved market conditions. In the long-run, subject to its debt restructuring agreements, the Group may pursue a number of growth options, including, among others, completion of the Taishet and Boguchansky aluminium smelters. Additionally, the Group's proximity to China provides an opportunity for the Group to benefit from the long-term potential for further aluminium demand growth in that country.

The Group's revenue was US$15,685 million for the year ended 31 December 2008 and US$3,757 million for the six months ended 30 June 2009.

The Group has evolved over the past decade through acquisitions and organic growth, culminating in the acquisition in March 2007 of SUAL, then one of the world's ten largest producers of aluminium, and certain of the aluminium and alumina businesses of Glencore, a company specialising in the production and processing of metals and the trading of metals, oil and agricultural products. The Group has operations in 19 countries across five continents, with more than 75,000 employees, and, despite recent developments in the global financial markets, has significant opportunities for growth through a number of modernisation programmes and approved projects in various stages of development in all parts of the aluminium upstream value chain, including energy.

The Shareholders of the Company have, by resolution dated 26 December 2009, resolved that the Company will be renamed as United Company RUSAL plc, with effect from the admission of the Shares to trading on the Hong Kong Stock Exchange. The change of the Company's name is subject to the registration of the change of the name becoming effective in Jersey and the registration of the change of the Company's name under Part XI of the Companies Ordinance. The Company will publish an announcement on the change of name and the arrangements for the exchange of share certificates, if any, as soon as practicable after the new name has been registered and the registration has taken effect.

Recent developments relating to financial condition and trends

Debt Restructuring

Background of the Debt Restructuring

As noted above, as a result of the economic downturn and a sharp decline in aluminium prices starting from September 2008 and continuing into the first half of 2009, as well as an increase in the Group's indebtedness in the first half of 2008, including its incurrence of indebtedness in April 2008 to finance its acquisition of a stake in Norilsk Nickel, the Group experienced a liquidity shortage and breached covenants under most of its loan agreements. Accordingly, in late 2009, the Company and certain of its subsidiaries entered into a series of agreements that effected a comprehensive restructuring of the Group's US$16.8 billion of indebtedness and certain other obligations to the Group's international, Russian and Kazakh lenders and certain other creditors.

The principal objective of the Directors and management in negotiating the debt restructuring was to give the Company greater time and flexibility to meet its debt obligations in anticipation of aluminium price recovery. This has been achieved through the following arrangements:

• linking debt repayment obligations to the Company's ability to generate excess operating cash flow (subject to meeting certain cumulative debt repayment targets);

• allowing a portion of interest charges to be capitalised under a pay in kind arrangement; and

• converting into equity a substantial obligation to Onexim.

The Directors believe that over time it will be necessary to reduce further the Company's new debt level of US$14.9 billion, and pursuant to the terms of the debt restructuring the Company has made certain commitments to:

• dedicate excess operating cash flow to the repayment of debt;

• sell assets and/or raise equity or subordinated debt to fund debt repayments;

• restrict dividend payments until total net debt has been reduced sufficiently; and

• limit capital expenditure, acquisitions and certain other investments.

Key Components of the Debt Restructuring

In its debt restructuring, the Company has executed a series of agreements with four different creditor groups.

• *International Debt Restructuring*: The Company has entered into an arrangement with 65 creditors under international facilities accounting for US$7.4 billion of debt and contingent liabilities pursuant to which such creditors have agreed to extend maturities until 6 December 2013. This arrangement is documented in an international override agreement, which became effective on 7 December 2009, and other related agreements. The arrangement does not require any fixed loan repayments but requires the Company to make certain repayments to the extent cash is available and contains certain overall debt repayment targets. For detailed information concerning the international debt restructuring, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring " at pages 226 to 238 of the HK Prospectus;

• *Russian and Kazakh Debt Restructuring*: Lenders under certain bilateral Russian and Kazakh loan facilities accounting for US$2.1 billion of indebtedness have also entered into new agreements and/or revised bilateral arrangements, which largely mirror the international banks' arrangements, but contain bank-by-bank cumulative debt repayment obligations. For detailed information concerning the Russian and Kazakh debt restructuring (other than VEB), see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of Russian and Kazakh Debt Restructuring (other than VEB)" at pages 242 to 244 of the HK Prospectus;

• *Onexim Restructuring*: Pursuant to the terms of the Company's acquisition of the Norilsk Nickel shareholding, there was US$2.7 billion plus accrued interest outstanding to Onexim. Under the terms of its restructuring, the interest accrued until and including 5 November 2009 and a restructuring fee in an aggregate amount of US$275 million were or are to be paid in cash (of which US$160 million was paid to Onexim on 1 December 2009 and US$115 million will be paid to Onexim from proceeds of the Global Offering); US$880 million plus accrued interest of approximately US$15 million will be paid to Onexim in accordance with and pro rata with the debt repayments to international, Russian and Kazakh lenders. The balance was converted into Shares representing approximately 6% of the Company's share capital on 7 December 2009. For detailed information concerning the Onexim debt restructuring, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of Onexim Debt Restructuring" at page 244 of the HK Prospectus;

• *Vnesheconombank ("VEB") Restructuring*: The VEB Debt (as defined below) amounts to US$4.5 billion and relates to a refinancing

of the Company's debt raised for the acquisition of its shareholding in Norilsk Nickel. VEB also benefits from security over these shares in Norilsk Nickel. On 30 October 2009 the Company signed an agreement involving the extension of this facility for 12 months, until 29 October 2010. The arrangements with VEB differ from those with the other creditor groups as:

— under the Federal Law No.173-FZ dated 13 October 2008 "On Additional Measures for the Support of Financial System of the Russian Federation" ("Federal Law No. 173"), VEB is not permitted to provide loans that have a maturity that extends beyond one year; and

— VEB has security over the Norilsk Nickel shares, which as of 17 December 2009 had a value that was 51% in excess of the outstanding debt owed to VEB and which are listed securities.

The Company intends to seek a further extension of the amounts outstanding under the US$4.5 billion loan dated 30 October 2008 between the Company and VEB (the "VEB Debt") or to request Sberbank to assume all rights, claims and obligations of VEB under the VEB Debt pursuant to the Sberbank Letter Agreement (as defined below), prior to the maturity date of the VEB Debt. It is the expectation of the Directors that VEB will extend the maturity of the VEB Debt for successive one year periods through the override period to October 2013, however VEB has no current obligation to extend the loan, and, if it does extend, there can be no assurance as to the terms of any such extension. For detailed information concerning the VEB Debt restructuring, including the reasons why the Directors believe it likely that the Company will be able to obtain an extension of the VEB Debt, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the VEB Debt Restructuring " at page 238 to 242 of the HK Prospectus. On 23 December 2009, Sberbank entered into a letter agreement with the Company (the "Sberbank Letter Agreement") stating an unconditional and irrevocable commitment to assume all rights, claims and obligations of VEB under the VEB Debt following a request from the Company. The Sberbank Letter Agreement states that following such assumption, the maturity date of the debt would be extended to 7 December 2013. The assumption by Sberbank of the rights, claims and obligations under the VEB Debt is subject to VEB assigning the VEB Debt to Sberbank. As consideration for such assumption by Sberbank, a commission of 2.00% of the outstanding principal amount, together with any other amounts accrued and payable under the VEB Debt and assumed by Sberbank as of the date of the assignment, is payable in cash to Sberbank by the Company (the Company being subject to a best efforts obligation to pay such commission without breaching any of the Group's obligation under the international override agreement) or, failing which, by the Major Shareholders. The commission is payable in instalments, some of which will fall due prior to the assumption by Sberbank of the right, claims and obligations of VEB under the VEB Debt, including a first instalment of US$22.5 million, which is payable by 31 December 2009 if paid by the Company or by 4 January 2010 if paid by the Major Shareholders. As of 29 December

2009, the first instalment had been paid by the Major Shareholders. For further information concerning Sberbank, including selected financial and other background information, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the VEB Debt Restructuring" at pages 241 to 242 of the HK Prospectus. The Company does not perceive there to be any additional material risks associated with the Sberbank Letter Agreement to those disclosed in this prospectus, including in "Risk Factors — Risks Relating to the Group and its Business — The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders" and "Risk Factors — Risks Relating to the Group and its Business — Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Political instability, changes in government or in economic policy and arbitrary government actions could adversely affect the Group's business and the value of investments in the Offer Shares" at pages 44 to 47 of the HK Prospectus.

The arrangements with the international banks, Onexim and certain of the Russian and Kazakh banks provide for:

• a portion of the interest to be capitalised (the VEB Debt also provides for this);

• the interest rate or interest rate margin to be reduced as the Company achieves certain financial ratio targets; and

• the cash payment obligations to be reduced when the Company achieves certain financial ratio targets.

Restrictions under the Debt Restructuring

The principal constraints on the Group are derived from the international override agreement, which operates:

• to limit significantly the Group's ability to incur additional indebtedness;

• to impose significant limitations on capital expenditure and other uses of available cash; while the Group will be allowed to incur maintenance capital expenditure within defined limits, it will be prohibited from incurring any development capital expenditure except with respect to the Boguchanskaya hydropower plant within specified limits;

• to restrict dividends unless cumulative debt repayments have been made of at least US$5 billion (excluding debt repayment to VEB and Onexim), the ratio of total net debt to Covenant EBITDA is 3 to 1 or less, there are no outstanding defaults under the international override agreement and the Group has sufficient cash to pay the proposed dividends;

• to maintain certain financial ratios as set out at "Financial

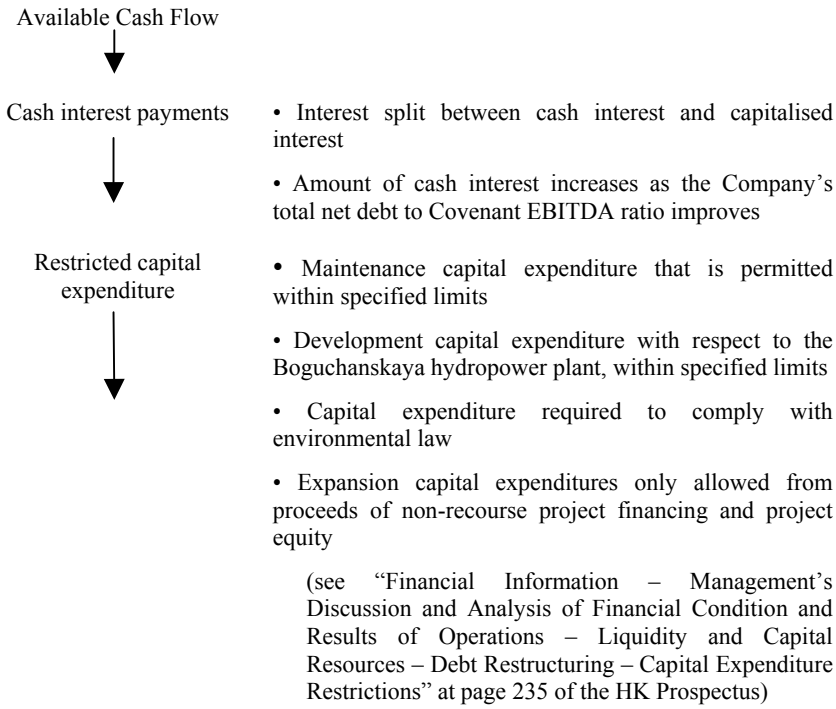
Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt Restructuring – Terms of International Debt Restructuring – Financial Covenants" at page 234 of the HK Prospectus;

• to require the Company to repay debt from excess operating cash flow as well as from the proceeds of equity and subordinated and other debt fund raising and assets disposals; and

• to require the Company to raise US$2.4 billion in equity or subordinated debt or from asset disposals over the override period in order to repay debt.

The Directors believe that (based on the Company's operating assumptions and the outlook for the aluminium sector), by the end of the four-year override period ending December 2013, the Company will be able to reduce its debt levels sufficiently, which the Directors believe will improve the Company's ability to access the credit markets (subject to market conditions at such time) to refinance any remaining obligations. The international lenders have provided a commitment to provide refinancing for a further three-year period following the override period subject to a number of conditions being met as at the end of the override period, including: i) the Group's debt (other than its debt to VEB and Onexim) having been reduced by at least US$5 billion; and ii) the ratio of total net debt to Covenant EBITDA being 3 to 1 or less. In addition, the Russian and Kazakh lenders (excluding VEB) have provided soft commitments to provide refinancing for a further three-year period following the override period.

The chart below provides a simplified cash waterfall under the terms of the debt restructuring arrangements.



Minimum cash buffer ↓	• Minimum cash balance of US$400 million required before any debt repayments
Cash sweep ↓	• Surplus cash distributed pro rata amongst the international lenders, the Russian and Kazakh lenders and Onexim to repay debt • Cumulative repayment targets and obligations
Dividends	• Dividends only allowed once cumulative debt repayments have been made of at least US$5 billion (excluding debt repayment to VEB and Onexim), and the ratio of total net debt to Covenant EBITDA is 3 to 1 or less • Under the terms of the restructuring agreements, the Company does not expect to be in a position to declare dividends in respect of any year at least through 2013

In addition, cash generated from equity and subordinated and other debt raisings and asset disposals will be used to repay debt. If the Company is not able to raise non-recourse project financing and project equity to fund any expansion capital expenditure, the Company's existing operational facilities should not be negatively impacted. However, the Company may be delayed or prevented from exploiting certain growth opportunities.

The table below provides a timetable of the Company's minimum target cumulative debt repayment profile and minimum closing debt balance (excluding capitalised interest) assuming that the Company will meet the minimum target cumulative debt repayments as set out in the international override agreement. The minimum closing debt balance takes into account the cash raised in the Global Offering and the target cumulative repayment profile excludes the debt owed to Onexim and VEB.

(Billion US$)	**Pre Global Offering (and after the debt restructuring has taken effect)**	**31 December 2010**	**30 September 2011**	**30 September 2012**	**30 September 2013**
Target cumulative repayment amount excluding Onexim and VEB	—	1.4	3.0	4.0	5.0
Minimum closing debt balance[(1)] (excluding capitalised interest)	14.7[(2)]	12.7[(3)]	11.6	10.5	9.4

Notes:
(1) Includes cumulative repayments to Onexim, which, for purposes of the table, are assumed to be pro rata to the target cumulative payment amount, with pro-rating based on Onexim's share of the closing debt balance (excluding the VEB Debt) on the effective date of the international override agreement.
(2) Does not include US$0.2 billion of contingent liabilities under payment instruments, including, without limitation, undrawn letters of credit.
(3) Reflects application of the proceeds of the Global Offering to repayment of debt (based on approximately US$2 billion of net proceeds from the Global Offering prior to exercise of the Over-allotment Option and following the cash settlement of fee warrants (based on the Offer Price

of HK$10.80 per Offer Share)).

Further details of the Russian and Kazakh bank repayment profiles, which form part of the above target cumulative repayment amounts, are included on page 243 of the HK Prospectus. The above minimum closing debt balances do not include the capitalised interest that is being charged by certain creditors, as outlined on pages 230 and 243 of the HK Prospectus, which would be cumulative on the closing debt balance.

Compliance with the Debt Restructuring and Sensitivity Analysis

Pages 222 to 226 of the HK Prospectus outline the reasons why the Directors believe that the Company will comply with the target cumulative repayment amounts and other terms and conditions of the debt restructuring agreements and, based on the assumptions therein, the Directors believe that the Company should generate sufficient cash to exceed the minimum target cumulative repayment amounts, reducing debt levels during the override period in excess of the minimum closing debt balance.

The Directors' compliance expectations were tested against an estimate of operational performance, which was then adjusted by changing certain assumptions to test compliance in an environment of greater stress (including a reduction in the aluminium price). A summary of the assumptions underlying the updated base case is presented on pages 223 to 224 of the HK Prospectus.

Stress test scenarios. Based on the stress test scenario described in pages 224 and 225 of the HK Prospectus, the Directors believe that in any year between 2010 and 2013, should the average aluminium price assumed for that year be reduced by up to approximately 20% (assuming that the production volume and cash cost assumptions are consistent with the assumed aluminium price as described on page 223 of the HK Prospectus and all other assumptions remain as per the updated base case), the Company should be able to comply with the financial covenants and debt reduction targets that form part of the debt restructuring.

There can be no assurance, however, that any of the variations will be as assumed. In particular, if: i) the assumed aluminium price is lower; ii) input costs and production cash costs are higher; iii) the RUR/US$ exchange rate is lower (i.e. the UCR depreciates); and/or iv) input costs and production cash costs do not decrease when the aluminium price falls, the Company's ability to comply with the financial covenants and debt reduction targets that form part of the debt restructuring will be adversely affected.

The updated base case average assumed aluminium price is forecasted to rise by a compound annual growth rate of approximately 8.6% between 2009 to 2013 and the average RUR/US$ exchange rate is forecasted to increase (i.e. the UCR depreciates) by a compound annual rate of approximately 3.6% between 2009 to 2013. **The Group's cash flows are highly sensitive to changes in the assumptions regarding the key variables and their correlation. Small changes in one or more of these assumptions could have a material adverse effect on the Company's ability to comply with**

the terms of its debt restructuring agreements.

In particular, if the aluminium price fails to increase and/or if the RUR/US$ exchange rate fails to increase (i.e. the RUR fails to depreciate) as forecast in the updated base case, the Company may not be able to comply with the financial covenants and debt reduction targets that form part of the debt restructuring. The following scenarios illustrate relevant sensitivities:

Scenario No. 1: constant nominal aluminium price and nominal RUR/US$ exchange rate. If the assumed aluminium price and the RUR/US$ exchange rate were to remain constant in nominal terms at the spot levels as sourced from Bloomberg on 2 December 2009 (US$2,126 per tonne of aluminium and RUR29.4/US$), and all other assumptions remained unchanged, the Company would not comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring in 2011; or

Scenario No. 2: Aluminium price falls by more than 20% for more than one year. If the assumed average aluminium price falls by more than 20% below the updated base case for more than one year, while other assumptions remain unchanged as per the stressed tested scenario described above, in 2011 the Company would not be able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring; or

Scenario No. 3: RUR/US$ exchange rate decreases (i.e. the RUR appreciates) more than 18% for more than one year. If the assumed average RUR/US$ exchange rate decreases (i.e. the RUR appreciates) by more than 18% below the updated base case for more than one year, while other assumptions remain unchanged as per the updated base case, in 2011 the Company would not be able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring; or

Scenario No. 4: Input costs remain flat or increase or the RUR/US$ exchange rate remains flat or decreases (i.e. the RUR fails to depreciate) when aluminium prices decrease. If input costs were to remain flat or increase, or the RUR/US$ exchange rate were to remain flat or decrease (i.e. the RUR fails to depreciate) when the assumed aluminium price decreases, the impact of such decrease on the Company's operating performance will be more severe, and could result in the Company not being able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring when the assumed aluminium price reduction is less than 20%.

Failure to comply with the terms of the debt restructuring agreements (including the financial covenants and debt reduction targets) could, if the required majority of lenders so elects, result in acceleration of the Group's indebtedness. In these circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. See also "Risk Factors — Risks Relating to the Group

and its Business — The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders".

The Directors believe that, based on the Company's operating assumptions and the outlook for the aluminium sector, at the end of the four year override period ending December 2013, the Company will be able to reduce its debt levels sufficiently, allowing the Company to refinance the closing debt balance (including capitalised interests) from new debt facilities to be provided by:

• existing international lenders subject to a number of conditions being met as at the end of the override period, including, without limitation: i) the Group's debt (other than its debt to VEB and Onexim) has been repaid by at least US$5 billion; and ii) the ratio of total net debt to Covenant EBITDA being 3 to 1 or less (for a description of these conditions, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Refinancing" at page 238 of the HK Prospectus); and/or

• Russian and Kazakh lenders; and/ or

• other third party sources of finance.

Pages 226 and 238 of the HK Prospectus provide further details of the refinancing and the basis of the Directors' belief why the Company should be able to raise the new debt. However there can be no assurance that the Company will be able to refinance the closing debt balance in 2013. If the Company cannot do so, it would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company.

For an overview of the debt restructuring key terms, see "Summary – Overview of the Debt Restructuring" on pages 9-10 of the HK Prospectus.

Strengths and Strategies

Strengths

The Directors believe that the Group's competitive strengths uniquely position it to benefit from the attractive fundamentals of the global aluminium industry. The Directors believe that the Group benefits from the following principal competitive strengths:

• Global scale and reach

- The Group is the world's largest producer of aluminium, producing approximately 4.4 million tonnes and 2.0 million tonnes in 2008 and the first half of 2009, respectively, and

accounting for approximately 11%[2] of global output in those periods, according to CRU.

- The Group operates the world's two largest aluminium smelters — Bratsk and Krasnoyarsk.
- The Group is able to capture opportunities arising from both a global platform and local reach.

• Secure and sustainable low-cost position and power advantage

- The Group's largest aluminium smelters located in Siberia benefit from access to low-cost and clean hydro generated electricity.

• Focus on higher margin upstream business

- The Directors believe that the Group's upstream focus enables it to benefit from the higher margins generally available to upstream businesses (compared to downstream businesses).

• High degree of vertical integration

- The Group benefits from a significant long position in alumina capacity, which contributes to the security of alumina supply to the Group's existing smelters and future expansion projects.
- The long position in alumina capacity is supported by the Group's bauxite resource base. The Group's own bauxite production was sufficient to cover approximately 71% and 78% of its alumina production in 2008 and the first six months of 2009, respectively.

• Proximity to China, the largest aluminium consumer in the world

- With more than 80% of its total aluminium production located in Siberia, the Group's production base is in direct proximity to China and other key Asian markets. The geographical location of the Group's smelters and its competitive cost structure position it to become one of the main external suppliers to China, where demand for aluminium has been constantly growing.

• Proprietary R&D and leading internal EPCM expertise

- With the acquisition of SUAL in March 2007, the Group consolidated over 70 years of Russian know-how and research and development in the aluminium industry.
- Within its Engineering and Construction Division, the Group as established research and development ("R&D") centres with focuses on aluminium (located in Krasnoyarsk), alumina (in St. Petersburg) and design (in Irkutsk).
- The Group is developing proprietary RA-300, RA-400 and RA-500 cell technologies. A variant of the RA-300 technology was selected for and successfully implemented at the Group's

[2] Information corrected compared to information included in the HK Prospectus on pages 11, 92, 94 and 168 thereof, as per the Clarification Announcement. For further details, see Exhibit 2 "Clarification Announcement" to this Prospectus.

Khakas aluminium smelter.

• Strategic investments, including:

- Acquisition of a more than 25% stake in Norilsk Nickel — the world's largest nickel and palladium producer (based on production in 2008 according to CRU) and one of the leading producers of platinum and copper.
- LLP Bogatyr Komir 50/50 joint venture with Samruk-Kazyna in Kazakhstan — an operator of open-pit mines in the Ekibastuz coal basin, one of the largest coal basins in the CIS.

• Experienced management team and world class corporate governance

- The Group has a highly skilled and experienced team of managers with proven industry expertise and an impressive track record of managing growth.
- Even while privately held, the Group has adopted international standards of corporate governance.

Strategies

The Group's management is pursuing and will pursue the following strategies over different timeframes:

• Maintain sustainable low-cost positioning through continuous cost reduction

- The Group is pursuing a multi-pronged strategy that includes, subject to the debt restructuring agreements, a number of initiatives, such as improving energy efficiency at its smelters, seeking to build smelter-generation complexes in regions in which low-cost captive energy sources are available and seeking to invest in selective energy-related assets, such as coal and power generating facilities.

• Maintain active and responsive production management

- Production cuts and/or facility shutdowns allow the Group to respond actively to oversupply situations whenever they occur. By cutting output at higher cost facilities, the Group is able to maintain high utilisation rates at its core low-cost smelters located in Siberia.

• Debt reduction through cash flow management

- The Directors consider reduction of the Group's leverage pursuant to its debt restructuring agreements to be a key priority in the near and medium term.

• Maintain leadership in the global aluminium industry in terms of market share and position on the cost curve through a number of measures, including:

- Completion of the Boguchanskaya hydropower plant — Under the debt restructuring agreements, the Group is permitted to fund capital expenditure up to US$300 million for Phase 1 of the BEMO project.
- Medium-term strategies, such as exploiting its proximity to

China and the rest of Asia and increasing sales to China; subject to its debt restructuring agreements, completing advanced projects with attractive fundamentals, such as the Taishet and Boguchansky aluminium smelters, and pursuing brownfield development projects such as Kindia (Guinea)-2.

- M&A growth options in the long term.

Selected financial information for the Group

The table below provides selected financial information for the Group. The information has been accurately reproduced from the HK Prospectus but should be read in conjunction with and qualified in its entirety by reference to, the Reports from KPMG on historical financial information included in section 18 of this Prospectus, the historical financial information included in Appendix I to the HK Prospectus and the section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations", included in the HK Prospectus.

The summary historical consolidated income statement data and consolidated cash flow statement data for the years ended 31 December 2006, 2007 and 2008, and the six-month periods ended 30 June 2008 and 2009, and the summary historical consolidated balance sheet data at 31 December 2006, 2007 and 2008, and 30 June 2009, set forth below have been prepared in accordance with IFRS and derived from the Accountants' Report included in Appendix I to the HK Prospectus. The results in the six-month period ended 30 June 2009 are not necessarily indicative of the results that may be expected for the full year, and the historical results of the Company in general do not necessarily indicate results expected for any future period.

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
			(Mln. US$)		
CONSOLIDATED INCOME STATEMENT DATA					
Revenue[1]	3,757	8,354	15,685	13,588	8,429
Cost of sales	(3,449)	(5,306)	(11,073)	(8,356)	(4,186)
Gross profit	**308**	**3,048**	**4,612**	**5,232**	**4,243**
Distribution expenses	(284)	(383)	(798)	(528)	(328)
Administrative expenses	(311)	(585)	(1,103)	(842)	(455)
Loss on disposal of property, plant and equipment	(7)	(8)	(56)	(97)	(5)
Impairment of non-current assets	(37)	(344)	(3,668)	—	—
Other operating expenses	(156)	(62)	(215)	(118)	(143)
Results from operating activities	**(487)**	**1,666**	**(1,228)**	**3,647**	**3,312**
Finance income	23	120	106	101	176
Finance expenses	(680)	(302)	(1,594)	(494)	(265)
Share of (losses) / profits of associates	348	79	(3,302)	(14)	(16)
Share of (losses) / profits of jointly controlled entities	(8)	40	(35)	(15)	(12)
Excess of the Group's share in net identifiable assets over cost of acquisition	—	—	—	—	28
(Loss)/profit before taxation	**(804)**	**1,603**	**(6,053)**	**3,225**	**3,223**
Income tax expense	(64)	(194)	69	(419)	(336)
(Loss)/profit from continuing operations	**(868)**	**1,409**	**(5,984)**	**2,806**	**2,887**
Profit from discontinued operations (net of income tax)	—	—	—	—	10
Net (loss)/profit for the year/period	**(868)**	**1,409**	**(5,984)**	**2,806**	**2,897**
Attributable to:					
Shareholders of the Company	(868)	1,411	(5,952)	2,809	2,897
Non-controlling interests	—	(2)	(32)	(3)	—
CONSOLIDATED BALANCE SHEET DATA					
Total assets	22,219	36,005	24,005	22,063	9,252
Equity attributable to:					
Shareholders of the Company	3,077	16,715	4,488	10,095	3,078
Non-controlling interests	—	30	—	44	61
Total non-current liabilities	934	10,093	929	8,141	4,236
Net current assets/(liabilities)	(14,397)	(3,220)	(13,516)	1,518	735
Note:					
(1) Sales to related parties (US$ million)	887	1,540	2,926	3,248	467
% of Revenue	24%	18%	19%	24%	6%

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
			(Mln. US$)		
CONSOLIDATED CASH FLOW STATEMENT DATA					
Cash flows (used in) / generated from operating activities	(232)	1,878	3,017	3,346	2,790
Cash flows used in investing activities	(61)	(5,271)	(5,802)	(2,853)	(584)
Cash flows (used in) / generated from financing activities	(143)	3,379	3,250	(477)	(2,366)
Cash and cash equivalents at end of year/period	239	237	685	247	229
Certain Non-IFRS Measures and Selected Ratios					
CERTAIN NON-IFRS MEASURES					
Adjusted EBITDA[(2)]	(144)	2,585	3,526	4,620	3,680
Adjusted EBITDA margin	(3.8)%	30.9%	22.5%	34%	43.7%
Net Debt[(3) (4)]	13,426	13,024	13,170	8,395	4,319
SELECTED RATIOS					
Net Debt to Adjusted EBITDA	Not meaningful[(5)]	2.5:1[(6)]	3.7:1	1.8:1	1.2:1

(2) Adjusted EBITDA for any period is defined as results from operating activities adjusted for amortisation and depreciation, impairments charges and loss on disposal of property, plant and equipment. Adjusted EBITDA is presented as additional information because the Company believes that it is a useful measure for certain investors to determine the Company's operating cash flow and historical ability to meet debt service and capital expenditure requirements. Adjusted EBITDA is not a measure of financial performance under IFRS and should not be considered as an alternative to cash flows from operating activities, a measure of liquidity or an alternative to net profit as indicators of the Company's operating performance or any other measures of performance derived in accordance with IFRS. Because it is not an IFRS measure, Adjusted EBITDA may not be comparable to similarly titled measures presented by other companies. Adjusted EBITDA is different from Covenant EBITDA, which is relevant for the Group's debt restructuring agreements. For the definition of Covenant EBITDA and a reconciliation of Covenant EBITDA to consolidated profit before tax for the year ended 30 June 2009, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring" of the HK Prospectus.

(3) For any period presented, Net Debt is calculated as loans and borrowings (plus as at 31 December 2006 and 2007, bonds outstanding) less any cash and cash equivalents as at the end of the period. Net Debt is presented as additional information because the Company believes that it is a useful measure for certain investors to assess the Company's financial condition. Net Debt is not a measure of financial performance under IFRS and should not be considered as an alternative to a measure of liquidity or an alternative to other IFRS measures as indicators of the Company's operating performance or any other measures of performance derived in accordance with IFRS. Because it is not an IFRS measure, Net Debt may not be comparable to similarly titled measures presented by other companies. Net Debt differs from total net debt as it is defined in the Group's financial arrangements including the Group's debt restructuring agreements. For the definition of total net debt, see "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt Restructuring" of the HK Prospectus.

(4) Net Debt does not include deferred consideration in relation to the obligations to Onexim and is stated prior to the debt restructuring as described in section entitled "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Indebtedness" in the HK Prospectus and in section 5.2 "Indebtedness Statement" of Chapter C "Additional Information" below.

(5) Information corrected compared to information included on pages 15, 164 and 250 of the HK Prospectus as per the Clarification Announcement. For further details, see Exhibit 2 "Clarification Announcement" to this Prospectus. The ratio of Net Debt to Adjusted EBITDA is not meaningful where Adjusted EBITDA is negative, as was the case for the six months ended 30 June 2009.

(6) For the purposes of calculating Net Debt to Adjusted EBITDA ratio for the period ended 30 June 2008, Adjusted EBITDA was annualised by multiplying Adjusted EBITDA for the period by two. This ratio may not be indicative of

what such ratio will be for the full fiscal year. Net Debt to Adjusted EBITDA differs from total net debt to Covenant EBITDA for the purposes of the Company's debt restructuring agreements.

Selected Financial Information for MMC Norilsk Nickel

The tables below provide selected financial information for MMC Norilsk Nickel, which has been reproduced from the audited financial information regarding MMC Norilsk Nickel for the year ended 31 December 2008 and unaudited financial information for MMC Norilsk Nickel for the six months ended 30 June 2009 included in Appendix II to the HK Prospectus. The financial information regarding MMC Norilsk Nickel set forth in Appendix II to the HK Prospectus has been reproduced from publicly available information published by MMC Norilsk Nickel. The Company believes that the sources of this information are appropriate sources for such information and has taken reasonable care in extracting and reproducing such information. The Company has no reason to believe that such information is false, inaccurate or misleading or that any fact has been omitted that would render such information false, inaccurate or misleading. The information has not been independently verified by the Company, the Joint Sponsors and Global Coordinators or any other party involved in the Global Offering and no representation is given as to its accuracy. In addition, neither Norilsk Nickel nor its auditors have been involved in the preparation of this Prospectus or the HK Prospectus and Norilsk Nickel has not consented to the inclusion of such financial statements and selected financial information.

Condensed Consolidated Statement of Financial Position

	30 June 2009 (Mln. US$)
Capital and reserves	11,923
Non-current loans and borrowings	3,209
Current loans and borrowings	2,914
Cash and cash equivalents at end of the period	2,323

Condensed Consolidated Income and Cash Flow Statements

	Six months ended 30 June		**Year ended 31 December**	
	2009	**2008**	**2008**	**2007**
	(Mln. US$)			
Revenue	4,078	8,311	13,980	17,119
Gross profit	1,337	4,571	6,354	11,237
Operating (loss)/ profit	963	3,355	(199)	7,437
(Loss)/ profit before tax	616	3,669	(273)	7,735
(Loss)/ profit for the period	439	2,682	(555)	5,276
Cash generated from operations	1,106	4,157	6,225	10,262

Principal risk factors relating to the Company and its business

Set forth below are summaries of certain of the risks, uncertainties and other factors that may affect the future results of the Company. The full description of these and other risk factors is included in the "Risk Factors" section on pages 21 to 52 of the HK Prospectus. The risk factors summarized below should also be read in conjunction with the other sections (including, but not limited to, the "Business" and the "Financial

Information" sections) of the HK Prospectus.

- The Group operates in a cyclical industry that has recently experienced significant price and demand volatility and overcapacity, which has had and may continue to have a material adverse effect on the Group's performance and financial results
- The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations
- The Group depends on the provision of uninterrupted transportation services and access to state-owned infrastructure for the transportation of its materials and end products across significant distances, and the prices for such services (particularly rail tariffs) could increase
- The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders
- The Group benefits significantly from its low effective tax rate, and changes to the Group's tax position may increase the Group's tax liability and affect its cost structure
- The Group is exposed to foreign currency fluctuations which may affect its financial results
- En+ is able to influence the outcome of important decisions relating to the Group's business and the Group's business includes transactions with certain related parties
- En+ is completing a restructuring of its debt and will give its lenders a pledge over 15% of the outstanding Shares
- The Group depends on the services of key senior management personnel and the strategic guidance of the beneficial owner of En+
- A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares
- Adverse media speculation, claims and other public statements could adversely affect the value of the Offer Shares
- The Group's results of operations in 2008 were significantly and adversely affected by impairment charges related principally to its property, plant and equipment and to its equity investment in Norilsk Nickel and by the Group's pro rata portion of loss suffered by Norilsk Nickel, and there can be no assurances that further impairment charges will not be necessary or that further losses related to the

Norilsk Nickel investment will not occur

- The Group does not have operational or management control over Norilsk Nickel and other material joint ventures.
- The Group's business may be affected by labour disruptions, shortages of skilled labour and labour cost inflation
- The Group relies on third-party suppliers for certain materials
- Equipment failures or other difficulties may result in production curtailments or shutdowns
- The Group is subject to certain requirements under Russian anti-monopoly laws
- The Group operates in an industry that gives rise to health, safety and environmental risks
- Ore Reserves and Mineral Resources data are only estimates and are inherently uncertain, and such Ore Reserves and Mineral Resources may be depleted more rapidly than anticipated
- The Group's licences and concession rights to explore and mine Ore Reserves may be suspended, amended or terminated prior to the end of their terms or may not be renewed
- Risks relating to the multi-jurisdictional regulatory, social, legal, tax and political environment in which the Group operates:
    - Political instability, changes in government or in economic policy and arbitrary government actions could adversely affect the Group's business and the value of investments in the Shares.
    - Weaknesses in the legal systems and legislation of some of the countries in which the Group operates create an uncertain environment for investment and business activity and could subject the Group to material liabilities.
    - Uncertainties relating to the tax systems of some of the countries in which the Group operates complicate the Group's tax planning and business decisions.
    - Legislation may not adequately protect against expropriation or nationalisation.

2 INFORMATION RELATING TO THE ISSUER OF THE GDSs

Corporate Name	The Bank of New York Mellon (the "Depositary").
Registered Office	101 Barclay Street, 22nd Floor, New York, New York 10286.
Legal Form and Nationality	The Depositary is a state-chartered New York banking corporation and a member of the United States Federal Reserve System, subject to regulation and supervision principally by the United States Board of Governors of the Federal Reserve System and the New York State Banking Department.

Date of Incorporation	The Depositary was constituted in 1784 in the State of New York.

3 INFORMATION RELATING TO THE ADMISSION

Overview	Admission to listing and trading (the "Admission") of global depositary shares (the "GDSs", which mean the global depositary shares evidenced by global depositary receipts, each representing 20 ordinary shares, except for the references to the Master GDS, which means a master global depositary receipt evidencing the GDSs) representing ordinary shares (the "Shares", and together with the GDSs, the "Securities") in the Company on the Professional Segment of Euronext Paris ("Euronext Paris") concurrently with the primary listing of the Company's Shares on the Main Board of the Stock Exchange of Hong Kong Limited (the "HKSE") (the "HK Listing"), as well as with a placing of Shares to certain eligible investors in Hong Kong (the "Hong Kong Placing") and an international private placing of the Shares and the GDSs to qualified investors (including French qualified investors) (the "International Placing", and together with the Hong Kong Placing, the "Global Offering"). In connection with the Global Offering, the Company has entered into an international placing agreement (the "International Placing Agreement") with the Joint Global Coordinators and the other Underwriters on January 22, 2010 which will become irrevocable as of the Listing Date unless terminated in accordance with its terms. The GDSs are being issued (i) outside the United States to certain persons in offshore transactions in reliance on Regulation S ("Regulation S", such GDSs being the "Regulation S GDSs") under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act") and (ii) in the United States to qualified institutional buyers ("QIBs"), as defined in and in reliance on the exemption from the registration requirements of the U.S. Securities Act, as provided by Rule 144A under the U.S. Securities Act ("Rule 144A", such GDSs being the "Rule 144A GDSs").
Purpose of the issuance and use of proceeds	The Company will not receive any proceeds from the admission to listing and trading of the GDSs on Euronext Paris distinct from the proceeds of the Global Offering. A description of the intended use of the proceeds from the Global Offering is set forth in section "Use of Proceeds" of the HK Prospectus. The Admission is intended to promote additional liquidity for all investors and provide greater access to the Company's Shares, notably among European fund managers who may only deal during European business hours and/or who may be required to invest in Euro-zone markets or currencies only.
Number of GDSs to be admitted to listing and trading on Euronext Paris	Up to 768,068,182 GDSs, each representing 20 Shares. This number represents the maximum number of GDSs that could be issued in representation of all the Shares issued and outstanding as of the Listing Date assuming exercise in full of the Over-allotment Option).
Over-allotment Option	Pursuant to the International Placing Agreement, the Company has granted the Joint Global Coordinators, on behalf of the Underwriters,

an option to purchase up to 225,000,000 additional new Shares representing approximately 14% of the total number of Shares (both in the form of Shares and GDSs) offered initially in the Global Offering, at the Offer Price, under the International Placing. This option is exercisable, in whole or in part, at the sole and absolute discretion of the Joint Global Coordinators, on behalf of the Underwriters, within 30 days after the Listing Date. The Over-allotment Option is granted to cover over-allotments and stabilization activities, if any. A press announcement will be made in the event that the Over-allotment Option is exercised.

Issue price of the GDSs

EUR19.91[3], based on one GDS representing 20 Shares, an Offer Price of HK$10.80 to which apply a brokerage fee of 1.0% of the Offer Price, Hong Kong Stock Exchange trading fee of 0.005% of the Offer Price and Hong Kong Securities and Futures Commission transaction levy of 0.004% of the Offer Price, which together amount to 1.009% of the Offer Price, and which together shall be payable by investors, as well as a foreign exchange rate of EUR1.00 to HK$10.9587, as at pricing on January 22, 2010.

Currency of trading

Trading of GDSs on Euronext Paris will be in euros.[4]

Key terms and conditions of the GDSs

The GDSs will upon issue be represented by book-entry interests in a Regulation S Master GDS, evidencing Regulation S GDSs, and by book-entry interests in a Rule 144A Master GDS, evidencing Rule 144A GDSs. The Regulation S Master GDS has been registered in the name of The Bank of New York Depository (Nominees) Limited as nominee of The Bank of New York Mellon as common depositary for Euroclear Bank S.A./N.V., as operator of the Euroclear System ("Euroclear") and Clearstream Banking, *société anonyme* ("Clearstream"). The Rule 144A Master GDS has been registered in the name of Cede & Co., as nominee for DTC. Beneficial ownership in the GDSs are held through financial institutions, including Euroclear France SA, as direct and indirect participants in Euroclear, Clearstream and DTC. For terms and conditions of GDSs while in master form, see "Summary of Provisions Relating to GDSs while in Master Form".

The GDSs are exchangeable in the circumstances set out in "Summary of Provisions Relating to the GDSs while in Master Form" for a certificate in definitive registered form in respect of GDSs representing the interest of the holder in the Master GDS.

The underlying Shares are held on deposit with the Custodian (as defined below), as agent of the Depositary, under the deposit agreement between the Company and the Depositary (the "Deposit Agreement").

A GDS holder is not a shareholder of the Company and does not have any shareholder rights. Jersey law governs shareholder rights. Because the Depositary or its nominee is the shareholder of record for the underlying Shares represented by outstanding GDSs, shareholder rights rest with such record holder. The rights of GDS holders derive from

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[3] With respect to Rule 144A GDSs settling in US Dollars through DTC, the issue price is US$28.08, based on a foreign exchange rate of US$1.00 to HK$7.7712, as at pricing on January 22, 2010.

[4] Rule 144A GDSs settling through DTC will settle in US Dollars.

the terms of the Deposit Agreement. The obligations of the Depositary and its agents are also set out in the Deposit Agreement. Because the Depositary or its nominee is the registered owner of the Shares, holders must rely on it to exercise the rights of a shareholder on its behalf. The Deposit Agreement and the GDSs are governed by and construed in accordance with English law, except for the forms of certificates in connection with (i) acquiring GDSs upon deposit of Shares or (ii) receiving deposited property upon withdrawal in relation to GDSs, which shall be governed in accordance with the laws of the State of New York.

For more information regarding the GDSs, see Sections 13, 14 and 15 of Chapter C of the Prospectus.

Dividends

Subject to the provisions of the Jersey Companies Law, and in light of the financial position of the Company and other factors, the Company may by ordinary resolution declare dividends whose aggregate amount shall not exceed the amount recommended by the directors of the Company. The Company and certain of its subsidiaries have entered into certain restructuring agreements with the Company's international lenders and the Company's Russian lenders, respectively. The terms of these restructuring agreements restrict the Company's ability to pay dividends until certain conditions are satisfied, including until the Company's ratio of net debt to Covenant EBITDA is below 3 to 1 (as of 30 June 2009, such ratio was 47.2:1) and the Group's debt (other than its debt to Vnesheconombank and Onexim Holdings) has been repaid by at least US$5 billion. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Restructuring" on page 222 of the HK Prospectus.

The Depositary will convert any dividends received by it from the Company into US Dollars (if the dividends are in any currency other than US Dollars) and distribute them to GDS holders, net of any applicable fees and charges. Accordingly, the value of dividends received by GDS holders will be subject to fluctuations in the exchange rates (if the dividends are in any currency other than US Dollars) and to reduction due to deduction of applicable fees and charges. Investors that hold GDSs through Euroclear France S.A. may elect to receive dividend payments in Euros by informing the French paying agent of such election through the Euroclear system in accordance with its procedures. The Company has appointed BNP Paribas Securities Services as the Company's paying agent in Paris, France for this purpose.

The Company does not expect to declare dividends in respect of any year through 2013 at least.

Voting Rights

Holders of Shares are entitled to one vote per Share at meetings of the Company's shareholders. Holders of GDSs may instruct the Depositary with regard to the exercise of voting rights with respect to the Shares underlying their GDSs, under circumstances described in the Deposit Agreement. See Chapter C, Section 13 "Terms and Conditions of the

GDSs – Voting Rights" on page 38 of this Prospectus.

Cornerstone investors

In December 2009, as part of the International Placing, the Company entered into placing agreements with Vnesheconombank ("VEB"), NR Investments Limited ("NR Investments"), Paulson & Co. Inc. ("Paulson"), Mr. Kuok Hock Nien, Kerry Trading Co. Limited, Cloud Nine Limited and Twin Turbo Limited (the "Cornerstone Investors") who, in the aggregate, have agreed to subscribe at the Offer Price for new Shares in the form of Shares or GDSs. The total number of new Shares (both in the form of Shares and in the form of GDSs) subscribed by the Cornerstone Investors is 635,106,000 Shares, which represent (i) 4.13% of the Shares issued and outstanding upon completion of the Global Offering, and (ii) 34.61% of the new Shares (both in the form of Shares and in the form of GDSs), in each case, assuming that the Over-allotment Option is exercised in full.

Share capital

Following the Global Offering, the Company will have 15,361,363,646 Shares outstanding, including 1,835,292,840 Shares issued in connection with the Global Offering (assuming that the Global Offering is fully subscribed and exercise in full of the Over-allotment Option).

Listing of the GDSs

Listing is expected to take place, and unconditional dealings in the GDSs are expected to commence, on Euronext Paris on January 27, 2010 under the ticker symbol "RUSAL" for Regulation S GDSs and "RUAL" for Rule 144A GDSs.

Regulation S GDSs:

- ISIN: US9098832093
- CUSIP: 909883209
- Common Code: 046725158

Rule 144A GDSs:

- ISIN: US9098831004
- CUSIP: 909883100
- Common Code: 046725093

The Rule 144A GDSs may also be traded in PORTAL Alliance ("PORTAL"). Trading of Rule 144A GDSs on PORTAL are in US Dollars and settle through DTC in US Dollars.

Listing and trading of the underlying Shares

It is expected that dealings on the HKSE will commence on January 27, 2010 under code 486 (the "Listing Date"). Trading in the Shares on the HKSE will be limited to nominal board lots of 24,000 Shares.

Euronext Paris Notice

The GDSs' listing terms, including the split between the number of Shares issued in the form of Shares and the number of Shares issued in the form of GDSs in connection with the Global Offering, will be set forth and published in a Euronext Paris notice on or around January 25, 2010.

Custodian

The Depositary has appointed The Hongkong and Shanghai Banking Corporation Limited as custodian (the "Custodian").

French paying agent

BNP Paribas Securities Services

Registrar	The Company's principal register of shareholders will be maintained by the Company's principal registrar, Ogier Corporate Services (Jersey) Limited, in Jersey, and the Company's Hong Kong register of shareholders will be maintained by the Company's Hong Kong Share Registrar, Computershare Hong Kong Investors Services Limited, in Hong Kong.
Dividend Policy	Under the terms of its restructuring agreements, the Company is not permitted to pay dividends unless its ratio of total net debt to Covenant EBITDA is 3 to 1 or less (as of 30 June 2009, such ratio was 47.2:1), the Group has made cumulative debt repayments of at least US$5 billion (excluding debt repayments to VEB and Onexim), there are no outstanding defaults under the international override agreement and the Group has sufficient cash to pay the proposed dividends. As a result, the Company does not expect to be in a position to declare dividends in respect of any year at least through 2013. The Company's current Major Shareholders expect to adopt a dividend policy under the Shareholders' Agreement between Major Shareholders only, which is a shareholders' agreement expected to be entered into by En+, SUAL Partners, Glencore and Onexim, to which the Company is not a party. This agreement sets out certain agreed matters between the Major Shareholders in relation to board appointments, board committees, voting, transfers of shares, veto rights with respect to certain related party transactions and certain matters of corporate law and certain other matters. For further information relating to the Shareholders' Agreement between Major Shareholders only, see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only" on pages 287-293 of the HK Prospectus. Under the dividend policy set out in this shareholders' agreement, not less than 50% of the annual consolidated net profits of the Group in each financial year are to be distributed to shareholders within four months after the end of the relevant financial year, subject to any applicable legislation. See "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only" on pages 287-293 of the HK Prospectus. This dividend policy would, however, be subject to the limitations contained in the Company's debt restructuring agreements and so would not be expected to come into effect in respect of any year through 2013 at least. The Depositary will convert any dividends received by it from the Company into US Dollars (if the dividends are in any currency other than US Dollars) and distribute them to GDS holders, net of any applicable fees and charges. Accordingly, the value of dividends received by GDS holders will be subject to fluctuations in the exchange rates (if the dividends are in any currency other than US Dollars) and to reduction due to deduction of applicable fees and charges. Investors that hold GDSs through Euroclear France SA may elect to receive dividend payments in euros by informing the French paying agent of such election through the Euroclear system in accordance with its procedures.
Clearing and Settlement	Settlement of any transactions with Regulation S GDSs is expected to

occur through the book-entry facilities of Euroclear, including, as the case may be, Euroclear France SA as participant of the Euroclear System, or Clearstream.

Delivery of Regulation S GDSs paid in Euros and Rule 144A GDSs paid in US Dollars will be made against payment on or about January 27, 2010.

Settlement of any transactions on Euronext Paris with Rule 144A GDSs is expected to occur through the book-entry facilities of Euroclear, including, as the case may be, Euroclear France SA as participant of the Euroclear System, or Clearstream, and settlement of other transactions with Rule 144A GDSs, including transactions on PORTAL, are expected to occur through the book-entry facilities of DTC.

Please refer to section 15 "Admission to trading and dealing arrangements in the GDSs" of Chapter C below for further information on clearing and settlement procedures.

Summary of the principal risks relating to the Global Offering and the Company's Shares

The Shares have not previously been listed, and, prior to the Global Offering, there has been no public market for the Shares.

The market price for the Shares may decline below the Offer Price.

The sale or availability for sale of substantial amounts of the Shares or equity-related securities could adversely affect their trading prices.

The minimum trading board lot size for the Shares, as imposed by the Securities and Futures Commission, could affect the Shares' liquidity, trading volume and trading price in the secondary market after Listing Date.

The liquidity and market prices of the Shares following the Global Offering may be volatile.

There is a risk of termination of the International Placing Agreement.

It may be difficult to serve process on and enforce legal judgments against the Company or its directors.

Summary of the principal risk factors related to the transaction that could have a material impact on the GDSs and their listing and admission to trading on Euronext Paris

The risks relating to the Company or the underlying Shares, as set out above, apply *mutatis mutandis* to the GDSs. In addition, purchasers of GDSs should consider the following additional risks relating specifically to the GDSs and their listing and admission to trading on the Professional Segment of Euronext Paris:

- If an active market for the GDSs does not develop, the price of the GDSs may fall below the issue price of the GDSs.

- The trading price of the Company's GDSs and the value of dividends paid on the Company's ordinary Shares underlying the GDSs may be materially adversely affected by fluctuations in the exchange rate for converting Hong-Kong or, in the case of dividends for investors who hold the GDSs through Euroclear France SA and elect to receive dividends in euros, US Dollar into euros.

4 SHARE CAPITAL AND EFFECT OF THE ISSUANCE

The following is a description of the authorised and issued share capital of the Company as of December 31, 2009 and immediately after completion of the Global Offering (but prior to the exercise of the Over-allotment Option)[1]:

As of December 31, 2009	**Number of Shares**
Authorised share capital:	1,350,000 Shares with a par value of US$0.01 each
Issued share capital:	1,237,000 Shares with a par value of US$0.01 each

Immediately after completion of the Global Offering (but prior to the exercise of the Over-allotment Option)	**Number of Shares**
Authorised share capital:	20,000,000,000 Shares with a par value of US$0.01 each
Including maximum number of Shares that the Directors are authorised to issue in connection with the general mandate they have been granted with [2]	3,027,272,729 Shares with a par value of US$0.01 each
Issued share capital (after Capitalization Issue):	13,500,000,000 Shares with a par value of US$0.01 each
Issued share capital (after Capitalisation Issue and conversion of fee warrants) [3]	13,526,070,806 Shares with a par value of US$0.01 each
Issue of Shares as part of the Global Offering	1,610,292,840 Shares with a par value of US$0.01 each [4]
Total issued Shares on completion of the Global Offering:	15,136,363,646 Shares with a par value of US$ 0.01 each [4] [5]

(1) The tables above assume the Global Offering becomes unconditional and is completed in accordance with the relevant terms and conditions. It takes no account of (a) any of the new Shares which may be issued upon the exercise of the Over-allotment Option or (b) any Shares which may be repurchased by the Company pursuant to the general mandate given to the Directors of the Company for the repurchase of Shares or (c) any bonus shares (the "Bonus Shares") that may be issued to the management (see section "Directors and Senior Management" – Future Compensation of Directors and Senior Management" on pages 281-283 of the HK Prospectus and section 6.3 "Compensation of Directors and Senior Management" of Chapter C "Additional Information" of this Prospectus).

Fee warrants entitling the Group's restructuring lenders to 1% of the Company's fully diluted share capital were issued in connection with its debt restructuring arrangements. Lenders may require the Company to settle the fee warrants fully in cash in lieu of Shares. Otherwise, warrants will be automatically converted into Shares on the date of the Global Offering, subject to lock-up arrangements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Warrants" in the HK Prospectus. Immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised and no Bonus Shares are issued to management, En+ would hold 47.59%, SUAL Partners would hold 15.86%, Amokenga Holdings would hold 8.65%, Onexim would hold 17.09% and the public would hold 10.81% (of which, VEB would hold 3.15% and the international lenders would hold 0.17%) of the issued share capital of the Company. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to the HK Prospectus.

(2) See section 4.4 "Authorisations" of Chapter C of the Prospectus and section "Resolutions in Writing of the Shareholders passed on 26 December 2009" on pages VIII-2 and VIII-3 of the HK Prospectus.

It is currently contemplated that this general mandate will be used, in particular, (i) in order to issue the Shares to be issued upon conversion of the equity compensation warrants that the Company may have to issue to international lenders during the override period (See section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity – Disposal and Equity Injection Undertakings, Debt Repayments Targets" on page 230 of the HK Prospectus, in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity – Warrants" on pages 233-234 of the HK Prospectus and in section "History and Corporate Structure – Shareholding Structure" on page 89 of the HK Prospectus); and (ii) in order to issue the Shares to be issued in connection with the Bonus Shares and the Long-Term Incentive Programs benefiting the Directors and Senior Management/Employees (See section "Directors and Senior Management — Future Compensation of Directors and Senior Management" on pages 281-283 of the HK Prospectus and section 6.3 "Compensation of Directors and Senior Management" of Chapter C "Additional Information" of this Prospectus).

(3) See section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt Restructuring – Terms of International Debt Restructuring" on pages 226-238 of the HK Prospectus and in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity – Warrants" on pages 233-234 of the HK Prospectus.

(4) Includes shares to be sold in the form of GDSs in the International Placing. The GDSs are to be issued by The Bank of New York Mellon, as depositary, pursuant to a Deposit Agreement entered into between the Company and the Depositary. Each GDS will represent 20 Shares. Pursuant to the Deposit Agreement, the Shares represented by the GDSs will be held with The Hongkong and Shanghai Banking Corporation Limited, as custodian, for the benefit of the Depositary. The Custodian will be the registered holder of such Shares in the share register of the Company. The number of GDSs to be sold in the International Placing will be determined by the Joint Global Coordinators following pricing of the Global Offering.

(5) Excludes such number of Bonus Shares as may be issued to the management of the Company, such number being 60,355,556 Bonus Shares, assuming an Offer Price of HK$10.80 per Offer Share, being the mid point of the estimated Offer Price range. For further information, see section "Directors and Senior Management" – Future Compensation of Directors and Senior Management" on pages 281-283 of the HK Prospectus and section 6.3 "Compensation of Directors and Senior Management" of Chapter C "Additional Information" of this Prospectus.

The following table illustrates the Company's shareholding structure as of December 31, 2009 and immediately after completion of the Global Offering:

As of December 31, 2009:

Name of shareholders	**Percentage of issued share capital***
En+ Group Limited (incorporated in Jersey) (1)	53.35%
Onexim Holdings Limited (incorporated in Cyprus) (1)	19.16%
SUAL Partners Limited (incorporated in Bahamas) (1)	17.78%
Amokenga Holdings Limited (incorporated in Bermuda) (1)	9.70%
Total	**100.00%**

* For details of the existing substantial shareholders, please refer to the "Substantial Shareholders" section of the HK Prospectus.

Immediately after completion of the Global Offering:

Name of shareholders	**Percentage of issued share capital***
En+ Group Limited (incorporated in Jersey) (1) (2) (3)	47.59%
Onexim Holdings Limited (incorporated in Cyprus) (1) (2)	17.09%
SUAL Partners Limited (incorporated in Bahamas) (1) (2)	15.86%
Amokenga Holdings Limited (incorporated in Bermuda) (1) (2)	8.65%

Public	10.81%
Of which:	
Vnesheconombank (a state owned financial institution in Russia) (VEB) (1) (2)	3.15%
International lenders (1) (2) (4) (5)	0.17%
Total	**100.00%**

* For details of the existing substantial shareholders, please refer to the "Substantial Shareholders" section of the HK Prospectus.

(1) Please refer to the "History and Business Development" section of the HK Prospectus for changes in the shareholding structure of United Company RUSAL Limited since 26 October 2006, when it was incorporated. For details of the existing substantial shareholders, please refer to the section headed "Substantial Shareholders". The shareholding percentages shown here are with the underlying assumptions that (a) there have been no changes to the interests of the existing shareholders in the Company, (b) there have been no equity conversions of any kind other than conversion of deferred consideration owed to Onexim in accordance with the restructuring arrangements and (c) no Bonus Shares have been issued to the management of the Company (see "Directors and Senior Management — Future Compensation of Directors and Senior Management"). The warrants issued by the Company to its international restructuring lenders entitling them to 1% of the Company's fully diluted share capital as at the date of effectiveness of the override agreement may be settled in cash. If any such lenders elect not to exercise this cash settlement option, the warrants will be automatically converted into Shares on the date of the Global Offering, subject to lock-up arrangements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Warrants". International lenders holding fee warrants representing 0.73% of the Company's share capital have exercised their cash settlement option and accordingly, immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised and no Bonus Shares have been issued to management of the Company, the public would hold 10.81% of the issued share capital of the Company, of which VEB would hold 3.15% and the international lenders would hold 0.17%. The 3.15% interest of VEB in the issued share capital of the Company after completion of the Global Offering, assuming the Over-allotment Option is not exercised and no Bonus Shares have been issued to management of the Company, will be considered to form part of the public float of the Company. During the override period, under the terms of the international override agreement, the Company may be obliged to issue equity compensation warrants to its international lenders representing equity in specified percentages, totaling up to 4.25%, of the fully diluted share capital of the Company as at the relevant warrant issue date.

(2) Excludes such number of Bonus Shares as may be issued to the management of the Company, such number being 60,355,556 Bonus Shares, assuming an Offer Price of HK$10.80 per Offer Share, being the mid point of the estimated Offer Price range. For further information, see section "Directors and Senior Management" – Future Compensation of Directors and Senior Management" on pages 281-283 of the HK Prospectus and section 6.3 "Compensation of Directors and Senior Management" of Chapter C "Additional Information" of this Prospectus.

(3) For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to the HK Prospectus.

(4) Includes shares to be sold in the form of GDSs in the International Placing. The GDSs are to be issued by The Bank of New York Mellon, as Depositary, pursuant to a Deposit Agreement entered into between the Company and the Depositary. Each GDS will represent 20 Shares. Pursuant to the Deposit Agreement, the Shares represented by the GDSs will be held with the Custodian, for the benefit of the Depositary. The Custodian will be the registered holder of such Shares in the share register of the Company. The number of GDSs to be sold in the International Placing will be determined by the Joint Global Coordinators following pricing of the Global Offering.

(5) Shares held by international lenders pursuant to conversion of fee warrants issued to such lenders on the date of effectiveness of the international override agreement.

5 PRACTICAL INFORMATION

The Admission consists of a listing of the GDSs on the Professional Segment of Euronext Paris. The GDSs will not be offered to the public in France nor in any other country.

The distribution of the Prospectus may, in certain countries, including the United States, be subject to specific regulations. Individuals in possession of a copy of this Prospectus must inform themselves of possible local restrictions and ensure compliance therewith.

Joint Global Coordinators

The Joint Global Coordinators are:

BNP Paribas Capital (Asia Pacific) Limited
59/F – 63/F, Two International Finance Centre
8 Finance Street
Central Hong Kong

Credit Suisse (Hong Kong) Limited
Three Exchange Square
8 Connaught Place
Central Hong Kong

Contact Person for Investors

Catherine Tamara Shiang
Rusal Investor Relation Department
19/F, Two International Finance Centre
8 Finance Street
Central Hong Kong
Telephone: +852 2252 8231
E-mail: Catherine.Shiang@rusal.com

Availability of the Prospectus

Copies of the Prospectus are available at the Company's offices and on its website (http://www.rusal.com) and on the AMF's website (http://www.amf-france.org) and on request free of charge from the Company's investor relations department and from the Joint Global Coordinators.

CHAPTER B
RISK FACTORS

Set forth below are summaries of certain of the risks, uncertainties and other factors that may affect the future results of the Company. The full description of these and other risk factors is included in the "Risk Factors" section on pages 21 to 52 of the HK Prospectus. The risk factors summarized above should also be read in conjunction with other sections of the HK Prospectus, including but not limited to, the "Business" and the "Financial Information" sections of the HK Prospectus.

1 Risks Relating to the Group and its Business

The Group operates in a cyclical industry that has recently experienced significant price and demand volatility and overcapacity, which has had and may continue to have a material adverse effect on the Group's performance and financial results.

The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations.

The Group depends on the provision of uninterrupted transportation services and access to state-owned infrastructure for the transportation of its materials and end products across significant distances, and the prices for such services (particularly rail tariffs) could increase.

The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders.

The Group benefits significantly from its low effective tax rate, and changes to the Group's tax position may increase the Group's tax liability and affect its cost structure.

The Group is exposed to foreign currency fluctuations which may affect its financial results.

En+ is able to influence the outcome of important decisions relating to the Group's business and the Group's business includes transactions with certain related parties.

En+ is completing a restructuring of its debt and will give its lenders a pledge over 15% of the outstanding Shares.

The Group depends on the services of key senior management personnel and the strategic guidance of the beneficial owner of En+.

A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of the Offer Shares.

Adverse media speculation, claims and other public statements could adversely affect the value of the Offer Shares.

The Group's results of operations in 2008 were significantly and adversely affected by impairment charges related principally to its property, plant and equipment and to its equity investment in Norilsk Nickel and by the Group's pro rata portion of loss suffered by Norilsk Nickel, and there can be no

assurances that further impairment charges will not be necessary or that further losses related to the Norilsk Nickel investment will not occur.

The Group does not have operational or management control over Norilsk Nickel and other material joint ventures.

The Group's business may be affected by labour disruptions, shortages of skilled labour and labour cost inflation.

The Group relies on third-party suppliers for certain materials.

Equipment failures or other difficulties may result in production curtailments or shutdowns.

The Group is subject to certain requirements under Russian anti-monopoly laws.

The Group operates in an industry that gives rise to health, safety and environmental risks.

Ore Reserves and Mineral Resources data are only estimates and are inherently uncertain, and such Ore Reserves and Mineral Resources may be depleted more rapidly than anticipated.

The Group's licences and concession rights to explore and mine Ore Reserves may be suspended, amended or terminated prior to the end of their terms or may not be renewed.

Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates:

- Political instability, changes in government or in economic policy and arbitrary government actions could adversely affect the Group's business and the value of investments in the Shares.

- Weaknesses in the legal systems and legislation of some of the countries in which the Group operates create an uncertain environment for investment and business activity and could subject the Group to material liabilities.

- Uncertainties relating to the tax systems of some of the countries in which the Group operates complicate the Group's tax planning and business decisions.

- Legislation may not adequately protect against expropriation or nationalisation.

2 Risks Relating to the Global Offering and the Company's Shares

The Shares have not previously been listed, and, prior to the Global Offering, there has been no public market for the Shares.

The market price for the Shares may decline below the Offer Price.

The sale or availability for sale of substantial amounts of the Shares or equity-related securities could adversely affect their trading prices.

The minimum trading board lot size for the Shares, as imposed by the Securities and Futures Commission, could affect the Shares' liquidity, trading volume and trading price in the secondary market after Listing Date.

The liquidity and market prices of the Shares following the Global Offering may be volatile.

There is a risk of termination of the International Placing Agreement.

It may be difficult to serve process on and enforce legal judgments against the Company or its directors.

3 Risks Relating to the GDSs and their listing and admission to trading on the Professional Segment of Euronext Paris

The risks relating to the Company or the underlying Shares, as set out above, apply *mutatis mutandis* to the GDSs. In addition, purchasers of GDSs should consider the following additional risks relating specifically to the GDSs and their listing and admission to trading on the Professional Segment of Euronext Paris:

If an active trading market for the GDSs does not develop, the price of the GDSs may fall below the issue price of the GDSs.

The Company has applied for the admission to listing and trading on the Professional Segment of Euronext Paris of the GDSs. However, prior to such listing, there has been no market for the GDSs and no assurance can be given as to the liquidity or sustainability of the trading market for the GDSs. Liquidity and trading in the GDSs would be affected by any limitation or suspension in the trading of the Shares on the HKSE. The Joint Global Coordinators are not obligated to make a market in the GDSs and, if applicable, any such market making will be subject to the limits imposed by applicable law and may be interrupted or discontinued at any time without notice. If a market for the GDSs fails to develop or be sustained, the trading price of the GDSs could fall. In addition, it is possible that the GDSs could trade at prices that may be lower than the issue price of the GDSs.

The trading price of the Company's GDSs and the value of dividends paid on the Company's ordinary Shares underlying the GDSs may be materially adversely affected by fluctuations in the exchange rate for converting Hong-Kong or, in the case of dividends for investors who hold the GDSs through Euroclear France SA and elect to receive dividends in euros, US Dollar into euros.

Fluctuations in the exchange rate for converting Hong Kong or, in the case of dividends, US Dollars into euros may affect the value of the GDSs and the Shares. Specifically, as the relative value of the Hong Kong or, in the case of dividends, US Dollars into euros declines, each of the following values will also decline (and vice versa):

- the euro equivalent of the H.K. dollar trading price of the Shares in Hong Kong, which may consequently cause the trading price of GDSs to also decline;

- the euro equivalent of the proceeds that a holder of the GDSs would receive upon the sale in Hong Kong of any Share withdrawn from the Depositary (to the extent such holder elects to convert such proceeds into euros); and

- the euro equivalent of cash dividends paid in US Dollar on the Shares represented by the GDSs if investors holding the GDSs through Euroclear France SA request dividends to be paid in euros.

CHAPTER C
ADDITIONAL INFORMATION

1 RESPONSIBILITY FOR THIS PROSPECTUS

1.1 Person Responsible for this Prospectus

Oleg Deripaska, Chief Executive Officer of United Company RUSAL Limited, acting for and on behalf of United Company RUSAL Limited

1.2 Responsibility Statement

"I hereby declare, after taking all reasonable measures for this purpose and to the best of my knowledge, that the information contained in this Prospectus is in accordance with the facts and that the Prospectus makes no material omission."

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Oleg Deripaska, Chief Executive Officer of United Company RUSAL Limited
January 22, 2010

2 KEY INFORMATION ABOUT THE GDSs

2.1 Purpose of the issuance and use of proceeds

The Company will not receive any proceeds from the admission to listing and trading of the GDSs on Euronext Paris distinct from the proceeds of the Global Offering. A description of the intended use of the proceeds from the Global Offering is set forth in section "Use of proceeds" of the HK Prospectus.

The Admission is intended to promote additional liquidity for all investors and provide greater access to the Shares, notably among European fund managers who may only deal during European business hours and/or who may be required to invest in Euro-zone markets or currencies only.

2.2 Type and class of GDSs

Each GDS represents an interest in 20 Shares. The GDSs are issued and delivered by the Depositary (as defined in section 3 "Information about the issuer of the GDSs" below) pursuant to a deposit agreement (the "Deposit Agreement") entered into between the Company and the Depositary on January 21, 2010. Pursuant to the Deposit Agreement, the Shares represented by the GDSs will be held with The Hongkong and Shanghai Banking Corporation Limited, as custodian, for the benefit of the Depositary.

The GDSs are being issued (i) outside the United States to certain persons in offshore transactions in reliance on Regulation S ("Regulation S", such GDSs being the "Regulation S GDSs") under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act"), and (ii) in the United States to qualified institutional buyers ("QIBs"), as defined in and in reliance on the exemption from the registration requirements of the U.S. Securities Act, as provided by Rule 144A under the U.S. Securities Act ("Rule 144A", such GDSs being the "Rule 144A GDSs"). The Regulation S GDSs will be evidenced by a Regulation S Master GDS and the Rule 144A GDSs will be evidenced by a Rule 144A Master GDS (the Rule 144A Master GDS together with the Regulation S Master GDS being the "Master GDSs" and

each a "Master GDS"), each to be issued by the Depositary pursuant to the Deposit Agreement.

2.3 Form and delivery of GDSs

The GDSs will upon issue be represented by book-entry interests in a Regulation S Master GDS, evidencing Regulation S GDSs, and by book-entry interests in a Rule 144A Master GDS, evidencing Rule 144A GDSs. The Regulation S Master GDS has been registered in the name of The Bank of New York Depository (Nominees) Limited as nominee of The Bank of New York Mellon as common depositary for Euroclear Bank S.A./N.V. as operator of the Euroclear System ("Euroclear") and Clearstream Banking, société anonyme ("Clearstream"). The Rule 144A Master GDS has been registered in the name of Cede & Co., as nominee for DTC. Beneficial ownership in the GDSs are held through financial institutions, including Euroclear France SA, as direct and indirect participants in Euroclear, Clearstream and DTC. For terms and conditions of GDSs while in master form, see "Summary of Provisions Relating to GDSs while in Master Form".

The GDSs are exchangeable in the circumstances set out in "Summary of Provisions Relating to the GDSs while in Master Form" for a certificate in definitive registered form in respect of GDSs representing the interest of the holder in the Master GDS.

2.4 French Paying Agent

Services performed in relation to the GDSs and financial services performed in relation to the GDSs will be handled in France by BNP Paribas Securities Services.

3 INFORMATION ABOUT THE ISSUER OF THE GDSs

The depositary bank is The Bank of New York Mellon (the "Depositary"), a state-chartered New York banking corporation and a member of the United States Federal Reserve System, subject to regulation and supervision principally by the United States Board of Governors of the Federal Reserve System and the New York State Banking Department. The Depositary was constituted in 1784 in the State of New York. It is a wholly owned subsidiary of The Bank of New York Mellon Corporation, a New York bank holding company and a financial holding company. The principal office of the Depositary is located at One Wall Street, New York, New York 10286, United States of America.

4 INFORMATION ABOUT THE UNDERLYING SHARES

4.1 Type, class and currency of the Shares

Immediately following completion of the Global Offering (but not taking into account any Shares which may be allotted and issued pursuant to the exercise of the Over-allotment Option), the issued share capital of the Company will be US$151,363,636.46 divided into 15,136,363,646 Shares of US$0.01 par value, all fully paid or credited as fully paid and 4,863,636,354 Shares will remain unissued. Immediately following completion of the Global Offering, the Shares will be registered with ISIN JE00B5BCW814.

The Shares are ordinary shares of the same class as the Company's existing ordinary shares. Their holders will be entitled to all rights and, as of their issuance date, to all distributions decided by the Company.

Trading in the Shares on the HKSE will be limited to nominal board lots of 24,000 Shares.

4.2 Governing law

The principal legislation under which the Company operates is the Jersey Companies Law and regulations made thereunder and the Shares are created under the Jersey Companies Law. The Shares are all in registered form and are denominated in US Dollars.

French rules relating to mandatory takeover bids and/or squeeze-out and sell-out do not apply to the Company. Jersey rules relating to compulsory acquisitions are set out in Appendix VII: pages 23-24 of the HK Prospectus.

4.3 Form of the Shares

All Shares are in registered form. The Company is obliged to maintain a register of shareholders at its registered office in Jersey (the "Jersey Share Register"). It will also have an overseas branch register of shareholders that will be maintained by the Company's branch registrar, Computershare Hong Kong Investors Services Limited, in Hong Kong (the "Hong Kong Share Register"). The Company recognizes as shareholders only those persons whose names and addresses are recorded on either its Hong Kong Share Register or its Jersey Share Register.

The Shares issued on the Hong Kong Share Register and on the Jersey Share Register are represented by share certificates.

The Company registers transfers of Shares on the relevant register of shareholders upon receipt of the share transfer instruction duly completed in all respects accompanied by the share certificate(s).

For settlement of trades on the Hong Kong Stock Exchange, share certificates may be deposited into the Central Clearing And Settlement System ("CCASS") established and operated by HKSCC (Hong Kong Securities and Clearing Company Limited), where the share certificates are immobilized and registered in the name of "HKSCC Nominees Ltd.", the nominee entity of CCASS holding share certificates on behalf of CCASS participants. Beneficial interests in these Shares are traded and settled on the basis of electronic book-entries within the CCASS System.

Information regarding registrars of the Shares is detailed in the sections entitled "Information about this Prospectus and the Global Offering – Register of Members and Stamp Duty" and "Corporate Information", respectively on pages 61 and 70 of the HK Prospectus.

4.4 Authorisations

Pursuant to written resolutions of the Shareholders of the Company passed on December 26, 2009, the directors of the Company have been authorised to allot and issue, and to approve the transfer of, such number of Shares in connection with the Global Offering and any exercise of the Over-allotment Option as they see fit, on and subject to the terms and conditions stated in the HK Prospectus.

In addition, a general unconditional mandate was given to the Directors to allot, issue and deal with Shares (otherwise than pursuant to, or in consequence of, the Global Offering, a rights issue or pursuant to the exercise of any subscription rights which may be granted under any scrip dividend scheme or similar arrangements, any adjustment of rights to subscribe for Shares under options and warrants or a special authority granted by the shareholders) with an aggregate nominal value of not more than the sum of:

- 20% of the aggregate nominal value of the share capital of the Company in issue immediately following completion of the Global Offering before any exercise of the Over-allotment Option; and

- the aggregate nominal value of the share capital of the Company repurchased by the Company (if any).

In connection with the above general mandate, the directors are authorised to allot, issue and deal with Shares under the terms and conditions, including as to pricing, as they see fit, within the limit of the authorised share capital of the Company (i.e., 20,000,000,000 Shares).

Pursuant to the Hong Kong Listing Rules, the Company may not issue new Shares on the basis of the above mentioned general mandate at a discount of 20% or more to a benchmark price which shall be determined in accordance with the Hong Kong Listing Rules.

See section "Resolutions in Writing of the Shareholders passed on 26 December 2009" on pages VIII-2 and VIII-3 of he HK Prospectus for further details.

4.5 Offer Price of the Offer Shares

The Offer Price per Share offered in the Global Offering has been set at HK$10.80, excluding a brokerage fee of 1.0% of the Offer Price, Hong Kong Stock Exchange trading fee of 0.005% of the Offer Price and Hong Kong Securities and Futures Commission transaction levy of 0.004% of the Offer Price, which together amount to 1.009% of the Offer Price, and which together shall be payable by investors, in accordance with the procedure described in the "Structure of the Global Offering – Pricing and Allocation" section of the HK Prospectus.

5 WORKING CAPITAL AND INDEBTEDNESS STATEMENTS

5.1 Working capital statement

The Company reiterates that, as indicated in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity" on page 220 of the HK Prospectus, the Company believes that the working capital available to the Group is sufficient for its present requirements until 31 January 2011. The Company notes that the amount of net proceeds of the Global Offering taken into account for purposes of such statement is supported by the facts that, as of the date hereof, the Global Offering period has ended, the Offer Price of the Offer Shares has been fixed and the International Placing Agreement relating to the Global Offering has been entered into and become irrevocable as of the Listing Date unless terminated in accordance with its terms.

For the reasons described in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt Restructuring – Terms of the VEB Debt Restructuring" on pages 238-242 of the HK Prospectus, this working capital statement is based upon the premise that either (i) on the extended maturity date of the VEB Debt (29 October 2010), VEB will extend the maturity of the VEB Debt for another year, (ii) pursuant to the Sberbank Letter Agreement, Sberbank will assume the rights, claims and obligations of VEB under the VEB Debt, following which the maturity date under the debt will be extended to 7 December 2013, or (iii) the Company will generate sufficient proceeds to repay the VEB Debt in full on 29 October 2010 (from refinancings permitted under the terms of the international override agreement, from equity or subordinated debt issuances and/or from the possible sale of its equity interest of 25% plus one share in Norilsk Nickel).

5.2 Indebtedness statement

Information regarding indebtedness is described in the "Financial Information – Capitalisation" section on page 166 of the HK Prospectus, in the "Financial Information – Balance sheet" section on page 167 of the HK Prospectus which are reproduced below, and in the "Financial Information – Indebtedness" on pages 217-219 of the HK Prospectus. Information regarding the Debt Restructuring is described in section 10 "Debt restructuring" below and in the "Financial Information - Management's Discussion and Analysis of Financial Condition and Results of Operations – Restructuring" section on pages 170-171 of the HK Prospectus, in the "Financial Information - Management's Discussion and Analysis of Financial Condition and Results of Operations – Certain Factors Affecting the Group's Results of Operations – Impact of Restructuring Going Forward" section on page 182 of the HK Prospectus and in the "Financial Information - Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt Restructuring" section on pages 222-244 of the HK Prospectus.

Capitalisation

The following table shows the Group's current and non-current loans and borrowings, deferred consideration and capitalisation as at 30 September 2009, (i) as adjusted to reflect the completion of the Group's debt restructuring; (ii) as further adjusted to reflect the Global Offering and the application of the proceeds thereof, in each case as though it had occurred on 30 September 2009; and (iii) assuming an Offer Price of HK$10.80 per Offer Share, being the approximate mid-point of the proposed Offer Price range of HK$9.10 to HK$12.50.

	As of 30 September 2009		
	Actual	**As adjusted for restructuring[(1)(2)]**	**As further adjusted for Global Offering and application of proceeds thereof**
		Mln US$ (unaudited)	
Current loans and borrowings and deferred consideration			
Bank and other loans	13,638	1,777	—
Deferred consideration	2,915	501	219
Total current loans and borrowings and current deferred consideration[(3)]	**16,553**	**2,278**	**219**
Non-current loans and borrowings and deferred consideration			
Bank loans	—	11,376	11,271
Deferred consideration	—	541	541
Total non-current loans and borrowings and deferred consideration[(4)]	**—**	**11,917**	**11,812**
Total equity[(4)]	**3,697**	**6,055**	**8,219[(5)]**
Total capitalisation[(6)]	3,697	17,972	20,031

Note:

(1) Current and non-current loans and borrowings and deferred consideration as adjusted to reflect the completion of the Group's debt restructuring are reflected at fair value, rather than contractual value. The allocation between current loans and borrowings and deferred consideration and non-current loans and borrowings and deferred consideration is on the basis of an estimate of what is expected to be repaid by 30 September 2010, based on the terms of the debt restructuring agreements. The maturity of the VEB Debt was extended to 29 October 2010 and the VEB Debt is therefore treated as non-current loans and borrowings.

(2) There is no fixed amortisation schedule of the debt repayment during the override period. The Directors estimated short term portions of bank and other loans payable and the deferred consideration as at 30 September 2009 to be US$1,777 million and US$501 million, respectively. The Group estimates the gain to be recognised on the extinguishment of debt as a result of this debt restructuring at US$485 million, net of various override fees and expenses of US$262 million and the gain to be recognised on the extinguishment of deferred consideration as a result of this restructuring at US$673 million, net of various restructuring fees and expenses of US$49 million. In addition, the Group estimates the fair value of new equity resulting from the conversion of a portion of deferred consideration into 6% of the Company's share capital at US$1,200 million.
(3) As at 31 October 2009 the indebtedness of the Group amounted to US$16,569 million, which included US$13,646 million of current loans and borrowings and US$2,923 million of current deferred consideration (including accrued interest) payable to Onexim. The amount stated does not take into account the effect of the debt restructuring in December 2009 nor the effect of the Global Offering. The details of the securities and guarantees in relation to the Group's borrowings are stated on page 218 of the HK Prospectus.
(4) There was no material change in total equity of the Group between 30 September 2009 and 31 October 2009 in respect of share capital and share premium, which are not affected by the period results of the Group for the month of October 2009.
(5) In the event the offer is priced at the low end of the Offer Price range, the net proceeds would be US$1,814 million and resulting total equity would be US$7,869 million. In the event the offer is priced at the high end of the Offer Price range, the net proceeds would be US$2,513 million and resulting total equity would be US$8,568 million. If the Global Offering is priced above or below the mid-point of the proposed Offer Price range, the change in estimated net proceeds will be balanced by a change in bank loans and deferred consideration so total capitalisation will not vary as a result of a change to estimated net proceeds.
(6) The Group's total capitalisation is equal to the sum of non-current loans and borrowings and deferred consideration and total equity.

The amounts shown in the above capitalisation table are based on a foreign exchange rate of US$1.00 to HK$7.76 and underwriting fees and commissions and estimated expenses payable by the Company in relation to the Global Offering of US$78 million. The US$/HK$ exchange rate has changed since the date of the HK Prospectus, which results in non-material differences in the figures of the above capitalisation table. These differences as well as those resulting from higher listing fees are not reflected in the above capitalisation table since they are non-material differences.

Balance sheet

As of 30 September 2009 and 30 June 2009, the Group's net current liabilities were approximately US$14,361 million and US$14,397 million, respectively, comprising the following:

	As of 30 September 2009	**As of 30 June 2009**
	(Mln. US$)	**(Mln. US$)**
	(unaudited)	
ASSETS		
Current assets		
Inventories	2,132	2,159
Loans to related parties	—	—
Trade and other receivables	1,455	1,388
Cash and cash equivalents	298	264
Total current assets	**3,885**	**3,811**
Current liabilities		
Loans and borrowings	13,638	13,690
Bonds outstanding	—	—
Income, tax payable	53	40
Trade and other payables	1,414	1,424
Deferred consideration	2,915	2,867
Provisions	226	187
Total current liabilities	**18,246**	**18,208**

Net current liabilities	**(14,361)**	**(14,397)**

6 DIRECTORS AND SENIOR MANAGEMENT

6.1 Composition of the board of directors

The Company's Board currently consists (subject to the appointment of Mr. Barry Cheung and Mr. Igor Ermilin with effect from the Listing Date) of 18 Directors, comprising three executive Directors, 11 non-executive Directors and four independent non-executive Directors.

These Directors of the Company are as follows:

Name	**Age**	**Position**
Oleg Deripaska	41	Chief Executive Officer, Executive Director
Petr Sinshinov	55	Deputy Chief Executive Officer, Executive Director
Tatiana Soina	47	Chief Financial Officer, Executive Director
Victor Vekselberg	52	Chairman and Non-executive Director
Dmitry Afanasiev	40	Non-executive Director
Len Blavatnik	52	Non-executive Director
Ivan Glasenberg	52	Non-executive Director
Vladimir Kiryukhin	53[5]	Non-executive Director
Alexander Popov	38[5]	Non-executive Director
Dmitry Razumov	34	Non-executive Director
Jivko Savov	43[5]	Non-executive Director
Vladislav Soloviev	36	Non-executive Director
Anatoly Tikhonov	40	Non-executive Director
Igor Ermilin	49	Non-executive Director
Peter Nigel Kenny	60	Independent Non-executive Director
Philip Lader	63	Independent Non-executive Director
Elsie Leung Oi-sie	70	Independent Non-executive Director
Barry Cheung Chun-yuen	51	Independent Non-executive Director

6.2 Additional information regarding directors and senior management

(i) At the date of this Prospectus, none of the Directors or members of senior management has at any time within the last five years:

a. had any convictions (whether spent or unspent) in relation to fraudulent offences;

b. been associated with any bankruptcies, receiverships or liquidations when acting in their capacity as Director or member of senior management of the Company; or

[5] Information corrected compared to information included on pages 259, 266, 267 and 268 of the HK Prospectus as per the Clarification Announcement. For further details, see Exhibit 2 "Clarification Announcement" to this Prospectus.

c. save as disclosed in the HK Prospectus, been the subject of any official public incrimination and/or sanctions by statutory or regulatory authorities (including designated professional bodies).

(ii) There are no family relationships among any of the Directors or members of senior management.

(iii) Save as disclosed in the "Directors and Senior Management" section of the HK Prospectus, none of the Directors or the members of senior management have any business interests, nor performs any activities, outside the Group which are significant with respect to the Group.

(iv) Save as disclosed in the HK prospectus (see section "Directors' remuneration" on page VIII-23 of the HK Prospectus), there is no service contract between the Group and any Director providing for benefits upon termination of employment.

6.3 Compensation of Directors and Senior Management

Information regarding compensation of Directors and Senior Management is detailed in section "Historical Compensation of Directors and Senior Management"[6] and section "Future Compensation of Directors and Senior Management" on pages 280-283 of the HK Prospectus.

In particular, for his services in preparation of the Global Offering, the CEO will be paid an IPO bonus of up to US$75 million, subject to certain conditions, in the form of restricted Shares of the Company, with a two-year lock-up (being 53,888,889 Shares, assuming an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range).

In addition, for services provided in preparation of the Global Offering, certain members of senior management and other employees will be paid an IPO bonus of approximately US$15 million, subject to certain conditions and to increase in certain circumstances, 60% of which will be in the form of Shares of the Company (half of such Shares being performance Shares and the remaining half being restricted Shares), with a two-year lock-up, and 40% of which will be in cash. Assuming that the amount of the bonus is US$15 million and an Offer Price of HK$10.80 per Offer Share, being the mid point of the estimated Offer Price range, the number of Shares that would be issued to senior management and other employees in respect of the IPO bonus would be 6,466,667 Shares.

7 CORPORATE GOVERNANCE

Jersey does not have its own corporate governance regime and as a Jersey registered company, the Company is not mandated to have a corporate governance framework. However, it is the Company's policy to comply with international best practices of corporate governance. See page 99-100 "Experienced management team and world class corporate governance" and pages 277-280 "Directors and Senior Management" of the HK Prospectus for further information regarding the Company's corporate governance practices.

8 SHAREHOLDERS

[6] It has come to the Company's attention that there are certain clerical errors on page 280 of the HK Prospectus and tables presented on pages I-54, I-55, I-56 and I-57 of the HK Prospectus in respect of the Directors' remuneration for the years ended 31 December 2007 and 2008 and the six months ended 30 June 2008 and 2009. For further details, see Exhibit 2 "Clarification Announcement" to this Prospectus.

None of the Company's major shareholders have or will have different voting rights attached to the Shares they hold in the Company.

9 CORNERSTONE INVESTORS

In December 2009, as part of the International Placing, the Company entered into placing agreements with Vnesheconombank ("VEB"), NR Investments Limited ("NR Investments"), Paulson & Co. Inc. ("Paulson"), Mr. Kuok Hock Nien, Kerry Trading Co. Limited, Cloud Nine Limited and Twin Turbo Limited (the "Cornerstone Investors") who, in the aggregate, have agreed to subscribe at the Offer Price for new Shares in the form of Shares or GDSs. The total number of new Shares (both in the form of Shares and in the form of GDSs) subscribed by the Cornerstone Investors is 635,106,000 Shares, which represent (i) 4.13% of the Shares issued and outstanding upon completion of the Global Offering, and (ii) 34.61% of the new Shares (both in the form of Shares and in the form of GDSs), in each case, assuming that the Over-allotment Option is exercised in full.

Information regarding each cornerstone investor is further detailed in the "The Cornerstone Placing" section on pages 316-318 of the HK Prospectus.

10 DEBT RESTRUCTURING

The terms and conditions of the debt restructuring, in particular the terms of the restructuring of the Company's obligations to Onexim and the resulting conversion of a portion of such obligations to Onexim into Shares representing approximately 6% of the Company's share capital on the date of effectiveness of the international override agreement is detailed in the HK Prospectus in the "Financial Information - Management's Discussion and Analysis of Financial Condition and Results of Operations – Restructuring" section (pp. 170-171), the "Financial Information - Management's Discussion and Analysis of Financial Condition and Results of Operations – Certain Factors Affecting the Group's Results of Operations – Impact of Restructuring Going Forward" section (p. 182) and "Financial Information - Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt Restructuring" section (pp. 222-244)[7].

On the effective date of the international override agreement, the principal amount of debt outstanding subject to the override agreement was US$7.4 billion (including US$0.2 billion of contingent liabilities).

As described in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Indebtedness – Security (including mortgages and pledges of assets) and guarantees" on page 218 of the HK Prospectus, in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Debt Restructuring – Terms of International Debt Restructuring – Additional Security" on pages 232-233 of the HK Prospectus and in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Debt Restructuring – Terms of Russian and Kazakh Debt Restructuring (other than VEB)" on pages 242-244 of the HK Prospectus, additional security interests will be granted in connection with the implementation of the debt restructuring.

As described in the "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Debt

[7] Since the date of the HK Prospectus, there has been changes to the certain conditions subsequent described on page 236 of the HK Prospectus. For further details, see Exhibit 2 "Clarification Announcement" to this Prospectus.

Restructuring – Terms of International Debt Restructuring" on pages 226-238 of the HK Prospectus and in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity – Warrants" on page 233-234 of the HK Prospectus, within the framework of its debt restructuring, the Company paid an upfront fee to the restructuring lenders, including 0.5% of the lenders' exposure in cash and nominal strike warrants ("fee warrants") entitling the restructuring lenders to 1% of the Company's fully diluted share capital as at the date of the international override agreement. The international lenders may require the Company to settle the fee warrants in cash in lieu of Shares. International lenders holding fee warrants representing 0.73% of the Company's share capital (immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised and no Bonus Shares are issued to management) have exercised their cash settlement option.

In addition, as described in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity – Disposal and Equity Injection Undertakings, Debt Repayments Targets" on page 230 of the HK Prospectus, in section "Financial Information – Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Liquidity – Warrants" on page 233-234 of the HK Prospectus and in section "History and Corporate Structure – Shareholding Structure" on page 89 of the HK Prospectus, if the Company does not comply with certain debt reduction obligations on certain specific dates, pursuant to the debt restructuring agreements, the Company will be obliged to issue zero strike warrants ("equity compensation warrants") to the international lenders representing equity in specified percentages (totaling up to 4.25%) of the fully diluted share capital of the Company as at the relevant warrant issue date. The issue of such warrants should have an immediate dilutive effect to the Company's shareholders. Equity compensation warrants that may be issued by the Company during the override period will be convertible, in whole but not in part, into the Company's Shares at any time following the Global Offering at the election of the warrantholders. Share for which any warrants are exercised may be sold by the relevant warrantholders subject to the Company's right of first refusal.

11 DIVIDEND

11.1 Dividend entitlement date

The holders of GDSs will be entitled to receive dividends to the same extent as the holders of the Shares, subject to deduction of any applicable fees and charges and to provision of the Deposit Agreement.

Information regarding dividend is further detailed in Appendix VII: "Summary of the Constitution of the Company and Jersey Companies Law – Articles of Association – Dividends and other methods of distribution" (Page VII: 9-10) and Appendix VII "Summary of the Constitution of the Company and Jersey Companies Law – Jersey Company Law – Dividends and distributions" (Page VII: 20), as well as in section 13 "Terms and Conditions of the GDSs – Cash Distributions" below.

11.2 Dividend policy

Under the terms of its restructuring agreements, the Company is not permitted to pay dividends unless certain conditions are satisfied, including until its ratio of total net debt to Covenant EBITDA is 3 to 1 or less (as of 30 June 2009, such ratio was 47.2:1), the Group has made cumulative debt repayments of at least US$5 billion (excluding debt repayments to VEB and Onexim), there are no outstanding defaults under the international override

agreement and the Group has sufficient cash to pay the proposed dividends. As a result, the Company does not expect to declare dividends in respect of any year at least through 2013.

The Company's current Major Shareholders expect to adopt a dividend policy under the Shareholders' Agreement between Major Shareholders only, which is a shareholders' agreement expected to be entered into by En+, SUAL Partners, Glencore and Onexim, to which the Company is not a party. This agreement sets out certain agreed matters between the Major Shareholders in relation to board appointments, board committees, voting, transfers of shares, veto rights with respect to certain related party transactions and certain matters of corporate law and certain other matters. For further information relating to the Shareholders' Agreement between Major Shareholders only, see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only" on pages 287-293 of the HK Prospectus. Under the dividend policy set out in this shareholders' agreement, not less than 50% of the annual consolidated net profits of the Group in each financial year are to be distributed to shareholders within four months after the end of the relevant financial year, subject to any applicable legislation. See "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only" on pages 287-293 of the HK Prospectus. This dividend policy would, however, be subject to the limitations contained in the Company's debt restructuring agreements and so would not be expected to come into effect in respect of any year through 2013 at least.

The Depositary will convert any dividends received by it from the Company into US Dollars (if the dividends are in any currency other than US Dollars) and distribute them to GDS holders, net of any applicable fees and charges. Accordingly, the value of dividends received by GDS holders will be subject to fluctuations in the exchange rates (if the dividends are in any currency other than US Dollars) and to reduction due to deduction of applicable fees and charges.

Investors that hold GDSs through Euroclear France SA may elect to receive dividend payments in euros by informing the French paying agent of such election through the Euroclear system in accordance with its procedures.

12 LITIGATION

Information regarding litigation in which any member of the Group is or has been involved is disclosed in the section "Business – Litigation" on pages 153 to 161 of the HK Prospectus.

Information regarding litigation involving the Company and its substantial shareholders is disclosed in the section "Substantial Shareholders – Litigation Involving Certain Beneficial Owners" on pages 295 to 299 of the HK Prospectus.

13 TERMS AND CONDITIONS OF THE GDSs

The following terms and conditions (subject to completion and amendment and excepting sentences in italics) will apply to the GDSs, and will be endorsed on each GDS certificate:

The GDSs represented by certificates in definitive registered form are each issued in respect of 20 Shares in the Company pursuant to and subject to the Deposit Agreement dated January 21, 2010, and made between the Company and the Depositary for the "Regulation S Facility" and for the "Rule 144A Facility". Pursuant to the provisions of the Deposit Agreement, the Depositary has appointed The Hongkong and Shanghai Banking Corporation Limited as Custodian (the "Custodian") to receive and hold on its behalf any relevant documentation respecting certain Shares (the "Deposited Shares") and all rights, interests and other

securities, property and cash deposited with the Custodian which are attributable to the Deposited Shares (together with the Deposited Shares, the "Deposited Property"). The Depositary shall hold Deposited Property for the benefit of the Holders (as defined below) as bare trustee in proportion to their holdings of GDSs. In these terms and conditions (the "Conditions"), references to the "Depositary" are to The Bank of New York Mellon and/or any other depositary which may from time to time be appointed under the Deposit Agreement, references to the "Custodian" are to The Hongkong and Shanghai Banking Corporation Limited. or any other custodian from time to time appointed under the Deposit Agreement and references to the "Main Office" mean, in relation to the relevant Custodian, its head office in Hong Kong or such other location of the head office of the Custodian as may be designated by the Custodian with the approval of the Depositary or the head office of any other custodian from time to time appointed under the Deposit Agreement.

The GDSs will upon issue be represented by interests in a Regulation S Master GDS, evidencing Regulation S GDSs, and by interests in a Rule 144A Master GDS, evidencing Rule 144A GDSs (as each such term is defined in the Deposit Agreement). The GDSs are exchangeable in the circumstances set out in Section 14 "Summary of Provisions Relating to the GDSs while in Master Form" for a certificate in definitive registered form in respect of GDSs representing the interest of the holder in the Master GDS.

References in these Conditions to the "Holder" of any GDS shall mean the person or persons registered on the books of the Depositary maintained for such purpose (the "Register") as holder. These Conditions include summaries of, and are subject to, the detailed provisions of the Deposit Agreement, which includes the forms of the certificates in respect of the GDSs. Copies of the Deposit Agreement are available for inspection at the specified office of the Depositary and each Agent (as defined in Condition 17) and at the Main Office of the Custodian. Terms used in these Conditions and not defined herein but which are defined in the Deposit Agreement have the meanings ascribed to them in the Deposit Agreement. **Holders of GDSs are not party to the Deposit Agreement and thus, under English Law, have no contractual rights against, or obligations to, the Company or Depositary. However, the Deed Poll executed by the Company in favour of the Holders provides that, if the Company fails to perform the obligations imposed on it by certain specified provisions of the Deposit Agreement, any Holder may enforce the relevant provisions of the Deposit Agreement as if it were a party to the Deposit Agreement and was the "Depositary" in respect of that number of Deposited Shares to which the GDSs of which he is the Holder relate. The Depositary is under no duty to enforce any of the provisions of the Deposit Agreement on behalf of any Holder of a GDS or any other person.**

1 Withdrawal of Deposited Property and Further Issues of GDSs

1.1 Any Holder may request withdrawal of, and the Depositary shall thereupon relinquish, the Deposited Property attributable to any GDS upon production of such evidence of the entitlement of the Holder to the relative GDS as the Depositary may reasonably require, at the specified office of the Depositary or any Agent accompanied by:

(i) a duly executed order (in a form approved by the Depositary) requesting the Depositary to cause the Deposited Property being withdrawn to be delivered at the Main Office of the Custodian, or (at the request, risk and expense of the Holder, and only if permitted by applicable law from time to time) at the specified office located in New York, London or Jersey of the Depositary or any Agent, or to the order in writing of, the person or persons designated in such order;

(ii) the payment of such fees, taxes, duties, charges, costs, expenses and governmental charges as may be required under these Conditions or the Deposit Agreement;

(iii) the surrender (if appropriate) of GDS certificates in definitive registered form properly endorsed in blank or accompanied by proper instruments of transfer satisfactory to the Depositary to which the Deposited Property being withdrawn is attributable; and

(iv) the delivery to the Depositary of a duly executed and completed certificate substantially in the form set out in Schedule 4, Part B to the Deposit Agreement (or as amended by the Depositary in accordance with Clause 3.10 of the Deposit Agreement and Condition 1.8), if Deposited Property is to be withdrawn or delivered in respect of surrendered Rule 144A GDSs.

1.2 Upon production of such documentation and the making of such payment as aforesaid for withdrawal of the Deposited Property in accordance with Condition 1.1, the Depositary will direct the Custodian, by tested telex, facsimile or SWIFT message, within a reasonable time after receiving such direction from such Holder, to deliver at its Main Office to, or to the order in writing of, the person or persons designated in the accompanying order:

(i) a certificate (if any) for, or other appropriate instrument of title (if any) to or evidence of a book-entry transfer in respect of the relevant Deposited Shares, registered in the name of the Depositary or its nominee and accompanied by such instruments of transfer in blank or to the person or persons specified in the order for withdrawal and such other documents, if any, as are required by law for the transfer thereof; and

(ii) all other property forming part of the Deposited Property attributable to such GDS, accompanied, if required by law, by one or more duly executed endorsements or instruments of transfer in respect thereof; provided however that the Depositary may make delivery at its specified office in New York of any Deposited Property which is in the form of cash;

PROVIDED THAT the Depositary (at the request, risk and expense of any Holder so surrendering a GDS):

(a) will direct the Custodian to deliver the certificates for, or other instruments of title to, or book-entry transfer in respect of, the relevant Deposited Shares and any document relative thereto and any other documents referred to in sub-paragraphs 1.2(i) and (ii) of this Condition (together with any other property forming part of the Deposited Property which may be held by the Custodian or its agent and is attributable to such Deposited Shares); and/or

(b) will deliver any other property forming part of the Deposited Property which may be held by the Depositary and is attributable to such GDS (accompanied, if required by law, by one or more duly executed endorsements or instruments of transfer in respect thereof);

in each case to the specified office located in New York or London of the Depositary (if permitted by applicable law from time to time) or at the specified office in Jersey of any Agent as designated by the surrendering Holder in the order accompanying such GDS.

1.3 Delivery by the Depositary, any Agent and the Custodian of all certificates, instruments, dividends or other property forming part of the Deposited Property as specified in this Condition will be made subject to any laws or regulations applicable thereto.

1.4 The Depositary may, in accordance with the terms of the Deposit Agreement and upon delivery of a duly executed order (in a form reasonably approved by the Depositary) and a duly executed certificate substantially in the form of (a) Schedule 3, Part A of the Deposit Agreement (which is described in the following paragraph) (or as amended by the Depositary in accordance with Clause 3.10 of the Deposit Agreement and Condition 1.8) by or on behalf of any investor who is to become the beneficial owner of the Regulation S GDSs or (b) Schedule 4, Part A of the Deposit Agreement (which is described in the second following paragraph) (or as amended by the Depositary in accordance with Clause 3.10 of the Deposit Agreement and Condition 1.8) by or on behalf of any investor who is to become the beneficial owner of Rule 144A GDSs from time to time execute and deliver further GDSs having the same terms and conditions as the GDSs which are then outstanding in all respects (or the same in all respects except for the first dividend payment on the Shares represented by such further GDSs) and, subject to the terms of the Deposit Agreement, the Depositary shall accept for deposit any further Shares in connection therewith, so that such further GDSs shall form a single series with the already outstanding GDSs. References in these Conditions to the GDSs include (unless the context requires otherwise) any further GDSs issued pursuant to this Condition and forming a single series with the already outstanding GDSs.

The certificate to be provided in the form of Schedule 3, Part A, of the Deposit Agreement certifies, among other things, that the person providing such certificate is not a US person (as defined in Regulation S under the U.S. Securities Act, is located outside the United States and will comply with the restrictions on transfer set forth in such certificate.

The certificate to be provided in the form of Schedule 4, Part A, of the Deposit Agreement certifies, among other things that the person providing such certificate is a qualified institutional buyer (as defined in Rule 144A under the U.S. Securities Act ("QIB")) or is acting for the account of another person and such person is a QIB and, in either case, will comply with the restrictions on transfer set forth in such certificate.

1.5 Any further GDSs issued pursuant to Condition 1.4 which (i) represent Shares which have rights (whether dividend rights or otherwise) which are different from the rights attaching to the Shares represented by the outstanding GDSs, or (ii) are otherwise not fungible (or are to be treated as not fungible) with the outstanding GDSs, will be represented by a GDS certificate in definitive registered form or a separate temporary Regulation S master GDS and/or temporary Rule 144A master GDS. Upon becoming fungible with outstanding GDSs, such further GDSs shall be evidenced by the Regulation S Master GDS and/or the Rule 144A Master GDS (by increasing the total number of GDSs evidenced by the relevant Regulation S Master GDS or Rule 144A Master GDS by the number of such further GDSs, as applicable).

1.6 The Depositary may issue GDSs against rights to receive Shares from the Company (or any agent of the Company recording Share ownership). No such issue of GDSs will be deemed a "Pre-Release" as defined in Condition 1.7.

1.7 Unless requested in writing by the Company to cease doing so, and notwithstanding the provisions of Condition 1.4, the Depositary may execute and deliver GDSs or issue interests in the Regulation S Master GDS or the Rule 144A Master GDS, as the case may be, prior to the receipt of Shares (a "Pre-Release"). The Depositary may, pursuant to Condition 1.1, deliver Shares upon the receipt and cancellation of GDSs, which have been Pre-Released, whether or not such cancellation is prior to the termination of such Pre-Release or the Depositary knows that such GDS has been Pre-Released. The Depositary may receive GDSs in lieu of Shares in satisfaction of a Pre-Release. Each Pre-Release will be (a) preceded or accompanied by a written representation and agreement from the person to whom GDSs or Deposited Property are to be delivered (the "Pre-Releasee") that such person, or its customer,

(i) owns or represents the owner of the corresponding Deposited Property or GDSs to be remitted (as the case may be), (ii) assigns all beneficial right, title and interest in such Deposited Property or GDSs (as the case may be) to the Depositary in its capacity as such and for the benefit of the Holders, and (iii) will not take any action with respect to such GDSs or Deposited Property (as the case may be) that is inconsistent with the transfer of beneficial ownership (including without the consent of the Depositary, disposing of such GDSs or Deposited Property, as the case may be), other than in satisfaction of such Pre-Release, (b) at all times fully collateralised with cash or such other collateral as the Depositary determines in good faith will provide substantially similar liquidity and security, (c) terminable by the Depositary on not more than five (5) business days' notice, and (d) subject to such further indemnities and credit regulations as the Depositary deems appropriate. The number of GDSs, which are outstanding at any time as a result of Pre-Release will not normally represent more than thirty per cent of the total number of GDSs then outstanding; provided, however, that the Depositary reserves the right to change or disregard such limit from time to time as it deems appropriate and may, with the prior written consent of the Company, change such limit for the purpose of general application. The Depositary will also set dollar limits with respect to Pre-Release transactions hereunder with any particular Pre-Releasee on a case by case basis as the Depositary deems appropriate. The collateral referred to in sub-paragraph (b) above shall be held by the Depositary as security for the performance of the Pre-Releasee's obligations in connection herewith, including the Pre-Releasee's obligation to deliver Shares and/or other securities or GDSs upon termination of a Pre-Release transaction anticipated hereunder (and shall not, for the avoidance of doubt, constitute Deposited Property hereunder).

The Depositary may retain for its own account any compensation received by it in connection with the foregoing including, without limitation, earnings on the collateral.

The person to whom any Pre-Release of Rule 144A GDSs or Rule 144A Shares is to be made pursuant to this Condition 1.7 shall be required to deliver to the Depositary a duly executed and completed certificate substantially in the form set out in Schedule 4 Part A of the Deposit Agreement (or as amended by the Depositary in accordance with Clause 3.10 of the Deposit Agreement and Condition 1.8). The person to whom any Pre-Release of Regulation S GDSs or Regulation S Shares is to be made pursuant to this paragraph shall be required to deliver to the Depositary a duly executed and completed certificate substantially in the form set out in Schedule 3 Part A of the Deposit Agreement (or as amended by the Depositary in accordance with Clause 3.10 of the Deposit Agreement and Condition 1.8).

1.8 The Depositary may make such amendments to the certificates contained in the Deposit Agreement in Schedule 3 Part A and in Schedule 4 Parts A and B as it may determine are required in order for the Depositary to perform its duties under the Deposit Agreement, or to comply with any applicable law or with the rules and regulations of any securities exchange, market or automated quotation system upon which the GDSs may be listed or traded, or to comply with the rules or requirements of any book entry system by which the GDSs may be transferred, or to confirm compliance with any special limitations or restrictions to which any particular GDSs are subject.

1.9 Notwithstanding any other provisions of the Deposit Agreement or the Conditions, the Depositary may, with (to the extent reasonably practicable) prior notice to the Company and the Holders, cancel a number of the GDSs then outstanding, sell (either by public or private sale and otherwise at its discretion, subject to all applicable laws and regulations) the Deposited Property formerly represented by such GDSs and distribute the net proceeds of such sale as a cash distribution pursuant to Condition 4 to the Holders entitled thereto, and thereby reduce the Depositary's holdings of any class of Deposited Property below an amount that the Depositary determines to be necessary or advisable, if (i) the Depositary or its agent

receives any notice from any governmental or regulatory authority that the existence or operation of a Facility or the holding by the Depositary (or its Custodian or any of their respective nominees) of the Deposited Property violates applicable law or regulation, or that the Depositary (or its Custodian or any of their respective nominees) is required to make any filing or obtain any consent, approval or license to operate that Facility or to own or exercise any rights with respect to the Deposited Shares or other Deposited Property (other than such filings, consents, approvals or licences which the Depositary in its reasonable discretion considers to be of a routine administrative nature required in the ordinary course of business) or (ii) the Depositary or the Custodian receives advice from legal counsel that the Depositary (or the Custodian or any of their respective nominees) reasonably could be subject to criminal or civil or other liabilities as a result of the existence or operation of the Facility or the holding or exercise by the Depositary (or the Custodian or any of their respective nominees) of any rights with respect to the Deposited Shares or other Deposited Property. If the Depositary cancels GDSs and sells Deposited Property under the preceding sentence, the Depositary shall allocate the cancelled GDSs converted under the preceding sentence and the net proceeds of the sale of the number of Deposited Property previously represented thereby, among the Holders pro-rata to their respective holdings of GDSs immediately prior to the cancellation, except that the allocations may be adjusted by the Depositary, in its sole discretion, so that no fraction of a cancelled GDS is allocated to any Holder. Any payment pursuant to this Condition in connection with GDSs represented by a Master GDS shall be made according to the usual practice between the Depositary and the relevant settlement system. Any payment pursuant to this Condition in connection with a GDS in definitive registered form shall be made to the relevant Holder only after surrender to the Depositary of the GDS certificate by such Holder for cancellation of the relevant number of GDSs.

2. Suspension of Issue of GDSs and of Withdrawal of Deposited Property

The Depositary shall be entitled, at its reasonable discretion, at such times as it shall determine, to suspend the issue or transfer of GDSs (and the deposit of Shares) generally or in respect of particular Shares. In particular, to the extent that it is in its opinion practicable for it to do so, the Depositary will refuse to accept Shares for deposit, to execute and deliver GDSs or to register transfers of GDSs if it has been notified by the Company in writing that the Deposited Shares or GDSs or any global depositary shares representing Shares are listed on a U.S. Securities Exchange or quoted on a U.S. automated inter dealer quotation system unless accompanied by evidence satisfactory to the Depositary that any such Shares are eligible for resale pursuant to Rule 144A under the U.S. Securities Act. Further, the Depositary may suspend the withdrawal of Deposited Property during any period when the Register, or the Share Register is closed or, generally or in one or more localities, suspend the withdrawal of Deposited Property or deposit of Shares if deemed necessary or desirable or advisable by the Depositary in good faith at any time or from time to time, in order to comply with any applicable law or governmental or stock exchange regulations or any provision of the Deposit Agreement or for any other reason. The Depositary shall (unless otherwise notified by the Company) restrict the withdrawal of Deposited Shares where the Company notifies the Depositary in writing that such withdrawal would result in ownership of Shares exceeding any limit under any applicable law, government resolution or the Company's constitutive documents or would otherwise violate any applicable laws.

3. Transfer and Ownership

Each GDS represents 20 Shares. The GDSs trade in book-entry form on Euronext Paris and PORTAL. Title to the GDSs passes by registration in the Register and accordingly, transfer of title to a GDS is effective only upon such registration. The Depositary will refuse to accept for transfer any GDSs if it reasonably believes that such transfer would result in violation of

any applicable laws. The Holder of any GDS will (except as otherwise required by law) be treated by the Depositary and the Company as its beneficial owner for all purposes (whether or not any payment or other distribution in respect of such GDS is overdue and regardless of any notice of ownership, trust or any interest in it or any writing on, or theft or loss of any certificate issued in respect of it) and no person will be liable for so treating the Holder.

Interests in Rule 144A GDSs represented by the Rule 144A Master GDS may be transferred to a person whose interest in such Rule 144A GDSs is subsequently represented by the Regulation S Master GDS only upon receipt by the Depositary of written certifications (in the forms provided in the Deposit Agreement) from the transferor and the transferee to the effect that such transfer is being made in accordance with Rule 903 or Rule 904 of Regulation S under the U.S. Securities Act. There shall be no transfer of Regulation S GDSs by an owner thereof to a qualified institutional buyer as defined in Rule 144A under the U.S. Securities Act (each a "QIB") except as aforesaid and unless such owner (i) withdraws Regulation S Shares from the Regulation S Facility in accordance with Clause 3.5 of the Deposit Agreement and (ii) instructs the Depositary to deliver the Shares so withdrawn to the account of the Custodian to be deposited into the Rule 144A Facility for issuance thereunder of Rule 144A GDSs to, or for the account of, such QIB. Issuance of such Rule 144A GDSs shall be subject to the terms and conditions of the Deposit Agreement, including, with respect to the deposit of Shares and the issuance of Rule 144A GDSs, delivery of the duly executed and completed written certificate and agreement required under the Deposit Agreement by or on behalf of each person who will be the beneficial owner of such Rule 144A GDSs certifying that such person is a QIB and agreeing that it will comply with the restrictions on transfer set forth therein and to payment of the fees, charges and taxes provided therein.

4. Cash Distributions

Whenever the Depositary shall receive from the Company any cash dividend or other cash distribution on or in respect of the Deposited Shares (including any amounts received in the liquidation of the Company) or otherwise in connection with the Deposited Property, in any currency other than US Dollars, the Depositary shall, as soon as practicable, convert the same into US Dollars in accordance with Condition 8. The Depositary shall, if practicable in the opinion of the Depositary, give notice to the Holders of its receipt of such payment in accordance with Condition 23, specifying the amount per Deposited Share payable in respect of such dividend or distribution and the earliest date, determined by the Depositary, for transmission of such payment to Holders and shall as soon as practicable distribute any such amounts to the Holders in proportion to the number of Deposited Shares represented by the GDSs so held by them respectively, subject to and in accordance with the provisions of Conditions 9 and 11; PROVIDED THAT:-

(a) in the event that the Depositary is aware that any Deposited Shares are not entitled, by reason of the date of issue or transfer or otherwise, to such full proportionate amount, the amount so distributed to the relative Holders shall be adjusted accordingly; and

(b) the Depositary will distribute only such amounts of cash dividends and other distributions as may be distributed without attributing to any GDS a fraction of the lowest integral unit of currency in which the distribution is made by the Depositary, and any balance remaining shall be retained by the Depositary beneficially as an additional fee under Condition 16.1(iv).

5. Distributions of Shares

Whenever the Depositary shall receive from the Company any distribution in respect of Deposited Shares which consists of a dividend or free distribution of Shares, the Depositary shall cause to be distributed to the Holders entitled thereto, in proportion to the number of Deposited Shares represented by the GDSs held by them respectively, additional GDSs representing an aggregate number of Shares received pursuant to such distribution. Such additional GDSs shall be distributed by an increase in the number of GDSs represented by the Master GDSs or by an issue of certificates in definitive registered form in respect of GDSs, according to the manner in which the Holders hold their GDSs; PROVIDED THAT, if and in so far as the Depositary deems any such distribution to all or any Holders not to be reasonably practicable (including, without limitation, due to the fractions which would otherwise result or to any requirement that the Company, the Custodian or the Depositary withhold an amount on account of taxes or other governmental charges) or to be unlawful, the Depositary shall (either by public or private sale and otherwise at its discretion, subject to all applicable laws and regulations) sell such Shares so received and distribute the net proceeds of such sale as a cash distribution pursuant to Condition 4 to the Holders entitled thereto.

6. Distributions other than in Cash or Shares

Whenever the Depositary shall receive from the Company any dividend or distribution in securities (other than Shares) or in other property (other than cash) on or in respect of the Deposited Property, the Depositary shall distribute or cause to be distributed such securities or other property to the Holders entitled thereto, in proportion to the number of Deposited Shares represented by the GDSs held by them respectively, in any manner that the Depositary may deem equitable and practicable for effecting such distribution; PROVIDED THAT, if and in so far as the Depositary deems any such distribution to all or any Holders not to be reasonably practicable (including, without limitation, due to the fractions which would otherwise result or to any requirement that the Company, the Custodian or the Depositary withhold an amount on account of taxes or other governmental charges) or to be unlawful, the Depositary shall deal with the securities or property so received, or any part thereof, in such way as the Depositary may determine to be equitable and practicable, including, without limitation, by way of sale (either by public or private sale and otherwise at its discretion, subject to all applicable laws and regulations) and shall (in the case of a sale) distribute the resulting net proceeds as a cash distribution pursuant to Condition 4 to the Holders entitled thereto.

7. Rights Issues

If and whenever the Company announces its intention to make any offer or invitation to the holders of Shares to subscribe for or to acquire Shares, securities or other assets by way of rights, the Depositary shall as soon as practicable give notice to the Holders, in accordance with Condition 23, of such offer or invitation, specifying, if applicable, the earliest date established for acceptance thereof, the last date established for acceptance thereof and the manner by which and time during which Holders may request the Depositary to exercise such rights as provided below or, if such be the case, specifying details of how the Depositary proposes to distribute the rights or the proceeds of any sale thereof. The Depositary will deal with such rights in the manner described below:

(i) if and to the extent that the Depositary shall, at its discretion, deem it to be lawful and reasonably practicable, the Depositary shall make arrangements whereby the Holders may, upon payment of the subscription price in US Dollars or other relevant currency together with such fees, taxes, duties, charges, costs and expenses as may be required under the Deposit Agreement and completion of such undertakings, declarations, certifications and other documents as the Depositary may reasonably require, request

the Depositary to exercise such rights on their behalf with respect to the Deposited Shares and to distribute the Shares, securities or other assets so subscribed or acquired to the Holders entitled thereto by an increase in the numbers of GDSs represented by the Master GDSs or an issue of certificates in definitive registered form in respect of GDSs, according to the manner in which the Holders hold their GDSs; or

(ii) if and to the extent that the Depositary shall at its discretion, deem it to be lawful and reasonably practicable, the Depositary will distribute such rights to the Holders entitled thereto in such manner as the Depositary may at its discretion determine; or

(iii) if and to the extent that the Depositary deems any such arrangement and distribution as is referred to in paragraphs (i) and (ii) above to all or any Holders not to be lawful and reasonably practicable (including, without limitation, due to the fractions which would otherwise result or to any requirement that the Company, the Custodian or the Depositary withhold an amount on account of taxes or other governmental charges) or to be unlawful, the Depositary (a) will, PROVIDED THAT Holders have not taken up rights through the Depositary as provided in (i) above, sell such rights (either by public or private sale and otherwise at its discretion subject to all applicable laws and regulations) or (b) may, if such rights are not transferable, in its discretion, arrange for such rights to be exercised and the resulting Shares or securities sold and, in each case, distribute the net proceeds of such sale as a cash distribution pursuant to Condition 4 to the Holders entitled thereto.

(a) Notwithstanding the foregoing, in the event that the Depositary offers rights pursuant to Condition 7(i) (the "Primary GDS Rights Offering"), if authorised by the Company to do so, the Depositary may, in its discretion, make arrangements whereby in addition to instructions given by a Holder to the Depositary to exercise rights on its behalf pursuant to Condition 7(i), such Holder is permitted to instruct the Depositary to subscribe on its behalf for additional rights which are not attributable to the Deposited Shares represented by such Holder's GDSs ("Additional GDS Rights") if at the date and time specified by the Depositary for the conclusion of the Primary GDS Rights Offering (the "Instruction Date") instructions to exercise rights have not been received by the Depositary from the Holders in respect of all their initial entitlements. Any Holder's instructions to subscribe for such Additional GDS Rights ("Additional GDS Rights Requests") shall specify the maximum number of Additional GDS Rights that such Holder is prepared to accept (the "Maximum Additional Subscription") and must be received by the Depositary by the Instruction Date. If by the Instruction Date any rights offered in the Primary GDS Rights Offering have not been subscribed by the Holders initially entitled thereto ("Unsubscribed Rights"), subject to Condition 7(iv)(c) and receipt of the relevant subscription price in US Dollars or other relevant currency, together with such fees, taxes, duties, charges, costs and expenses as it may deem necessary, the Depositary shall make arrangements for the allocation and distribution of Additional GDS Rights in accordance with Condition 7(iv)(b).

(b) Holders submitting Additional GDS Rights Requests shall be bound to accept the Maximum Additional Subscription specified in such Additional GDS Rights Request but the Depositary shall not be bound to arrange for a Holder to receive the Maximum Additional Subscription so specified but may make arrangements whereby the Unsubscribed Rights are allocated pro rata on the basis of the extent of the Maximum Additional Subscription specified in each Holder's Additional GDS Rights Request.

(c) In order to proceed in the manner contemplated in this Condition 7(iv), the Depositary shall be entitled to receive such opinions from Jersey counsel and US counsel as in its discretion it deems necessary which opinions shall be in a form and provided by counsel satisfactory to the Depositary and at the expense of the Company and may be requested in addition to any other opinions and/or certifications which the Depositary shall be entitled to receive under the Deposit Agreement and these Conditions. For the avoidance of doubt, save as provided in these Conditions and the Deposit Agreement, the Depositary shall have no liability to the Company or any Holder in respect of its actions or omissions to act under this Condition 7(iv) and, in particular, the Depositary will not be regarded as being negligent, acting in bad faith, or in wilful default if it elects not to make the arrangements referred to in Condition 7(iv)(a).

The Company has agreed in the Deposit Agreement that it will, unless prohibited by applicable law or regulation, give its consent to, and if requested use all reasonable endeavours (subject to the next paragraph) to facilitate, any such distribution, sale or subscription by the Depositary or the Holders, as the case may be, pursuant to Conditions 4, 5, 6, 7 or 10 (including the obtaining of legal opinions from counsel reasonably satisfactory to the Depositary concerning such matters as the Depositary may reasonably specify).

If the Company notifies the Depositary that registration is required in any jurisdiction under any applicable law of the rights, securities or other property to be distributed under Condition 4, 5, 6, 7 or 10 or the securities to which such rights relate in order for the Company to offer such rights or distribute such securities or other property to the Holders or owners of GDSs and to sell the securities corresponding to such rights, the Depositary will not offer such rights or distribute such securities or other property to the Holders or sell such securities unless and until the Company procures the receipt by the Depositary of an opinion from counsel reasonably satisfactory to the Depositary that a registration statement is in effect or that the offering and sale of such rights or securities to such Holders or owners of GDSs are exempt from registration under the provisions of such law. Neither the Company nor the Depositary shall be liable to register such rights, securities or other property or the securities to which such rights relate and they shall not be liable for any losses, damages or expenses resulting from any failure to do so.

If at the time of the offering of any rights, at its discretion, the Depositary shall be satisfied that it is not lawful or practicable (for reasons outside its control) to dispose of the rights in any manner provided in paragraphs (i), (ii), (iii) and (iv) above, the Depositary shall permit the rights to lapse. The Depositary will not be responsible for any failure to determine that it may be lawful or feasible to make such rights available to Holders or owners of GDSs in general or to any Holder or owner of a GDS or Holders or owners of GDSs in particular.

8. Conversion of Foreign Currency

Whenever the Depositary shall receive any currency other than US Dollars by way of dividend or other distribution or as the net proceeds from the sale of securities, other property or rights, and if at the time of the receipt thereof the currency so received can in the judgement of the Depositary be converted on a reasonable basis into US Dollars and distributed to the Holders entitled thereto, the Depositary shall as soon as practicable convert or cause to be converted, by sale or in any other manner that it may reasonably determine, the currency so received into US Dollars. If such conversion or distribution can be effected only with the approval or licence of any government or agency thereof, the Depositary may make reasonable efforts to apply, or procure that an application be made, for such approval or licence, if any, as it may deem desirable. If at any time the Depositary shall determine that in

its judgement any currency is not convertible on a reasonable basis into US Dollars and distributable to the Holders entitled thereto, or if any approval or licence of any government or agency thereof which is required for such conversion is denied or, in the opinion of the Depositary, is not obtainable, or if any such approval or licence is not obtained within a reasonable period as determined by the Depositary, the Depositary may distribute such other currency received by it (or an appropriate document evidencing the right to receive such other currency) to the Holders entitled thereto to the extent permitted under applicable law, or the Depositary may in its discretion hold such other currency without liability for interest for the benefit of the Holders entitled thereto. If any conversion of any such currency can be effected in whole or in part for distribution to some (but not all) Holders entitled thereto, the Depositary may at its discretion make such conversion and distribution in US Dollars to the extent possible to the Holders entitled thereto and may distribute the balance of such other currency received by the Depositary to, or hold such balance for the account of, the Holders entitled thereto, and notify the Holders accordingly.

9. Distribution of any Payments

9.1 Any distribution of cash under Condition 4, 5, 6, 7 or 10 will be made by the Depositary to Holders on the record date established by the Depositary for that purpose (such date to be as close to the record date set by the Company as is reasonably practicable) and, if practicable in the opinion of the Depositary, notice shall be given promptly to Holders in accordance with Condition 23, in each case subject to any laws or regulations applicable thereto and (subject to the provisions of Condition 8) distributions will be made in US Dollars by cheque drawn upon a bank in New York or, in the case of the Master GDSs, according to usual practice between the Depositary and Clearstream, Euroclear, Euroclear France S.A. or DTC, as the case may be. The Depositary or the Agent, as the case may be, may deduct and retain from all moneys due in respect of such GDS in accordance with the Deposit Agreement all fees, taxes, duties, charges, costs and expenses which may become or have become payable under the Deposit Agreement or under applicable law or regulation in respect of such GDS or the relative Deposited Property.

9.2 Delivery of any securities or other property or rights other than cash shall be made as soon as practicable to the Holders on the record date established by the Depositary for that purpose (such date to be as close to the record date set by the Company as is reasonably practicable), subject to any laws or regulations applicable thereto. If any distribution made by the Company with respect to the Deposited Property and received by the Depositary shall remain unclaimed at the end of three years from the first date upon which such distribution is made available to Holders in accordance with the Deposit Agreement, all rights of the Holders to such distribution or the proceeds of the sale thereof shall be extinguished and the Depositary shall (except for any distribution upon the liquidation of the Company when the Depositary shall retain the same) return the same to the Company for its own use and benefit subject, in all cases, to the provisions of applicable law or regulation.

10. Capital Reorganisation

Upon any sub-division, consolidation or other reclassification of Deposited Shares or any other part of the Deposited Property or upon any reduction of capital, or upon any reorganisation, merger or consolidation of the Company or to which it is a party (except where the Company is the continuing corporation), the Depositary shall as soon as practicable give notice of such event to the Holders and at its discretion may treat such event as a distribution and comply with the relevant provisions of Conditions 4, 5, 6 and 7 with respect thereto, or may execute and deliver additional GDSs in respect of Shares or may require the exchange of existing GDSs for new GDSs which reflect the effect of such change.

11. Withholding Taxes and Applicable Laws

11.1 Payments to Holders of dividends or other distributions on or in respect of the Deposited Shares will be subject to deduction of Jersey, Hong Kong and other withholding taxes, if any, at the applicable rates.

11.2 If any governmental or administrative authorisation, consent, registration or permit or any report to any governmental or administrative authority is required under any applicable law in Jersey or Hong Kong in order for the Depositary to receive from the Company Shares or other securities to be deposited under these Conditions, or in order for Shares, other securities or other property to be distributed under Condition 4, 5, 6 or 10 or to be subscribed under Condition 7, or to offer any rights or sell any securities represented by such rights relevant to any Deposited Shares, the Company has agreed to apply for such authorisation, consent, registration or permit or file such report on behalf of the Holders within the time required under such laws. In this connection, the Company has undertaken in the Deposit Agreement to take such action in obtaining or filing the same to the extent that doing so is reasonably practicable and does not involve unreasonable expense to the Company. The Depositary shall not be obliged to distribute GDSs representing such Shares, Shares, other securities or other property deposited under these Conditions or make any offer of any such rights or sell any securities corresponding to any such rights with respect to which (as notified to the Depositary by the Company) such authorisation, consent, registration or permit or such report has not been obtained or filed, as the case may be, and shall have no duties to obtain any such authorisation, consent, registration or permit, or to file any such report.

12. Voting Rights

12.1 Holders will have the right to instruct the Depositary with regard to the exercise of voting rights with respect to the Deposited Shares subject to and in accordance with Condition 12. The Company has agreed to notify the Depositary of any resolution to be proposed at a General Meeting of the Company and the Depositary will vote or cause to be voted the Deposited Shares in the manner set out in this Condition 12.

The Company has agreed with the Depositary that it will promptly provide to the Depositary sufficient copies, as the Depositary may reasonably request, of notices of meetings of the shareholders of the Company and the agenda therefor as well as written requests containing voting instructions by which each Holder may give instructions to the Depositary to vote for or against each and any resolution specified in the agenda for the meeting, which the Depositary shall send to any person who is a Holder on the record date established by the Depositary for that purpose (which shall be the same as the corresponding record date set by the Company or as near as practicable thereto) as soon as practicable after receipt of the same by the Depositary in accordance with Condition 23. The Company has also agreed to provide to the Depositary appropriate proxy forms to enable the Depositary to appoint a representative to attend the relevant meeting and vote on behalf of the Depositary.

12.2 In order for each voting instruction to be valid, the voting instructions form must be completed and duly signed by the respective Holder (or in the case of instructions received from the clearing systems should be received by authenticated SWIFT message) in accordance with the written request containing voting instructions and returned to the Depositary by such record date as the Depositary may specify.

12.3 The Depositary will exercise or cause to be exercised the voting rights in respect of the Deposited Shares so that a portion of the Deposited Shares will be voted for and a portion of

the Deposited Shares will be voted against any resolution specified in the agenda for the relevant meeting in accordance with the voting instructions it has received.

12.4 If the Depositary is advised in the opinion referred to in Condition 12.7 below that it is not permitted by Jersey law to exercise the voting rights in respect of the Deposited Shares differently (so that a portion of the Deposited Shares may be voted for a resolution and a portion of the Deposited Shares may be voted against a resolution) the Depositary shall, if the opinion referred to in Condition 12.7 below confirms it to be permissible under Jersey law, calculate from the voting instructions that it has received from all Holders (x) the aggregate number of votes in favour of a particular resolution and (y) the aggregate number of votes opposed to such resolution and cast or cause to be cast in favour of or opposed to such resolution the number of votes representing the net positive difference between such aggregate number of votes in favour of such resolution and such aggregate number of votes opposed to such resolution.

12.5 The Depositary will only endeavour to vote or cause to be voted the votes attaching to Deposited Shares in respect of which voting instructions have been received, except that if no voting instructions are received by the Depositary (either because no voting instructions are returned to the Depositary or because the voting instructions are incomplete, illegible or unclear) from a Holder with respect to any or all of the Deposited Shares represented by such Holder's GDSs on or before the record date specified by the Depository, such Holder shall be deemed to have instructed the Depositary to give a discretionary proxy to a person designated by the Company with respect to such Deposited Shares, and the Depositary shall give a discretionary proxy to a person designated by the Company to vote such Deposited Shares, PROVIDED THAT no such instruction shall be deemed given, and no such discretionary proxy shall be given, with respect to any matter as to which the Company informs the Depositary (and the Company agrees to provide such information in writing as soon as practicable) that (i) the Company does not wish such proxy to be given, or (ii) such matter materially and adversely affects the rights of holders of the Deposited Shares.

12.6 If the Depositary is advised in the opinion referred to in Condition 12.7 below that it is not permissible under Jersey law or the Depositary determines that it is not reasonably practicable to vote or cause to be voted such Deposited Shares in accordance with Conditions 12.3, 12.4 or 12.5, the Depositary shall not vote or cause to be voted such Deposited Shares.

12.7 Where the Depositary is to vote in respect of each and any resolution in the manner described in Conditions 12.3, 12.4 or 12.5 above the Depositary shall notify the Chairman of the Company and appoint a person designated by him as a representative of the Depositary to attend such meeting and vote the Deposited Shares in the manner required by this Condition 12. The Depositary is entitled to request the Company to provide to the Depositary, and where such request has been made shall not be required to take any action required by this Condition 12 unless it shall have received, an opinion from the Company's legal counsel (such counsel being reasonably acceptable to the Depositary) at the expense of the Company to the effect that such voting arrangement is valid and binding on Holders under Jersey law and the statutes of the Company and that the Depositary is permitted to exercise votes in accordance with the provisions of this Condition 12 but that in doing so the Depositary will not be deemed to be exercising voting discretion.

12.8 By continuing to hold GDSs, all Holders shall be deemed to have agreed to the provisions of this Condition 12 as it may be amended from time to time in order to comply with applicable Jersey law.

12.9 The Depositary shall not, and the Depositary shall ensure the Custodian and its nominee do not, vote or attempt to exercise the right to vote that attaches to the Deposited Shares other than in accordance with instructions given, or deemed given, in accordance with this Condition 12.

13. Recovery of Taxes, Duties and Other Charges, and Fees and Expenses due to the Depositary

The Depositary shall not be liable for any taxes, duties (including, without limitation, stamp duties and other similar duties), charges, costs or expenses which may become payable in respect of the Deposited Shares or other Deposited Property or the GDSs, whether under any present or future fiscal or other laws or regulations, and such part thereof as is proportionate or referable to a GDS (the "Charges") shall be payable by the Holder thereof to the Depositary at any time on request or may be deducted from any amount due or becoming due on such GDS in respect of any dividend or other distribution. The Depositary may sell (whether by way of public or private sale and otherwise at its discretion, subject to all applicable laws and regulations) for the account of the Holder an appropriate number of Deposited Shares or amount of other Deposited Property and will discharge out of the proceeds of such sale any Charges, and any fees or expenses due to the Depositary from the Holder pursuant to Condition 16, and subsequently pay any surplus to the Holder. Any request by the Depositary for the payment of Charges shall be made by giving notice pursuant to Condition 23.

14. Liability

14.1 In acting hereunder the Depositary shall have only those duties, obligations and responsibilities expressly specified in the Deposit Agreement and these Conditions and, other than holding the Deposited Property for the benefit of Holders as bare trustee, does not assume any relationship of trust for or with the Holders or owners of GDSs or any other person.

14.2 Neither the Depositary, the Custodian, the Company, any Agent, nor any of their agents, officers, directors or employees shall incur any liability to any other of them or to any Holder or owner of a GDS or any other person with an interest in any GDSs if, by reason of any provision of any present or future law or regulation of Jersey or any other country or of any relevant governmental authority, or by reason of the interpretation or application of any such present or future law or regulation or any change therein, or by reason of any other circumstances beyond their control, or in the case of the Depositary, the Custodian, any Agent or any of their agents, officers, directors or employees by reason of any provision, present or future, of the constitutive documents of the Company, any of them shall be prevented, delayed or forbidden from doing or performing any act or thing which the terms of the Deposit Agreement or these Conditions provide shall or may be done or performed; nor shall any of them incur any liability to any Holder or owner of GDSs or any other person with an interest in any GDSs by reason of any exercise of, or failure to exercise, any voting rights attached to the Deposited Shares or any of them or any other discretion or power provided for in the Deposit Agreement. Any such party may rely on, and shall be protected in acting upon, any written notice, request, direction or other document believed by it to be genuine and to have been duly signed or presented (including a translation which is made by a translator believed by it to be competent or which appears to be authentic).

14.3 Neither the Depositary nor any Agent shall be liable (except for its own wilful default, negligence or bad faith or that of its agents, officers, directors or employees) to the Company or any Holder or owner of GDSs or any other person by reason of having accepted as valid or

not having rejected any certificate for Shares or GDSs or any signature on any transfer or instruction purporting to be such and subsequently found to be forged or not authentic or for its failure to perform any obligations under the Deposit Agreement or these Conditions.

14.4 The Depositary and its agents may engage or be interested in any financial or other business transactions with the Company or any of its subsidiaries or affiliates, or in relation to the Deposited Property (including, without prejudice to the generality of the foregoing, the conversion of any part of the Deposited Property from one currency to another), may at any time hold or be interested in GDSs for its own account, and shall be entitled to charge and be paid all usual fees, commissions and other charges for business transacted and acts done by it as a bank, and not in the capacity of Depositary, in relation to matters arising under the Deposit Agreement (including, without prejudice to the generality of the foregoing, charges on the conversion of any part of the Deposited Property from one currency to another and on any sales of property) without accounting to Holders or any other person for any profit arising therefrom.

14.5 The Depositary shall use its reasonable endeavours to effect any such sale as is referred to or contemplated in Condition 5, 6, 7, 10, 13 or 21 or any such conversion as is referred to in Condition 8 in accordance with the Depositary's normal practices and procedures but shall have no liability (in the absence of its own wilful default, negligence or bad faith or that of its agents, officers, directors or employees) with respect to the terms of such sale or conversion or if such sale or conversion shall not be reasonably practicable.

14.6 The Depositary shall not be required or obliged to monitor, supervise or enforce the observance and performance by the Company of its obligations under or in connection with the Deposit Agreement or these Conditions.

14.7 The Depositary shall have no responsibility whatsoever to the Company, any Holders, or any owner of GDSs or any other person as regards any deficiency which might arise because the Depositary is subject to any tax in respect of the Deposited Property or any part thereof or any income therefrom or any proceeds thereof.

14.8 In connection with any proposed modification, waiver, authorisation or determination permitted by the terms of the Deposit Agreement, the Depositary shall not, except as otherwise expressly provided in Condition 22, be obliged to have regard to the consequence thereof for the Holders or the owners of GDSs or any other person.

14.9 Notwithstanding anything else contained in the Deposit Agreement or these Conditions, the Depositary may refrain from doing anything which could or might, in its opinion, be contrary to any law of any jurisdiction or any directive or regulation of any agency or state or which would or might otherwise render it liable to any person and the Depositary may do anything which is, in its opinion, necessary to comply with any such law, directive or regulation.

14.10 The Depositary may, in relation to the Deposit Agreement or these Conditions, act or take no action on the advice or opinion of, or any certificate or information obtained from, any lawyer, valuer, accountant, banker, broker, securities company or other expert whether obtained by the Company, the Depositary or otherwise, and shall not be responsible or liable for any loss or liability occasioned by so acting or refraining from acting or relying on information from persons presenting Shares for deposit or GDSs for surrender or requesting transfers thereof.

14.11 Any such advice, opinion, certificate or information (as discussed in Condition 14.10 above) may be sent or obtained by letter, telex, facsimile transmission, telegram or cable and the

Depositary shall not be liable for acting on any advice, opinion, certificate or information purported to be conveyed by any such letter, telex or facsimile transmission although (without the Depositary's knowledge) the same shall contain some error or shall not be authentic.

14.12 The Depositary may call for and shall be at liberty to accept as sufficient evidence of any fact or matter or the expediency of any transaction or thing, a certificate, letter or other communication, whether oral or written, signed or otherwise communicated on behalf of the Company by a director of the Company or by a person duly authorised by a director of the Company or such other certificate from persons specified in Condition 14.10 above which the Depositary considers appropriate and the Depositary shall not be bound in any such case to call for further evidence or be responsible for any loss or liability that may be occasioned by the Depositary acting on such certificate.

14.13 The Depositary shall have no obligation under the Deposit Agreement except to perform its obligations as are specifically set out therein without wilful default, negligence or bad faith.

14.14 The Depositary may delegate by power of attorney or otherwise to any person or persons or fluctuating body of persons, whether being a joint Depositary of the Deposit Agreement or not and not being a person to whom the Company may reasonably object, all or any of the powers, authorities and discretions vested in the Depositary by the Deposit Agreement and such delegation may be made upon such terms and subject to such conditions, including power to sub-delegate, and subject to such regulations as the Depositary may in the interests of the Holders think fit, provided that no objection from the Company to any such delegation as aforesaid may be made to a person whose financial statements are consolidated with those of the Depositary's ultimate holding company. Any delegation by the Depositary shall be on the basis that the Depositary is acting on behalf of the Holders and the Company in making such delegation. The Company shall not (in any circumstances) and the Depositary shall not (provided that it shall have exercised reasonable care in the selection of such delegate) be bound to supervise the proceedings or be in any way responsible for any loss, liability, cost, claim, action, demand or expense incurred by reason of any misconduct or default on the part of any such delegate or sub-delegate. However, the Depositary shall, if practicable, and if so requested by the Company, pursue (at the Company's expense and subject to receipt by the Depositary of such indemnity and security for costs as the Depositary may reasonably require) any legal action it may have against such delegate or sub-delegate arising out of any such loss caused by reason of any such misconduct or default. The Depositary shall, within a reasonable time of any such delegation or any renewal, extension or termination thereof, give notice thereof to the Company. Any delegation under this Condition which includes the power to sub-delegate shall provide that the delegate shall, within a specified time of any sub-delegation or amendment, extension or termination thereof, give notice thereof to the Company and the Depositary.

14.15 The Depositary may, in the performance of its obligations hereunder, instead of acting personally, employ and pay an agent, whether a solicitor or other person, to transact or concur in transacting any business and do or concur in doing all acts required to be done by such party, including the receipt and payment of money.

14.16 The Depositary shall be at liberty to hold or to deposit the Deposit Agreement and any deed or document relating thereto in any part of the world with any banking company or companies (including itself) whose business includes undertaking the safe custody of deeds or documents or with any lawyer or firm of lawyers of good repute, and the Depositary shall not (in the case of deposit with itself, in the absence of its own negligence, wilful default or bad faith or that of its agents, directors, officers or employees) be responsible for any losses, liability or expenses incurred in connection with any such deposit.

14.17 Notwithstanding anything to the contrary contained herein or in the Deposit Agreement, the Depositary shall not be liable in respect of any loss or damage which arises out of or in connection with its performance or non-performance, or the exercise or attempted exercise of (or the failure to exercise any of) its powers or discretions, under the Deposit Agreement, except to the extent that such loss or damage arises from the wilful default, negligence or bad faith of the Depositary or that of its agents, officers, directors or employees. Without prejudice to the generality of the foregoing, in no circumstances shall the Depositary have any liability for any act or omission of any securities depository, clearing agency or settlement system in connection with or arising out of book-entry settlement of Deposited Shares or otherwise.

14.18 No provision of the Deposit Agreement or these Conditions shall require the Depositary to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties or in the exercise of any of its right or powers.

14.19 For the avoidance of doubt, the Depositary shall be under no obligation to check, monitor or enforce compliance with any ownership restrictions in respect of GDSs or Shares under any applicable law as the same may be amended from time to time. Notwithstanding the generality of Condition 3, the Depositary shall refuse to register any transfer of GDSs or any deposit of Shares against issuance of GDSs if notified by the Company, or the Depositary becomes aware of the fact, that such transfer or issuance would result in a violation of the limitations set forth above.

14.20 No disclaimer of liability under the Securities Act is intended by any provision of the Deposit Agreement.

15. Issue and Delivery of Replacement GDSs and Exchange of GDSs

Subject to the payment of the relevant fees, taxes, duties, charges, costs and expenses and such terms as to evidence and indemnity as the Depositary may require, replacement GDSs will be issued by the Depositary and will be delivered in exchange for or replacement of outstanding lost, stolen, mutilated, defaced or destroyed GDSs upon surrender thereof (except in the case of the destruction, loss or theft) at the specified office of the Depositary or (at the request, risk and expense of the Holder) at the specified office of any Agent.

16. Depositary's Fees, Costs and Expenses

16.1 The Depositary shall be entitled to charge the following remuneration and receive the following remuneration and reimbursement (such remuneration and reimbursement being payable on demand) from the Holders in respect of its services under the Deposit Agreement:

(i) for the issue of GDSs (other than upon the issue of GDSs pursuant to the Offering) or the cancellation of GDSs upon the withdrawal of Deposited Property: EUR 5.00 or less per 100 GDSs (or portion thereof) issued or cancelled;

(ii) for issuing GDS certificates in definitive registered form in replacement for mutilated, defaced, lost, stolen or destroyed GDS certificates: a sum per GDS certificate which is determined by the Depositary to be a reasonable charge to reflect the work, costs and expenses involved;

(iii) for issuing GDS certificates in definitive registered form (other than pursuant to (ii) above): the greater of EUR 1.50 per GDS certificate (plus printing costs) or such other sum per GDS certificate which is determined by the Depositary to be a reasonable

charge to reflect the work plus costs (including, but not limited to, printing costs) and expenses involved;

(iv) for receiving and paying any cash dividend or other cash distribution on or in respect of the Deposited Shares: a fee of EUR 0.02 or less per GDS for each such dividend or distribution;

(v) in respect of any issue of rights or distribution of Shares (whether or not evidenced by GDSs) or other securities or other property (other than cash) upon exercise of any rights, any free distribution, stock dividend or other distribution: EUR 5.00 or less per 100 outstanding GDSs (or portion thereof) for each such issue of rights, dividend or distribution;

(vi) for transferring interests from and between the Regulation S Master GDS and the Rule 144A Master GDS: a fee of EUR 0.05 or less per GDS;

(vii) a fee of EUR 0.03 or less per GDS (or portion thereof) per calendar year for depositary services which shall be payable as provided in paragraph (ix) below;

(viii) for any inspections by the Depositary (or the Custodian or their respective agents) of the register of shareholders of the Company: a fee of EUR 0.01 per GDS per annum, which shall be payable as provided in paragraph (ix) below; and

(ix) any other charge payable by the Depositary, any of the Depositary's agents, including the Custodian, or the agents of the Depositary's agents, in connection with the servicing of Deposited Shares or other Deposited Property (which charge shall be assessed against Holders as of the date or dates set by the Depositary and shall be payable at the sole discretion of the Depositary by billing such Holders for such charge or deducting such charge from one or more cash dividends or other cash distributions),

together with all expenses (including currency conversion expenses), transfer and registration fees, taxes, duties and charges payable by the Depositary, any Agent or the Custodian, or any of their agents, in connection with any of the above.

16.2 Whenever in the judgement of the Depositary it is not practicable or reasonable to charge fees set forth in Condition 16.1 in euros, the Depositary may choose to charge such fees in US Dollars at a spot EUR/US$ exchange rate as of the relevant fee assessment or announcement date.

16.3 The Depositary is entitled to receive from the Company the fees, taxes, duties, charges costs and expenses as specified in a separate agreement between the Company and the Depositary.

17. Agents

17.1 The Depositary shall be entitled to appoint one or more agents (the "Agents") for the purpose, inter alia, of making distributions to the Holders.

17.2 Notice of appointment or removal of any Agent or of any change in the specified office of the Depositary or any Agent will be duly given by the Depositary to the Holders.

18. Listing

The Company has undertaken in the Deposit Agreement to use its reasonable endeavours to maintain, so long as any GDS is outstanding, a listing for the GDSs on Euronext Paris.

For that purpose the Company will pay all fees and sign and deliver all undertakings required by Euronext Paris in connection therewith. In the event that the listing on Euronext Paris becomes unreasonably burdensome and, for this reason, is subsequently suspended or terminated, the Company will use its reasonable endeavours with the reasonable assistance of the Depositary (provided at the Company's expense) to obtain and maintain a listing of the GDSs on any other EEA Regulated Market.

19. The Custodian

The Depositary has agreed with the Custodian that the Custodian will receive and hold (or appoint agents approved by the Depositary to receive and hold) all Deposited Property for the account and to the order of the Depositary in accordance with the applicable terms of the Deposit Agreement which include a requirement to segregate the Deposited Property from the other property of, or held by, the Custodian PROVIDED THAT the Custodian shall not be obliged to segregate cash comprised in the Deposited Property from cash otherwise held by the Custodian. The Custodian shall be responsible solely to the Depositary PROVIDED THAT, if and so long as the Depositary and the Custodian are the same legal entity, references to them separately in these Conditions and the Deposit Agreement are for convenience only and that legal entity shall be responsible for discharging both functions directly to the Holders and the Company. The Custodian may resign or be removed by the Depositary by giving prior notice, except that if a replacement Custodian is appointed which is a branch or affiliate of the Depositary, the Custodian's resignation or discharge may take effect immediately on the appointment of such replacement Custodian. Upon the removal of or receiving notice of the resignation of the Custodian, the Depositary shall promptly appoint a successor Custodian, which shall, upon acceptance of such appointment, and the expiry of any applicable notice period, become the Custodian. The Depositary in its discretion may appoint a substitute or additional custodian or custodians, which shall, upon acceptance of such appointment, become the Custodian under the Deposit Agreement. The Depositary shall notify Holders of such change in accordance with Condition 23. Notwithstanding the foregoing, the Depositary may temporarily deposit the Deposited Property in a manner or a place other than as therein specified; PROVIDED THAT, in the case of such temporary deposit in another place, the Company shall have consented to such deposit, and such consent of the Company shall have been delivered to the Custodian. In case of transportation of the Deposited Property under this Condition, the Depositary shall obtain appropriate insurance at the expense of the Company if and to the extent that the obtaining of such insurance is reasonably practicable and the premiums payable are of a reasonable amount.

20. Resignation and Termination of Appointment of the Depositary

20.1 The Company may terminate the appointment of the Depositary under the Deposit Agreement by giving at least 120 days' prior notice in writing to the Depositary and the Custodian, and the Depositary may resign as Depositary by giving at least 120 days' prior notice in writing to the Company and the Custodian. Within 30 days after the giving of either such notice, notice thereof shall be duly given by the Depositary to the Holders, in accordance with Condition 23.

The termination of the appointment or resignation of the Depositary shall take effect on the date specified in such notice; PROVIDED THAT no such termination of appointment or resignation shall take effect until the appointment by the Company of a successor depositary under the Deposit Agreement and the acceptance of such appointment to act in accordance with the terms thereof and hereof, by the successor depositary. The Company has undertaken

in the Deposit Agreement to use its reasonable endeavours to procure the appointment of a successor depositary with effect from the date of termination specified in such notice as soon as reasonably possible following notice of such termination or resignation. Upon any such appointment and acceptance, notice thereof shall be duly given by the Depositary to the Holders in accordance with Condition 23.

20.2 Upon the termination of the appointment or resignation of the Depositary and against payment of all fees and expenses due to the Depositary from the Company under the Deposit Agreement, the Depositary shall deliver to its successor as depositary sufficient information and records to enable such successor efficiently to perform its obligations under the Deposit Agreement and shall deliver and pay to such successor depositary all property and cash held by it under the Deposit Agreement. The Deposit Agreement provides that, upon the date when such termination of appointment or resignation takes effect, the Custodian shall be deemed to be the Custodian thereunder for such successor depositary and shall hold the Deposited Property for such successor depositary and the Depositary shall thereafter have no obligation under the Deposit Agreement or under the Conditions (other than liabilities accrued prior to the date of termination of appointment or resignation or any liabilities stipulated in relevant laws or regulations).

21. Termination of Deposit Agreement

21.1 Either the Company or the Depositary but, in the case of the Depositary, only if the Company has failed to appoint a replacement Depositary within 90 days of the date on which the Depositary has given notice pursuant to Condition 20 that it wishes to resign, may terminate the Deposit Agreement by giving 90 days' prior notice to the other and to the Custodian. Within 30 days after the giving of such notice, notice of such termination shall be duly given by the Depositary to Holders of all GDSs then outstanding in accordance with Condition 23.

21.2 During the period beginning on the date of the giving of such notice by the Depositary to the Holders and ending on the date on which such termination takes effect, each Holder shall be entitled to obtain delivery of the Deposited Property relative to each GDS held by it, subject to the provisions of Condition 1.1 and upon compliance with Condition 1, payment by the Holder of the charge specified in Condition 16.1(i) and Clause 10.1.1(a) of the Deposit Agreement for such delivery and surrender, and payment by the Holder of any sums payable by the Depositary and/or any other expenses incurred by the Depositary (together with all amounts which the Depositary is obliged to pay to the Custodian) in connection with such delivery and surrender, and otherwise in accordance with the Deposit Agreement.

21.3 If any GDSs remain outstanding after the date of termination, the Depositary shall as soon as reasonably practicable sell the Deposited Property then held by it under the Deposit Agreement and shall not register transfers, shall not pass on dividends or distributions or take any other action, except that it will deliver the net proceeds of any such sale, together with any other cash then held by it under the Deposit Agreement, pro rata to Holders of GDSs which have not previously been so surrendered by reference to that proportion of the Deposited Property which is represented by the GDSs of which they are the Holders. After making such sale, the Depositary shall be discharged from all obligations under the Deposit Agreement and these Conditions, except its obligation to account to Holders for such net proceeds of sale and other cash comprising the Deposited Property without interest.

22. Amendment of Deposit Agreement and Conditions

All and any of the provisions of the Deposit Agreement and these Conditions (other than this Condition 22) may at any time and from time to time be amended by agreement between the

Company and the Depositary in any respect which they may deem necessary or desirable. Notice of any amendment of these Conditions (except to correct a manifest error) shall be duly given to the Holders by the Depositary, and any amendment (except as aforesaid) which shall increase or impose fees payable by Holders or which shall otherwise, in the opinion of the Depositary, be materially prejudicial to the interests of the Holders (as a class) shall not become effective so as to impose any obligation on the Holders until the expiration of three months after such notice shall have been given. During such period of three months, each Holder shall be entitled to obtain, subject to and upon compliance with Condition 1, delivery of the Deposited Property relative to each GDS held by it upon surrender thereof, payment of the charge specified in Condition 16.1(i) for such delivery and surrender and otherwise in accordance with the Deposit Agreement and these Conditions. Each Holder at the time when such amendment so becomes effective shall be deemed, by continuing to hold a GDS, to approve such amendment and to be bound by the terms thereof in so far as they affect the rights of the Holders. In no event shall any amendment impair the right of any Holder to receive, subject to and upon compliance with Condition 1, the Deposited Property attributable to the relevant GDS.

For the purposes of this Condition 22, an amendment shall not be regarded as being materially prejudicial to the interests of Holders if its principal effect is to permit the creation of GDSs in respect of additional Shares to be held by the Depositary which are or will become fully consolidated as a single series with the other Deposited Shares PROVIDED THAT temporary GDSs will represent such Shares until they are so consolidated.

23. Notices

23.1 Any and all notices to be given to any Holder shall be duly given if personally delivered, or sent by mail (if domestic, first class, if overseas, first class airmail) or air courier, or by facsimile transmission confirmed by letter sent by mail or air courier, addressed to such Holder at the address of such Holder as it appears on the transfer books for GDSs of the Depositary, or, if such Holder shall have filed with the Depositary a written request that notices intended for such Holder be mailed to some other address, at the address specified in such request.

23.2 Delivery of a notice sent by mail or air courier shall be effective three days (in the case of domestic mail or air courier) or seven days (in the case of overseas mail) after despatch, and any notice sent by facsimile transmission, as provided in this Condition, shall be effective when the intended recipient has confirmed by telephone to the transmitter thereof that the recipient has received such facsimile in complete and legible form. The Depositary or the Company may, however, act upon any facsimile transmission received by it from the other or from any Holder, notwithstand*ing that such facsimile transmission shall not subsequently be confirmed as aforesaid.*

24. Reports and Information on the Company

24.1 The Company has undertaken in the Deposit Agreement (so long as any GDS is outstanding) to furnish the Depositary with six copies in the English language (and to make available to the Depositary, the Custodian and each Agent as many further copies as they may reasonably require to satisfy requests from Holders) of any financial statements or accounts that it makes generally available to its shareholders, including but not limited to any financial statements or accounts that may be required by law or regulation or in order to maintain a listing for the GDSs on Euronext Paris as soon as practicable following the publication or availability of such communications.

24.2 The Depositary shall upon receipt thereof give due notice to the Holders that such copies are available upon request at its specified office and the specified office of any Agent.

24.3 For so long as any of the GDSs or the Shares remain outstanding and are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, if at any time the Company is neither subject to and in compliance with the reporting requirements of Section 13 or 15(d) of the United States Securities Exchange Act of 1934, as amended, nor exempt from such reporting requirements by complying with the information furnishing requirements of Rule 12g3-2(b) thereunder, the Company has agreed in the Deposit Agreement to supply to the Depositary such information in the English language and in such quantities as the Depositary may from time to time reasonably request, as is required to be delivered to any Holder or beneficial owner of GDSs or to any holder of Shares or prospective purchaser designated by such Holder, beneficial owner or holder pursuant to a Deed Poll executed by the Company in favour of such persons and the information delivery requirements of Rule 144A(d)(4) under the Securities Act to permit compliance with Rule 144A thereunder in connection with resales of GDSs or Shares or interests therein in reliance on Rule 144A under the Securities Act and otherwise to comply with the requirements of Rule 144A(d)(4) under the Securities Act.

25. Copies of Company Notices

The Company has undertaken in the Deposit Agreement to transmit to the Custodian and the Depositary on or before the day when the Company first gives notice, by mail, publication or otherwise, to holders of any Shares or other Deposited Property, whether in relation to the taking of any action in respect thereof or in respect of any dividend or other distribution thereon or of any meeting or adjourned meeting of such holders or otherwise, such number of copies of such notice and any other material (which contains information having a material bearing on the interests of the Holders) furnished to such holders by the Company (or such number of English translations of the originals if the originals were prepared in a language other than English) in connection therewith as the Depositary may reasonably request. If such notice is not furnished to the Depositary in English, either by the Company or the Custodian, the Depositary shall, at the Company's expense, arrange for an English translation thereof (which may be in such summarised form as the Depositary may deem adequate to provide sufficient information) to be prepared. Except as provided below, the Depositary shall, as soon as practicable after receiving notice of such transmission or (where appropriate) upon completion of translation thereof, give due notice to the Holders which notice may be given together with a notice pursuant to Condition 9.1, and shall make the same available to Holders in such manner as it may determine.

26. Moneys held by the Depositary

The Depositary shall be entitled to deal with moneys paid to it by the Company for the purposes of the Deposit Agreement in the same manner as other moneys paid to it as a banker by its customers and shall not be liable to account to the Company or any Holder or any other person for any interest thereon, except as otherwise agreed and shall not be obliged to segregate such moneys from other moneys belonging to the Depositary.

27. Severability

If any one or more of the provisions contained in the Deposit Agreement or in these Conditions shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained therein or herein shall in no way be affected, prejudiced or otherwise disturbed thereby.

28. Governing Law

28.1 The Deposit Agreement, the GDSs and all non-contractual obligations arising from or connected with the Deposit Agreement and the GDSs, are governed by and shall be construed in accordance with English law, except that the certifications set forth in Schedules 3 and 4 to the Deposit Agreement and any provisions relating thereto shall be governed by and construed in accordance with the laws of the State of New York. The rights and obligations attaching to the Deposited Shares will be governed by Jersey law. The Company has agreed in the Deposit Agreement and the Deed Poll to finally resolve Disputes by arbitration under the Rules of the London Court of International Arbitration.

28.2 The Company has irrevocably appointed Law Debenture Corporate Services Limited, Fifth Floor, 100 Wood Street, London EC2V 7EX as its agent in England to receive service of process in any proceedings in England based on the Deed Poll and appointed CT Corporation System, 111 Eighth Avenue, New York, NY 10011 as its agent in New York to receive service of process in any proceedings in New York. If for any reason the Company does not have such an agent in England or New York as the case may be, it will promptly appoint a substitute process agent and notify the Holders and the Depositary of such appointment. Nothing herein shall affect the right to serve process in any other manner permitted by law.

28.3 Any disputes arising out of or in connection with these Conditions (including any dispute, whether in tort, contract, statute or otherwise, relating to the existence, validity or termination of these Conditions, or any non-contractual obligation arising out of or in connection with these Conditions, or the consequences of the nullity of these Conditions) or the GDSs (each a "Dispute") shall be referred to and finally resolved by arbitration under the Rules of the London Court of International Arbitration (the "Rules"), which Rules are deemed to be incorporated by reference into these Conditions. Judgement upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof.

28.4 The Depositary and the GDS Holders agree that:

(i) The number of arbitrators shall be three, appointed by the London Court of International Arbitration in accordance with its Rules. Two of the arbitrators shall be nominated by the respective parties in the Request for Arbitration and the Response, and the third, who shall be the Chairman of the tribunal, shall be nominated by the two party nominated arbitrators within 30 days of the last of their appointments. In the event of a failure to nominate an arbitrator by either party or a failure to agree the Chairman of the tribunal, the London Court of International Arbitration shall, at the written request of either party, make such appointments forthwith;

(ii) The place of the arbitration shall be London;

(iii) The language to be used in the arbitration proceedings shall be English; and

(iv) The decision and award of the arbitration shall be final.

28.5 If any Dispute raises issues which are substantially the same as or connected with issues raised in a Dispute which has already been referred to arbitration (an "Existing Dispute"), or arises out of substantially the same facts as are the subject of an Existing Dispute (in any such case a "Related Dispute"), the arbitrators appointed or to be appointed in respect of any such Existing Dispute shall also be appointed as the arbitrators in respect of any Related Dispute, save where the arbitrators consider such appointment to be inappropriate.

28.6 The arbitrators, upon the request of one of the parties to a Dispute or Related Dispute or the Depositary which itself wishes to be joined in any reference to arbitration proceedings in relation to a Dispute or Related Dispute, may join any party to any reference to arbitration proceedings in relation to that Dispute or Related Dispute and may make a single, final award determining all Disputes and Related Disputes between them. Each of the Depositary and the Holders hereby consents to be joined to any reference to arbitration proceedings in relation to any dispute at the request of a party to that Dispute or Related Dispute, and to accept joinder of any party requesting to be joined under this Condition.

28.7 Where, pursuant to the above provisions, the same arbitrators have been appointed in relation to an Existing Dispute and one or more Related Disputes, the arbitrators may, with the agreement of all the parties concerned or upon the application of one of the parties, being a party to each of the Disputes, order that the whole or part of the matters at issue shall be heard together upon such terms or conditions as the arbitrators think fit. The arbitrators shall have power to make such directions and any provisional, interim or partial awards as they consider just and desirable.

28.8 Nothing in these dispute resolution provisions shall be construed as preventing either party from seeking conservatory or similar interim relief in any court of competent jurisdiction.

28.9 The Depositary and the Holders hereby agree to waive any right of appeal to any court of law or other judicial authority insofar as such waiver may be validly made.

28.10 In the event that the Depositary is made a party to or is otherwise required to participate in any litigation, arbitration or proceeding (whether judicial or administrative) which arises from or is related to or is based upon any act or failure to act by the Company, or which contains allegations to such effect, upon notice from the Depositary, the Company has agreed to fully co-operate with the Depositary in connection with such litigation, arbitration or proceeding.

28.11 Without prejudice to the powers of the arbitrators provided in the Rules, statute or otherwise, the arbitrators shall have power at any time, following the written request (with reasons) of any party at any time, and after due consideration of any written and/or oral response(s) to such request made within such time periods as the arbitrators shall determine, to make an award in favour of the claimant(s) (or the respondent(s) if a counterclaim) in respect of any claims (or counterclaims) if it appears to the arbitrators that there is no reasonably arguable defence to those claims (or counterclaims), either at all or except as to the amount of any damages or other sum to be awarded.

28.12 The Depositary and the GDS Holders agree that in no circumstances will they request the arbitrators to, and the arbitrators shall have no authority to, exercise any power to award damages which are not calculated by reference to the party's actual costs or to award any loss of profit whatsoever or any consequential, special or punitive damages.

28.13 The Depositary irrevocably appoints The Bank of New York Mellon, London Branch, (Attention: The Manager) of 48th Floor, One Canada Square, London E14 5AL as its agent in England to receive service of process in any proceedings in England based on any of the GDSs. If for any reason the Depositary does not have such an agent in England, it will promptly appoint a substitute process agent and notify the Holders of such appointment. Nothing herein shall affect the right to serve process in any other manner permitted by law.

28.14 To the extent that the Company may in any jurisdiction claim for itself or its assets or revenues immunity from suit, execution, attachment (whether in aid of execution, before judgment or otherwise) or other legal process and to the extent that such immunity (whether

or not claimed) may be attributed in any such jurisdiction to the Company or its assets or revenues, the Company has agreed not to claim and irrevocably waives such immunity to the full extent permitted by the laws of such jurisdiction.

DEPOSITARY
The Bank of New York Mellon
101 Barclay Street
22nd Floor
New York, NY 10286
U.S.A.

CUSTODIAN
The Hongkong and Shanghai Banking Corporation Limited
5/F, Tower 1, HSBC Centre
1 Sham Mong Road
Kowloon
Hong Kong

and/or such other Depositary and/or such other Custodian or Custodians and/or such other or further Agent or Agents and/or specified offices as may from time to time be duly appointed or nominated and notified to the Holders.

14 SUMMARY OF PROVISIONS RELATING TO THE GDSs WHILE IN MASTER FORM

The GDSs are represented by (i) a single Regulation S Master GDS in registered form and (ii) a single Rule 144A Master GDS in registered form. The Regulation S Master GDS has been registered in the name of The Bank of New York Depository (Nominees) Limited as nominee of The Bank of New York Mellon, as common depositary for Euroclear and Clearstream. The Rule 144A Master GDS has been registered in the name of Cede & Co., as nominee for DTC.

The Regulation S Master GDS and the Rule 144A Master GDS contain provisions which apply to the GDSs while they are in master form, some of which modify the effect of the terms and conditions of the GDSs set out in this Prospectus (see "Terms and Conditions of the GDSs"). The following is a summary of certain of those provisions. Unless otherwise defined, the terms used below shall have the same meaning as in the terms and conditions of the GDSs.

14.1 Exchange of Master GDSs for Certificates in Definitive Registered Form Representing GDSs

The Master GDSs will only be exchanged for certificates in definitive registered form representing GDSs in the circumstances described in (i), (ii), (iii) or (iv) below in whole but not in part and until exchanged in full is subject to the Conditions and the Deposit Agreement. The Depositary hereby irrevocably undertakes to deliver certificates in definitive registered form in exchange for this Regulation S Master GDS to Holders in the event that:

(i) Clearstream or Euroclear (in the case of the Regulation S Master GDS) or DTC (in the case of the Rule 144A Master GDS) advises the Company in writing at any time that it is unwilling or unable to continue as depositary and a successor depositary is not appointed within 90 calendar days; or

(ii) in the case of the Rule 144A Master GDS only, DTC or any successor ceases to be a "clearing agency" registered under the U.S. Exchange Act; or

(iii) either Clearstream or Euroclear (in the case of the Regulation S Master GDS) or DTC (in the case of the Rule 144A Master GDS) is closed for business for a continuous period of 14 calendar days (other than by reason of holiday, statutory or otherwise) or announces an intention permanently to cease business or does, in fact, do so and no alternative clearing system satisfactory to the Depositary is available within 45 calendar days; or

(iv) the Depositary has determined that, on the occasion of the next payment in respect of the Master GDSs, the Depositary or its agent would be required to make any deduction or withholding from any payment in respect of the Master GDSs which would not be required were the GDSs represented by certificates in definitive registered form, provided that the Depositary shall have no obligation to so determine or to attempt to so determine,

within 60 calendar days of the occurrence of the relevant event. Any such exchange shall be at the expense of the Company.

Upon any exchange of a Master GDS for GDSs in definitive registered form, or any exchange of interests between the Regulation S Master GDS and the Rule 144A Master GDS pursuant to Clause 4 of the Deposit Agreement, or any distribution of GDSs pursuant to Conditions 5, 7, and 10 or any reduction in the number of GDSs represented by the Regulation S Master GDS or Rule 144A Master GDS following any withdrawal of Deposited Property pursuant to Condition 1, the relevant details will be entered by the Depositary on the Register maintained by the Depositary (which shall be maintained at all times outside the United Kingdom and Jersey,) whereupon the number of GDSs represented by the Regulation S Master GDS or Rule 144A Master GDS will be reduced or increased (as the case may be) accordingly. If the number of GDSs represented by a Master GDS is reduced to zero the Master GDS shall continue in existence until the obligations of the Company under the Deposit Agreement and the obligations of the Depositary under the Deposit Agreement and the Conditions have terminated.

14.2 Payments, Distributions and Voting Rights

Payments of cash dividends and other amounts (including cash distributions) in respect of the GDSs represented by the Master GDSs will be made by the Depositary through Euroclear and Clearstream (in the case of the Regulation S Master GDS) or DTC (in the case of the Rule 144A Master GDS) on behalf of persons entitled thereto upon receipt of funds therefor from the Company. Any free distribution or rights issue of Shares to the Depositary on behalf of the Holders will result in the records of the Depositary being adjusted to reflect the enlarged number of GDSs represented by the Master GDS.

Holders of the Master GDSs will have voting rights in respect of the underlying Shares as set out in Condition 12 and Clause 5 of the Deposit Agreement. Voting rights will be exercised by the Depositary only upon receipt of written instructions in accordance with the Conditions and the Deposit Agreement and if permitted by law, which shall be subject to an opinion being given by the Company's legal counsel, such counsel being reasonably satisfactory to the Depositary, that the Depositary can do so. In the absence of an opinion from legal counsel as aforesaid, the Depositary shall not exercise any voting rights and shall have no liability to the Company or any Holder for any action taken or not taken as the case may be.

14.3 Surrender of GDSs

Any requirement in the Conditions relating to the surrender of a GDS to the Depositary shall be satisfied by the production by Euroclear or Clearstream (in the case of the Regulation S Master GDS) or DTC (in the case of the Rule 144A Master GDS), on behalf of a person entitled to an interest therein, of such evidence of entitlement of such person as the Depositary may reasonably require, which is expected to be a certificate or other documents issued by Euroclear or Clearstream (in the case of the Regulation S Master GDS) or DTC (in the case of the Rule 144A Master GDS). The delivery or production of any such evidence shall be sufficient evidence, in favour of the Depositary, any Agent and the Custodian of the title of such person to receive (or to issue instructions for the receipt of) all moneys or other property payable or distributable and to issue voting instructions in respect of the Deposited Property represented by such GDS.

14.4 Notices

For as long as the Regulation S Master GDS is registered in the name of a nominee for a common depositary holding on behalf of Euroclear and Clearstream, and for so long as the Rule 144A Master GDS is registered in the name of DTC or its nominee, notices to Holders may be given by the Depositary by delivery of the relevant notice to Euroclear and Clearstream in the case of the Regulation S Master GDS) or DTC (in the case of the Rule 144A Master GDS), for communication to Holders in substitution for publications required by Condition 23.

14.5 Information (applicable to the Rule 144A Master GDS only)

For so long as any of the GDSs or the Shares remain outstanding and are "restricted securities" within the meaning of Rule 144(a) (3) under the U.S. Securities Act, if at any time the Company is neither subject to and in compliance with the reporting requirements of Section 13 or 15(d) of the U.S. Exchange Act, nor exempt from such reporting requirements by complying with the information furnishing requirements of Rule 12g3-2(b) thereunder, the Company has agreed to supply to the Depositary such information in the English language and in such quantities as the Depositary may from time to time reasonably request, as is required to be delivered to any Holder or beneficial owner of GDSs or to any holder of Shares or prospective purchaser designated by such Holder, beneficial owner or holder pursuant to a Deed Poll executed by the Company in favour of such persons and the information delivery requirements of Rule 144A(d)(4) under the U.S. Securities Act, as amended, to permit compliance with Rule 144A in connection with resales of GDSs or Shares or interests therein in reliance on Rule 144A under the U.S. Securities Act and otherwise will comply with the requirements of Rule 144A(d)(4) under the U.S. Securities Act;

14.6 Governing Law of Master GDSs

The Master GDSs are governed by and construed in accordance with English law.

14.7 U.S. Securities Act and Other Legends

The Master GDSs bear the following legends.

Legends for Regulation S Master GDSs

THIS REGULATION S MASTER GLOBAL DEPOSITARY SHARE AND THE ORDINARY SHARES OF UNITED COMPANY RUSAL LIMITED REPRESENTED HEREBY (THE "SHARES") HAVE NOT BEEN AND WILL NOT BE REGISTERED

UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH THE SECURITIES ACT AND ANY APPLICABLE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES.

JUDGMENTS OR ARBITRAL AWARDS OBTAINED IN THE COURTS OF ENGLAND, THE FEDERAL COURTS OF THE UNITED STATES OF AMERICA OR THE COURTS OF THE STATE OF NEW YORK MAY NOT BE RECOGNIZED OR ENFORCED BY COURTS IN JERSEY OR ELSEWHERE AGAINST THE COMPANY.

Legends for Rule 144A Master GDSs

THIS RULE 144A MASTER GLOBAL DEPOSITARY SHARE AND THE ORDINARY SHARES OF UNITED COMPANY RUSAL LIMITED REPRESENTED HEREBY (THE "SHARES") HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES. THE HOLDER HEREOF BY PURCHASING THE GDSs, AGREES FOR THE BENEFIT OF UNITED COMPANY RUSAL LIMITED THAT THE GDSs AND THE SHARES REPRESENTED HEREBY MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (A) TO A PERSON WHOM THE SELLER AND ANY PERSON ACTING ON ITS BEHALF REASONABLY BELIEVE IS A QUALIFIED INSTITUTIONAL BUYER ("QIB") (WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (B) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, OR (C) PURSUANT TO AN EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE), IN EACH CASE IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES. THE HOLDER OF THE GDSs WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY SUBSEQUENT PURCHASER OF SUCH GDSs OF THE RESALE RESTRICTIONS REFERRED TO ABOVE. THE BENEFICIAL OWNER OF SHARES RECEIVED UPON CANCELLATION OF ANY RULE 144A GLOBAL DEPOSITARY SHARES MAY NOT DEPOSIT OR CAUSE TO BE DEPOSITED SUCH SHARES INTO ANY GLOBAL DEPOSITARY SHARE FACILITY IN RESPECT OF SHARES ESTABLISHED OR MAINTAINED BY A DEPOSITARY BANK, OTHER THAN A RULE 144A RESTRICTED GLOBAL DEPOSITARY SHARE FACILITY, SO LONG AS SUCH SHARES ARE "RESTRICTED SECURITIES" WITHIN THE MEANING OF RULE 144(a)(3) UNDER THE SECURITIES ACT. NO REPRESENTATION CAN BE MADE AS TO THE AVAILABILITY OF THE EXEMPTION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT FOR RESALE OF THE SHARES OR ANY RULE 144A GLOBAL DEPOSITARY SHARES.

JUDGMENTS OR ARBITRAL AWARDS OBTAINED IN THE COURTS OF ENGLAND, THE FEDERAL COURTS OF THE UNITED STATES OF AMERICA OR THE COURTS OF THE STATE OF NEW YORK MAY NOT BE RECOGNIZED OR ENFORCED BY COURTS IN JERSEY OR ELSEWHERE AGAINST THE COMPANY.

15 ADMISSION TO TRADING AND DEALING ARRANGEMENTS IN THE GDSs

15.1 Admission to listing and trading

Application has been made for the admission of up to 768,068,182 GDSs, representing up to 15,361,363,646 Shares (each GDS representing 20 Shares), to trading and listing on the Professional Segment of Euronext Paris. This number represents the maximum number of GDSs that could be issued in representation of all the Shares issued and outstanding as of the Listing Date assuming exercise in full of the Over-allotment Option.

The GDSs are expected to be listed and dealings in the GDSs are expected to commence on Euronext Paris on January 27, 2010, under the ticker symbol "RUSAL" for the Regulation S GDSs and "RUAL" for the Rule 144A GDSs, ISIN codes US9098832093 for the Regulation S GDSs and US9098831004 for the Rule 144A GDSs and CUSIP codes 909883209 for the Regulation S GDSs and 909883100 for the Rule 144A GDSs. Common codes are 046725158 for the Regulation S GDSs and 046725093 for the Rule 144A GDSs.

The Rule 144A GDSs may also be traded in PORTAL Alliance ("PORTAL"). Trading of Rule 144A GDSs on PORTAL are in US$ and settle through DTC in US$.

Trading of GDSs on Euronext Paris will be in euros. Rule 144A GDSs settling through DTC will settle in US Dollars. The first issue price of the GDSs will be EUR19.91. This price is based on one GDS representing 20 Shares, an Offer Price of HK$10.80 to which apply a brokerage fee of 1.0% of the Offer Price, Hong Kong Stock Exchange trading fee of 0.005% of the Offer Price and Hong Kong Securities and Futures Commission transaction levy of 0.004% of the Offer Price, which together amount to 1.009% of the Offer Price, and which together shall be payable by investors, as well as a foreign exchange rate of EUR1.00 to HK$10.9587, as at pricing on January 22, 2010.

As of the date hereof, there are no plans for the GDSs to be listed on any other market.

The GDSs' listing terms, including the split between the number of Shares issued in the form of Shares and the number of Shares issued in the form of GDSs in connection with the International Placing, will be set forth and published in a Euronext Paris notice on or around January 25, 2010.

15.2 Admission to listing and trading of securities in the same class

The Company has not previously issued GDSs for the same class of Shares.

Application has been made for the listing of, and permission to deal in, the Shares on the Main Board of the Hong Kong Stock Exchange. The Company's Shares are expected to be listed on the Hong Kong Stock Exchange, and unconditional dealings in the Shares are expected to commence, on January 27, 2010, under code 486.

15.3 Settlement and delivery

Clearing and Settlement of GDSs

Custodial and depositary links have been established between Euroclear, Clearstream and DTC to facilitate the initial issue of the GDSs and cross-market transfers of the GDSs associated with secondary market trading. Cross-market transfers of the GDSs held through Euroclear France SA will be conducted through Euroclear in accordance with the normal rules and operating procedures of Euroclear.

Euroclear and Clearstream

Euroclear and Clearstream each hold securities for participating organizations and facilitate the clearance and settlement of securities transactions between their respective participants through electronic book-entry changes in accounts of such participants. Euroclear and Clearstream provide to their respective participants, among other things, services for safekeeping, administration, clearance and settlement of internationally-traded securities and securities lending and borrowing. Euroclear and Clearstream participants are financial institutions throughout the world, including underwriters, securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Euroclear and Clearstream have established an electronic bridge between their two systems across which their respective customers may settle trades with each other. Indirect access to Euroclear or Clearstream is also available to others, such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Euroclear or Clearstream participant, either directly or indirectly.

Distributions of dividends and other payments with respect to book-entry interests in the GDSs held through Euroclear or Clearstream will be credited, to the extent received by the Depositary, to the cash accounts of Euroclear or Clearstream participants in accordance with the relevant system's rules and procedures.

DTC

DTC is a limited-purpose trust company organized under the laws of the State of New York, a "banking organization" within the meaning of the New York Banking Law, a member of the United States Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the U.S. Exchange Act. DTC holds securities for DTC participants and facilitates the clearance and settlement of securities transactions between DTC participants through electronic computerized book-entry changes in DTC participants' accounts.

DTC participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Indirect access to the DTC system is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a DTC participant, either directly or indirectly.

Holders of book-entry interests in the GDSs holding through DTC will receive, to the extent received by the Depositary, all distributions of dividends or other payments with respect to book-entry interests in the GDSs from the Depositary through DTC and DTC participants. Distributions in the United States will be subject to relevant U.S. tax laws and regulations. Because DTC can act on behalf of DTC direct participants only, who in turn act on behalf of DTC indirect participants, the ability of beneficial owners who are indirect participants to pledge book-entry interests in the GDSs to persons or entities that do not participate in DTC, or otherwise take actions with respect to book-entry interests in the GDSs, may be limited.

Registration and Form

Book-entry interests in the GDSs held through Euroclear and Clearstream will be represented by the Regulation S Master GDS registered in the name of The Bank of New York Depository (Nominees) Limited as nominee of The Bank of New York Mellon, as common depositary for Euroclear and Clearstream. Book-entry interests in the GDSs held through DTC will be represented by the Rule 144A Master GDS registered in the name of Cede & Co., as nominee for DTC. As necessary, the Depositary will adjust the amounts of GDSs on the relevant register to reflect the amounts of GDSs held through Euroclear, Clearstream and DTC, respectively. Beneficial ownership in the GDSs will be held through financial institutions as direct and indirect participants in Euroclear, Clearstream and DTC.

The aggregate holdings of book-entry interests in the GDSs in Euroclear, Clearstream and DTC will be reflected in the book-entry accounts of each such institution. Euroclear, Clearstream and DTC, as the case may be, and every other intermediate holder in the chain to the beneficial owner of book-entry interest in the GDSs, will be responsible for establishing and maintaining accounts for their participants and customers having interests in the book-entry interests in the GDSs. The Depositary will be responsible for maintaining a record of the aggregate holdings of GDSs registered in the name of the common depositary for Euroclear and Clearstream and the nominee for DTC. The Depositary will be responsible for ensuring that payments received by it from the Company for holders holding through Euroclear or Clearstream are credited to Euroclear or Clearstream as the case may be, and the Depositary will also be responsible for ensuring that payments received by it from the Company for holders holding through DTC are received by DTC.

The Company will not impose any fees in respect of the GDSs; however, holders of book-entry interests in the GDSs may incur fees normally payable in respect of the maintenance and operation of accounts in Euroclear, Clearstream or DTC and certain fees and expenses payable to the Depositary in accordance with the terms of the Deposit Agreement. See Section 13 "Terms and Conditions of the GDSs."

General

None of the Company, the Depositary, the Custodian or their respective agents will have any responsibility for the performance by Euroclear, Clearstream or DTC or their respective participants of their respective obligations under the rules and procedures governing their operations.

15.4 Stabilization and Short Positions

In connection with the Global Offering, Credit Suisse (Hong Kong) Limited acting as stabilization manager (the "Stabilizing Manager"), or its affiliates or any persons acting on its behalf, on behalf of the Underwriters, may engage in transactions that stabilize, maintain or otherwise affect the price in the Shares or GDSs. Specifically, the Stabilizing Manager may over-allot in connection with the offering, creating a short position in the Shares or GDSs. In addition, to cover over-allotments or to stabilize the price of the Shares or GDSs, the Stabilizing Manager may bid for, and purchase, Shares or GDSs in the open market. Finally, the Stabilizing Manager may reclaim selling concessions allowed to an agent or dealer for distributing the Shares or GDSs in the Global Offering, if the Stabilizing Manager repurchases previously distributed Shares or GDSs in transactions to cover syndicate short positions, in stabilizing transactions or otherwise. Any of these activities may stabilize or maintain the market price of the Shares and GDSs above independent market levels.

The Stabilizing Manager, on behalf of the Underwriters, is not required to engage in these activities, and if it does commence, it may end any of these activities at any time, but in any event, any such activity may begin on or after the listing of the Shares and GDSs on the Main Board of the Hong Kong Stock Exchange Limited and the Professional Segment of the Euronext Paris market (the "Listing Date"), respectively and, if begun, may be ended at any time, but it must end no later than 30 days after the Listing Date. These transactions may be effected on the Hong Kong Stock Exchange, Euronext Paris, in an over-the-counter market or otherwise, subject to compliance with applicable legal and regulatory requirements, such as Regulation (EC) No. 2273/2003 of the European Commission dated December 22, 2003 applying the European Parliament and Council's 20036/06/EC directive of January 28, 2003 relating to insider dealing and market manipulation (the "European Regulations"), as the case may be.

Such stabilization activity may be carried out at any time during a 30-day period from the Listing Date, i.e., from January 27, 2010 until February 26, 2010. The Stabilizing Manager will be responsible for disclosing information to the public in accordance with Article 9 of the European Regulations and Article 631-10 of the General Regulation of the AMF via press releases where applicable.

16 TAXATION

16.1 Cyprus Tax Considerations

The Company claims tax residence in Cyprus. The following summary of material Cyprus tax consequences of ownership of the GDSs is based upon laws, regulations, decrees, rulings, income tax conventions (treaties), administrative practice and judicial decisions in effect at the date of this Prospectus. Legislative, judicial or administrative changes or interpretations may, however, be forthcoming that could alter or modify the statements and conclusions set forth herein. Any such changes or interpretations may be retroactive and could affect the tax consequences to holders of GDSs. This summary does not purport to be a legal opinion or to address all tax aspects that may be relevant to a holder of GDSs. Each prospective holder is urged to consult its own tax adviser as to the particular tax consequences to such holder of the ownership and disposition of GDSs, including the applicability and effect of any other tax laws or tax treaties, and of pending or proposed changes in applicable tax laws as at the date of this Prospectus, and of any actual changes in applicable tax laws after such date.

Tax Residency

A company which is considered to be a resident for tax purposes in Cyprus is subject to corporate income tax in Cyprus (Corporate Income Tax) on its worldwide income, taking into account certain exemptions. A company is considered to be a resident of Cyprus for tax purposes if its management and control is exercised from Cyprus.

With respect to the individual GDS holders, an individual is considered to be a tax resident of Cyprus if he or she is physically present in Cyprus for a period or periods exceeding in aggregate more than 183 days in any calendar year.

Rates of Taxation

The rate of Corporate Income Tax in Cyprus is 10 per cent.

Defence Tax is levied on certain types of income. Defence Tax applies, subject to any available exemptions, at three per cent. on 75 per cent. of certain rental income, at 10 per

cent. on interest income not arising in the ordinary course of the business and at 15 per cent. on dividend income from non resident companies. Defence Tax is levied on gross income without any deduction for expenses.

Capital gains tax (Capital Gains Tax) is levied in Cyprus at a rate of 20 per cent. on profits from disposal of immovable property situated in Cyprus or shares of companies which own immovable property situated in Cyprus (unless the shares are listed on a recognized stock exchange).

Taxation of Income and Gains of the Company

Gains from the disposal of securities

Any gain from disposal of securities by the Company shall be exempt from Corporate Income Tax irrespective of the trading nature of the gain, the number of shares held or the holding period and shall not be subject to Defence Tax. Such gains are also outside of the scope of Capital Gains Tax provided that the company whose shares are disposed of does not own any immovable property situated in Cyprus.

The definition of securities includes shares and bonds of companies or legal persons wherever incorporated and options thereon. GDSs are generally accepted as falling within the definition of securities.

Dividends to be Received by the Company

Dividend income (whether received from Cypriot resident or non-resident companies) is exempt from Corporate Income Tax in Cyprus. Dividend income from Cypriot resident companies is exempt from Defence Tax whereas dividend income received from non-Cypriot resident companies is exempt from Defence Tax unless the company paying the dividend engages directly or indirectly for more than 50 per cent. in activities which lead to investment income and the foreign tax burden of the company paying the dividend is substantially lower than the tax burden of the company in Cyprus receiving the dividend (in practice ''foreign tax burden being significantly lower'' means at an effective tax rate of less than five per cent.). If the exemption for Defence Tax does not apply, dividends receivable from non-Cypriot resident companies are taxed at a rate of 15 per cent.

The Company may claim credits of foreign taxes paid on dividends or on the profits out of which the dividend was paid either by reference to the provisions of an applicable double tax treaty or, unilaterally, by reference to the provisions of the Cypriot tax legislation.

Interest Income

Any interest accruing to the Company which is considered to arise in the ordinary course of the business or is considered closely connected thereto qualifies as business income and shall be subject only to Corporate Income Tax in Cyprus at a rate of 10 per cent. Such interest income shall be exempt from Defence Tax.

Specifically, interest income arising from the provision of loans to related or associated parties should be generally considered income arising from activities closely connected with the ordinary carrying on of a business and should as such be exempt from Defence Tax and only be subject to Corporate Income Tax.

Interest income not arising in the ordinary course of a business and not being considered closely connected thereto shall be exempt from the Corporate Income Tax and shall be subject to Defence Tax only at a rate of 10 per cent.

Deemed Distribution Rules

Defence Tax at a rate of 15 per cent. would be payable by the Cypriot company on deemed dividend to the extent that its shareholders (both individuals and companies) are Cypriot tax residents. A Cypriot company which does not distribute 70 per cent. of its after-tax profits within two years of the end of the year in which the profits arose, would be deemed to have distributed this amount as a dividend two years after that year end. The amount of this deemed dividend distribution (subject to Defence Tax) is reduced by any actual dividend (not subject to Defence Tax) paid out of the profits of the relevant year at any time up to the date of the deemed distribution. The accounting profits to be taken into account in this respect do not include fair value adjustments to movable or immovable property (if any).

In case where a person who is not a Cyprus tax resident receives dividend from a Cypriot tax resident company and that dividend is paid out of profits which at any stage were subjected to the deemed dividend distribution rule described above, then the Defence Tax paid under the deemed dividend distribution provisions is refundable.

Taxation of Income and Gains of the GDS Holders

Gains from Disposal of GDSs by the GDS Holders

A gain realised on the sale of GDSs by either a resident or a non resident holder shall be exempt from any tax in Cyprus.

Dividends to be Received by the GDS Holders

Dividends to be received from the Company by non resident GDS holders and corporate resident GDS holders shall not be subject to tax in Cyprus, whether by way of withholding or otherwise.

Dividends to be received from the Company by resident individual GDS holders shall be subject to Defence Tax at the rate of 15 per cent.

Capital Duty

Capital duty in the form of registration fees is payable to the Registrar of Companies in respect of the registered authorised and issued share capital of a Cyprus-incorporated company upon its incorporation and upon subsequent increases thereon.

The capital duty rates for subsequent changes of the registered authorised and issued share capital are as follows:

- 0.6 per cent. on the nominal value of additional registered authorised share capital; and

- EUR 17 flat duty on every issue, whether the shares are issued at their nominal value or at a premium.

The Company is not liable to capital duty as it is not Cyprus-incorporated.

Stamp Duty

Cyprus levies stamp duty on documents (i.e. contracts/agreements) that relate to:

- any assets situated in Cyprus; or
- any matter or thing which is performed or done in Cyprus.

There are documents which are subject to stamp duty in Cyprus at a fixed fee (ranging from three cents to EUR 34) and documents which are subject to stamp duty based on the value of the instrument (0.15 per cent. for sums up to EUR 170,860 and 0.2 per cent. for sums exceeding EUR 170,860 and up to EUR 8,543,007). There is a maximum (capped) stamp duty of EUR 17,086 per agreement/contract regarding amounts exceeding EUR 8,543,007. The above obligation arises irrespective of whether the instrument is executed in Cyprus or abroad.

Agreements relating to trading of the GDSs which represent shares listed on a recognized stock exchange should be exempt from Cypriot stamp duty.

16.2 French Taxation

The following provisions summarize the French tax consequences likely to be applied to investors who are not residents of France. Investors should nonetheless consult their own tax advisors with regard to tax consequences applicable to their individual situation.

Any payments made under the GDSs will not be subject to withholding or deduction for, or on account of, any French Taxes. For the purpose of this paragraph "French Taxes" shall mean taxes of whatever nature levied by or on behalf of the French Republic or any of its subdivisions or taxing authorities.

17 THIRD PARTY INFORMATION, STATEMENTS BY EXPERT

17.1 Hatch and SRK

The Hatch and SRK independent technical report for the mining and non-mining assets held by the Company and its subsidiaries is included in Appendix VI to the HK Prospectus. The grounds and context for this report are included in the introductory section of such report on pages VI-1 to VI-3 of the HK Prospectus.

Hatch and SRK have given and have not withdrawn their written consent to the inclusion in this document of their report and references to them and to the use of their name in the form and context in which they appear and have authorised the contents of their report for the purposes of item 23.1 of Annex X of the Commission Regulation (EC) 809/2004.

17.2 American Appraisal

The American Appraisal property valuation report on selected property interests of the Company and its subsidiaries in certain countries is included in Appendix V to the HK Prospectus. The grounds and context for this report are included in the introductory section of such report on page V-1 of the HK Prospectus.

American Appraisal has given and have not withdrawn its written consent to the inclusion in this document of its report and references thereto and to the use of its name in the form and

context in which they appear and have authorised the contents of their report for the purposes of item 23.1 of Annex X of the Commission Regulation (EC) 809/2004.

17.3 CRU

CRU Strategies Limited is a company incorporated in England and Wales which is an independent business analysis and consulting group focused on the mining, metals, power cables, fertiliser and chemical sectors.

CRU has given and has not withdrawn its written consent to the inclusion in this document of references to it and to the use of its name in the form and context in which they appear for the purposes of item 23.1 of Annex X of the Commission Regulation (EC) 809/2004. In addition, the information sourced from CRU has been accurately reproduced and so far as the Company is aware and has been able to ascertain from the published information, no facts have been omitted which would render the reproduced information inaccurate or misleading.

18 AUDIT REPORTS FROM KPMG ON HISTORICAL FINANCIAL INFORMATION IN APPENDIX I TO THE HK PROSPECTUS

18.1 Audit Report from KPMG on the annual financial information for the years 2006, 2007 and 2008

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Independent Auditors' Report

To the Board of Directors

United Company RUSAL Limited

We have audited the consolidated financial statements of United Company RUSAL Limited (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as at 31 December 2008, 2007 and 2006, and the consolidated statements of income, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory notes as set out in Appendix I "Accountants' report" of the prospectus prepared for the purpose of the Hong Kong Placing dated 31 December 2009 ("the HK Prospectus").

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatements, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with International Standards on Auditing. Those standards require that we comply with relevant ethical requirements and plan and perform the audits to obtain reasonable assurance whether the consolidated financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2008, 2007 and 2006, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards.

ZAO KPMG
31 December 2009

18.2 Audit Report from KPMG on the interim financial information as of June 30, 2009

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Independent Auditors' Report

To the Board of Directors

United Company RUSAL Limited

We have audited the interim consolidated financial statements of United Company RUSAL Limited and its subsidiaries (the "Group"), which comprise the interim consolidated statement of financial position as at 30 June 2009, and the related interim consolidated statement of income, interim consolidated statement of comprehensive income, interim consolidated statement of changes in equity and interim consolidated statement of cash flows for the six-month period then ended, and a summary of significant accounting policies and other explanatory notes as set out in Appendix I "Accountants' report" of the prospectus prepared for the purpose of the Hong Kong Placing dated 31 December 2009 ("the HK Prospectus").

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these interim consolidated financial statements in accordance with International Financial Reporting Standards. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of interim consolidated financial statements that are free from material misstatements, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditors' Responsibility

Our responsibility is to express an opinion on these interim consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance whether the interim consolidated financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the interim consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the interim consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the interim consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the interim consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the interim consolidated financial statements present fairly, in all material respects, the interim consolidated financial position of the Group as at 30 June 2009, and its interim consolidated financial performance and its interim consolidated cash flows for the six-month period then ended in accordance with International Financial Reporting Standard IAS 34 *Interim Financial Reporting*.

ZAO KPMG
31 December 2009

19 REPORT FROM KPMG ON UNAUDITED PRO FORMA FINANCIAL INFORMATION

Unaudited pro forma statement of adjusted net assets and net tangible assets of the Company and its subsidiaries is set out in part A of Appendix III "Unaudited Pro Forma Financial Information" on pages III-1 and III-2 of the HK Prospectus.

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Report on Unaudited Pro Forma Financial Information

To the Board of Directors
United Company RUSAL Limited

Dear Sirs,

We report on the unaudited pro forma statement of adjusted net assets and net tangible assets (the "pro forma financial information") of United Company RUSAL Limited (the "Company") and its subsidiaries (hereinafter collectively referred to as "the Group") as set out in part A of Appendix III "Unaudited Pro Forma Financial Information" of the prospectus prepared for the purpose of the Hong Kong Placing dated 31 December 2009 ("the HK Prospectus"). The pro forma financial information has been compiled by the Directors of the Company on the basis described in Notes 1-7 in part A of Appendix III "Unaudited Pro Forma Financial Information" in the HK Prospectus, for illustrative purposes only, to provide information about how the proposed Global Offering of the Company's shares (the "Global Offering") might have affected the financial information presented on the basis of the accounting policies adopted by the Company in preparing the financial statements for the period ended 30 June 2009. Because of its nature, the pro forma financial information addresses a hypothetical situation and therefore does not represent the Company's Group's actual financial position had the Global Offering occurred on 30 June 2009.

Responsibilities

The Directors of the Company are responsible for the compilation of the pro forma financial information in accordance with the requirements of the Commission Regulation (EC) No 809/2004. Our responsibility is to express an opinion as required by item 7 of Annex II of the Commission Regulation (EC) No 809/2004, as to the proper compilation of the pro forma financial information. In providing this opinion we are not updating or refreshing any reports or opinions previously made by us on any financial information used in the compilation of the pro forma financial information, nor do we accept responsibility for such reports or opinions beyond that owed to those to whom those reports or opinions were addressed by us at the dates of their issue.

Basis of opinion

We conducted our work in accordance with International Standard on Assurance Engagements 3000, Assurance Engagements Other Than Audits or Reviews of Historical Financial Information. The work that we performed for the purpose of making this report, which involved no independent examination of any of the underlying financial information, including their adjustment to the Company's accounting policies nor of the pro forma assumptions stated in the pro forma notes, consisted primarily of comparing the unadjusted financial information with the source documents, considering the evidence supporting the pro forma adjustments and discussing the pro forma financial information with the Company's management.

We planned and performed our work so as to obtain the information and explanations we considered necessary in order to provide us with reasonable assurance that the pro forma financial information has been properly compiled on the basis stated and that such basis is consistent with the accounting policies of the Company.

Opinion

In our opinion:

- the unaudited pro forma financial information has been properly compiled on the basis stated in Notes 1-7 in part A of Appendix III "Unaudited Pro Forma Financial Information" in the HK Prospectus; and
- such basis is consistent with the accounting policies of the Company as described in the notes to the financial statements of the Company for the period ended 30 June 2009.

This report is required by the Commission Regulation (EC) No 809/2004 and is given for the purpose of complying with that Regulation and for no other purpose.

ZAO KPMG

31 December 2009

20 REPORT FROM KPMG ON PROFIT FORECAST INFORMATION

Profit Forecast comprises the forecast of the consolidated net profit attributable to the equity holders of the Company (as set out in the section "Financial Information – Profit Forecast" on pages 249-250 of the HK Prospectus[8] and in part A of Appendix IV "Profit Forecast" on pages IV-1 to IV-4 of the HK Prospectus) and the forecast earnings per Share after the estimated effect of the Global Offering (as set out in part B of Appendix III "Unaudited Pro forma Financial Information" on page III-3 of the HK Prospectus) of the Company and its subsidiaries for the year ending 31 December 2009.

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Report on Profit Forecast

To the Board of Directors
United Company RUSAL Limited

Dear Sirs,

[8] It has come to the Company's attention that, on page 249 of the HK Prospectus, the first paragraph under the heading "Profit Forecast" incorrectly states the estimated net gain in relation to the debt restructuring in December 2009. For further details, see Exhibit 2 "Clarification Announcement" to this Prospectus.

We report on the Profit Forecast comprising the forecast of the consolidated net profit attributable to the equity holders of the Company and the forecast earnings per Share after the estimated effect of the Global Offering of United Company RUSAL Limited ("the Company") and its subsidiaries (together "the Group") for the year ending 31 December 2009 (the "Profit Forecast"). The forecast of the consolidated net profit attributable to the equity holders of the Company is set out in the section "Financial Information – Profit Forecast", and the material assumptions upon which it is based are set out in part A of Appendix IV "Profit Forecast" of the prospectus prepared for the purpose of the Hong Kong Placing dated 31 December 2009 ("the HK Prospectus"). Forecast earnings per Share are set out in part B of Appendix III "Unaudited Pro forma Financial Information" of the HK Prospectus.

Responsibility

The Directors of the Company are responsible for the preparation of the forecast of the consolidated net profit attributable to the equity holders of the Company and for the bases and assumptions made therein, in accordance with the requirements of item 13 of Annex I of the EU Prospectus Regulation and for the preparation of forecast earnings per Share after the estimated effect of the Global Offering derived from this latter and for assumptions made therein. Our responsibility is to express an opinion as required by item 13.2 of Annex I of the EU Prospectus Regulation, as to the proper compilation of the Profit Forecast on the basis stated and consistency of basis of accounting with policies of the Group applied to historical financial statements and to report that opinion to you.

Basis of opinion

We conducted our work in accordance with International Standard on Assurance Engagements 3000, Assurance Engagements Other Than Audits or Reviews of Historical Financial Information. Our work included considering whether the Profit Forecast has been accurately compiled based upon the disclosed assumptions and the accounting policies of the Group.

We planned and performed our work so as to obtain the information and explanations we considered necessary in order to provide us with reasonable assurance that the Profit Forecast has been properly compiled on the basis stated and basis of accounting used for a Profit Forecast has been consistent with accounting policies of the Group.

Since the Profit Forecast and the assumptions on which it is based relate to the future and may therefore be affected by unforeseen events, we express no opinion as to whether the actual results reported will correspond to those shown in the Profit Forecast, and differences may be material. Our engagement does not include an audit of the assumptions identified by the company and underlying the profit forecast.

Opinion

In our opinion, the Profit Forecast has been properly compiled on the basis stated in part A of Appendix IV "Profit Forecast" in the HK Prospectus and the basis of accounting used is consistent with the accounting policies of the Group as described in the notes to the financial statements of the Group for the period ended 30 June 2009.

Without qualifying our opinion above, we draw attention to section headed "Bases and Assumptions" in the Appendix IV to the HK Prospectus which sets out the assumptions and estimates adopted by the Directors regarding the impact of the debt restructuring in December

2009. In preparing the Profit Forecast, the Directors of the Company have assumed that there will be a gain recognised in respect of the debt restructuring of US$ 1,067 million, net of various restructuring fees and expenses of US$201 million, for the year ending 31 December 2009. The Directors believe this is the best estimate of the gain on the debt restructuring. Should the actual gain differ from the amount estimated by the Directors, such difference would have the effect of increasing or decreasing the consolidated net profit attributable to the equity shareholders of the Company for the year ending 31 December 2009.

This report is required by item 13.2 of Annex I of the EU Prospectus Regulation and is given for the purpose of complying with that requirement and for no other purpose.

ZAO KPMG

31 December 2009

CROSS-REFERENCE-LIST

ANNEX X

MINIMUM DISCLOSURE REQUIREMENTS FOR THE DEPOSITORY RECEIPTS ISSUED OVER SHARES (SCHEDULE)

(Page numbering refers to the page contained in the relevant document)

Item #	Item contents	Chapter / Exhibit	Page/Section
10.1	**PERSONS RESPONSIBLE**		
10.1.1.	All persons responsible for the information given in the prospectus and, as the case may be, for certain parts of it, with, in the latter case, an indication of such parts. In the case of natural persons including members of the issuer's administrative, management or supervisory bodies indicate the name and function of the person; in case of legal persons indicate the name and registered office.	Chapter C	33 (Responsibility for this Prospectus)
		Exhibit	63-64 (Directors)
10.1.2.	A declaration by those responsible for the prospectus that, having taken all reasonable care to ensure that such is the case, the information contained in the prospectus is, to the best of their knowledge, in accordance with the facts and contains no omission likely to affect its import. As the case may be, declaration by those responsible for certain parts of the prospectus that, having taken all reasonable care to ensure that such is the case, the information contained in the part of the prospectus for which they are responsible is, to the best of their knowledge, in accordance with the facts and contains no omission likely to affect its import.	Chapter C	33 (Responsibility for this Prospectus)
		Exhibit	60 (Information about this Prospectus and the Global Offering – Directors' responsibility for the content of this Prospectus)
A12.2	**STATUTORY AUDITORS**		
10.2.1	Names and addresses of the issuer's auditors for the period covered by the historical financial information (together with their membership in a professional body).	Exhibit	68 (Directors and Parties involved in the Global Offering),
		Chapter C:	78 (Audit reports from KPMG on historical financial information in Appendix I to the HK Prospectus)
10.2.2	If auditors have resigned, been removed or not been re-appointed during the period covered by the historical financial information, indicate details if material.	Not applicable	Not applicable
10.3	**SELECTED FINANCIAL INFORMATION**		
10.3.1.	Selected historical financial information regarding the issuer, presented for each financial year for the period covered by the historical financial information, and any subsequent interim financial period, in the same currency as the financial information. The selected historical financial information must provide the key figures that summarise the financial condition of the issuer.	Exhibit	162-167 (Selected Financial Data of the Group)

Item #	Item contents	Chapter / Exhibit	Page/Section
10.3.2.	If selected financial information for interim periods is provided, comparative data from the same period in the prior financial year shall also be provided, except that the requirement for comparative balance sheet information is satisfied by presenting the year end balance sheet information.	Exhibit	162-167 (Selected Financial Data of the Group)
10.4.	**RISK FACTORS**		
	Prominent disclosure of risk factors that are specific to the issuer or its industry in a section headed "Risk Factors".	Chapter B	30-31 (Risk Factors – Risks relating to the Group and its Business)
		Exhibit	21-52 (Risk Factors)
10.5	**INFORMATION ABOUT THE ISSUER**		
10.5.1	**History and Development of the Issuer**		
10.5.1.1.	the legal and commercial name of the issuer;	Prospectus	Cover page
		Exhibit	Cover page
10.5.1.2	the place of registration of the issuer and its registration number;	Exhibit	69 (Corporate information), Appendix VIII-1 (Statutory and General Information)
10.5.1.3	the date of incorporation and the length of life of the issuer, except where indefinite;	Exhibit	Appendix VIII-1 (Statutory and General Information)
10.5.1.4	the domicile and legal form of the issuer, the legislation under which the issuer operates, its country of incorporation, and the address and telephone number of its registered office (or principal place of business if different from its registered office);	Exhibit	69 (Corporate Information) Appendix VIII-1 (Statutory and General Information)
10.5.1.4	the important events in the development of the issuer's business	Exhibit	86-91 (History and Corporate Structure), 92-161 (Business) 168-258 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
10.5.2	**Investments**		

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10.5.2.1	A description, (including the amount) of the issuer's principal investments for each financial year for the period covered by the historical financial information up to the date of the prospectus;	Exhibit	86-88 (History and Development), 98-99 (Strategic Investments), 142-145 (Norilsk Nickel and Material Joint Ventures), 172 (The Acquisition of a 25% plus one share stake in Norilsk Nickel and Subsequent Impairment) 220-221 (Cash lows)
10.5.2.2	A description of the issuer's principal investments that are currently in progress, including the distribution of these investments geographically (home and abroad) and the method of financing (internal or external);	Exhibit	112-113 (Approved projects within the Aluminium Division), 127 (Approved Projects within the Alumina Division), 143-145 (Material Joint Ventures), 244 (Capital Expenditure), 245-247 (Contractual commitments)
10.5.2.3	Information concerning the issuer's principal future investments on which its management bodies have already made firm commitments.	Exhibit	245-246 (Contractual Commitments, Capital Commitments)
10.6.	**BUSINESS OVERVIEW**		
10.6.1	**Principal Activities**		
10.6.1.1	A description of, and key factors relating to, the nature of the issuer's operations and its principal activities, stating the main categories of products sold and/or services performed for each financial year for the period covered by the historical financial information;	Exhibit	92-161 (Business),
10.6.1.2	An indication of any significant new products and/or services that have been introduced and, to the extent the development of new products or services has been publicly	Not applicable	Not applicable

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	disclosed, give the status of development.		
10.6.1.2	**<u>Principal Markets</u>** A description of the principal markets in which the issuer competes, including a breakdown of total revenues by category of activity and geographic market for each financial year for the period covered by the historical financial information.	Exhibit	92-161 (Business), 184-186 (Revenue), 193-194 (Revenue), 203-204 (Revenue) Appendix I-33-42 (Segment reporting)
10.6.3	Where the information given pursuant to items 6.1. and 6.2. has been influenced by exceptional factors, mention that fact.	Exhibit	168-182 (Management's Discussion and Analysis of Financial Condition and Results of Operations)
10.6.4	If material to the issuer's business or profitability, disclose summary information regarding the extent to which the issuer is dependent on patents or licences, industrial, commercial or financial contracts or new manufacturing processes.	Exhibit	97-98 (Proprietary R&D and leading internal EPCM expertise), 128 (Technology), 153 (Intellectual Property), Appendix VIII-10 (Intellectual Property Rights)
10.6.5	The basis for any statements made by the issuer regarding its competitive position.	Exhibit	1 (Overview), 21 (Risk Factors), 81-83 (Industry and Market Overview) 86 (History and Corporate Structure), 92 (Overview), 94-95 (Secure and sustainable low cost position and power advantage), 99 (Acquisition of 25% plus one share in Norilsk

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			Nickel), 100-101 (Maintain a sustainable low-cost positioning through continuous cost reduction), 104 (The Group's operations), 109 (Bratsk Aluminium Smelter), 110 (Krasnoyarsk Aluminium Smelter), 168-169 (Overview)
10.7	**ORGANIZATIONAL STRUCTURE**		
10.7.1	If the issuer is part of a group, a brief description of the group and the issuer's position within the group.	Exhibit	34-36 (Risk factors), 90 (Corporate structure)
10.7.2	A list of the issuer's significant subsidiaries, including name, country of incorporation or residence, proportion of ownership interest and, if different, proportion of voting power held.	Exhibit	Appendix I:125-129 (Particulars of Subsidiaries) Appendix VIII: 1 (Statutory and General Information)
10.8	**PROPERTY, PLANTS AND EQUIPMENT**		
10.8.1	Information regarding any existing or planned material tangible fixed assets, including leased properties, and any major encumbrances thereon.	Exhibit	109-112 (Principal Aluminium Smelters), 113-115 (Production of other Aluminium Products or Other Materials Related to Aluminium Production), 118-123 (Principal Alumina Refineries), 124-127 (Mining), 129-130

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			(Packaging Division), 232-233 (Additional security) Appendix V (Property Valuation)
10.8.2	A description of any environmental issues that may affect the issuer's utilisation of the tangible fixed assets.	Exhibit	41-43 (Risk Factors), 147-151 (Environmental, Health and Safety Matters)
10.9	**OPERATING AND FINANCIAL REVIEW**		
10.9.1	**Financial Condition** To the extent not covered elsewhere in the prospectus, provide a description of the issuer's financial condition, changes in financial condition and results of operations for each year and interim period, for which historical financial information is required, including the causes of material changes from year to year in the financial information to the extent necessary for an understanding of the issuer's business as a whole.	Exhibit	168-258 (Management's Discussion and Analysis of Financial Condition and Results of Operation)
10.9.2	**Operating Results**		
10.9.2.1	Information regarding significant factors, including unusual or infrequent events or new developments, materially affecting the issuer's income from operations, indicating the extent to which income was so affected.	Exhibit	168-182 (Management's Discussion and Analysis of Financial Condition and Results of Operation)
10.9.2.2	Where the financial statements disclose material changes in net sales or revenues, provide a narrative discussion of the reasons for such changes.	Exhibit	184-186 (Revenue), 193-194 (Revenue), 203-204 (Revenue)
10.9.2.3	Information regarding any governmental, economic, fiscal, monetary or political policies or factors that have materially affected, or could materially affect, directly or indirectly, the issuer's operations.	Exhibit	23-24, 29-30, 41-43, 44-50 (Risk Factors), 168-182 (Management's Discussion and Analysis of Financial Condition and Results of

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			Operation)
10.	**CAPITAL RESOURCES**		
10.10.1	Information concerning the issuer's capital resources (both short and long term);	Exhibit	219-244 (Liquidity and Capital Resources)
10.10.2	An explanation of the sources and amounts of and a narrative description of the issuer's cash flows;	Exhibit	220-221 (Cash Flows)
10.10.3	Information on the borrowing requirements and funding structure of the issuer;	Exhibit	170-171 (Restructuring), 219-244 (Liquidity and Capital Resources)
		Chapter C	36 (Working Capital and indebtedness statements)
10.10.4	Information regarding any restrictions on the use of capital resources that have materially affected, or could materially affect, directly or indirectly, the issuer's operations.	Exhibit	170-171 (Restructuring), 219-244 (Liquidity and Capital Resources)
10.10.5	Information regarding the anticipated sources of funds needed to fulfil commitments referred to in items 5.2.3. and 8.1.	Exhibit	143-145 (Material Joint Ventures), 244 (Capital Expenditure), 245-246 (Contractual Commitments, Capital Commitments)
10.11	**RESEARCH AND DEVELOPMENT, PATENTS AND LICENCES**		
	Where material, provide a description of the issuer's research and development policies for each financial year for the period covered by the historical financial information, including the amount spent on issuer-sponsored research and development activities.	Exhibit	97-98 (Proprietary R&D and leading internal EPCM expertise), 118-119 (Aughinish Alumina Refinery) 127-128 (Engineering and Construction Division)
10.12	**TREND INFORMATION**		
10.12.1	The most significant recent trends in production, sales and inventory, and costs and selling prices since the end of the	Exhibit	72-85 (Industry and Market

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	last financial year to the date of the prospectus.		Overview) 104 (Aluminium Division), 115 (Alumina Production), 129-130 (Packaging Division), 139-142 (Sales and Distribution), 168-188 (Management's Discussion and Analysis of Financial Condition and Results of Operation)
10.12.2	Information on any known trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on the issuer's prospects for at least the current financial year.	Exhibit	21-52 (Risk Factors), 80-81 (Expectations for the Remainder of 2009 and 2010-2012) 168-182 (Management's Discussion and Analysis of Financial Condition and Results of Operation)
10.13	**PROFIT FORECASTS OR ESTIMATES** If an issuer chooses to include a profit forecast or a profit estimate the prospectus must contain the information items 13.1 and 13.2:		
10.13.1	A statement setting out the principal assumptions upon which the issuer has based its forecast, or estimate. There must be a clear distinction between assumptions about factors which the members of the administrative, management or supervisory bodies can influence and assumptions about factors which are exclusively outside the influence of the members of the administrative, management or supervisory bodies; the assumptions must be readily understandable by investors, be specific and precise and not relate to the general accuracy of the estimates underlying the forecast.	Exhibit	249-250 (Financial Information – Profit Forecast) Appendix IV (Profit Forecast); Pages IV-5 to IV-7 intentionally omitted. Appendix III, Part B, page III-3 (Unaudited Pro Forma Forecast Earnings per Share)

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10.13.2	A report prepared by independent accountants or auditors stating that in the opinion of the independent accountants or auditors the forecast or estimate has been properly compiled on the basis stated and that the basis of accounting used for the profit forecast or estimate is consistent with the accounting policies of the issuer.	Chapter C	82-84 (Report from KPMG on profit forecast information)
10.13.3	The profit forecast or estimate prepared on a basis comparable with the historical financial information.	Exhibit	249-250 (Financial Information – Profit Forecast)
10.13.4	If the issuer has published a profit forecast in a prospectus which is still outstanding, provide a statement setting out whether or not that forecast is still correct as at the time of the prospectus, and an explanation of why such forecast is no longer valid if that is the case.	Not applicable	Not applicable
10.14	**ADMINISTRATIVE, MANAGEMENT, AND SUPERVISORY BODIES AND SENIOR MANAGEMENT**		
10.14.1	Names, business addresses and functions in the issuer of the following persons and an indication of the principal activities performed by them outside that issuer where these are significant with respect to that issuer:		
	(a) members of the administrative, management or supervisory bodies; (b) partners with unlimited liability, in the case of a limited partnership with a share capital;	Exhibit	259-283 (Directors and Senior Management)
	(c) founders, if the issuer has been established for fewer than five years; (d) any senior manager who is relevant to establishing that the issuer has the appropriate expertise and experience for the management of the issuer's business.	Chapter C	38 (Composition of Board of Directors)
	The nature of any family relationship between any of those persons.	Chapter C	39 (Additional information regarding directors and senior management)
	In the case of each member of the administrative, management or supervisory bodies of the issuer and person described in points (b) and (d) of the first subparagraph, details of that person's relevant management expertise and experience and the following information:	Exhibit	259-283 (Directors and Senior Management)
	(a) the names of all companies and partnerships of which such person has been a member of the administrative, management or supervisory bodies or partner at any time in the previous five years, indicating whether or not the individual is still a member of the administrative, management or supervisory bodies or partner. It is not necessary to list all the subsidiaries of an issuer of which the person is also a member of the administrative, management or supervisory bodies;	Exhibit	259-283 (Directors and Senior Management)
	(b) any convictions in relation to fraudulent offences for at least the previous five years;	Chapter C	39 (Additional information regarding

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	(c) details of any bankruptcies, receiverships or liquidations with which a person described in points (a) and (d) of the first subparagraph who was acting in the capacity of any of the positions set out in points (a) and (d) of the first subparagraph member of the administrative, management or supervisory bodies was associated for at least the previous five years; (d) details of any official public incrimination and/or sanctions of such person by statutory or regulatory authorities (including designated professional bodies) and whether such person has ever been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of an issuer or from acting in the management or conduct of the affairs of any issuer for at least the previous five years. If there is no such information to be disclosed, a statement to that effect must be made.		directors and senior management)
10.14.2	**Administrative, Management, and Supervisory bodies and Senior Management conflicts of interests** Potential conflicts of interests between any duties to the issuer of the persons referred to in the first subparagraph of item 14.1. and their private interests and or other duties must be clearly stated. In the event that there are no such conflicts, make a statement to that effect. Any arrangement or understanding with major shareholders, customers, suppliers or others, pursuant to which any person referred to in the first subparagraph of item 14.1 was selected as a member of the administrative, management or supervisory bodies or member of senior management.	Exhibit	34-36 (Risk Factors), 259-283 (Directors and Senior Management), 284-299 (Substantial Shareholders) Appendix VIII: 19-23 (Further information about our Directors, Management, Staff and Experts)
10.15	**REMUNERATION AND BENEFITS** In relation to the last full financial year for those persons referred to in points (a) and (d) of the first subparagraph of item 14.1:		
10.15.1.	The amount of remuneration paid (including any contingent or deferred compensation), and benefits in kind granted, to such persons by the issuer and its subsidiaries for services in all capacities to the issuer and its subsidiaries by any person. This information must be provided on an individual basis unless individual disclosure is not required in the issuer's home country and is not otherwise publicly disclosed by the issuer.	Exhibit	280-283 (Compensation of Directors and Senior Management) Appendix I: 53-57 (Directors' remuneration) Appendix VIII: 23 (Directors' remuneration)

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		Chapter C	40 (Compensation of Directors and Senior Management)
10.15.2	The total amounts set aside or accrued by the issuer or its subsidiaries to provide pension, retirement or similar benefits.	Exhibit	280-283 (Compensation of Directors and Senior Management) Appendix VIII: 23 (Directors' remuneration)
		Chapter C	40 (Compensation of Directors and Senior Management)
10.16	**BOARD PRACTICES** In relation to the issuer's last completed financial year, and unless otherwise specified, with respect to those persons referred to in point (a) of the first subparagraph of item 14.1.		
10.16.1	Date of expiration of the current term of office, if applicable, and the period during which the person has served in that office.	Exhibit	259-283 (Directors and Senior Management), Appendix VII: 3-5 (Retirement, appointment and removal), Appendix VIII: 22 (Particulars of service contracts)
10.16.2	Information about members of the administrative, management or supervisory bodies' service contracts with the issuer or any of its subsidiaries providing for benefits upon termination of employment, or an appropriate negative statement.	Chapter C	39 (Additional information regarding directors and senior management)
10.16.3	Information about the issuer's audit committee and remuneration committee, including the names of committee members and a summary of the terms of reference under which the committee operates.	Exhibit	278 (Directors and Senior Management)
10.16.4	A statement as to whether or not the issuer complies with its country's of incorporation corporate governance	Chapter C	40 (Corporate Governance)

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	regime(s). In the event that the issuer does not comply with such a regime, a statement to that effect together with an explanation regarding why the issuer does not comply with such regime.	Exhibit	99-100 (Experienced management team and world class corporate governance) 277-280 (Directors and Senior Management – Committees and Compliance Adviser)
10.17	**EMPLOYEES**		
10.17.1	Either the number of employees at the end of the period or the average for each financial year for the period covered by the historical financial information up to the date of the prospectus (and changes in such numbers, if material) and, if possible and material, a breakdown of persons employed by main category of activity and geographic location. If the issuer employs a significant number of temporary employees, include disclosure of the number of temporary employees on average during the most recent financial year.	Exhibit	152 (Employees)
10.17.2	**Shareholdings and stock options** With respect to each person referred to in points (a) and (b) of the first subparagraph of item 14.1., provide information as to their share ownership and any options over such shares in the issuer as of the most recent practicable date.	Exhibit	Appendix VIII: 19 (Disclosure of interests) 280-283 (Compensation of Directors and Senior Management)
		Chapter C	40 (Compensation of Directors and Senior Management)
10.17.3	Description of any arrangements for involving the employees in the capital of the issuer.	Exhibit	280-283 (Compensation of Directors and Senior Management)
		Chapter C	40 (Compensation of Directors and Senior Management)
10.18	**MAJOR SHAREHOLDERS**		
10.18.1	In so far as is known to the issuer, the name of any person other than a member of the administrative, management or supervisory bodies who, directly or indirectly, has an interest notifiable under the issuer's national law in the issuer's capital or voting rights, together with the amount of each such person's interest or, if there are no such persons, an appropriate negative statement.	Exhibit	284-285 (Substantial shareholders)

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10.18.2	Whether the issuer's major shareholders have different voting rights, or an appropriate negative statement.	Chapter C	40 (Shareholders)
10.18.3	To the extent known to the issuer, state whether the issuer is directly or indirectly owned or controlled and by whom and describe the nature of such control and describe the measures in place to ensure that such control is not abused.	Exhibit	284-285 (Substantial shareholders) 300-304 (Relationship with our Controlling Shareholder and Non-Competition)
10.18.4	A description of any arrangements, known to the issuer, the operation of which may at a subsequent date result in a change in control of the issuer.	Exhibit	32-33 (Risk Factors – Risks Relating to the Group and its Business – En+ is completing a restructuring of its debts and will give its lenders a pledge over 15% of the outstanding Shares)
10.19	**RELATED PARTY TRANSACTIONS** Details of related party transactions (which for these purposes are those set out in the Standards adopted according to Regulation (EC) No 1606/2002), that the issuer has entered into during the period covered by the historical financial information and up to the date of the prospectus must be disclosed in accordance with the respective standard adopted according to Regulation (EC) No 1606/2002 if applicable. If such standards do not apply to the issuer the following information must be disclosed: (a) The nature and extent of any transactions which are - as a single transaction or in their entirety - material to the issuer. Where such related party transactions are not concluded at arm's length provide an explanation of why these transactions were not concluded at arms length. In the case of outstanding loans including guarantees of any kind indicate the amount outstanding. (b) The amount or the percentage to which related party transactions form part of the turnover of the issuer.	Exhibit	34-36 (Risk Factors), 130-138 (Energy Supply), 305-311 (Connected Transactions), Appendix I: 123-124 (Related Party Transactions); I-48 (Revenue)
10.20	**FINANCIAL INFORMATION CONCERNING THE ISSUER'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES**		
10.20.1	**<u>Historical Financial Information</u>** Audited historical financial information covering the latest 3 financial years (or such shorter period that the issuer has been in operation), and the audit report in respect of each year. Such financial information must be prepared according to Regulation (EC) No 1606/2002, or if not applicable to a Member States national accounting	Exhibit	Appendix I: 4-143 (Accountants' Report) – pages 1 to 3 of Appendix I intentionally omitted

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	standards for issuers from the Community. If the issuer has changed its accounting reference date during the period for which historical financial information is required, the audited historical information shall cover at least 36 months, or the entire period for which the issuer has been in operation, whichever is the shorter. For third country issuers, such financial information must be prepared according to the international accounting standards adopted pursuant to the procedure of Article 3 of Regulation (EC) No 1606/2002 or to a third country's national accounting standards equivalent to these standards. If such financial information is not equivalent to these standards, it must be presented in the form of restated financial statements. The last two years audited historical financial information must be presented and prepared in a form consistent with that which will be adopted in the issuer's next published annual financial statements having regard to accounting standards and policies and legislation applicable to such annual financial statements. If the issuer has been operating in its current sphere of economic activity for less than one year, the audited historical financial information covering that period must be prepared in accordance with the standards applicable to annual financial statements under Regulation (EC) No 1606/2002, or if not applicable to a Member States national accounting standards where the issuer is an issuer from the Community. For third country issuers, the historical financial information must be prepared according to the international accounting standards adopted pursuant to the procedure of Article 3 of Regulation (EC) No 1606/2002 or to a third country's national accounting standards equivalent to these standards. This historical financial information must be audited. If the audited financial information is prepared according to national accounting standards, the financial information required under this heading must include at least the following: (a) the balance sheet; (b) the income statement; (c) a statement showing either all changes in equity or changes in equity other than those arising from capital transactions with owners and distributions to owners; (d) the cash flow statement; (e) the accounting policies and explanatory notes. The historical annual financial information must be independently audited or reported on as to whether or not, for the purposes of the prospectus, it gives a true and fair view, in accordance with auditing standards applicable in a Member State or an equivalent standard.	Chapter C	78 (Audit report from KPMG on the annual financial information for the years 2006, 2007 and 2008)
10.20.1.bis	**This paragraph may be used only for issues of depository receipts having a denomination per unit of at least EUR 50,000.**	Not applicable	Not applicable

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10.20.2	**Financial statements** If the issuer prepares both own and consolidated annual financial statements, include at least the consolidated annual financial statements in the prospectus.	Exhibit	Appendix I: 4-143 (Accountants' Report) – pages 1 to 3 of Appendix I intentionally omitted
10.20.3	**Auditing of historical annual financial information**		
10.20.3.1	A statement that the historical financial information has been audited. If audit reports on the historical financial information have been refused by the statutory auditors or if they contain qualifications or disclaimers, such refusal or such qualifications or disclaimers must be reproduced in full and the reasons given.	Chapter C	78 (Audit report from KPMG on the annual financial information for the years 2006, 2007 and 2008)
10.20.3.2	Indication of other information in the prospectus which has been audited by the auditors.	Not applicable	Not applicable
10.20.3.3	Where financial data in the prospectus is not extracted from the issuer's audited financial statements state the source of the data and state that the data is unaudited.	Exhibit	14-16 (Summary Financial Information), 162-167 (Selected Financial Data of the Group), Appendix II: 1-95 (Financial Statements of MMC Norilsk Nickel) Appendix III (Unaudited Pro Forma Financial Information); Pages III-4 to III-6 intentionally omitted Appendix IV (Profit forecast); Pages IV-5 to IV-7 intentionally omitted
10.20.4	**Age of latest financial information**		
10.20.4.1	The last year of audited financial information may not be older than: (a) 18 months from the date of the prospectus if the issuer includes audited interim financial statements in the prospectus; (b) 15 months from the date of the prospectus if the issuer includes unaudited interim financial statements in the prospectus.	Exhibit	Appendix I: 4-143 (Accountants' Report) – pages 1 to 3 of Appendix I intentionally omitted
10.20.5	**Interim and other financial information**		

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10.20.5.1	If the issuer has published quarterly or half yearly financial information since the date of its last audited financial statements, these must be included in the prospectus. If the quarterly or half yearly financial information has been reviewed or audited the audit or review report must also be included. If the quarterly or half yearly financial information is unaudited or has not been reviewed, state that fact.	Exhibit	Appendix I: 1-143 (Accountants' Report) - pages 1 to 3 of Appendix I intentionally omitted
		Chapter C	79 (Audit report from KPMG on interim financial information as of June 30, 2009)
10.20.5.2	If the prospectus is dated more than nine months after the end of the last audited financial year, it must contain interim financial information, which may be unaudited (in which case that fact shall be stated) covering at least the first six months of the financial year. The interim financial information must include comparative statements for the same period in the prior financial year, except that the requirement for comparative balance sheet information may be satisfied by presenting the years end balance sheet.	Exhibit	Appendix I: 1-143 (Accountants' Report) – pages 1 to 3 of Appendix I intentionally omitted
10.20.6	**Dividend policy** A description of the issuer's policy on dividend distributions and any restrictions thereon.	Exhibit	17-18 (Dividend Policy), 26-28 (Risk Factors), 182 (Impact of Restructuring Going Forward), 233 (Dividends), Appendix VII: 9-10 (Dividends and other methods of distribution), Appendix VII: 20 (Dividends and distributions)
		Chapter C	42 (Dividend)
10.20.6.1	The amount of the dividend per share for each financial year for the period covered by the historical financial information adjusted, where the number of shares in the issuer has changed, to make it comparable.	Exhibit	Appendix I: 10-11 (Consolidated statements of changes in equity), Appendix I: 88 (Distributions)
10.20.7	**Legal and arbitration proceedings** Information on any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the issuer is aware), during a period covering at least the previous 12 months which may have, or have had in the recent past significant effects on the issuer and/or group's financial position or	Exhibit	153-161 (Litigation), 295-299 (Litigation Involving Certain Beneficial Owners)

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	profitability, or provide an appropriate negative statement.		
10.20.8	**<u>Significant change in the issuer's financial or trading position</u>** A description of any significant change in the financial or trading position of the group which has occurred since the end of the last financial period for which either audited financial information or interim financial information have been published, or provide an appropriate negative statement.	Exhibit	170-171 (Restructuring), 182 (Impact of Restructuring Going Forward), 222-244 (Debt Restructuring) Appendix I: 130-137 (Events subsequent to balance sheet date)
10.21	**ADDITIONAL INFORMATION**		
10.21.1	**<u>Share Capital</u>** The following information as of the date of the most recent balance sheet included in the historical financial information:		
10.21.1.1	The amount of issued capital, and for each class of share capital: (a) the number of shares authorised; (b) the number of shares issued and fully paid and issued but not fully paid; (c)the par value per share, or that the shares have no par value; (d) a reconciliation of the number of shares outstanding at the beginning and end of the year. If more than 10% of capital has been paid for with assets other than cash within the period covered by the historical financial information, state that fact.	Exhibit	312 (Share Capital)
10.21.1.2	If there are shares not representing capital, state the number and main characteristics of such shares.	Not applicable	Not applicable
10.21.1.3	The number, book value and face value of shares in the issuer held by or on behalf of the issuer itself or by subsidiaries of the issuer.	Not applicable	Not applicable
10.21.1.4	The amount of any convertible securities, exchangeable securities or securities with warrants, with an indication of the conditions governing and the procedures for conversion, exchange or subscription.	Exhibit	226-238 (Terms of International Debt Restructuring); 233-234 (Warrants)
		Chapter C	41-42 (Debt Restructuring)

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10.21.1.5	Information about and terms of any acquisition rights and or obligations over authorised but unissued capital or an undertaking to increase the capital.	Exhibit	230 (Disposal and Equity Injection Undertakings, Debt Repayment Targets); 233-234 (Warrants); 313-314 (General Mandate to Issue Shares); Appendix VII-1-2 (Power to allot and issue shares and warrants); Appendix VII-20 (Warrants); Appendix VIII-2-3 (Resolutions in Writing of the Shareholders passed on 26 December 2009)
		Chapter C	41-42 (Debt Restructuring)
10.21.1.6	Information about any capital of any member of the group which is under option or agreed conditionally or unconditionally to be put under option and details of such options including those persons to whom such options relate.	Exhibit	285 (Shareholder Option)
10.21.1.7	A history of share capital, highlighting information about any changes, for the period covered by the historical financial information.	Exhibit	Appendix VIII-1 (Changes in share capital of our Group)
10.21.2	**Memorandum and Articles of Association**		
10.21.2.1	A description of the issuer's objects and purposes and where they can be found in the memorandum and articles of association.	Exhibit	Appendix VII: 1 (Memorandum of Association)
10.21.2.2	A summary of any provisions of the issuer's articles of association, statutes or charter and bylaws with respect to the members of the administrative, management and supervisory bodies.	Exhibit	Appendix VII: 1-5 (Directors)
10.21.2.3	A description of the rights, preferences and restrictions attaching to each class of the existing shares.	Exhibit	Appendix VII: 1-17 (Summary of the Constitution of the Company and Jersey Companies Law)
10.21.2.4	A description of what action is necessary to change the rights of holders of the shares, indicating where the conditions are more significant than is required by law.	Exhibit	Appendix VII: 5 (Variation of rights of existing

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			shares or classes of shares)
10.21.2.5	A description of the conditions governing the manner in which annual general meetings and extraordinary general meetings of shareholders are called including the conditions of admission.	Exhibit	Appendix VII: 7 (Requirements for annual general meetings), Appendix VII: 7-8 (Notice of meetings and business to be conducted thereat)
10.21.2.6	A brief description of any provision of the issuer's articles of association, statutes, charter or bylaws that would have an effect of delaying, deferring or preventing a change in control of the issuer.	Not applicable	Not applicable
10.21.2.7	An indication of the articles of association, statutes, charter or bylaws provisions, if any, governing the ownership threshold above which shareholder ownership must be disclosed.	Not applicable	Not applicable
10.21.2.8	A description of the conditions imposed by the memorandum and articles of association statutes, charter or bylaws governing changes in the capital, where such conditions are more stringent than is required by law.	Exhibit	Appendix VII: 9 (Power for the Company to purchase its own shares)
10.22	**MATERIAL CONTRACTS** A summary of each material contract, other than contracts entered into in the ordinary course of business, to which the issuer or any member of the group is a party, for the two years immediately preceding publication of the prospectus. A summary of any other contract (not being a contract entered into in the ordinary course of business) entered into by any member of the group which contains any provision under which any member of the group has any obligation or entitlement which is material to the group as at the date of the prospectus.	Exhibit	Appendix VIII: 6-9 (Summary of material contracts)
10.21.23	**THIRD PARTY INFORMATION, STATEMENT BY EXPERTS AND DECLARATIONS OF ANY INTEREST**		
10.23.1	Where a statement or report attributed to a person as an expert is included in the prospectus provide such person's name, business address, qualifications and material interest if any in the issuer. If the report has been produced at the issuer's request a statement to that effect that such statement or report is included, in the form and context in which it is included, with the consent of that person who has authorised the contents of that part of the prospectus.	Exhibit	63-68 (Directors and Parties involved in the Global Offering) Appendix VIII: 25 (Qualifications of experts)
		Chapter C	77 (Third Party Information – Statements by Experts)
10.23.2	Where information has been sourced from a third party,	Exhibit	72 (Industry and

Item #	Item contents	Chapter / Exhibit	Page/Section
	provide a confirmation that this information has been accurately reproduced and that as far as the issuer is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. In addition, the issuer shall identify the source(s) of the information.		Market Overview), 142-145 (Norilsk Nickel), Appendix II: (Financial Statements of MMC Norilsk Nickel) Appendix VIII: 26 (Consents)
10.24	**DOCUMENTS ON DISPLAY** A statement that for the life of the prospectus the following documents (or copies thereof), where applicable, may be inspected: (a) the memorandum and articles of association of the issuer; (b) all reports, letters, and other documents, historical financial information, valuations and statements prepared by any expert at the issuer's request any part of which is included or referred to in the prospectus; (c) the historical financial information of the issuer or, in the case of a group, the historical financial information for the issuer and its subsidiary undertakings for each of the two financial years preceding the publication of the prospectus. An indication of where the documents on display may be inspected, by physical or electronic means.	Exhibit	Appendix IX: 1 (Documents delivered to the Registrar of Companies and Available for Inspection)
10.25	**INFORMATION ON HOLDINGS**		
10.25.1	Information relating to the undertakings in which the issuer holds a proportion of the capital likely to have a significant effect on the assessment of its own assets and liabilities, financial position or profits and losses.	Exhibit	86-88 (History and Development), 98-99 (Strategic Investments), 142-145 (Norilsk Nickel and Material Joint Ventures), 172 (The Acquisition of a 25% plus one share stake in Norilsk Nickel and Subsequent Impairment) 220-221 (Cash flows) Appendix I: 125-129 (Particulars of Subsidiaries), Appendix II: 1-95 (Financial Statements of MMC Norilsk

Item #	Item contents	Chapter / Exhibit	Page/Section
			Nickel)
10.26	**INFORMATION ABOUT THE ISSUER OF THE DEPOSITORY RECEIPTS**		
10.26.1	Name, registered office and principal administrative establishment if different from the registered office.	Chapter C	34 (Information about the Issuer of the GDSs)
10.26.2	Date of incorporation and length of life of the issuer, except where indefinite.	Chapter C	34 (Information about the Issuer of the GDSs)
10.26.3	Legislation under which the issuer operates and legal form which it has adopted under that legislation.	Chapter C	34 (Information about the Issuer of the GDSs)
10.27	**INFORMATION ABOUT THE UNDERLYING SHARES**		
10.27.1	A description of the type and the class of the underlying shares, including the ISIN (International Security Identification Number) or other such security identification code.	Chapter C	34 (Type, class and currency of the Shares)
		Exhibit	312 (Share Capital), 332 (Dealing)
10.27.2	Legislation under which the underlying shares have been created.	Chapter C	35 (Governing law)
10.27.3	An indication whether the underlying shares are in registered form or bearer form and whether the underlying shares are in certificated form or book-entry form. In the latter case, name and address of the entity in charge of keeping the records.	Chapter C	35 (Form of the Shares)
		Exhibit	61 (Register of members and stamp duty) 70 (Corporate Information)
10.27.4	Currency of the underlying shares.	Exhibit	Cover page, 312 (Share Capital)
10.27.5	A description of the rights, including any limitations of these, attached to the underlying shares and procedure for the exercise of said rights.	Exhibit	Appendix VII: 6 (Voting Rights)
10.27.6	Dividend rights: (a) Fixed date(s) on which the entitlement arises, (b) Time limit after which entitlement to dividend lapses and an indication of the person in whose favour the lapse operates, (c)Dividend restrictions and procedures for non resident holders, (d) Rate of dividend or method of its calculation, periodicity and cumulative or noncumulative nature of payments.	Exhibit	233 (Dividends), Appendix VII: 9-10 (Dividends and other methods of distribution), Appendix VII: 20 (Dividends and distributions)
		Chapter C	42 (Dividend)

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10.27.7	Voting rights. Pre-emption rights in offers for subscription of securities of the same class. Right to share in the issuer's profits. Rights to share in any surplus in the event of liquidation. Redemption provisions. Conversion provisions.	Exhibit	Appendix VII: 6 (Voting rights), Appendix VII: 9-10 (Dividends and other methods of distribution), Appendix VII: 14 (Procedures on liquidation) Appendix VII: 14-15 (Alteration of share capital) Appendix VII: 19-20 (Purchases of shares and warrants by a company and its subsidiaries)
10.27.8	The issue date of the underlying shares if new underlying shares are being created for the issue of the depository receipts and they are not in existence at the time of issue of the depository receipts.	Not applicable	Not applicable
10.27.9	If new underlying shares are being created for the issue of the depository receipts, state the resolutions, authorisations and approvals by virtue of which the new underlying shares have been or will be created and/or issued.	Chapter C	35 (Authorisations)
		Exhibit	Appendix VIII: 1 (Changes in share capital of our Group), Appendix VIII: 2-3 (Resolutions in Writing of our Shareholders passed on 26 December 2009),
10.27.10	A description of any restrictions on the free transferability of the underlying shares.	Exhibit	Appendix VII: 8-9 (Transfer of shares)
10.27.11	In respect of the country of registered office of the issuer and the country(ies) where the offer is being made or admission to trading is being sought: (a) information on taxes on the income from the underlying shares withheld at source (b) indication as to whether the issuer assumes responsibility for the withholding of taxes at the source.	Chapter C	74 (Taxation)
		Exhibit	Appendix VIII: 24-25 (Taxation of Holders of Shares)
10.27.12	An indication of the existence of any mandatory takeover bids and/or squeeze-out and sell-out rules in relation to the underlying shares.	Exhibit	Appendix VII: 23-24 (Compulsory Acquisition)

Item #	Item contents	Chapter / Exhibit	Page/Section
		Chapter C	35 (Governing law)
10.27.13	An indication of public takeover bids by third parties in respect of the issuer's equity, which have occurred during the last financial year and the current financial year. The price or exchange terms attaching to such offers and the outcome thereof must be stated.	Exhibit	Appendix VII – 23-24 (Compulsory Acquisition)
10.27.14	Lock up agreements: the parties involved; content and exceptions of the agreement; indication of the period of the lock up.	Exhibit	320-321
10.27.15	**Information about selling shareholders if any**		
10.27.15.1	Name and business address of the person or entity offering to sell the underlying shares, the nature of any position office or other material relationship that the selling persons has had within the past three years with the issuer of the underlying shares or any of its predecessors or affiliates.	Not applicable	Not applicable
10.27.16	**Dilution**		
10.27.16.1	Amount and percentage of immediate dilution resulting from the offer of the depository receipts.	Exhibit	Appendix III, Part A, page III-3 (Unaudited Pro Forma Financial Information - Unaudited pro forma adjusted net assets and net tangible assets)
10.27.16.2	In the case of a subscription offer of the depository receipts to existing shareholders, disclose the amount and percentage of immediate dilutions if they do not subscribe to the offer of depository receipts.	Not applicable	Not applicable
10.27.17	**Additional information where there is a simultaneous or almost simultaneous offer or admission to trading of the same class of underlying shares as those underlying shares over which the depository receipts are being issued.**		
10.27.17.1	If simultaneously or almost simultaneously with the creation of the depository receipts for which admission to a regulated market is being sought underlying shares of the same class as those over which the depository receipts are being issued are subscribed for or placed privately, details are to be given of the nature of such operations and of the number and characteristics of the underlying shares to which they relate.	Note to the Prospectus	i (Overview)
		Exhibit	Cover page 326-332 (Structure of the Global Offering)
10.27.17.2	Disclose all regulated markets or equivalent markets on which, to the knowledge of the issuer of the depository	Note to the Prospectus	i (Overview)

Item #	Item contents	Chapter / Exhibit	Page/Section
	receipts, underlying shares of the same class of those over which the depository receipts are being issued are offered or admitted to trading.	Chapter C	71 (Admission to listing and trading of securities in the same class)
		Exhibit	Cover page
10.27.17.3	To the extent known to the issuer of the depository receipts, indicate whether major shareholders, members of the administrative, management or supervisory bodies intended to subscribe in the offer, or whether any person intends to subscribe for more than five per cent of the offer.	Chapter C	41 (Cornerstone investors)
		Exhibit	316-318 (The Cornerstone Placing)
10.28	**INFORMATION REGARDING THE DEPOSITORY RECEIPTS**		
10.28.1	A description of the type and class of depository receipts being offered and/or admitted to trading.	Chapter C	33 (Type and class of GDSs)
10.28.2	Legislation under which the depository receipts have been created.	Chapter C	53-54; 64-66 (Terms and Conditions of the GDSs) 69 (Summary of provisions relating to the GDSs while in Master form)
10.28.13	An indication whether the depository receipts are in registered or bearer form and whether the depository receipts are in certificated or book-entry form. In the latter case, include the name and address of the entity in charge of keeping the records.	Chapter C	43-49 (Terms and Conditions of the GDSs) 67-69 (Summary of provisions relating to the GDSs while in Master form)
10.28.4	Currency of the depository receipts.	Chapter C	71 (Admission to listing and trading)
10.28.5	Describe the rights attaching to the depository receipts, including any limitations of these attached to the depository receipts and the procedure if any for the exercise of these rights.	Chapter C	49-53; 54-55 (Terms and Conditions of the GDSs) 68 (Summary of provisions relating to the GDSs while in Master form)
10.28.6	If the dividend rights attaching to depository receipts are different from the dividend rights disclosed in relation to the underlying disclose the following about the dividend rights: (a) Fixed date(s) on which the entitlement arises, (b) Time limit after which entitlement to dividend lapses and an indication of the person in whose favour the lapse	Chapter C	49-53; 54-55 (Terms and Conditions of the GDSs) 68 (Summary of provisions relating to the GDSs while in

Item #	Item contents	Chapter / Exhibit	Page/Section
	operates, (c) Dividend restrictions and procedures for non resident holders, (d) Rate of dividend or method of its calculation, periodicity and cumulative or noncumulative nature of payments.		Master form)
10.28.7	If the voting rights attaching to the depository receipts are different from the voting rights disclosed in relation to the underlying shares disclose the following about those rights: Voting rights. Pre-emption rights in offers for subscription of securities of the same class. Right to share in the issuer's profits. Rights to share in any surplus in the event of liquidation. Redemption provisions. Conversion provisions.	Not applicable	Not applicable
10.28.8	Describe the exercise of and benefit from the rights attaching to the underlying shares, in particular voting rights, the conditions on which the issuer of the depository receipts may exercise such rights, and measures envisaged to obtain the instructions of the depository receipt holders - and the right to share in profits and any liquidation surplus which are not passed on to the holder of the depository receipt.	Chapter C	49-53; 54-55 (Terms and Conditions of the GDSs) 68 (Summary of provisions relating to the GDSs while in Master form)
10.28.9	The expected issue date of the depository receipts.	Chapter C	71 (Admission to listing and trading)
10.28.10	A description of any restrictions on the free transferability of the depository receipts.	Not applicable	None other than customary securities laws selling restrictions
10.28.11	In respect of the country of registered office of the issuer and the country(ies) where the offer is being made or admission to trading is being sought: (a) information on taxes on the income from the depository receipts withheld at source (b) indication as to whether the issuer assumes responsibility for the withholding of taxes at the source.	Chapter C	53-54 (Terms and Conditions of the GDSs) 74 (Taxation)
10.28.12	Bank or other guarantees attached to the depository receipts and intended to underwrite the issuer's obligations.	Not applicable	Not applicable
10.28.13	Possibility of obtaining the delivery of the depository receipts into original shares and procedure for such delivery	Chapter C	43-48 (Terms and Conditions of the GDSs) 68-69 (Summary of provisions relating to the GDSs while in

Item #	Item contents	Chapter / Exhibit	Page/Section
			Master form)
10.29	**INFORMATION ABOUT THE TERMS AND CONDITIONS OF THE OFFER OF THE DEPOSITORY RECEIPTS**		
10.29.1	**Offer statistics, expected timetable and action required to apply for the offer**		
10.29.1.1	Total amount of the issue/offer, distinguishing the securities offered for sale and those offered for subscription; if the amount is not fixed, description of the arrangements and time for announcing to the public the definitive amount of the offer.	Not applicable	Not applicable
10.29.1.2	The time period, including any possible amendments, during which the offer will be open and description of the application process.	Not applicable	Not applicable
10.29.1.3	An indication of when, and under what circumstances, the offer may be revoked or suspended and whether revocation can occur after dealing has begun.	Not applicable	Not applicable
10.29.1.4	A description of the possibility to reduce subscriptions and the manner for refunding excess amount paid by applicants.	Not applicable	Not applicable
10.29.1.5	Details of the minimum and/or maximum amount of application (whether in number of securities or aggregate amount to invest).	Not applicable	Not applicable
10.29.1.6	An indication of the period during which an application may be withdrawn, provided that investors are allowed to withdraw their subscription.	Not applicable	Not applicable
10.29.1.7	Method and time limits for paying up the securities and for delivery of the securities.	Not applicable	Not applicable
10.29.1.8	A full description of the manner and date in which results of the offer are to be made public.	Not applicable	Not applicable
10.29.1.9	The procedure for the exercise of any right of pre-emption, the negotiability of subscription rights and the treatment of subscription rights not exercised.	Not applicable	Not applicable
10.29.2	**Plan of distribution and allotment**		
10.29.2.1	The various categories of potential investors to which the securities are offered. If the offer is being made simultaneously in the markets of two or more countries and if a tranche has been or is being reserved for certain of these, indicate any such tranche.	Not applicable	Not applicable
10.29.2.2	To the extent known to the issuer, indicate whether major shareholders or members of the issuer's management, supervisory or administrative bodies intended to subscribe in the offer, or whether any person intends to subscribe for more than five per cent of the offer.	Not applicable	Not applicable
10.29.2.3	Pre-allotment Disclosure:		
10.29.2.3.1	The division into tranches of the offer including the institutional, retail and issuer’s employee tranches and any other tranches;	Not applicable	Not applicable
10.29.2.3.2	The conditions under which the claw-back may be used, the maximum size of such claw back and any applicable minimum percentages for individual tranches;	Not applicable	Not applicable

Item #	Item contents	Chapter / Exhibit	Page/Section
10.29.2.3.3	The allotment method or methods to be used for the retail and issuer's employee tranche in the event of an over-subscription of these tranches;	Not applicable	Not applicable
10.29.2.3.4	A description of any pre-determined preferential treatment to be accorded to certain classes of investors or certain affinity groups (including friends and family programmes) in the allotment, the percentage of the offer reserved for such preferential treatment and the criteria for inclusion in such classes or groups.	Not applicable	Not applicable
10.29.2.3.5	Whether the treatment of subscriptions or bids to subscribe in the allotment may be determined on the basis of which firm they are made through or by;	Not applicable	Not applicable
10.29.2.3.6	A target minimum individual allotment if any within the retail tranche;	Not applicable	Not applicable
10.29.2.3.7	The conditions for the closing of the offer as well as the date on which the offer may be closed at the earliest;	Not applicable	Not applicable
10.29.2.3.8	Whether or not multiple subscriptions are admitted, and where they are not, how any multiple subscriptions will be handled.	Not applicable	Not applicable
10.29.2.3.9	Process for notification to applicants of the amount allotted and indication whether dealing may begin before notification is made.	Not applicable	Not applicable
10.29.2.4	Over-allotment and 'green shoe':	Not applicable	Not applicable
10.29.2.4.1	The existence and size of any over-allotment facility and / or 'green shoe'.	Not applicable	Not applicable
10.29.2.4.2	The existence period of the over-allotment facility and / or 'green shoe'.	Not applicable	Not applicable
10.29.2.4.3	Any conditions for the use of the over-allotment facility or exercise of the 'green shoe'.	Not applicable	Not applicable
10.29.3	**Pricing**		
10.29.3.1	An indication of the price at which the securities will be offered. When the price is not known or when there is not an established and/or liquid market for the securities, indicate the method for determination of the offer price, including who has set the criteria or is formally responsible for its determination. Indication of the amount of any expenses and taxes specifically charged to the subscriber or purchaser.	Not applicable	Not applicable
10.29.3.2	Process for the disclosure of the offer price.	Not applicable	Not applicable
10.29.3.3	Where there is or could be a material disparity between the public offer price and the effective cash cost to members of the administrative, management or supervisory bodies or senior management, or affiliated persons, of securities acquired by them in transactions during the past year, or which they have the right to acquire, include a comparison of the public contribution in the proposed public offer and the effective cash contributions of such persons.	Not applicable	Not applicable
10.29.4	**Placing and Underwriting**		

Item #	Item contents	Chapter / Exhibit	Page/Section
10.29.4.1	Name and address of the co-coordinator(s) of the global offer and of single parts of the offer and, to the extend known to the issuer, of the placers in the various countries where the offer takes place.	Not applicable	Not applicable
10.29.4.2	Name and address of any paying agents and depository agents in each country.	Not applicable	Not applicable
10.29.4.3	Name and address of the entities agreeing to underwrite the issue on a firm commitment basis, and name and address of the entities agreeing to place the issue without a firm commitment or under "best efforts" arrangements. Indication of the material features of the agreements, including the quotas. Where not all of the issue is underwritten, a statement of the portion not covered. Indication of the overall amount of the underwriting commission and of the placing commission	Not applicable	Not applicable
10.29.4.4	When the underwriting agreement has been or will be reached.	Not applicable	Not applicable
10.30	**ADMISSION TO TRADING AND DEALING ARRANGEMENTS IN THE DEPOSITORY RECEIPTS**		
10.30.1	An indication as to whether the securities offered are or will be the object of an application for admission to trading, with a view to their distribution in a regulated market or other equivalent markets with indication of the markets in question. This circumstance must be mentioned, without creating the impression that the admission to trading necessarily will be approved. If known, the earliest dates on which the securities will be admitted to trading must be given.	Chapter C	71 (Admission to listing and trading)
10.30.2	All the regulated markets or equivalent markets on which, to the knowledge of the issuer, securities of the same class of the securities to be offered or admitted to trading are already admitted to trading.	Chapter C	71 (Admission to listing and trading of securities in the same class)
10.30.3	If simultaneously or almost simultaneously with the creation of the securities for which admission to a regulated market is being sought securities of the same class are subscribed for or placed privately or if securities of other classes are created for public or private placing, details must be given of the nature of such operations and of the number and characteristics of the securities to which they relate.	Note to the Prospectus	i (Overview)
		Exhibit	61 (Application for listing of the Shares on the Hong Kong Stock Exchange)
10.30.4	Name and address of the entities which have a firm commitment to act as intermediaries in secondary trading, providing liquidity through bid and offer rates and description of the main terms of their commitment.	Not applicable	Not applicable
10.30.5	Stabilisation: where an issuer or a selling shareholder has granted an over-allotment option or it is otherwise proposed that price stabilising activities may be entered into in connection with an offer:	Chapter C	73 (Stabilization and Short Positions)
10.30.6	The fact that stabilisation may be undertaken, that there is no assurance that it will be undertaken and that it may be stopped at any time.	Chapter C	73 (Stabilization Stabilization and Short Positions)

Item #	Item contents	Chapter / Exhibit	Page/Section
10.30.7	The beginning and the end of the period during which stabilisation may occur,	Chapter C	73 (Stabilization Stabilization and Short Positions)
10.30.8	The identity of the stabilisation manager for each relevant jurisdiction unless this is not known at the time of publication,	Chapter C	73 (Stabilization Stabilization and Short Positions)
10.30.9	The fact that stabilisation transactions may result in a market price that is higher than would otherwise prevail.	Chapter C	73 (Stabilization Stabilization and Short Positions)
10.31	**KEY INFORMATION ABOUT THE ISSUE OF THE DEPOSITORY RECEIPTS**		
10.31.1	**Reasons for the offer and use of proceeds**		
10.31.1.1	Reasons for the offer and, where applicable, the estimated net amount of the proceeds broken into each principal intended use and presented by order of priority of such uses. If the issuer is aware that the anticipated proceeds will not be sufficient to fund all the proposed uses, state the amount and sources of other funds needed. Details must be given with regard to the use of the proceeds, in particular when they are being used to acquire assets, other than in the ordinary course of business, to finance announced acquisitions of other business, or to discharge, reduce or retire indebtedness.	Chapter C	33 (Purpose of the issuance and use of proceeds)
10.31.2	**Interest of natural and legal persons involved in the issue/offer**		
10.31.2.1	A description of any interest, including conflicting ones, that is material to the issue/offer, detailing the persons involved and the nature of the interest	Exhibit	34-36 (Risk Factors), 259-283 (Directors and Senior Management), 284-299 (Substantial Shareholders) 322-325 (Underwriters' Interests in the Company; Underwriters' Interests under the Debt Restructuring) Appendix VIII: 1-19 (Further information about the Group)
10.31.3	**Risk factors**		

Item #	Item contents	Chapter / Exhibit	Page/Section
10.31.3.1	Prominent disclosure of risk factors that are material to the securities being offered and/or admitted to trading in order to assess the market risk associated with these securities in a section headed "Risk Factors".	Chapter B	31-32 (Risk Factors – Risks relating to the Global Offering and the Company's Shares and Risks relating to the GDSs and their listing and admission to trading on the Professional Segment of Euronext Paris)
		Exhibit	50-52 (Risk Factors)
10.32	**EXPENSE OF THE ISSUE/OFFER OF THE DEPOSITORY RECEIPTS**		
10.32.1	The total net proceeds and an estimate of the total expenses of the issue/offer.	Not applicable	Not applicable

ANNEX II

PRO FORMA FINANCIAL INFORMATION BUILDING BLOCK

Item #	Item contents	Chapter / Exhibit	Page/Section
2.1	The pro forma information must include a description of the transaction, the businesses or entities involved and the period to which it refers, and must clearly state the following: a) the purpose to which it has been prepared; b) the fact that it has been prepared for illustrative purposes only; c) the fact that because of its nature, the pro forma financial information addresses a hypothetical situation and, therefore, does not represent the company's actual financial position or results.	Exhibit	Appendix III, Part A, page III-3 (Unaudited Pro Forma Financial Information - Unaudited pro forma adjusted net assets and net tangible assets)
2.2	In order to present pro forma financial information, a balance sheet and profit and loss account, and accompanying explanatory notes, depending on the circumstances may be included.	Not applicable	Not applicable
2.3	Pro forma financial information must normally be presented in columnar format, composed of: a) the historical unadjusted information; b) the pro forma adjustments; and c) the resulting pro forma financial information in the final column. The sources of the pro forma financial information have to be stated and, if applicable, the financial statements of the acquired businesses or entities must be included in the prospectus.	Exhibit	Appendix III, Part A, page III-3 (Unaudited Pro Forma Financial Information - Unaudited pro forma adjusted net assets and net tangible assets)
2.4	The pro forma information must be prepared in a manner consistent with the accounting policies adopted by the issuer in its last or next financial statements and shall identify the following: a) the basis upon which it is prepared; b) the source of each item of information and adjustment.	Exhibit	Appendix III, Part A, page III-3 (Unaudited Pro Forma Financial Information - Unaudited pro forma adjusted net assets and net tangible assets)
2.5	Pro forma information may only be published in respect of a) the current financial period; b) the most recently completed financial period; and/or c) the most recent interim period for which relevant unadjusted information has been or will be published or is being published in the same document.	Exhibit	Appendix III, Part A, page III-3 (Unaudited Pro Forma Financial Information - Unaudited pro forma adjusted net assets and net tangible assets)
2.6	Pro forma adjustments related to the pro forma financial information must be: a) clearly shown and explained; b) directly attributable to the transaction; c) factually supportable. In addition, in respect of a pro forma profit and loss or cash	Exhibit	Appendix III, Part A, page III-3 (Unaudited Pro Forma Financial Information - Unaudited pro forma adjusted

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	flow statement, they must be clearly identified as to those expected to have a continuing impact on the issuer and those which are not.		net assets and net tangible assets)
2.7	The report prepared by the independent accountants or auditors must state that in their opinion: a) the pro forma financial information has been properly compiled on the basis stated; b) that basis is consistent with the accounting policies of the issuer.	Chapter C	80 (Report from KPMG on unaudited pro forma financial information)

EXHIBIT 1:
HONG KONG PROSPECTUS

As indicated on page (ii) above, the HK Prospectus as attached to this Prospectus, omits the following parts of the HK Prospectus:

(i) the letter of the Joint Reporting Accountants in the Accountants' Report in Appendix I to the HK Prospectus relating to historical financial information,

(ii) the report from the Joint Reporting Accountants in Appendix III "Unaudited Pro Forma Financial Information" to the HK Prospectus,

(iii) the letter from the Joint Reporting Accountants in Appendix IV "Profit Forecast" to the HK Prospectus, and

(iv) the letter from the Joint Sponsors in Appendix IV "Profit Forecast" to the HK Prospectus.

IMPORTANT

IMPORTANT: If you are in any doubt about any of the contents of this prospectus, you should seek independent professional advice.

UNITED COMPANY RUSAL LIMITED

(Incorporated under the laws of Jersey with limited liability)

GLOBAL OFFERING

Number of Offer Shares in the Global Offering	:	**1,610,292,840 Offer Shares (in the form of Shares or in the form of Global Depositary Shares) (subject to the Over-allotment Option)**
Maximum Offer Price	:	**HK$12.50 per Offer Share, plus brokerage of 1%, SFC transaction levy of 0.004%, and Hong Kong Stock Exchange trading fee of 0.005% (payable in full on application in Hong Kong dollars and subject to refund)**
Nominal value	:	**US$0.01 per Share**
Stock code	:	**486**

Joint Sponsors, Global Coordinators and Bookrunners

Joint Bookrunners

Financial Adviser

Hong Kong Exchanges and Clearing Limited, The Stock Exchange of Hong Kong Limited and Hong Kong Securities Clearing Company Limited take no responsibility for the contents of this prospectus, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this prospectus.

A copy of this prospectus, having attached thereto the documents specified in the paragraph headed "Documents Delivered to the Registrar of Companies and Available for Inspection" in Appendix IX, has been registered by the Registrar of Companies in Hong Kong as required by Section 342C of the Hong Kong Companies Ordinance (Chapter 32 of the Laws of Hong Kong). The Securities and Futures Commission and the Registrar of Companies in Hong Kong take no responsibility for the contents of this prospectus or any other document referred to above.

A copy of this document has been delivered to the registrar of companies in Jersey in accordance with Article 5 of the Companies (General Provisions) (Jersey) Order 2002, and the registrar has given, and has not withdrawn, consent to its circulation. The Jersey Financial Services Commission has given, and has not withdrawn, its consent under Article 2 of the Control of Borrowing (Jersey) Order 1958 to the issue of securities in the Company. It must be distinctly understood that, in giving these consents, neither the registrar of companies in Jersey nor the Jersey Financial Services Commission takes any responsibility for the financial soundness of the Company or for the correctness of any statements made, or opinions expressed, with regard to it.

The Offer Price is expected to be fixed by agreement between the Joint Global Coordinators (on behalf of the Underwriters) and the Company on the Price Determination Date. The Price Determination Date is expected to be on or around Friday, 22 January 2010 and, in any event, not later than Monday, 25 January 2010. The Offer Price is currently expected to be no more than HK$12.50 per Offer Share and no less than HK$9.10 per Offer Share, unless otherwise announced. If, for any reason, the Company and the Joint Global Coordinators (on behalf of the Underwriters) are unable to reach an agreement on the Offer Price, the Global Offering will not become unconditional and will not proceed.

Prior to making an investment decision, prospective investors should consider carefully all of the information set out in this prospectus, including the risk factors set out in the section headed "Risk Factors".

ATTENTION

An investment in shares in United Company RUSAL Limited (the "Company") involves significant risk. investors may lose part or all of the value of their investment. Subscription for Shares in the Company is being limited to potential investors who are professional investors or who are willing to subscribe for or purchase at least HK$1 million worth of Shares. Trading in the Shares will be limited to minimum board lots of the number of Shares that make up a minimum board lot trading value at the Listing Date of HK$200,000. Shares in the Company should only be bought and traded by persons who are particularly knowledgeable in investment matters and can afford to lose their investment.

31 December 2009

IMPORTANT

The Company does not meet the profit test to qualify for listing on the Main Board of the Hong Kong Stock Exchange Limited (the "Exchange"). The Company has been admitted to listing on the Exchange on the basis of a large market capitalisation, revenue of more than HK$500,000,000 and positive cash flows from operating activities.

In late 2009, the Group entered into agreements with creditors to restructure US$16.8 billion of indebtedness. The Group continues to have significant debt obligations and is subject to stringent covenants and repayment schedules that severely limit its operations and ability to incur new financing. The restructuring has generally extended the maturity of the Group's debt obligations until 2013. However, an important part of the Group's debt falls due in less than ten months' time. By 29 October 2010, unless the Company obtains an extension, the Company must repay a US$4.5 billion loan from Vnesheconombank ("VEB"), a financial institution controlled by the Russian Government and used to support and develop the Russian economy. If the repayment of the whole of the Group's indebtedness is accelerated, for example because a relevant member of the Group is unable to comply with or satisfy any of the terms or conditions of, or triggers any event of default under, the debt restructuring or other debt obligations, or if the Company should be unable to extend or refinance or repay the VEB loan as and when it falls due (for any reason including, without limitation, should OJSC Savings Bank of the Russian Federation ("Sberbank") not assume the rights, claims and obligations under the VEB loan), the Group may cease to continue as a going-concern.

Investors are directed to read the Risk Factors commencing on page 21 of this prospectus for a description of these and other risks.

IMPORTANT

Pursuant to section 6(3)(b) of the Securities and Futures (Stock Market Listing) Rules, the Securities and Futures Commission is imposing the following conditions to the listing of the Shares on the Hong Kong Stock Exchange:

1. **The provisions of the Management, Supervision and Internal Control Guidelines ("ICG") and the Code of Conduct for Persons Licensed by or Registered with the SFC ("Code") apply to the placing of the Offer Shares and must be complied with by intermediaries placing the Offer Shares in Hong Kong.**

2. **The offer for subscription or purchase of the Offer Shares in Hong Kong will be conducted by way of placing only. Where the Offer Shares are placed in Hong Kong, subscribers for or purchasers of the Offer Shares must be limited to:**

   (a) **persons falling under paragraphs (a) to (i) of the definition of "professional investors" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (where the provisions specified in paragraph 15.5 of the Code may be waived);**

   (b) **persons falling under paragraph (j) of the definition of "professional investors" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (where the provisions specified in paragraph 15.5 of the Code may be waived in relation to a person provided that the intermediary placing the Offer Shares in Hong Kong has, in respect of that person complied with paragraphs 15.3 and 15.4 of the Code); or**

   (c) **other clients of an intermediary provided that the subscription price or purchase price payable by each client is a minimum of HK$1 million and the intermediary complies with the requirements in respect of suitability set out in paragraph 5.2 of the Code.**

3. **The intermediaries placing the Offer Shares in Hong Kong confirm to the Joint Sponsors and the Company that condition 2 above has been fulfilled in respect of Offer Shares placed by them.**

4. **The Joint Sponsors confirm in writing to the SFC and the Hong Kong Stock Exchange by 1700 hours Hong Kong time on the business day immediately preceding the Listing Date that condition 2 above has been fulfilled.**

5. **The trading board lot size of the Shares at and after listing of the Shares must be no less than the number of Shares that make up a minimum board lot trading value of HK$200,000 based on the Offer Price, or such other number of Shares as the SFC may from time to time specify by notice in writing to the Hong Kong Stock Exchange and the Company in response to any proposed corporate action in connection with the share capital of the Company which will or is reasonably likely to materially reduce the value of a board lot of Shares in the Company.**

6. **The conditions being imposed by the SFC for not objecting to the listing are set out in full in this prospectus.**

	2010[1]
Expected Price Determination Date[2]	Friday, 22 January
Announcement of the Offer Price, an indication of the level of interest and the basis of allocation of the Offer Shares of the Global Offering to be published on the Company's website at www.rusal.com and the website of the Hong Kong Stock Exchange at **www.hkexnews.hk** on or before	Monday, 25 January
Despatch of share certificates on or before[3]	Tuesday, 26 January
Dealings in Shares on the Hong Kong Stock Exchange to commence on	Wednesday, 27 January

Notes:

(1) All references to times in this prospectus are Hong Kong local time, except as otherwise stated. Details of the structure of the Global Offering, including its conditions, are set out in the section titled "Structure of the Global Offering".

(2) The Price Determination Date, being the date on which the Offer Price is to be determined, is expected to be on or about Friday, 22 January 2010 and, in any event, not later than Monday, 25 January 2010. If, for any reason, the Offer Price is not agreed between the Joint Global Coordinators (on behalf of the Underwriters) and the Company by Monday, 25 January 2010, the Global Offering will not proceed and will lapse, unless otherwise agreed by the Company and the Joint Global Coordinators.

(3) Share certificates are expected to be issued on Tuesday, 26 January 2010 but will only become valid certificates of title when the Global Offering has become unconditional in all respects, provided that the International Placing Agreement has not been terminated in accordance with its terms, which is scheduled to be at around 8:00 a.m. on Wednesday, 27 January 2010.

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IMPORTANT NOTICE TO INVESTORS

You should rely only on the information contained in this prospectus to make your investment decision. We have not authorised anyone to provide you with information that is different from what is contained in this prospectus. Any information or representation not made in this prospectus must not be relied on by you as having been authorised by us, the Joint Global Coordinators, the Joint Bookrunners, the Joint Sponsors, the Underwriters, any of their respective directors or any other person or party involved in the Global Offering.

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This summary is an overview of the information contained in this prospectus and does not contain all the information that may be important to you. You should read the whole document before you decide to invest in the Offer Shares.

There are risks associated with any investment. Some of the particular risks in investing in the Offer Shares are set out in the section headed "Risk Factors" in this prospectus. You should read that section carefully before you decide to invest in the Offer Shares.

Overview

United Company RUSAL Limited is the world's largest producer of aluminium, with a particular focus on the upstream segment of the industry — the production and sale of primary aluminium (including alloys and value-added products). Within its upstream business, the United Company RUSAL Limited Group is vertically integrated to a high degree, having secured supplies of bauxite and having the capacity to produce alumina in excess of its current requirements. The Group's core smelters are located in Siberia, Russia, and benefit from access to low cost hydro generated electricity. This is a region where the Group is generally the principal consumer of electricity and there are few, if any, alternative sources of significant demand. The Group's scale, upstream focus and position on the cost curve provide a unique exposure to the aluminium industry, which in turn is highly levered to the economic cycle.

With the onset of the global economic downturn in the second half of 2008, some of the key end-user sectors for the aluminium industry (including automotive and transportation, construction and electrical engineering) suffered a sharp contraction of demand. This resulted in a surplus supply of aluminium in the market and a decline in the price of the metal and intermediate products such as alumina. In response, the Group reduced output at some of its older and higher-cost production facilities, as did many other leading companies in the industry globally, and restructured its debt as described in greater detail below. Output reduction measures have effectively balanced the Group in terms of its alumina requirements and have helped to optimise financial performance. According to CRU, the first quarter of 2009 marked the bottom of the aluminium industry cycle, in terms of demand for primary aluminium and prices. Since then, both measures have improved sharply.

As a result of the global economic downturn and the sharp decline in aluminium prices starting from September 2008 and continuing into the first half of 2009, as well as an increase in the Group's indebtedness in the first half of 2008, the Group experienced a liquidity shortage and breached covenants under most of its loan agreements. In late 2009, the Company and certain of its subsidiaries entered into a series of agreements that effected a comprehensive restructuring of the Group's indebtedness and other obligations. See "— Debt Restructuring" below.

The following table summarises the Group's debt by major class of creditor as at the date of this prospectus, after the effective date of the debt restructuring agreements:

Creditors	Principal amount of debt outstanding as at the date of this prospectus (and after the debt restructuring has taken effect)
International lenders	US$7.4 billion[(1)]
Russian and Kazakh lenders	US$2.1 billion
VEB	US$4.5 billion
Onexim	US$895 million[(2)]
Total	US$14.9 billion

Notes:

(1) Includes US$0.2 billion of contingent liabilities under payment instruments, including, without limitation, undrawn letters of credit.

(2) Does not include US$115 million that will be paid to Onexim from the net proceeds of the Global Offering. For further details, see"— Debt Restructuring — Key Components of Debt Restructuring — Onexim Restructuring".

As evidence of economic recovery emerges, the Group has retained the flexibility to re-start its mothballed capacity to take advantage of improved market conditions. In the long-run, subject to its debt restructuring agreements, the Group may pursue a number of growth options, including, among others, completion of the Taishet and Boguchansky aluminium smelters. Additionally, the Group's proximity to China provides an opportunity for the Group to benefit from the long-term potential for further aluminium demand growth in that country.

The Group's revenue was US$15,685 million for the year ended 31 December 2008 and US$3,757 million for the six months ended 30 June 2009.

The Group has evolved over the past decade through acquisitions and organic growth, culminating in the acquisition in March 2007 of SUAL, then one of the world's ten largest producers of aluminium, and certain of the aluminium and alumina businesses of Glencore, a company specialising in the production and processing of metals and the trading of metals, oil and agricultural products. The Group has operations in 19 countries across five continents, with more than 75,000 employees, and, despite recent developments in the global financial markets, has significant opportunities for growth through a number of modernisation programmes and approved projects in various stages of development in all parts of the aluminium upstream value chain, including energy.

The Shareholders of the Company have by resolution dated 26 December 2009 resolved that the Company will be renamed as United Company RUSAL plc, with effect from the admission of the Shares to trading on the Hong Kong Stock Exchange. The change of the Company's name is subject to the registration of the change of the name becoming effective in Jersey and the registration of the change of the Company's name under Part XI of the Companies Ordinance. The Company will publish an announcement on the change of name and the arrangements for the exchange of share certificates, if any, as soon as practicable after the new name has been registered and the registration has taken effect.

Debt Restructuring

Background of the Debt Restructuring

As noted above, as a result of the economic downturn and a sharp decline in aluminium prices starting from September 2008 and continuing into the first half of 2009, as well as an increase in the Group's indebtedness in the first half of 2008, including its incurrence of indebtedness in April 2008 to finance its acquisition of a stake in Norilsk Nickel, the Group experienced a liquidity shortage and breached covenants under most of its loan agreements. Accordingly, in late 2009, the Company and certain of its subsidiaries entered into a series of agreements that effected a comprehensive restructuring of the Group's US$16.8 billion of indebtedness and certain other obligations to the Group's international, Russian and Kazakh lenders and certain other creditors.

The principal objective of the Directors and management in negotiating the debt restructuring was to give the Company greater time and flexibility to meet its debt obligations in anticipation of aluminium price recovery. This has been achieved through the following arrangements:

- linking debt repayment obligations to the Company's ability to generate excess operating cash flow (subject to meeting certain cumulative debt repayment targets);
- allowing a portion of interest charges to be capitalised under a pay in kind arrangement; and
- converting into equity a substantial obligation to Onexim.

The Directors believe that over time it will be necessary to reduce further the Company's new debt level of US$14.9 billion, and pursuant to the terms of the debt restructuring the Company has made certain commitments to:

- dedicate excess operating cash flow to the repayment of debt;
- sell assets and/or raise equity or subordinated debt to fund debt repayments;
- restrict dividend payments until total net debt has been reduced sufficiently; and
- limit capital expenditure, acquisitions and certain other investments.

Key Components of the Debt Restructuring

In its debt restructuring, the Company has executed a series of agreements with four different creditor groups.

- *International Debt Restructuring*: The Company has entered into an arrangement with 65 creditors under international facilities accounting for US$7.4 billion of debt and contingent liabilities pursuant to which such creditors have agreed to extend maturities until 6 December 2013. This arrangement is documented in an international override agreement, which became effective on 7 December 2009, and other related agreements. The arrangement does not require any fixed loan repayments but requires the Company to make certain repayments to the extent cash is available and contains certain overall debt repayment targets. For detailed information concerning the international debt restructuring, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring" at pages 226 to 238 of this prospectus;

- *Russian and Kazakh Debt Restructuring*: Lenders under certain bilateral Russian and Kazakh loan facilities accounting for US$2.1 billion of indebtedness have also entered into new agreements and/or revised bilateral arrangements, which largely mirror the international banks' arrangements, but contain bank-by-bank cumulative debt repayment obligations. For detailed information concerning the Russian and Kazakh debt restructuring (other than VEB), see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of Russian and Kazakh Debt Restructuring (other than VEB)" at pages 242 to 244 of this prospectus;

- *Onexim Restructuring*: Pursuant to the terms of the Company's acquisition of the Norilsk Nickel shareholding, there was US$2.7 billion plus accrued interest outstanding to Onexim. Under the terms of its restructuring, the interest accrued until and including 5 November 2009 and a restructuring fee in an aggregate amount of US$275 million were or are to be paid in cash (of which US$160 million was paid to Onexim on 1 December 2009 and US$115 million will be paid to Onexim from proceeds of the Global Offering); US$880 million plus accrued interest of approximately US$15 million will be paid to Onexim in accordance with and pro rata with the debt repayments to international, Russian and Kazakh lenders. The balance was converted into Shares representing approximately 6% of the Company's share capital on 7 December 2009. For detailed information concerning the Onexim debt restructuring, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of Onexim Debt Restructuring" at page 244 of this prospectus;

- *Vnesheconombank ("VEB") Restructuring*: The VEB Debt (as defined below) amounts to US$4.5 billion and relates to a refinancing of the Company's debt raised for the acquisition of its shareholding in Norilsk Nickel. VEB also benefits from security over these shares in Norilsk Nickel. On 30 October 2009, the Company signed an agreement involving the extension of this facility for 12 months, until 29 October 2010. The arrangements with VEB differ from those with the other creditor groups as:

  — under the Federal Law No.173-FZ dated 13 October 2008 "On Additional Measures for the Support of Financial System of the Russian Federation" ("Federal Law No. 173"), VEB is not permitted to provide loans that have a maturity that extends beyond one year; and

  — VEB has security over the Norilsk Nickel shares, which as of 17 December 2009 had a value that was 51% in excess of the outstanding debt owed to VEB and which are listed securities.

The Company intends to seek a further extension of the amounts outstanding under the US$4.5 billion loan dated 30 October 2008 between the Company and VEB (the "VEB Debt") or to request Sberbank to assume all rights, claims and obligations of VEB under the VEB Debt pursuant to the Sberbank Letter Agreement (as defined below), prior to the maturity date of the VEB Debt. It is the expectation of the Directors that VEB will extend the maturity of the VEB Debt for successive one year periods through the override period to October 2013, however VEB has no current obligation to extend the loan, and, if it does extend, there can be no assurance as to the terms of any such extension. For detailed information concerning the VEB Debt restructuring, including the reasons why the Directors believe it likely that the Company will be able to obtain an extension of the VEB Debt, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the VEB Debt Restructuring" at pages 238 to 242 of this Prospectus. On 23 December 2009, Sberbank entered into a letter agreement with the Company (the "Sberbank Letter Agreement") stating an unconditional and irrevocable commitment to assume all rights, claims and obligations of VEB under the VEB Debt following a request from the Company. The Sberbank Letter Agreement states that following such assumption, the maturity date of the debt would be extended to 7 December 2013. The assumption by Sberbank of the rights, claims and obligations under the VEB Debt is subject to VEB assigning the VEB Debt to Sberbank. As consideration for such assumption by Sberbank, a commission of 2.00% of the outstanding principal amount, together with any other amounts accrued and payable under the VEB Debt and assumed by Sberbank as of the date of the assignment, is payable in cash to Sberbank by the Company (the Company being subject to a best efforts obligation to pay such commission without breaching any of the Group's obligations under the international override agreement) or, failing which, by the Major Shareholders. The commission is payable in instalments, some of which will fall due prior to the assumption by Sberbank of the rights, claims and obligations of VEB under the VEB Debt, including a first instalment of US$22.5 million, which is payable by 31 December 2009 if paid by the Company or by 4 January 2010 if paid by the Major Shareholders. It is expected that the first instalment will be paid by the Major Shareholders on or before 4 January 2010. For further information concerning Sberbank, including selected financial and other background information, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the VEB Debt Restructuring" at pages 241 to 242. The Company does not perceive there to be any additional material risks associated with the Sberbank Letter Agreement to those disclosed in this prospectus, including in "Risk Factors — Risks Relating to the Group and its Business — The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders" and "Risk Factors — Risks Relating to the Group and its Business — Risks

relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Political instability, changes in government or in economic policy and arbitrary government actions could adversely affect the Group's business and the value of investments in the Offer Shares".

The arrangements with the international banks, Onexim and certain of the Russian and Kazakh banks provide for:

- a portion of the interest to be capitalised (the VEB Debt also provides for this);
- the interest rate or interest rate margin to be reduced as the Company achieves certain financial ratio targets; and
- the cash payment obligations to be reduced when the Company achieves certain financial ratio targets.

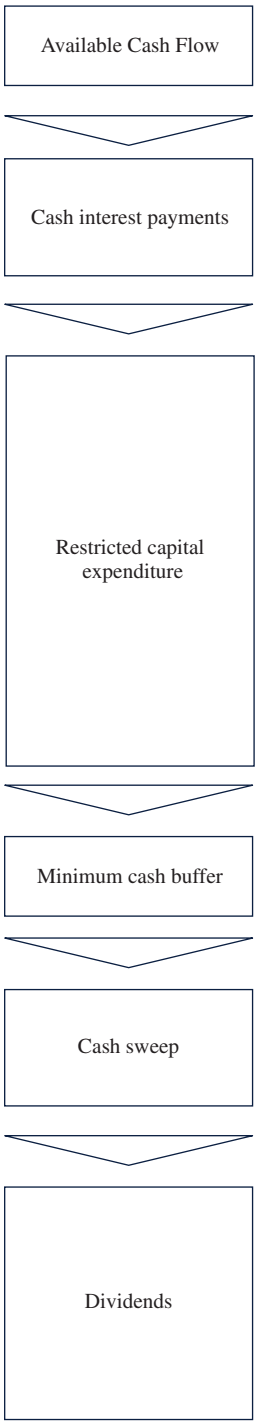
Restrictions under the Debt Restructuring

The principal constraints on the Group are derived from the international override agreement, which operates:

- to limit significantly the Group's ability to incur additional indebtedness;
- to impose significant limitations on capital expenditure and other uses of available cash; while the Group will be allowed to incur maintenance capital expenditure within defined limits, it will be prohibited from incurring any development capital expenditure except with respect to the Boguchanskaya hydropower plant within specified limits;
- to restrict dividends unless cumulative debt repayments have been made of at least US$5 billion (excluding debt repayment to VEB and Onexim), the ratio of total net debt to Covenant EBITDA is 3 to 1 or less, there are no outstanding defaults under the international override agreement and the Group has sufficient cash to pay the proposed dividends;
- to maintain certain financial ratios as set out at "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Financial Covenants" at page 234 of this prospectus;
- to require the Company to repay debt from excess operating cash flow as well as from the proceeds of equity and subordinated and other debt fund raising and asset disposals; and
- to require the Company to raise US$2.4 billion in equity or subordinated debt or from asset disposals over the override period in order to repay debt.

The Directors believe that (based on the Company's operating assumptions and the outlook for the aluminium sector), by the end of the four-year override period ending December 2013, the Company will be able to reduce its debt levels sufficiently, which the Directors believe will improve the Company's ability to access the credit markets (subject to market conditions at such time) to refinance any remaining obligations. The international lenders have provided a commitment to provide refinancing for a further three-year period following the override period subject to a number of conditions being met as at the end of the override period, including: i) the Group's debt (other than its debt to VEB and Onexim) having been reduced by at least US$5 billion; and ii) the ratio of total net debt to Covenant EBITDA being 3 to 1 or less. In addition, the Russian and Kazakh lenders (excluding VEB) have provided soft commitments to provide refinancing for a further three-year period following the override period.

The chart below provides a simplified cash waterfall under the terms of the debt restructuring arrangements.



- Interest split between cash interest and capitalised interest
- Amount of cash interest increases as the Company's total net debt to Covenant EBITDA ratio improves

- Maintenance capital expenditure that is permitted within specified limits
- Development capital expenditure with respect to the Boguchanskaya hydropower plant, within specified limits
- Capital expenditure required to comply with environmental law
- Expansion capital expenditures only allowed from proceeds of non-recourse project financing and project equity

  (see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Capital Expenditure Restrictions" at page 235 of this prospectus)

- Minimum cash balance of US$400 million required before any debt repayments

- Surplus cash distributed pro rata amongst the international lenders, the Russian and Kazakh lenders and Onexim to repay debt
- Cumulative repayment targets and obligations

- Dividends only allowed once cumulative debt repayments have been made of at least US$5 billion (excluding debt repayment to VEB and Onexim), and the ratio of total net debt to Covenant EBITDA is 3 to 1 or less
- Under the terms of the restructuring agreements, the Company does not expect to be in a position to declare dividends in respect of any year at least through 2013

In addition, cash generated from equity and subordinated and other debt raisings and asset disposals will be used to repay debt. If the Company is not able to raise non-recourse project financing and project equity to fund any expansion capital expenditure, the Company's existing operational facilities should not be negatively impacted. However, the Company may be delayed or prevented from exploiting certain growth opportunities.

The table below provides a timetable of the Company's minimum target cumulative debt repayment profile and minimum closing debt balance (excluding capitalised interest) assuming that the Company will meet the minimum target cumulative debt repayments as set out in the international override agreement. The minimum closing debt balance takes into account the cash raised in the Global Offering and the target cumulative repayment profile excludes the debt owed to Onexim and VEB.

(Billion US$)	Pre Global Offering (and after the debt restructuring has taken effect)	31 December 2010	30 September 2011	30 September 2012	30 September 2013
Target cumulative repayment amount excluding Onexim and VEB	—	1.4	3.0	4.0	5.0
Minimum closing debt balance[1] (excluding capitalised interest)	14.7[2]	12.7[3]	11.6	10.5	9.4

Notes:

(1) Includes cumulative repayments to Onexim, which, for purposes of the table, are assumed to be pro rata to the target cumulative payment amount, with pro-rating based on Onexim's share of the closing debt balance (excluding the VEB Debt) on the effective date of the international override agreement.

(2) Does not include US$0.2 billion of contingent liabilities under payment instruments, including, without limitation, undrawn letters of credit.

(3) Reflects application of the proceeds of the Global Offering to repayment of debt (assuming approximately US$2 billion of net proceeds from the Global Offering prior to exercise of the Over-allotment Option and following the cash settlement of fee warrants (assuming an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range)).

Further details of the Russian and Kazakh bank repayment profiles, which form part of the above target cumulative repayment amounts, are included on page 243 of this prospectus. The above minimum closing debt balances do not include the capitalised interest that is being charged by certain creditors, as outlined on pages 230 and 243 of the prospectus, which would be cumulative on the closing debt balance.

Compliance with the Debt Restructuring and Sensitivity Analysis

Pages 222 to 226 of this prospectus outline the reasons why the Directors believe that the Company will comply with the target cumulative repayment amounts and other terms and conditions of the debt restructuring agreements and, based on the assumptions therein, the Directors believe that the Company should generate sufficient cash to exceed the minimum target cumulative repayment amounts, reducing debt levels during the override period in excess of the minimum closing debt balance.

The Directors' compliance expectations were tested against an estimate of operational performance, which was then adjusted by changing certain assumptions to test compliance in an environment of greater stress (including a reduction in the aluminium price). A summary of the assumptions underlying the updated base case is presented on pages 223 to 224 of this prospectus.

Stress test scenarios. Based on the stress test scenario described in pages 224 and 225 of this prospectus, the Directors believe that in any year between 2010 and 2013, should the average aluminium price assumed for that year be reduced by up to approximately 20% (assuming that the production volume and cash cost assumptions are consistent with the assumed aluminium price as described on page 223 and all other assumptions remain as per the updated base case), the Company should be able to comply with the financial covenants and debt reduction targets that form part of the debt restructuring.

There can be no assurance, however, that any of the variations will be as assumed. In particular, if: i) the assumed aluminium price is lower; ii) input costs and production cash costs are higher; iii) the RUR/US$ exchange rate is lower (i.e. the RUR appreciates); and/or iv) input costs and production cash costs do not decrease when the aluminium price falls, the Company's ability to comply with the financial covenants and debt reduction targets that form part of the debt restructuring will be adversely affected.

The updated base case average assumed aluminium price is forecasted to rise by a compound annual growth rate of approximately 8.6% between 2009 to 2013 and the average RUR/US$ exchange rate is forecast to increase (i.e. the RUR depreciates) by a compound annual rate of approximately 3.6% between 2009 to 2013. **The Group's cash flows are highly sensitive to changes in the assumptions regarding the key variables and their correlation. Small changes in one or more of these assumptions could have a material adverse effect on the Company's ability to comply with the terms of its debt restructuring agreements**.

In particular, if the aluminium price fails to increase and/or if the RUR/US$ exchange rate fails to increase (i.e. the RUR fails to depreciate) as forecast in the updated base case, the Company may not be able to comply with the financial covenants and debt reduction targets that form part of the debt restructuring. The following scenarios illustrate relevant sensitivities:

Scenario No. 1: constant nominal aluminium price and nominal RUR/US$ exchange rate. If the assumed aluminium price and the RUR/US$ exchange rate were to remain constant in nominal terms at the spot levels as sourced from Bloomberg on 2 December 2009 (US$2,126 per tonne of aluminium and RUR29.4/US$), and all other assumptions remained unchanged, the Company would not comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring in 2011; or

Scenario No. 2: Aluminium price falls by more than 20% for more than one year. If the assumed average aluminium price falls by more than 20% below the updated base case for more than one year, while other assumptions remain unchanged as per the stressed tested scenario described above, in 2011 the Company would not be able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring; or

Scenario No. 3: RUR/US$ exchange rate decreases (i.e. the RUR appreciates) more than 18% for more than one year. If the assumed average RUR/US$ exchange rate decreases (i.e. the RUR appreciates) by more than 18% below the updated base case for more than one year, while other assumptions remain unchanged as per the updated base case, in 2011 the Company would not be able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring; or

Scenario No. 4: Input costs remain flat or increase or the RUR/US$ exchange rate remains flat or decreases (i.e. the RUR fails to depreciate) when aluminium prices decrease. If input costs were to remain flat or increase, or the RUR/US$ exchange rate were to remain flat or decrease (i.e. the RUR fails to depreciate) when the assumed aluminium price decreases, the impact of such decrease on the Company's operating performance will be more severe, and could result in the Company not being able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring when the assumed aluminium price reduction is less than 20%.

Failure to comply with the terms of the debt restructuring agreements (including the financial covenants and debt reduction targets) could, if the required majority of lenders so elects, result in acceleration of the Group's indebtedness. In these circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. See also "Risk Factors — Risks Relating to the Group and its Business — The terms of the debt restructuring

agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders".

The Directors believe that, based on the Company's operating assumptions and the outlook for the aluminium sector, at the end of the four year override period ending December 2013, the Company will be able to reduce its debt levels sufficiently, allowing the Company to refinance the closing debt balance (including capitalised interest) from new debt facilities to be provided by:

- existing international lenders subject to a number of conditions being met as at the end of the override period, including, without limitation: i) the Group's debt (other than its debt to VEB and Onexim) has been repaid by at least US$5 billion; and ii) the ratio of total net debt to Covenant EBITDA being 3 to 1 or less (for a description of these conditions, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Refinancing" at page 238 of this prospectus); and/or

- Russian and Kazakh lenders; and/or

- other third party sources of finance.

Pages 226 and 238 of this prospectus provide further details of the refinancing and the basis of the Directors' belief why the Company should be able to raise the new debt. However there can be no assurance that the Company will be able to refinance the closing debt balance in 2013. If the Company cannot do so, it would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company.

Overview of the Debt Restructuring

Below is an overview of certain of the key terms of the Group's debt restructuring agreements, which should be read in conjunction with the further details of the debt restructurings as described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring" at pages 222 to 244 of this prospectus:

Debt restructuring	Creditor(s)	Principal amount of debt outstanding as at the date of this prospectus	Effective date of restructuring	Tenor	Key terms	
					Pricing	Repayment
International debt restructuring	International lenders [1]	US$7.4 billion[2]	7 December 2009	• 4 years under the international override agreement • Following the override period, a refinancing period of 3 years	Flexible cash and payment in kind (meaning capitalised) margin, depending on the level of gearing	During the override period, no fixed amortisation schedule (prepayments out of asset disposals and equity and subordinated and other debt fund raising proceeds and through cash sweep mechanism)

Debt restructuring	Creditor(s)	Principal amount of debt outstanding as at the date of this prospectus	Effective date of restructuring	Tenor	Key terms	
					Pricing	Repayment
Russian and Kazakh debt restructuring	Russian and Kazakh lenders (3)	US$2.1 billion	November and December 2009	4 years and a soft commitment for up to 3 years' refinancing thereafter	Flexible cash and payment in kind interest margin, depending on the level of gearing (except for Sberbank and Kazkommertzbank where rate varies on annual basis and Surgutneftegasbank where fixed rate applies)	Fixed amortisation schedule to be met through cash sweep mechanism and out of proceeds of asset disposals and equity (including proceeds of the Global Offering) and subordinated and other debt fund raisings, subject to the Company's option to retain a certain cash buffer or utilise such proceeds to repay debt owed to other creditors
VEB Debt	VEB	US$4.5 billion	30 October 2009	1 year	Interest will accrue at LIBOR plus 5% margin, of which 2% will be capitalised	Bullet repayment at maturity on 29 October 2010. Debt owing to VEB may be repaid out of equity and subordinated debt fund raisings (other than the Global Offering) and proceeds of any disposals of shares in Norilsk Nickel
Onexim liabilities	Onexim	US$880 million plus accrued interest in the amount of approximately US$15 million(4)	1 December 2009	4 years	Subject to the pricing terms set out in the international override agreement for the international debt	Subject to the repayment terms set out in the international override agreement for the international debt, with limited exceptions

Notes:

(1) The international lenders comprise non-Russian and Russian lenders under 33 syndicated and bilateral loans.

(2) Includes US$0.2 billion of contingent liabilities under payment instruments, including, without limitation, undrawn letters of credit.

(3) The Russian and Kazakh lenders are VTB, Gazprombank, Sberbank, Surgutneftegasbank and Kazkommertzbank.

(4) Does not include US$115 million that will be paid to Onexim from the net proceeds of the Global Offering. For further details, see "— Debt Restructuring — Key Components of Debt Restructuring — Onexim Restructuring".

Strengths and Strategies

Strengths

The Directors believe that the Group's competitive strengths uniquely position it to benefit from the attractive fundamentals of the global aluminium industry. The Directors believe that the Group benefits from the following principal competitive strengths:

- Global scale and reach
  - — The Group is the world's largest producer of aluminium, producing approximately 4.4 million tonnes and 2.0 million tonnes in 2008 and the first half of 2009, respectively, and accounting for approximately 12% and 11%, respectively, of global output in those periods, according to CRU.
  - — The Group operates the world's two largest aluminium smelters — Bratsk and Krasnoyarsk.
  - — The Group is able to capture opportunities arising from both a global platform and local reach.
- Secure and sustainable low-cost position and power advantage
  - — The Group's largest aluminium smelters located in Siberia benefit from access to low-cost and clean hydro generated electricity.
- Focus on higher margin upstream business
  - — The Directors believe that the Group's upstream focus enables it to benefit from the higher margins generally available to upstream businesses (compared to downstream businesses).
- High degree of vertical integration
  - — The Group benefits from a significant long position in alumina capacity, which contributes to the security of alumina supply to the Group's existing smelters and future expansion projects.
  - — The long position in alumina capacity is supported by the Group's bauxite resource base. The Group's own bauxite production was sufficient to cover approximately 71% and 78% of its alumina production in 2008 and the first six months of 2009, respectively.
- Proximity to China, the largest aluminium consumer in the world
  - — With more than 80% of its total aluminium production located in Siberia, the Group's production base is in direct proximity to China and other key Asian markets. The geographical location of the Group's smelters and its competitive cost structure position it to become one of the main external suppliers to China, where demand for aluminium has been constantly growing.

- Proprietary R&D and leading internal EPCM expertise
  - — With the acquisition of SUAL in March 2007, the Group consolidated over 70 years of Russian know-how and research and development in the aluminium industry.
  - — Within its Engineering and Construction Division, the Group has established research and development ("R&D") centres with focuses on aluminium (located in Krasnoyarsk), alumina (in St. Petersburg) and design (in Irkutsk).
  - — The Group is developing proprietary RA-300, RA-400 and RA-500 cell technologies. A variant of the RA-300 technology was selected for and successfully implemented at the Group's Khakas aluminium smelter.
- Strategic investments, including:
  - — Acquisition of a more than 25% stake in Norilsk Nickel — the world's largest nickel and palladium producer (based on production in 2008 according to CRU) and one of the leading producers of platinum and copper.
  - — LLP Bogatyr Komir 50/50 joint venture with Samruk-Kazyna in Kazakhstan — an operator of open-pit mines in the Ekibastuz coal basin, one of the largest coal basins in the CIS.
- Experienced management team and world class corporate governance
  - — The Group has a highly skilled and experienced team of managers with proven industry expertise and an impressive track record of managing growth.
  - — Even while privately held, the Group has adopted international standards of corporate governance.

Strategies

The Group's management is pursuing and will pursue the following strategies over different timeframes:

- Maintain sustainable low-cost positioning through continuous cost reduction
  - — The Group is pursuing a multi-pronged strategy that includes, subject to the debt restructuring agreements, a number of initiatives, such as improving energy efficiency at its smelters, seeking to build smelter-generation complexes in regions in which low-cost captive energy sources are available and seeking to invest in selective energy-related assets, such as coal and power generating facilities.
- Maintain active and responsive production management
  - — Production cuts and/or facility shutdowns allow the Group to respond actively to oversupply situations whenever they occur. By cutting output at higher cost facilities, the Group is able to maintain high utilisation rates at its core low-cost smelters located in Siberia.
- Debt reduction through cash flow management
  - — The Directors consider reduction of the Group's leverage pursuant to its debt restructuring agreements to be a key priority in the near and medium term.

- Maintain leadership in the global aluminium industry in terms of market share and position on the cost curve through a number of measures, including:

  — Completion of the Boguchanskaya hydropower plant — Under the debt restructuring agreements, the Group is permitted to fund capital expenditure up to US$300 million for Phase 1 of the BEMO project.

  — Medium-term strategies, such as exploiting its proximity to China and the rest of Asia and increasing sales to China; subject to its debt restructuring agreements, completing advanced projects with attractive fundamentals, such as the Taishet and Boguchansky aluminium smelters, and pursuing brownfield development projects such as Kindia (Guinea)-2.

  — M&A growth options in the long term.

Summary Financial Information

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
			(Mln. US$)		
CONSOLIDATED INCOME STATEMENT DATA					
Revenue	3,757	8,354	15,685	13,588	8,429
Cost of sales	(3,449)	(5,306)	(11,073)	(8,356)	(4,186)
Gross profit	**308**	**3,048**	**4,612**	**5,232**	**4,243**
Distribution expenses	(284)	(383)	(798)	(528)	(328)
Administrative expenses	(311)	(585)	(1,103)	(842)	(455)
Loss on disposal of property, plant and equipment	(7)	(8)	(56)	(97)	(5)
Impairment of non-current assets	(37)	(344)	(3,668)	—	—
Other operating expenses	(156)	(62)	(215)	(118)	(143)
Results from operating activities	**(487)**	**1,666**	**(1,228)**	**3,647**	**3,312**
Finance income	23	120	106	101	176
Finance expenses	(680)	(302)	(1,594)	(494)	(265)
Share of (losses)/profits of associates	348	79	(3,302)	(14)	(16)
Share of (losses)/profits of jointly controlled entities	(8)	40	(35)	(15)	(12)
Excess of the Group's share in net identifiable assets over cost of acquisition	—	—	—	—	28
(Loss)/profit before taxation	**(804)**	**1,603**	**(6,053)**	**3,225**	**3,223**
Income tax expense	(64)	(194)	69	(419)	(336)
(Loss)/profit from continuing operations	**(868)**	**1,409**	**(5,984)**	**2,806**	**2,887**
Profit from discontinued operations (net of income tax)	—	—	—	—	10
Net (loss)/profit for the year/period	**(868)**	**1,409**	**(5,984)**	**2,806**	**2,897**
Attributable to:					
Shareholders of the Company	(868)	1,411	(5,952)	2,809	2,897
Non-controlling interests	—	(2)	(32)	(3)	—
CONSOLIDATED BALANCE SHEET DATA					
Total assets	22,219	36,005	24,005	22,063	9,252
Equity attributable to:					
Shareholders of the Company	3,077	16,715	4,488	10,095	3,078
Non-controlling interests	—	30	—	44	61
Total non-current liabilities	934	10,093	929	8,141	4,236
Net current assets/(liabilities)	(14,397)	(3,220)	(13,516)	1,518	735
CONSOLIDATED CASH FLOW STATEMENT DATA					
Cash flows (used in)/generated from operating activities	(232)	1,878	3,017	3,346	2,790
Cash flows used in investing activities	(61)	(5,271)	(5,802)	(2,853)	(584)
Cash flows (used in)/generated from financing activities	(143)	3,379	3,250	(477)	(2,366)
Cash and cash equivalents at end of year/period	239	237	685	247	229

Certain Non-IFRS Measures and Selected Ratios

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
	(Mln. US$, except for percentages and ratios)				
CERTAIN NON-IFRS MEASURES					
Adjusted EBITDA[1]	(144)	2,585	3,526	4,620	3,680
Adjusted EBITDA margin	(3.8)%	30.9%	22.5%	34%	43.7%
Net Debt[2]	13,426	13,024	13,170	8,395	4,319
SELECTED RATIOS					
Net Debt to Adjusted EBITDA	46.6:1[3]	2.5:1[3]	3.7:1	1.8:1	1.2:1

Notes:

(1) Adjusted EBITDA for any period is defined as results from operating activities adjusted for amortisation and depreciation, impairment charges and loss on disposal of property, plant and equipment. Adjusted EBITDA is presented as additional information because the Company believes that it is a useful measure for certain investors to determine the Company's operating cash flow and historical ability to meet debt service and capital expenditure requirements. Adjusted EBITDA is not a measure of financial performance under IFRS and should not be considered as an alternative to cash flows from operating activities, a measure of liquidity or an alternative to net profit as indicators of the Company's operating performance or any other measures of performance derived in accordance with IFRS. Because it is not an IFRS measure, Adjusted EBITDA may not be comparable to similarly titled measures presented by other companies. Adjusted EBITDA is different from Covenant EBITDA, which is relevant for the Group's debt restructuring agreements. For the definition of Covenant EBITDA and a reconciliation of Covenant EBITDA to consolidated profit before tax for the year ended 30 June 2009, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring".

(2) For any period presented, Net Debt is calculated as loans and borrowings (plus as at 31 December 2006 and 2007, bonds outstanding) less any cash and cash equivalents as at the end of the period. Net Debt is presented as additional information because the Company believes that it is a useful measure for certain investors to assess the Company's financial condition. Net Debt is not a measure of financial performance under IFRS and should not be considered as an alternative to a measure of liquidity or an alternative to other IFRS measures as indicators of the Company's operating performance or any other measures of performance derived in accordance with IFRS. Because it is not an IFRS measure, Net Debt may not be comparable to similarly titled measures presented by other companies. Net Debt differs from total net debt as it is defined in the Group's financial arrangements including the Group's debt restructuring agreements. For the definition of total net debt, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring".

(3) For the purposes of calculating Net Debt to Adjusted EBITDA ratio for the period ended 30 June 2009 and 2008, Adjusted EBITDA was annualised by multiplying Adjusted EBITDA for the respective period by two. These ratios may not be indicative of what these ratios will be for the full fiscal year ending 31 December 2009. Net Debt to Adjusted EBITDA differs from total net debt to Covenant EBITDA for the purposes of the Company's debt restructuring agreements.

The following is a reconciliation of Adjusted EBITDA to the Group's results from operating activities for the periods presented:

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
	(Mln. US$)				
Reconciliation of Adjusted EBITDA					
Results from operating activities	(487)	1,666	(1,228)	3,647	3,312
Add:					
Amortisation and depreciation	299	567	1,030	876	363
Impairment of non-current assets	37	344	3,668	—	—
Loss on disposal of property, plant and equipment	7	8	56	97	5
Adjusted EBITDA	(144)	2,585	3,526	4,620	3,680

For the Group's net current liabilities as at 30 September 2009, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Balance Sheet", for the Group's loans and borrowings as at 30 September 2009, see "Financial Information — Selected Financial Data of the Group — Capitalisation" and for the Group's capital commitments as at 30 June 2009, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Capital Commitments".

Key Operating Data

The table below provides selected aggregate attributable production information for the Group.

	Six months ended 30 June	Year ended 31 December		
Production	**2009**	**2008**	**2007**	**2006**
Primary aluminium (ktonnes)	1,980	4,424	4,202	3,958
Alumina (ktonnes)[(1)]	3,738	11,317	11,347	11,313
Bauxite (mtonnes wet) [(2)]	6.1	19.1	18.5	19.2

Notes:

(1) Alpart and Windalco are consolidated by the Group on a proportionate basis as they are jointly controlled assets and operations (the Group's interests in Alpart and Windalco are 65% and 93%, respectively). Accordingly, the alumina production data set forth above includes the Group's pro rata share of Alpart and Windalco's production. Zaporozhye alumina refinery is a fully consolidated subsidiary of the Company, so the attributable production is presented on a 100% plant production basis to reflect UC RUSAL's effective control of the finished product. QAL is consolidated on an equity basis and accordingly the data shown is the proportion attributed to UC RUSAL based on its 20% equity interest.

(2) Because Alpart and Windalco are consolidated on a proportionate basis, the bauxite production data set forth above includes the Group's pro rata share of Alpart's and Windalco's respective production. The total production of the Group's fully consolidated subsidiaries is included, even if there are minority interests. Accordingly, the total production of Timan and BCGI is included, even though the Group's interests in Timan and BCGI are approximately 80% and 90%, respectively.

Global Offering Statistics

The Company is offering 1,610,292,840 Offer Shares in the form of Shares or Global Depositary Shares (subject to an Over-allotment Option as described in the section headed "Underwriting - International Placing") in the Global Offering that comprises (1) the International Placing, i.e. an international private placing of Offer Shares outside the United States (including to professional investors within Hong Kong) in offshore transactions in reliance on Regulation S, and in the United States to QIBs in reliance on Rule 144A or another exemption from the registration requirements under the US Securities Act and (2) the Hong Kong Placing, i.e. a concurrent placing of Offer Shares to certain eligible investors in Hong Kong. This prospectus relates only to the Hong Kong Placing. The International Placing is being made pursuant to a separate offering document.

The Company expects to enter into the International Placing Agreement relating to the International Placing and Hong Kong Placing on the Price Determination Date.

Assuming that the Global Offering becomes unconditional at or before 8:00 a.m. in Hong Kong on Wednesday, 27 January 2010, it is expected that dealings in the Shares on the Stock Exchange will commence on Wednesday, 27 January 2010.

Shareholding Structure

The following table sets out the Group's shareholding structure immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised:

Name or class of Shareholder	Number and class of securities[1]	Approximate percentage interest in the Company immediately after the Global Offering
En+[2]	7,202,910,267 Shares (L)	47.59%
Onexim	2,586,499,596 Shares (L)	17.09%
SUAL Partners	2,400,970,089 Shares (L)	15.86%
Amokenga Holdings	1,309,620,048 Shares (L)	8.65%
Public	1,636,363,646 Shares (L)	10.81%[3]
Of which:		
Vnesheconombank	477,090,000 Shares (L)	3.15%
International lenders[4]	26,070,806 Shares (L)	0.17%
Total[5]	15,136,363,646 Shares (L)	100%

Notes:

(1) The letter "L" denotes the shareholder has a long position in such securities.

(2) Mr. Oleg Deripaska beneficially owns the entire issued share capital of En+. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.

(3) Includes Shares to be sold in the form of Global Depositary Shares evidenced by Global Depositary Receipts (the "GDSs") in the International Placing. The GDSs are to be issued by The Bank of New York Mellon, as depositary, pursuant to a deposit agreement to be entered into between the Company and the Depositary. Each GDS will represent 20 Shares. Pursuant to the deposit agreement, the Shares represented by the GDSs will be held by The Hongkong and Shanghai Banking Corporation Limited, as custodian (the "Custodian"), for the benefit of the Depositary. The Custodian will be the registered holder of such Shares in the share register of the Company. The number of GDSs to be sold in the International Placing will be determined by the Joint Global Coordinators following pricing of the Global Offering. For the avoidance of doubt, both Shares and GDS will be sold in the International Placing.

(4) Shares held by international lenders pursuant to conversion of fee warrants issued to such lenders on the date of effectiveness of the international override agreement.

(5) Excludes such number of bonus Shares as may be issued to the management of the Company. See "Directors and Senior Management — Future Compensation of Directors and Senior Management".

Dividend Policy

Under the terms of its restructuring agreements, the Company is not permitted to pay dividends unless its ratio of total net debt to Covenant EBITDA is 3 to 1 or less (as of 30 June 2009, such ratio was 47.2:1), the Group has made cumulative debt repayments of at least US$5 billion (excluding debt repayments to VEB and Onexim), there are no outstanding defaults under the international override agreement and the Group has sufficient cash to pay the proposed dividends. As a result, the Company does not expect to be in a position to declare dividends in respect of any year at least through 2013.

The Company's current Major Shareholders expect to adopt a dividend policy under the Shareholders' Agreement between Major Shareholders only, which is a shareholders' agreement expected to be entered into by En+, SUAL Partners, Glencore and Onexim, to which the Company is not a party. This agreement sets out certain agreed matters between the Major Shareholders in relation to board appointments, board committees, voting, transfers of shares, veto rights with respect to certain related party transactions and certain matters of corporate law and certain other matters. For further information relating to the Shareholders' Agreement between Major Shareholders only, see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only". Under the dividend policy set out in this shareholders' agreement, not less than 50% of the annual consolidated net profits of the Group in each financial year are to be distributed to shareholders within four months after the end of the relevant financial year, subject to any applicable legislation. See "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only". This dividend policy would, however, be subject to the limitations contained in the Company's debt restructuring agreements and so would not be expected to come into effect in respect of any year through 2013 at least.

Use of Proceeds

The Company estimates that it will receive net proceeds from the Global Offering of approximately HK$16,790 million (assuming an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range), after deducting the underwriting fees and commissions and estimated expenses payable by the Company in relation to the Global Offering.

The Group intends to use all of the net proceeds received from the Global Offering immediately to reduce outstanding debt and to satisfy other obligations to its creditors (which include the settlement of fee warrants exercised for cash and a specified payment to Onexim) pursuant to the terms of its debt restructuring agreements. Certain of the Underwriters and/or their affiliates have lending exposure to the Group that will be reduced by application of the net proceeds from the Global Offering and have either elected to have their fee warrants settled in cash or will take delivery of the Shares underlying such fee warrants. See "Underwriting — Underwriters' Interests in the Company".

Risk Factors

The Group and investors in the Offer Shares are subject to risks relating to the Group's business, and investors in the Offer Shares are also subject to risks relating to the Global Offering and the Offer Shares. Among others, these risks include: that the Group operates in a cyclical industry subject to significant price and demand volatility and overcapacity; that the Group depends on continued access to inexpensive and uninterrupted electricity; that the Group depends on uninterrupted transportation services and access to state-owned infrastructure at acceptable prices; that the Group must comply with the terms of its debt restructuring agreements; and that the Group's effective tax rate may change. In addition, due to its position in the Russian aluminium market, the Group is also subject to compliance with specific requirements under Russian anti-monopoly laws. Furthermore, because the Group's assets and production facilities are located in many countries (including, principally, in Russia), the businesses conducted in those countries are subject to specific risks that are discussed in greater detail in "Risk Factors". Investors should familiarise themselves with these country specific risks prior to making an investment decision. For a description of these and other risks, see "Risk Factors". In particular, investors should note that if the Company fails to comply with the terms and conditions of its debt restructuring agreements, and for this or other reasons its outstanding debt is accelerated, it would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company.

This prospectus contains certain statements that are, or may be deemed to be, "forward-looking statements". These forward-looking statements may be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "projects", "anticipates", "expects", "intends", "may", "will" or "should" or, in each case, their negative or other variations, or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this prospectus and include, but are not limited to, statements regarding the Group's intentions, beliefs or current expectations concerning, among other things, the Group's business, results of operations, financial position, liquidity, prospects, growth, strategies and the bauxite, alumina and aluminium industries.

By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. Forward-looking statements are not guarantees of future performance and of the actual results of the Group's operations, financial position and liquidity, and the development of the markets and the industries in which the Group operates may differ materially from the development of those same industries as described in, or suggested by, the forward-looking statements contained in this prospectus. In addition, even if the Group's results of operations, financial position and liquidity, and the development of the markets and the industries in which the Group operates, are consistent with the forward-looking statements contained in this prospectus, those results or developments may not be indicative of results or developments in subsequent periods. A number of risks, uncertainties and other factors could cause results and developments to differ materially from those expressed or implied by the forward-looking statements including, without limitation:

- materially adverse changes in economic or industry conditions generally or in the markets served by the Group;
- changes in the supply and demand for and the price of aluminium, alumina, aluminium products and other products;
- fluctuations in inflation, interest rates and exchange rates;
- the Group's ability to comply with the terms of its debt restructuring agreements;
- changes in the costs of the materials required for the Group's production of aluminium;
- changes in the Group's operating costs, including the costs of energy and transportation;
- changes in the Group's capital expenditure requirements, including those relating to the Group's potential environmental liabilities or the ability of the Group to fund its capital expenditure requirements through borrowing or otherwise;
- the Group's ability to successfully implement any of its business strategies;
- the Group's ability to obtain or extend the terms of the licences necessary for the operation of the Group's business;
- developments in, or changes to, laws, regulations, governmental policies, taxation or accounting standards or practices affecting the Group's operations;
- the Group's ability to recover its reserves or develop new resources and reserves;
- the Group's success in accurately identifying future risks to its business and managing the risks of the aforementioned factors; and
- other factors discussed in "Risk Factors", "Business" and "Financial Information".

Forward-looking statements may and often do differ materially from actual results. Any forward-looking statements in this prospectus reflect the Group management's current view with respect to future events and are subject to risks relating to future events and other risks, uncertainties and assumptions relating to the Group's business, results of operations, financial position, liquidity, prospects, growth, strategies and the bauxite, alumina and aluminium industries. Investors should specifically consider the factors identified in this prospectus, which could cause actual results to differ, before making any investment decision. Subject to the requirements of the Listing Rules and except as may be required by applicable law, the Company undertakes no obligation to revise any forward-looking statements that appear in this prospectus to reflect any change in the Company's expectations, or any events or circumstances, that may occur or arise after the date of this prospectus. All forward-looking statements in this prospectus are qualified by reference to this cautionary statement.

In addition to other information in this prospectus, you should carefully consider the following risk factors, which may not typically be associated with investing in equity securities of companies from other jurisdictions, before making any investment decision in relation to the Offer Shares. If any of the possible events described below occur, our business, financial condition or results of operations could be materially and adversely affected and the market price of the Offer Shares could fall significantly. In particular, investors should note that if the Company fails to comply with the terms and conditions of its debt restructuring agreements, and for this or other reasons its outstanding debt is accelerated, it would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. The risks described in this prospectus are not the only risks the Company faces. Additional risk factors not currently known or which are currently deemed immaterial may also have a material adverse effect on the Group, its business, financial condition and results of operations and development. Certain risks relating specifically to the Company's facilities are also described in the Independent Technical Report in Appendix VI.

Risks Relating to the Group and its Business

The Group operates in a cyclical industry that has recently experienced significant price and demand volatility and overcapacity, which has had and may continue to have a material adverse effect on the Group's performance and financial results

The aluminium industry is cyclical, and is currently suffering from significant overcapacity. Prices for the Group's products are difficult to forecast. While the Group benefited from the business cycle in 2006 through 2008, with the average price of aluminium quoted on the LME increasing from an average price of US$2,568 per tonne in 2006 to an average price of US$2,662 per tonne in 2007 and to US$2,836 per tonne in the first six months of 2008 before reaching a maximum price of US$3,341 per tonne in mid-July 2008, aluminium prices declined precipitously in the second half of 2008 and continued to decline at the beginning of 2009 (with a lowest price of US$1,290 per tonne in February 2009), reflecting a significant decrease in demand for aluminium as a result of the global economic downturn. The average price of aluminium quoted on the LME in the last quarter of 2008 was US$1,830 per tonne, which was below the average cost of production of aluminium worldwide. The sharp decline in aluminium prices resulted in significant reductions in aluminium production volumes worldwide.

Although prices have increased slightly since the beginning of 2009 to US$2,035 per tonne as of 30 November 2009, the timing and extent of price recovery and return to prior levels cannot be predicted. An eventual rebound in aluminium prices will likely depend on a broad recovery from the current global economic downturn and a more favourable supply-demand balance, although the length and nature of business cycles affecting the aluminium industry have historically been unpredictable. The Group does not control a number of factors affecting aluminium prices, which include, but are not limited to:

- global and regional economic and political conditions;
- global supply of and demand for bauxite, alumina and aluminium and expectations of future supply and demand (including significant spare capacity in the industry and decisions by competitors to reactivate idle capacity);
- volatility of electricity and, in general, of energy costs;
- demand for key products for which aluminium is used, such as cars, aircraft, infrastructure and aluminium food packaging materials;

- speculative trading;
- the release of built-up reserves of aluminium commodities that can be used as a substitute for aluminium;
- variations in freight and transport costs with respect to raw materials and finished products;
- the use of new technologies, including technologies that enable commodity substitution or the use of scrap commodities; and
- government regulations and regulatory actions, including tariffs, quotas and customs duties.

In addition, following the decline in demand for and price of aluminium, the demand for and price of alumina also experienced a sharp decline beginning in the second half of 2008. This caused the Group to reduce its alumina production capacity, to match its aluminium production. Accordingly, the Group's decision to expand its aluminium production will also be affected by alumina prices and the Group may decide to increase its aluminium production to match its alumina production capacity or sell excess alumina on the market. The market for alumina is primarily governed by contractual arrangements in which the pricing is not publicly available information. There is only a small portion of the world alumina trade that is conducted on the spot market.

As a result of the fall in demand for both aluminium and alumina, there has been significant overcapacity in these markets. In response, the Group cut back production at its facilities, reducing aluminium and alumina production by 10% and 33%, respectively, for the first six months of 2009, compared to the first six months of 2008.

Continued financial weakness among substantial consumers of aluminium products such as automobile manufacturers, and persistent weakness in demand for their products, would further exacerbate the negative trend in the current market conditions experienced by the aluminium industry. While the Company has implemented a variety of measures to mitigate the impact of the market downturn and the decline in demand for aluminium, including through reductions in production by closing higher cost facilities and reducing production volumes, further cost reductions, more effective management of raw materials and energy supplies, decreases in management expenses, headcount optimisation and significant revision of investment plans, these measures may not prove sufficient in terms of cost-saving or in realigning the Group's production levels with reduced demand to maintain the Group's profitability going forward.

Unfavourable changes in the price of aluminium and alumina have had and could continue to have a material adverse effect on the Group's business, financial condition and results of operations. A sustained fall of more than 20% in the price of aluminium could also adversely affect the Company's ability to meet certain targets and financial covenants under its debt restructuring agreements. A fall of 50% in the price of aluminium from current levels would likely cause the Group to be unable to comply fully with the terms of its debt restructuring agreements and would, moreover, make the Group's operations (and, the Company believes, the operations of substantially all other aluminium producers) unprofitable. See "— The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders".

The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations

Energy costs, particularly the cost of electricity, comprise a significant portion of the Group's cost of goods sold and in 2008 and in the six months ended 30 June 2009, represented approximately 18.5% and 26.4%, respectively, of such costs. Historically, the Group has benefited from access to competitively priced electricity. In 2008 and the first half of 2009, approximately 80% and 84%, respectively, of the Group's aluminium was produced by Siberian smelters, which obtain their energy mainly from low-cost hydropower stations with few, if any, alternative sources of significant demand. In 2008, hydropower accounted for approximately 79% of the Group's total energy consumption. An important part of the Group's energy strategy is to enter into long-term contracts for the supply of low-cost electricity to these Siberian smelters. As of the date of this prospectus, the Group has secured three such long-term contracts for its Bratsk, Krasnoyarsk and Irkutsk aluminium smelters. For the remaining 20% of the Group's production, it relies more heavily on thermal power. In 2008, aluminium smelters in Siberia paid a production-weighted average of US$0.0192/kWh for electricity, compared to a production-weighted average of US$0.0355/kWh in the Urals region and US$0.0473/kWh in the European region of Russia (excluding the Urals region), compared to a weighted average price of US$0.0376/kWh paid by the world's aluminium producers, according to CRU. See "Business — Strengths and Strategies — Strategies — Maintain sustainable low-cost positioning through continuous cost reduction", "Business — Energy Supply " and "Connected Transactions — Electricity and Capacity Supply Contracts".

Electricity prices in Russia are partially regulated by the Russian Government. Tariffs are set in Roubles and have increased at least in line with inflation, though some of the former SUAL smelters have experienced more significant increases. In April 2007, the Russian Government established guidelines for a share of total national electricity production to be sold on the wholesale electricity market under regulated tariffs during the period from 1 January 2007 to 31 December 2010. That share ranges from 45% to 50% during the period of 1 July to 31 December 2009 and is expected to gradually decrease to 15 to 20% by 1 July 2010. National electricity production that is not supplied to industrial users under regulated tariffs is supplied at free market prices. Starting from 1 January 2011, all electricity production volumes are expected to be supplied to industrial users under free market prices.

Electricity tariffs for industrial users have risen since 2007, and are expected to be further increased following further deregulation, as a result of such price liberalisation and growth in demand. Electricity tariffs may also increase as a result of expected fuel price increases for generators that rely on thermal power. With regard to the latter, regulated natural gas prices in Russia are also expected to increase. See "Business — Energy Supply".

In addition to electricity for aluminium production, significant heat energy is required to refine bauxite into alumina. The Group's alumina refineries primarily use fuel oil, gas and coal to generate the required heat energy and fluctuation in these fuel prices directly impact the cost of production.

Reliance on affiliated suppliers

In 2008, 69% of electricity used by the Group was supplied by subsidiaries of En+ (a Controlling Shareholder), 21% from state-owned suppliers and the remaining 10% from various wholesale electricity market suppliers.

Service/supply interruption

Electricity price increases may also result from the need to secure alternative electricity supplies following industrial accidents or breakdowns at major electricity suppliers. In August 2009, a major accident occurred at the Sayano-Shushenskaya hydroelectric power plant in Siberia, which was the main supplier of electricity to the Group's Sayanogorsk and Khakas aluminium smelters. According to preliminary estimates, it may take up to several years to fully restore the station's previous production capacity. The accident resulted in a temporary cessation of power supplies to the Sayanogorsk and Khakas aluminium smelters and SAYANAL and a reduction in power supplies to the Novokuznetsk aluminium smelter. The Group estimates that losses incurred as a consequence of the accident amounted to approximately RUR41.6 million (approximately US$1.33 million at the exchange rate of the Central Bank of Russia as of 30 June 2009). The accident at the Sayano-Shushenskaya hydroelectric power plant has led to changes to the main power supply source for the Sayanogorsk and Khakas aluminium smelters. Currently, nearly all of the electricity for the Group's Sayanogorsk and Khakas aluminium smelters is transferred from the Krasnoyarsk and Kemerovo regions. Though all of the affected smelters have secured alternative electricity supplies and resumed operating at normal capacity in a short timeframe, and although the Russian Government has indicated its intention to control the price of electricity in the region to minimise any potential negative effect of the accident, there is a risk that electricity costs could increase. Further, in view of the effect of the accident on the industry and consumers in the region in general, the Russian Government may inquire whether production cuts at the Group's smelter facilities are possible or necessary to alleviate the pressure on the regional electricity supply system, in particular, during seasons with peak electrical use. To mitigate any negative effect from such possible production cuts, the Company may need to consider shifting production to its less cost efficient facilities or rerouting electricity supplies from other regions. Increases in electricity prices resulting from using alternative suppliers of electricity or production cuts may have a material adverse effect on the Group's business, financial condition and results of operations.

The Group depends on the provision of uninterrupted transportation services and access to state-owned infrastructure for the transportation of its materials and end products across significant distances, and the prices for such services (particularly rail tariffs) could increase

Rail tariffs and infrastructure

The production of aluminium generally involves the transportation of materials and end products from and to various locations, often over great distances, because bauxite mines, alumina refineries, aluminium smelters and the principal markets for aluminium products are located in different parts of the world. Most of the Group's main smelters are located in Siberia, far from their sources of materials, seaports and primary markets. Railway transportation is the Group's principal means of transporting materials, mainly alumina, to its smelters, and end products to its customers. The Group also relies on key Russian ports to receive shipments of foreign-sourced alumina and to export finished aluminium products.

Russian railway tariffs are currently regulated by the government and consist of two parts: infrastructure costs and carriage costs. In recent years, annual tariff increases have been in line with inflation (except for 2008, when tariffs rose faster than inflation), and in 2006 and 2007 the increases were less than inflation. Although according to current government policy, tariffs are planned to increase in line with inflation from 2010 through 2012, there can be no assurance that this policy will be maintained.

The Group currently benefits from favourable rail tariffs on certain routes, and protection from rate increases, pursuant to Russian regulations adopted in 2003 and 2004 (the "Railway Tariff Regulations") and an implementing agreement entered into in 2004 between a former RUSAL entity and the railway operator, JSC Russian Railways. Under these regulations and the implementing agreement, the infrastructure component of the railway tariff for transportation on specified routes of

certain materials is fixed in Roubles at the level prevailing at 1 October 2003 subject to conversion into US dollars at the average RUR/USD exchange rate for the preceding quarter until December 2011, provided that increasing annual volume levels are met. Subject to the possibility of early termination by either party before any calendar year end, the agreement is automatically renewed on an annual basis. If the Group fails to comply with its volume increase obligations under the agreement, or if the Railway Tariff Regulations are amended or repealed, the Group could become subject to the standard railway tariffs, which could be significantly higher than the currently applicable tariffs.

The tariffs set by the Railway Tariff Regulations and implemented by the agreement are applicable to the transportation of the current and future production of certain former RUSAL Russian aluminium smelters and alumina refineries. The tariffs under the agreement apply to approximately 70% of the Group's production. These regulations and the implementing agreement do not apply to the former SUAL facilities.

In 2008, the Group agreed with JSC Russian Railways to fix the infrastructure component of transport tariffs generally applicable to specific types of raw materials and products at 2008 levels, subject to a certain diminishing factor with subsequent annual increases indexed in accordance with general annual tariff indexation. Such fixed transport tariffs would apply to the principal types of raw materials and products usually transported by the Group, rather than particular entities or transportation routes, and thus would indirectly benefit the entire Group inclusive of the former SUAL facilities. The Group intends to continue the negotiation process in relation to the fixed transport tariffs in 2010. Once the negotiations with JSC Russian Railways and the Federal Service for Tariffs ("FST") are finalised, it is expected that new regulations will have to be issued by the state tariff service in order to give effect to the new tariffs. Upon entry of the new tariffs into force, the Railway Tariff Regulations and the implementing agreement will terminate. Until then, the Group expects that the Railway Tariff Regulations and the implementing agreement with JSC Russian Railways will continue to apply. As an alternative, the Group is also discussing with JSC Russian Railways the possibility of extending the current agreement to SUAL and new production facilities with a simultaneous extension of its term until 2020. If the Group fails to complete the negotiations, new regulations are not adopted or JSC Russian Railways terminates the existing agreement, or the Group fails to extend such agreement's term, the Group could be subject to the standard railway tariffs, which could be significantly higher than the currently applicable tariffs. Further, the Group could be subject to certain penalties if the Company fails to comply with its obligations to increase volumes under the agreement.

The infrastructure component of the tariff, which is fixed as described above, represents approximately 85% of the tariff, while the carriage component accounts for the remainder. The carriage component is not stipulated for in the implementing agreement and is not subject to the ongoing negotiations with JSC Russian Railways. The carriage component is subject to indexation in line with inflation, which is typically undertaken annually. Currently, the Russian Government is contemplating plans to increase competition through the privatisation of the rolling stock owned by JSC Russian Railways, which could influence the carriage costs portion of the tariff. Although the Company believes that it is more likely that the Russian Government will limit any increase in the carriage component of the tariff until December 2010 so as not to exceed the inflation rate, should deregulation occur, the pricing structure for the rail industry would be difficult to predict and the Group could be subject to tariff increases that would adversely affect its financial results.

Certain portions of the railway tracks, such as rail sidings and branch lines laid from the main rail system directly to several of the Group's production facilities, are not owned by the Group or by JSC Russian Railways. Although not likely to affect production, the Group's reliance on such infrastructure may result in further increases in its transportation costs and cause additional expenses, such as expenses related to the maintenance of larger inventories of materials to secure against disruptions of rail delivery schedules.

Sea Transport

The Group transports materials, mainly alumina, from its overseas facilities to its Russian smelters and distributes most of its upstream output to customers in markets outside Russia by sea via a number of ports, primarily St. Petersburg and Vanino. The St. Petersburg port has experienced bottlenecks in recent years due to increasing volumes of goods being transported as well as delays due to a work-to-rule slowdown. Starting in June 2009, deliveries of goods to and from the Vanino port have been subject to delays and interruptions due to increasing volumes of goods being transported via the regional railway system, which has a limited capacity. In September and October 2009, JSC Russian Railways suspended deliveries of non-ferrous metals to the Vanino port for a period not exceeding one month.

In Russia, cargo rates are subject to state agency regulation. To secure timely delivery of materials and finished products when the volume of cargo resumes, the Group may consider the development of its own port facilities in Ust'-Luga and may also consider development opportunities in Novorossiysk, St. Petersburg and Russia's Far East. A failure in the transportation of materials to the Group's upstream production facilities, or any delays in deliveries, or any increase in costs arising from the use of the ports, could reduce the Group's competitiveness in international markets.

The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders

As a result of the global economic downturn and a sharp decline in aluminium prices starting from September 2008 and continuing into the first half of 2009, as well as an increase in the Group's indebtedness in the first half of 2008, including its incurrence of indebtedness in April 2008 to finance its acquisition of a stake in Norilsk Nickel, the Group experienced a liquidity shortage and breached covenants under most of its loan agreements. The Group's debt as at 30 June 2009 included US$13,690 million under 54 syndicated and bilateral loans with international and Russian and Kazakh lenders. The Group also had obligations to Onexim, one of the Group's substantial shareholders, in the amount of US$2.7 billion plus accrued interest in respect of deferred consideration for the purchase of shares in Norilsk Nickel. In addition, the Company had US$260 million of off-balance sheet liabilities in relation to a guarantee of indebtedness of its joint venture.

On 7 December 2009, the Company and certain of its subsidiaries entered into an international override agreement with the Group's international lenders implementing a long-term restructuring of the Group's debt to its international lenders, providing for a stated maturity date on 6 December 2013, subject to earlier repayments out of excess cashflow and the proceeds of asset disposals and equity and subordinated and other debt fund raisings. In addition, in late 2009, the Company and certain of its subsidiaries entered into debt restructuring agreements to various existing bilateral loans with Russian and Kazakh lenders providing for the long-term restructuring of these loans on broadly similar terms, except in the case of the loan agreement with VEB, which was extended for a shorter period. Further, on 1 December 2009, the Company entered into an amendment agreement in relation to a stock purchase agreement among the Company, Onexim and certain other parties relating to the acquisition of shares in Norilsk Nickel to restructure deferred consideration in the amount of US$2.7 billion plus interest accrued thereon. In accordance with the amendment agreement, the Company's obligations in respect of US$880 million plus interest accrued on the total amount of deferred consideration from 6 November 2009 until the date of effectiveness of the international override agreement (in the amount of approximately US$15 million) and any interest capitalised thereon during the override period will be settled out of excess cashflow and other proceeds used to prepay debt (being proceeds of asset disposals and equity and subordinated and other debt fund raisings) during the term of the international override agreement. The remaining obligations were converted into Shares representing approximately 6% of the Company's share capital on the date of effectiveness of

the international override agreement. The interest accrued until and including 5 November 2009 and a restructuring fee in an aggregate amount of US$275 million were or are to be paid in cash: US$160 million was paid by the Company on the date of the effectiveness of the international override agreement; and US$115 million will be paid out of the proceeds of the Global Offering. For a description of the debt restructuring, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring".

The terms of the debt restructuring agreements:

- significantly limit the Group's ability to incur additional indebtedness;
- impose significant limitations on capital expenditure; while the Group will be allowed to make maintenance capital expenditure within specified limits it will be prohibited from making development capital expenditure, except with respect to the Boguchanskaya hydropower plant (within specified limits) or to comply with environmental laws;
- oblige the Company, under certain circumstances, to dispose of its interest in Norilsk Nickel or a considerable part of it to repay debt to VEB;
- do not permit the Company to pay dividends unless its ratio of total net debt to Covenant EBITDA is 3 to 1 or less, the Group's debt (other than its debt to VEB and Onexim) has been repaid by at least US$5 billion, there are no outstanding defaults under the international override agreement and the Group has sufficient cash to pay the proposed dividends;
- oblige the Group to use excess operating cash flow and the net proceeds of asset disposals and equity and subordinated and other debt fund raisings (including proceeds from the Global Offering) to repay outstanding indebtedness; and
- oblige the Group to maintain specified financial ratios.

Compliance with these terms will considerably reduce the Group's ability to expand its operations and to pay dividends.

Further, a substantial portion of the Company's operating cash flow is required to service its debt and other payment obligations, which reduces funds available to finance its operations and pursue new business opportunities, limits its flexibility in responding to changing business and economic conditions, including technological changes and increased competition, and potentially makes the Company more vulnerable than certain of its competitors to a future downturn in the economy. In the event that cash flow from operations is less than anticipated and the Company is unable to secure additional funding to cover its expenses, the Company's business, financial condition, expansion plans and operations would be materially adversely affected.

The international override agreement and the debt restructuring agreements relating to the Group's Russian and Kazakh loans, as well as the agreement with Onexim, have only recently become effective, and the Company has had no track record of complying with them. When considering the terms and conditions of the debt restructuring agreements, the Group's management has taken into account its best estimate of the Company's projected operational and financial performance during the override period. There are, however, many factors, including many that are beyond the control of the Group (such as aluminium, alumina and raw materials, fuel, electricity and transport prices, base interest rates and the value of the Rouble against the US dollar and the Euro) that may adversely affect the Group's performance during the override period. Accordingly, there are limitations on management's best estimate of the Group's performance and, as a result, there are risks associated with the Group's ability to comply with the terms and conditions of the debt restructuring agreements.

For example, a sustained fall of more than 20% in the price of aluminum could adversely affect the Group's ability to meet certain targets and financial covenants under the debt restructuring agreements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring". Failure to comply with the terms or conditions of the debt restructuring agreements (including conditions subsequent) could, if the required majority of lenders so elects, result in acceleration of the Group's indebtedness. Further, adverse outcomes in litigation involving members of the Group or the Company's shareholders could potentially lead to an event of default under the terms of the international override agreement, which could, if the required majority of lenders so elect, result in acceleration of the Group's indebtedness. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Events of Default". In the above circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. In addition, failure to meet certain debt repayment targets could have a material adverse effect, including, among others, potential dilution of shareholders' interests in the Company through the issuance of zero strike equity compensation warrants to the international lenders and compulsory disposal of shares in Norilsk Nickel.

In addition to providing for acceleration in the event of a failure relating to the Group, the debt restructuring agreements also provide for mandatory prepayment of all outstanding indebtedness if a person (or a group of persons acting in concert) other than Mr. Deripaska and members of his immediate family acquires effective control of the Company (meaning the ownership of more than one half of the Shares in the Company, the right to exercise voting rights with respect to more than one half of the Company's Shares or elect more than half of its Board of Directors, or the power otherwise to direct the affairs of the Company). For a discussion of circumstances in which Mr. Deripaska's effective interest in the Company may be reduced, see "— Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "— En+ is completing a restructuring of its debts and will give its lenders a pledge over 15% of the outstanding Shares" and "Risks Relating to the Global Offering and Offer Shares — The sale or availability for sale of substantial amounts of the Shares or equity-related securities could adversely affect their trading prices".

Moreover, the VEB Debt matures on 29 October 2010. The Company expects either to request VEB to extend the maturity of the VEB Debt for successive one-year periods through the end of the override period in December 2013, or to request Sberbank to assume the rights, claims and obligations of VEB under the VEB Debt pursuant to the Sberbank Letter Agreement. If VEB does not extend the maturity of the VEB Debt through the end of the override period and Sberbank does not assume the rights, claims and obligations of VEB under the VEB Debt pursuant to the Sberbank Letter Agreement, the Company expects that it will be able to generate sufficient proceeds to repay the VEB Debt in full upon maturity (by way of refinancing permitted under the terms of the international override agreement, from equity and/or subordinated debt issuances and/or from the possible sale of its more than 25% stake in Norilsk Nickel). See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the VEB Debt Restructuring". However, if VEB does not extend the maturity of the VEB Debt through the end of the override period, and Sberbank does not assume the rights, claims and obligations under the VEB Debt pursuant to the Sberbank Letter Agreement, and if for any reason the Company were not able to generate sufficient cash out of the sources specified above to repay the VEB Debt on its maturity date, the Company would be in default under its debt restructuring agreements, which could, if the required majority of lenders so elect, result in acceleration of the Group's indebtedness. In these circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company.

The Group benefits significantly from its low effective tax rate, and changes to the Group's tax position may increase the Group's tax liability and affect its cost structure

The Group's effective tax rate for the year ended 31 December 2006 was 10% and for the year ended 31 December 2007 was 13%. The concept of effective tax rate is not meaningful where there is negative profit before tax, as was the case for the Group for the year ended 31 December 2008 and the six months ended 30 June 2009. The difference between the statutory tax rate and the Group's effective tax rate results primarily from the location of Group operations in tax-efficient jurisdictions, including the Group's trading structure being located in Switzerland as well as the principal trading company being registered in Jersey; and the holding company of the Group, which is also registered in Jersey and holds Group assets through a number of intermediary holding companies registered in Cyprus, Jersey, BVI, Bahamas and other tax-efficient jurisdictions.

The Group also uses tolling arrangements, mainly because a substantial portion of its alumina is sourced from outside Russia and processed by smelters in Russia, and the majority of third party sales of aluminium are outside Russia. Pursuant to the Group's international tolling arrangements, a tolling company, registered and subject to taxation in Switzerland and acting upon instructions of the principal trading company of the Group, purchases materials, such as alumina, and arranges for their delivery to manufacturers, such as aluminium smelters, in another country for processing into end products, such as primary aluminium, in consideration for a tolling (or processing) fee. The title to the materials or end products is not transferred to the manufacturers and, therefore, where tolling is employed, the shipment of raw materials and end products into and out of the country of the manufacturer is not characterised as an import/export operation and is not subject to local import/export duties. The tolling company and the manufacturer are taxed on their respective profits in their respective countries of tax residence. This tax treatment of tolling arrangements in Russia is subject, among other things, to the requirement that imported materials are processed within a set period of time and, consequently, that finished goods are exported from Russia within that timeframe. This requirement may limit the ability of the Group to retain materials and finished goods at its sites in Russia prior to their processing and export to customers outside Russia. See "Business — Sales and Distribution" and "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Certain Factors Affecting the Group's Results of Operations — Certain Factors Affecting Results of Operations — Effective Tax Rate".

Management intends to continue relying on tolling arrangements of the kind described above with respect to aluminium production in Russia when the alumina is sourced, and the finished aluminium is sold, outside Russia. Tolling arrangements are permitted under Russian law and the Group's tolling agreements are regularly registered by the Russian customs authorities. The Directors believe that the Group's tolling arrangements are conducted on appropriate commercial terms based on applicable Russian law and regulation. Processing fees are clearly indicated on the Group's tax declarations in Russia, and the Russian anti-monopoly authorities also receive periodic reports from each of the Group's smelters on the breakdown of the amount of aluminium that is "produced" versus "processed".

Group transfer prices are generally linked to LME prices, less amounts reflecting transportation, marketing, financing and other logistical and overhead costs absorbed by the Group trading companies.

Russian transfer pricing rules effective since 1999 give the Russian tax authorities the right to make transfer pricing adjustments and to impose additional tax liabilities with respect to all "controlled" transactions, provided that the transaction price differs from the market price (upwards or downwards) by more than 20%. "Controlled" transactions include transactions with related parties, barter transactions, foreign trade transactions and transactions with unrelated parties with significant price fluctuations (i.e., if the price of such transactions differs from the prices of similar transactions by more than 20% within a short period of time). Special transfer pricing rules apply to securities

transactions and derivatives. The Russian transfer pricing rules are vaguely drafted, leaving wide scope for interpretation by Russian tax authorities and courts. There has been very little guidance (although some court practice is available) as to how these rules should be applied. In addition, in the event that a transfer pricing adjustment is assessed by Russian tax authorities, the Russian transfer pricing rules do not provide for an offsetting adjustment to the related counterparty in the transaction that is subject to adjustment. Certain amendments to the Russian transfer pricing laws and regulations are expected to be considered by the Russian legislative authorities and the new rules are expected to become effective in the near future. Such amendments, if adopted, are expected to result in stricter transfer pricing rules. The control functions of the Russian tax authorities are expected to be expanded giving rise to higher tax risks for Russian corporate taxpayers, including the Group. Taxpayers are expected to be given an option to conclude price formation agreements with the tax authorities, which should allow them to manage such risks and, as described below, the Group is seeking to conclude such arrangements.

Russian tax and customs laws and regulations, including the transfer pricing rules described above, are subject to varying interpretations and changes, which can occur frequently. It is expected, for example, that the unified social tax will be abolished starting from 2010 and will be replaced by duties payable to non-budgetary funds.

Management's interpretation of such legislation as applied to the transactions and activities of the Group may be challenged by the relevant local, regional and federal authorities, which have wide discretion to do so. Recent developments in the Russian environment suggest that the Russian authorities are becoming more active in seeking to enforce, through the Russian court system, interpretations of the tax legislation, in particular in relation to the use of certain commercial trading structures, which may be selective for particular tax payers and different from the authorities' previous interpretations or practices. The limitation period for review of taxation in Russia is generally three years. See "Risks relating to the Group and its Business — Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Uncertainties relating to the tax systems of some of the countries in which the Group operates complicate the Group's tax planning and business decisions".

The Russian entities in the Group are regularly audited by the Russian tax authorities and, in particular, audits of the tax years 2005 and 2006 of the Group's major Russian operating subsidiaries, including SUAL and its branches, have been completed. See "— Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Uncertainties relating to the tax systems of some of the countries in which the Group operates complicates the Group's tax planning and business decisions". As a result of these tax audits, the Directors believe that the Group's commercial structure and its terms are acceptable to the Russian tax authorities. The Directors also believe that the Group's non-Russian trading companies involved in these arrangements are not subject to taxes outside their countries of incorporation or where they have established and declared tax residency. However, there is a risk that Russian tax authorities may still challenge the treatment of these companies and their transactions. Finally, the laws that currently permit tolling in Russia, or that regulate transfer pricing or the circumstances in which profits earned outside Russia are free of Russian profit tax, could be changed, requiring the Group to revise or discontinue its existing arrangements. Any of these developments could increase the Group's effective tax rate going forward, and any successful challenge to the Group's practices under applicable law at the time could result in material liability for additional tax, penalties and interest, which could adversely impact the Group's financial condition.

The Group's effective tax rate could also be affected by a number of other risk factors referred to in "— Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Uncertainties relating to the tax systems of some of the countries in which the Group operates complicate the Group's tax planning and business decisions".

The Group is exposed to foreign currency fluctuations which may affect its financial results

Substantially all of the Group's revenues are either denominated in US dollars or linked to the US dollar. While the majority of the Group's costs are also denominated in, or linked to the US dollar, a significant part is denominated in Roubles, Euros and the Ukrainian Hryvnia, because the Group has substantial production facilities in Russia, the EU and Ukraine. Accordingly, depreciation of these currencies against the US dollar has a positive effect, and appreciation of these currencies against the US dollar has a negative effect, on the Group's operating margins. Moreover, inflation of the Group's costs in Roubles, Euros and Hryvnia, if not counterbalanced by a corresponding depreciation of the relevant currency against the US dollar or an increase in prices for aluminium and related products, could adversely affect the Group's margins. For the year ended 2008 the Company recorded a US$201 million foreign exchange loss. The Company recorded a foreign exchange loss of US$79 million in the first six months of 2009. The Group enters into very limited foreign currency swaps to mitigate to a small extent the foreign currency risk, but there can be no assurance that such hedging will be effective. For more information on the Group's exposure to foreign currency fluctuations, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Certain Factors Affecting the Group's Results of Operations — Certain Factors Affecting Results of Operations — Changes in Foreign Currency Exchange Rates" and "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Quantitative and Qualitative Disclosures About Market Risk — Interest Rate and Foreign Currency Risk".

En+ is able to influence the outcome of important decisions relating to the Group's business and the Group's business includes transactions with certain related parties

En+, in which Mr. Deripaska has a controlling interest as described in "Substantial Shareholders — En+", owns approximately 53.35% of the issued ordinary shares in the Company as of the date of this prospectus and will continue to own 47.59% following the Global Offering assuming the Over-allotment Option is not exercised and no bonus Shares are issued to management. Mr. Deripaska, the Group's CEO, is the beneficial owner of En+. As a result, En+ and Mr. Deripaska have substantial power in relation to all matters requiring shareholder approval, including the election of Directors and significant corporate transactions, and may be in a position where their own interests and those of other shareholders are in conflict. For information about a claim that could affect the size of En+'s interest in the Company, see "— A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus. In addition, SUAL Partners, Amokenga Holdings and Onexim Holdings own approximately 17.78%, 9.70% and 19.16%, respectively, of the issued ordinary shares in the Company as of the date of this prospectus and will own 15.86%, 8.65% and 17.09%, respectively, following the Global Offering assuming the Over-allotment Option is not exercised and no bonus Shares are issued to management. En+ and the other Major Shareholders of the Company have agreed how control rights will be exercised in relation to the Company pursuant to the Shareholders' Agreement between Major Shareholders only expected to be entered into by the Major Shareholders. See "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only".

In the course of its business, the Group engages in transactions with related parties, primarily transactions with En+ and entities under its control. In particular, electricity suppliers controlled by the beneficial owners of En+, a controlling shareholder of the Company, were suppliers of electricity to Group smelters that accounted for approximately 57.3% of its aluminium production in 2008. The Group has entered into long-term energy supply contracts with the hydropower suppliers controlled by the beneficial owners of En+. Generally speaking, such transactions may be on terms more or less favourable to the Group than those that could be obtained from a third-party supplier. See "Business — Energy Supply — Security of Power Supply" and "Connected Transactions".

When the Group acquired certain of the alumina businesses of Glencore in late March 2007, it became subject to contracts for the supply of alumina to Glencore that continued through 2008, in declining amounts. The Group sold to Glencore approximately 36% of its excess alumina in 2008. The Company also has a variety of supply contracts with Glencore for alumina and primary aluminium, including long-term supply contracts, and Glencore was the Group's largest customer of alumina and primary aluminium in the six months ended 30 June 2009, accounting for approximately 21% of the Group's sales of primary aluminum and alloys.

En+ is completing a restructuring of its debts and will give its lenders a pledge over 15% of the outstanding Shares

En+ has been going through a complex restructuring of its bank debt of approximately US$1.04 billion as described below (all information in this description being based on information provided to the Company by En+). The debts consist of a US$750 million syndicated loan, a second US$200 million syndicated loan to one of its subsidiaries which has been elevated to En+ and US$90 million in bilateral debt. Following extensive negotiations over recent months, it is proposed that these facilities will be converted into one new loan facility. The current status of the debt restructuring is that the requisite majority (more than 75% by value) of lenders under the two syndicates have signed a standstill agreement which has attached the complete documentation for the new facility which is agreed in final form. The bilateral debt is in the process of being re-financed by a new lender which has agreed to roll its loan into the new facility. Currently En+ is completing the conditions precedent to the standstill agreement which, when effective, will enable the implementation of the restructuring either via a scheme of arrangement or, if all lenders agree, by consensual execution of the new loan documentation. En+ expects that the debt restructuring will be fully implemented by the end of the first quarter of 2010.

The new facility has been structured to allow En+ a period of time to improve its liquidity situation through the sale of non-core assets and the raising of equity. The main terms are:

- 100% bullet repayment on 31 December 2011, with two possible one-year extensions up to 31 December 2013, subject to a deleveraging test on the secured assets;

- one tranche with all interest paid in kind (meaning capitalised) for two years and a small equity-based upside (payable to the lenders as a lump sum amount in cash on maturity, based upon the increase in value of En+ as a company over the period of the loan), the second tranche with a small cash margin, lower payment in kind (meaning capitalised) interest and no equity-based upside;

- security over 15% of the outstanding (post-Global Offering) shares in the Company and additional Shares as may be required to be pledged to meet loan to value tests, plus 25% of the holding company of the En+ electricity business;

- a secured cash sweep mechanism for prepayment of the debt after operating costs and interest;

- extensive information and other covenants (all of which exclude the Company) typical of a restructured debt facility, which prevent En+ from making most additional investments or acquisitions; and

- additional governance measures, including the addition of an independent director and a board observer to the board of En+.

Accordingly, there are minimal mandatory principal or interest payments over the first two years of the restructured debt period. En+ expects to fund these payments and its operating costs and significantly reduce the size of the facility through pre-payments over the next two years from the sale of non-core assets. En+ also expects to fund partial repayment of the debt through raising equity directly or at the level of its subsidiaries.

If En+ is not able to complete its restructuring in the manner described, its existing lenders may take action against En+ to recover their existing debt from En+'s assets, including its shareholding in the Company. If, as described, En+ completes its restructuring by the end of the first quarter 2010, there is a risk that it will be unable to complete the proposed asset sales to fund interest payments, or that it will default against the large number of covenants and undertakings in the restructured loan agreement. In that event, its lenders may exercise security and seek to sell the Shares pledged by En+. One or the other of these events could reduce En+'s share in the Company to the level that Mr. Deripaska is no longer able to exert the same level of influence over the Company as he now does, result in sales of Shares into the market that would not otherwise occur and/or contribute to a change in control of the Company that could result in acceleration of the Group's indebtedness under the Company's debt restructuring agreements. For the implications of these events for the Company and the trading price of the Shares, see "— The Group depends on the services of key senior management personnel and the strategic guidance of the beneficial owner of En+", "— Risks Relating to the Global Offering and the Offer Shares — The sale or availability for sale of substantial amounts of the Shares or equity-related securities could adversely affect their trading prices" and "— The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders".

The Group depends on the services of key senior management personnel and the strategic guidance of the beneficial owner of En+

The Group's business has benefited from the contributions of a number of the Group's key senior managers, whose services may cease to be available to the Group. Factors critical to retaining the Group's present management and attracting additional highly qualified managers include the Group's ability to provide these individuals with competitive compensation arrangements. Competition for qualified management personnel is intense, and the Group's business may be adversely affected if it is unable to retain or attract highly qualified individuals in key management positions.

The Group has also benefited from the strategic guidance of Mr. Deripaska, the beneficial owner of En+, the Company's controlling shareholder, and starting from January 2009, the Company's CEO. The Group's business may be adversely affected if Mr. Deripaska ceases to have a significant interest in the Company, and consequently ceases to provide strategic guidance. Mr. Deripaska's interest in the Company could be reduced for any reason, including meeting his liquidity requirements or those of En+. As discussed above, En+ has informed the Company that it is in the process of completing a restructuring of approximately US$1.04 billion of its indebtedness. In the event, however, that the debt restructuring is not concluded, En+ creditors could foreclose on the debt and seek to realise against assets of En+, including Shares in the Company. Moreover, as discussed above, En+ is expected to pledge 15% of the issued share capital of the Company to the lenders of En+ in connection with En+'s debt restructuring arrangements and additional Shares may be required to be so pledged to meet loan to value tests. Further, 5% of the issued share capital of the Company is expected to be pledged by En+, SUAL Partners, Glencore and Onexim on a pro rata basis to VEB in connection with the restructuring of the Company's obligations to VEB. If an event of default were to occur with respect to the restructured indebtedness of En+ or the Group's indebtedness to VEB, the relevant creditors could seek to foreclose on the Shares in the Company that will be pledged to secure such indebtedness. For a description of a pending claim against Mr. Deripaska that, if successful (or if it results in a substantial monetary award), could lead to a significant reduction of his interest in the

Company, see "— A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares" and "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus. Pursuant to the terms of the Shareholders' Agreement between Major Shareholders only, expected to be entered into by the Major Shareholders, En+ has the right to nominate (and the other Major Shareholders have agreed to use their respective voting rights to procure the appointment of) Directors representing 50% of the Board. En+ retains this right unless and until it holds less than 40% of the Shares held by the Major Shareholders and their respective wholly owned subsidiaries. For a description of the rights En+ will have to nominate Directors when it holds less than 40% of the Shares held by the Major Shareholders and their respective wholly owned subsidiaries, see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only". In addition, as discussed above, the Company's debt restructuring agreements provide for acceleration if a person (or a group of persons acting in concert) other than Mr. Deripaska or members of his immediate family acquires effective control of the Company (meaning the ownership of more than one half of the Shares in the Company, the right to exercise voting rights with respect to more than one half of the Shares or elect more than half of its Board of Directors, or the power otherwise to direct the affairs of the Company).

A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares

On 24 November 2006, a claim was issued on behalf of Mr. Michael Cherney ("Mr. Cherney") against Mr. Deripaska, the beneficial owner of En+, from the High Court of Justice, Queen's Bench Division, Commercial Court, London (the "High Court"). Neither UC RUSAL nor any of its subsidiaries is a party to this dispute — it is entirely between two individuals, Mr. Cherney and Mr. Deripaska. UC RUSAL has not had access to non-public information about the case and is not privy to the litigation strategy of either party or the prospects of settlement.

The claim relates to the alleged breach or repudiation by Mr. Deripaska of certain alleged contractual commitments to sell for Mr. Cherney's benefit 20% of Russian Aluminium ("RA"), an entity that the claim does not formally identify, but which may be Rusal Limited, now a wholly owned direct subsidiary of UC RUSAL (see "History and Corporate Structure — History and Development"). The claim states that, at least pending receipt by Mr. Cherney of the amounts due to him pursuant to these alleged commitments, Mr. Cherney is entitled to and seeks:

- A declaration that Mr. Deripaska (directly or indirectly) holds (i) 20% of the shares in RA and (ii) 20% of the 66% shareholding in UC RUSAL (held by former shareholders of RA) in trust for Mr. Cherney and to his order.

- A declaration that any benefits or proceeds derived directly or indirectly by Mr. Deripaska from such shares and shareholding as well as any assets acquired using directly or indirectly any dividends or other monies or benefits received by Mr. Deripaska and referable to the shares and shareholding are held on trust for Mr. Cherney, alternatively subject to a lien in Mr. Cherney's favour.

- A declaration that, insofar as the shares are held indirectly by a person acting subject to Mr. Deripaska's directions or companies or entities owned and controlled by Mr. Deripaska, Mr. Deripaska's right to control those persons, companies or entities and to sell the said shares is held on trust for and to be exercised on behalf of and at the direction of Mr. Cherney.

- A declaration that, if and to the extent that Mr. Deripaska directly or indirectly acquired assets from RA (further or alternatively Sibal) or UC RUSAL for "inadequate consideration", such assets and/or proceeds thereof are subject to the aforementioned trust and/or lien.

- An order that Mr. Deripaska sell or procure the sale of 20% of the shares in RA and 20% of the 66% of the shares in UC RUSAL at the market price and account to Mr. Cherney for the proceeds of that sale.

- The claim alleges further, or alternatively, that by reason of Mr. Deripaska's breaches of contract, Mr. Cherney suffered loss and damage at least equal to the market value of 20% of RA and 20% of 66% of UC RUSAL, which the claim alleges to be in excess of US$4 billion, less US$250 million already paid, increased by the value of any assets diverted for "inadequate consideration".

- Mr. Cherney also claims interest on the amounts alleged to be owed him.

The High Court determined on 3 July 2008 that it had jurisdiction to hear the claim, and the Court of Appeal upheld this determination. On 9 December 2009 the United Kingdom Supreme Court refused Mr. Deripaska's application for permission to appeal the decision of the Court of Appeal. On 14 December 2009 Mr. Deripaska was served with Mr. Cherney's claim. Mr. Deripaska will be required to serve a defence to Mr. Cherney's claim in early 2010. Accordingly, proceedings with respect to the merits of the claim have only just commenced. At present, there is considerable uncertainty as to the possible scope and the potential outcomes in the case and how, if at all, UC RUSAL and/or its subsidiaries and/or its or their respective assets might be affected by any decision against Mr. Deripaska. Nonetheless, the following can be noted:

- Neither UC RUSAL nor any of its subsidiaries or investees, nor En+ (the majority shareholder owned indirectly by Mr. Deripaska), nor any other direct shareholder in UC RUSAL, is currently a party in this case.

- When the merits of the case are heard, issues to be resolved will include whether there was in fact a contract with respect to 20% of RA as alleged by Mr. Cherney and, if so, whether it is governed by English or Russian law.

- In the event that Mr. Cherney were to prevail on the merits, the essence of his claim would be for money from Mr. Deripaska. The quantum of the claim referred to above (in excess of US$4 billion in respect of 20% of RA, and 20% of 66% of UC RUSAL, plus possible additional amounts) has not yet been subject to judicial examination, and it is uncertain at this time how the quantum of the claim ultimately would be determined.

- As noted above, given that (i) UC RUSAL is not a party to the litigation and (ii) the litigation is still at a very early stage, UC RUSAL is unable to express a view on the merits of Mr. Cherney's claim. However, in the event that Mr. Cherney succeeds in his claim and obtains the relief he is seeking, then, unless Mr. Deripaska funds the judgment bill entirely from assets unconnected with the Group, Mr. Deripaska's beneficial interest in UC RUSAL or (depending on the remedy granted) certain assets of the Group, such as a portion of UC RUSAL's interest in RA, would be affected adversely by the claim. In such circumstances, such adverse effects could also have adverse consequences under the terms of the Group's debt restructuring agreements. Mr. Deripaska's beneficial interest in UC RUSAL would also be adversely affected if he financed any settlement of the claim through a sale of his beneficially owned shares in UC RUSAL. For further discussion, see "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska", "— The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its subsidiaries", "— The Group depends on the services of key senior management personnel

and the strategic guidance of the beneficial owner of En+" and "— Risks Relating to the Global Offering and the Offer Shares — The sale or availability for sale of substantial amounts of the Shares or equity-related securities could adversely affect their trading prices".

A final decision against Mr. Deripaska in this case that resulted in a trust or lien being declared over, or the sale of, shares in UC RUSAL or RA, or that otherwise affected Group assets, could adversely affect the trading price of the Shares. Moreover, even before a final decision is made, further proceedings in respect of this claim, and publicity surrounding them, could adversely affect the trading price of the Shares.

Mr. Deripaska has informed the Company that he strongly denies and will vigorously resist Mr. Cherney's claim. The Company would vigorously contest any claim if made against it, any of its subsidiaries or any of its or their respective assets. See "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" for a fuller description of the case, including the High Court's assessment on 3 July 2008 of the relative strengths of the arguments about this alleged contract by each side as presented at that time. For extracts from the 3 July 2008 decision of the High Court on jurisdiction, see Appendix X to this prospectus. The full decision is on public display and can be found at <www.bailii.org/ew/cases/EWHC/Comm/2008/1530.html>.

Adverse media speculation, claims and other public statements could adversely affect the value of the Offer Shares

The media and others have speculated publicly from time to time about a wide variety of matters relating to the Group, its shareholders and beneficial owners and members of its management. These have included the manner in which the businesses that now comprise the Group were acquired by predecessors of companies that combined to form the Group, or by the Company itself, and a number of allegations regarding these transactions have been made, some in the context of legal claims. See "History and Corporate Structure — History and Development". There has also been speculation about the consequences of a claim that has been brought against Mr. Deripaska, the beneficial owner of En+ and the chief executive officer of the Company, including the possibility that Mr. Deripaska's interest in the Company could be reduced or that the Group or its assets could be affected. See "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and "— A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares".

In addition, there has been negative coverage in the media recently relating to the rejection by U.S. authorities of Mr. Deripaska's application for a visa to enter the United States. Some of such coverage includes speculation that the rejection was due to alleged connections to organised crime. There were also media reports alleging that Mr. Deripaska had travelled to the United States twice in the past few months using entry permits arranged by the Federal Bureau of Investigation, with whom he is alleged to have met during his visits. Mr. Deripaska has confirmed to the Company that he had an application for a U.S. visa denied in 1998 pursuant to Section 212(a)(3) of the U.S. Immigration and Nationality Act, which relates to aliens deemed ineligible for U.S. visas based on security, unlawful activity and related reasons, and that this position was reiterated in 1999 and 2000. Mr. Deripaska has repeatedly and consistently challenged these denials as being unwarranted and unsupported. He has also confirmed to the Company that he subsequently visited the United States lawfully a number of times. The most recent visits were in August and October 2009. On these occasions, Mr. Deripaska was permitted to enter the United States pursuant to Section 212(d)(5) of the U.S. Immigration and Nationality Act, whereby neither his movements nor his activities was restricted. Mr. Deripaska has also confirmed to the Company that, to the best of his knowledge, he is not under investigation by any U.S. authority.

Mr. Deripaska has also confirmed to the Company that he was denied visas to Canada in 2003 and 2006 pursuant to section 37(1)(a) of the Immigration and Refugee Protection Act of Canada which relates to persons deemed ineligible for Canadian visas based on alleged criminality. Mr. Deripaska has confirmed to the Company that he challenged these denials, and was subsequently issued Canadian visas based on entry permits on multiple occasions, covering a number of periods from 30 March 2007 to 28 July 2008. With respect to the United Kingdom, Mr. Deripaska has confirmed to the Company that he has visited the United Kingdom on numerous occasions, has been issued with a succession of U.K visas and recently obtained a new multiple entry visa to enter the United Kingdom which expires in May 2010.

While Mr. Deripaska is not subject to any special restrictions on his travel, as a Russian citizen he is subject to ordinary requirements to obtain visas or other permits when traveling outside Russia. There can be no assurance he will be granted permission to enter the United States, Canada or any other country in the future or that any limitation on his ability to travel to the United States, Canada or any such other country will not adversely affect his ability, as the Chief Executive Officer of the Company, to interact directly with existing and prospective business counterparties of the Company, the shareholders of the Company and other stakeholders of the Company in the United States, Canada and any such other countries.

In October 2009, the Russian newspaper Vedomosti, and related publications, published confidential information about the Company's financial performance leaked by an unknown person. Because that information appeared to be derived from a publication that contained a strict confidentiality clause, the Company, concerned about the Listing Rules and other rules against publicity in advance of the Global Offering, instructed its Russian legal advisor to seek to stop further publication by Vedomosti. As a result, Vedomosti has accused the legal advisor of "an information terror campaign", which both the Company and the legal advisor have denied.

Adverse media speculation, claims and other public statements of the kinds referred to above may adversely affect the value of the Offer Shares or distract management from their day to day management responsibilities.

The Group's results of operations in 2008 were significantly and adversely affected by impairment charges related principally to its property, plant and equipment and to its equity investment in Norilsk Nickel and by the Group's pro rata portion of loss suffered by Norilsk Nickel, and there can be no assurances that further impairment charges will not be necessary or that further losses related to the Norilsk Nickel investment will not occur

The Group recognised US$6,774 million and US$37 million in impairment charges relating to non-current assets in 2008 and the first six months of 2009, respectively, as compared to no such impairment in 2007 and 2006. Following the global economic downturn in the fourth quarter of 2008, the Group carried out impairment tests for all of its significant cash-generating units, for its investment in Norilsk Nickel, which is accounted for using the equity method, and for certain other projects. These impairment tests led to recognition of impairment charges of US$3,532 million relating to property, plant and equipment, US$2,408 million relating to the Group's investment in Norilsk Nickel (which was recognised in UC RUSAL's Accountants' Report in the line item "Share of losses of associates"), US$554 million relating to fair value adjustment on financial instruments (which was recognised in UC RUSAL's Accountants' Report in the line item "Finance Expense") and US$280 million relating to other assets as of 31 December 2008. For further information, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Year Ended 31 December 2008 Compared to Year Ended 31 December 2007 — Impairment of Non-Current Assets". In addition, the Group's results of operations in 2008 were negatively impacted by its US$881 million share in the net loss of Norilsk Nickel for that year.

If demand for and prices of aluminium are not sustained as the Group currently expects, the Group could be required to record additional impairment charges related to property, plant and equipment. Moreover, if recovery of demand for and prices of nickel, palladium and other metals produced by Norilsk Nickel are not sustained as the Group currently expects, the Group could be required to record additional impairment charges related to its investment in Norilsk Nickel. As of 30 June 2009, the carrying value of the Norilsk Nickel investment in the Group's balance sheet was US$7,158 million. The Group's share of market capitalisation of Norilsk Nickel, based on the RTS closing price, was US$4,527 million on 30 June 2009 and was US$6,791 million on 17 December 2009.

In addition, if recovery of demand for and prices of Norilsk Nickel's products are not sustained as the Group currently expects, Norilsk Nickel may experience further losses, which would adversely affect the Group's results of operations.

Furthermore, under the terms of the Group's debt restructuring, the Group may be required to sell all or a significant portion of its stake in Norilsk Nickel under certain circumstances. Such a required sale could result in a substantial loss to the Group. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring".

The Group does not have operational or management control over Norilsk Nickel and other material joint ventures

The Group currently owns an interest of more than 25% in the share capital of Norilsk Nickel. The Group's representatives on the board of directors of Norilsk Nickel do not constitute the majority of the board. Although the Group is able to exert significant influence over Norilsk Nickel, the Directors believe that the Group's interest in the share capital and the presence of its directors on the board does not provide the Group with the ability to control actions that require shareholder approval. As a result the Group does not have the ability to prevent Norilsk Nickel from engaging in activities or pursuing strategic objectives that may conflict with the interests or overall strategic objectives of the Group. The Group also does not control the cashflows of Norilsk Nickel and its profit out of this investment is limited to the amount of dividends paid by Norilsk Nickel, which the Group does not control. See "Business — Norilsk Nickel and Material Joint Ventures".

Further, the Group is a party to certain material joint venture agreements through which it owns a:

- 20% equity interest in Queensland Alumina Limited ("QAL");
- 50% equity interest in companies comprising Boguchanskoye Energy and Metals Complex ("BEMO"); and
- 50% equity interest in LLP Bogatyr Komir ("BK"),

and the Group's representatives on the boards of directors of QAL, companies comprising BEMO and BK do not constitute majorities. Consequently, the Directors believe that the Group's interest in the share capital and the presence of its directors on the respective boards does not provide the Group with the ability to exert control over actions that require shareholder approval. See Notes 19 and 20 of UC RUSAL's Accountants' Report.

The Group's business may be affected by labour disruptions, shortages of skilled labour and labour cost inflation

Competition for skilled labour is intense in the aluminium industry, and labour costs have in the past increased significantly, particularly in Russia. The demand and hence costs for skilled engineers, construction workers and operators will continue to increase, reflecting the significant demand from other industries and public infrastructure projects. Continual high demand for skilled labour and continued increases in labour costs could have a material adverse effect on the Group's business, financial condition and results of operations.

Approximately 70% of the Group's employees in Russia are members of labour unions. The Group has not experienced any strikes that have had a material adverse effect on the Group, and the Directors believe its present labour relations are good overall. However, there can be no assurance that a material work slowdown, stoppage or strike will not occur, and the Directors are unable to estimate the effect of any such work slowdown, stoppage or strike on the Group's production levels. For example, commencing on 22 November 2009, Bauxite Company of Guyana Inc., a subsidiary of the Company engaged in bauxite mining, has been experiencing a strike that had led to temporary suspension of production (through 7 December 2009). In addition, although the Directors do not consider the strike to be material, miners in one of the Group's Russian bauxite mines staged a sit-down strike in March-April 2008. While the Group is insured against business interruptions up to certain limits (see "Business — Operational Hazards and Insurance"), significant work slowdowns, stoppages or other labour-related developments could have an adverse effect on the Group's business, financial condition and results of operations, particularly if they occur at either the Bratsk aluminium smelter or the Krasnoyarsk aluminium smelter, which together account for approximately half of the Group's primary aluminium production.

As a result of recent suspensions of operations at certain Group facilities, there is potential for unrest amongst affected employees, local communities and/or labour unions, although no such unrest has been experienced to date. Such unrest could result in a material work slowdown, stoppage or strike and/or negative publicity in respect of the Group, which may affect its public image and business.

The Group relies on third-party suppliers for certain materials

The Group's mines supplied most of the bauxite it used in alumina production in 2008 and the first six months of 2009, with the remainder being supplied by third-party mines with which the Group has medium- and long-term supply contracts. These contracts are generally effective through 2011 and 2013. If the Group is unable to renew its bauxite supply contracts or expand production from its mines or acquire new mines, the Group might have to acquire bauxite from other suppliers at less favourable prices, which could adversely affect the Group's business, financial condition and results of operations.

The Group's cathode plant, Shanxi RUSAL Cathode Co. Ltd., located in China, supplied approximately 20% of the Group's own consumption of cathodes in the first half of 2009. In March 2008, the Group acquired assets of another cathode plant in China, which have been integrated into Shanxi RUSAL Cathode Co. Ltd. The Group is considering further expansion of its cathode production on the basis of the acquired assets. See "Business — The Group's Operations — Aluminium Division". As a result, the Group relies on third-party suppliers of cathodes for the remainder. It could be difficult for the Group to find alternative sources of these materials on commercially acceptable terms or at all, if production by its third-party suppliers were disrupted. Failure by the Group to secure the supply of these materials, either through purchases from other third-party suppliers or through an increase in its own production capacity, could have a material adverse effect on the Group's business, financial condition and results of operations.

Equipment failures or other difficulties may result in production curtailments or shutdowns

The manufacturing processes of all aluminium producers depend on critical pieces of equipment, which may, on occasion, be put out of service unexpectedly as a result of failures, unplanned maintenance, ageing or otherwise. In addition, the business of mining, smelting and refining metals involves a number of other risks and hazards, including unusual or unexpected geological conditions, mine collapses, fires, explosions, adverse weather conditions and other natural phenomena such as earthquakes, hurricanes and floods. Moreover, the production of aluminium is dependent on the consistent supply of electricity, which can be interrupted for many reasons. Certain operational risks relating to specific sites and facilities are outlined in the Independent Technical Report in Appendix VI.

The occurrence of any of these events could result in production curtailments or shutdowns, reduced sales, increased costs, significant damage to property or the environment, or a need for the Group to incur larger than expected capital expenditure to remedy the situation (such capital expenditures should be permitted under the terms of the debt restructuring agreements to the extent that they fall within the limits approved by such agreements for maintenance capital expenditures). For example, as a result of damage to the boiler at the Group's Friguia alumina refinery in 2006, the refinery's alumina and bauxite production fell, and alumina purchases increased, leading to higher costs that were only partially offset by insurance coverage.

While the Group has not experienced significant electricity interruptions, the generators and transmission infrastructure in Russia, which supply most of the Group's smelters, are ageing. Despite consumption redundancy within the Russian electricity grid, interruptions could occur. See "— The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations" for information relating to the recent accident at the Sayano-Shushenskaya hydropower plant. While the Group's insurance agreements cover business interruption, including losses in circumstances such as these up to specific limits (see "Business — Operational Hazards and Insurance"), significant events, particularly at either of the Bratsk aluminium smelter or the Krasnoyarsk aluminium smelter, which are the two largest smelters in the world in terms of production capacity and which produce approximately half of the Group's primary aluminium, could have a material adverse effect on the Group's business, financial condition and results of operations. Neither of these smelters has experienced significant production curtailments or shutdowns to date. In addition, the Group's combined insurance policies may be insufficient to cover all of the Group's potential liability, loss of business or increased costs.

The Group is subject to certain requirements under Russian anti-monopoly laws

As a condition to obtaining anti-monopoly approval in Russia for RUSAL's acquisition of SUAL and certain of the alumina and aluminium businesses of Glencore (the "Glencore Businesses"), which occurred in 2007, the Group is required to notify the Russian regulatory authorities of any change in the prices of its products above a permitted range and, subject to certain exceptions, of acquisitions of more than a 10% interest in entities, which supply products to the Russian market with annual revenues for such supply greater than or equal to RUR2.5 billion (approximately US$80 million at the exchange rate of the Central Bank of Russia as of 30 June 2009). In addition, for 20 years following the acquisition, the Group cannot charge a price for primary aluminium higher than a price calculated pursuant to a formula based primarily on the LME price and transportation costs when entering into agreements with purchasers in Russia. The Group also may not undertake "unsubstantiated" actions to reduce or limit production (with the exception of modernisation) of its Russian subsidiaries during such 20-year period without obtaining the preliminary consent of the regulatory authorities. In addition, during such 20-year period, the Group must maintain or increase (with certain exceptions) the production of the Group's Russian subsidiaries, unless it receives the prior consent of the regulatory authorities, satisfy the demand on the Russian market at reasonable prices, particularly with respect to products of which the Group is the sole Russian producer (to the extent possible), offer non-discriminatory terms to all purchasers on Russian commodities markets, and not increase the price of foil and certain other products by more than 5% each quarter or 20% each year. For a period of five years following the acquisition, the Group is also required to provide the regulatory authorities with quarterly price and volume reports for aluminium and half-yearly price and volume reports for alumina and bauxite. In addition, the Group was required to investigate the establishment of a Russian trading exchange for the sale of the Group's products within three years of effective date of the acquisition. The Group completed its investigation and issued a report to the Federal Antimonopoly Service of Russia ("FAS") on 1 October 2009, concluding that there is no economic basis for the establishment of a trading exchange for the Group's products in Russia at the present time. The Group

is also expected to continue investing in the foil production facilities with a view to improving the quality and the competitiveness of the product. Furthermore, the Group is required to inform the antimonopoly authority of any change in Group structure, position on the market of any member of the Group, and in merchandise policy.

In connection with the Group's international expansion, past or future transactions, such as acquisitions, could be subject to reviews or approvals of foreign national or regional antitrust authorities, which could result in fines, sanctions, delay or prevent the Group from completing transactions or restrict its ability to realise expected financial strategic goals.

The Group operates in an industry that gives rise to health, safety and environmental risks

As with other large aluminium, alumina and bauxite companies, the Group's operations produce emissions and by-products that are hazardous to the environment and are subject to increasingly stringent regulatory oversight in all jurisdictions in which it operates. Specific environmental risks relating to certain sites and facilities are set out in the Independent Technical Report in Appendix VI. Compliance by the Group with environmental laws and regulations requires the commitment of significant financial resources. A study undertaken on behalf of the Group in 2008 and 2009 estimates the capital expenditure the Group would have to make over a five-year period between 2010 and 2014 to address known and potential environmental, health and safety and social issues at the level of US$5 million or more per issue per site. The estimate does not include costs relating to the decommissioning of redundant equipment associated with any Group asset, or any decommissioning or closure costs, including restoration costs, or charges that may be required as a result of changes in specifications for plant operation. The study estimates that, when adjusted for probability, the Group's most likely case scenario would entail aggregate capital expenditure of US$1.2 billion and its reasonable worst-case scenario would entail an aggregate capital expenditure of US$1.3 billion (such capital expenditure is permitted under the debt restructuring agreements to the extent that they are required for compliance with environmental laws). The study concluded that most of this capital expenditure would pertain to the reduction of air emissions from the Group's aluminium smelters. The study also identified that part of this capital expenditure may be required to address soil and groundwater conditions at a number of the Group's sites (including the conditions existing at the Eurallumina refinery), in the form of on and off-site soil and groundwater remediation. In addition, the Group's ongoing waste management needs are likely to require capital expenditure in the future as existing waste management facilities are rehabilitated and new facilities are constructed to receive waste from future production. The main social issue reflected in the study concerns the possible relocation of communities from the sanitary protection zones surrounding some of the smelters, including the relocation of residents located close to the Bratsk aluminium smelter to the town of Bratsk. The Group may be responsible for the costs of relocating inhabitants from the sanitary protection zones surrounding its smelters. Any such relocation could also have a negative impact on the reputation of the Group. According to the study, the Urals aluminium smelter has over 17,500 inhabitants residing within the site's sanitary protection zone, along with accompanying social infrastructure. The study estimates that if the residents were required to be resettled (the study indicates that there is a 1% to 10% probability that this will be required), direct costs to the Group would be US$160 million in the most likely case and US$200 million in the reasonable worst-case. Also according to the study, the sanitary protection zone at the Bogoslovsk aluminium smelter has approximately 50,000 people resident within it. The Group is planning to implement a modernisation programme that is expected to reduce the size of the sanitary protection zone at the site. Approximately 5,500 people could be resident inside the reduced sanitary protection zone, and the report estimates that if such residents need to be resettled (the study indicates that there is a 1% to 10% probability that this will be required), direct costs to the Group would be US$48.5 million in the most likely case and US$60 million in the reasonable worst-case scenario. See "Business — Environmental, Health and Safety Matters".

Approximately 70% of the Group's primary aluminium is produced at smelters using Söderberg technology, which produces greater levels of emissions and is generally more damaging to the environment than pre-bake technology. One of the Group's environmental priorities is to invest in the modernisation of its Söderberg pots to reduce emissions of air pollutants. The Engineering and Technology Centre has been conducting research and trials to improve the environmental performance of Söderberg cells in a project referred to as "Clean Söderberg Technology". See "Business — The Group's Operations — Engineering and Construction Division". There can be no assurance that the Group's technical solutions will become commercially viable or whether the Group will be able under the terms of the debt restructuring documents to use its capital resources to make such improvements.

The Group's mines, refineries, smelters and other plants located in Russia are subject to statutory limits on air emissions and the discharge of liquids and other substances. Russian authorities may permit, in accordance with the relevant Russian laws and regulations, a particular Group facility to exceed these statutory limits, provided that the Group develops a plan for the reduction of the emissions or discharge and pays a levy based on the amount of contaminants released in excess of the limits. Fees are assessed on a sliding scale in accordance with the relevant laws and regulations: the lowest fees are imposed for pollution within the statutory limits, intermediate fees are imposed for pollution within the individually approved limits, and the highest fees are imposed for pollution exceeding all such limits. In 2007, 2008 and the first six months of 2009, such fees amounted to US$29.7 million, US$29.4 million and US$8.2 million, respectively. It is within the discretion of the Russian authorities to permit pollution in excess of the statutory limits, but any request may be denied. Moreover, the payment of fees for exceeding these limits does not relieve the Group from its responsibility to take environmental protection measures and undertake restoration and clean-up activities.

Compliance with environmental regulations in the jurisdictions where the Group has facilities, including EU regulations applicable to the Group's current and potential future assets located in the EU, is an ongoing process. New laws and regulations, the imposition of stricter requirements for obtaining licences, increasingly strict enforcement or new interpretations of existing environmental laws, regulations or licences and/or the discovery of previously unknown contamination may require further expenditure to modify operations, install pollution control equipment, perform site clean-ups, curtail or cease certain operations, pay fees or fines or make other payments for discharges or other breaches of environmental laws or regulations. Measures required to be taken by the Group to comply with environmental regulations, either as a result of the conditions identified in the environmental study described above or to comply with any future legislation or otherwise, could require additional expenditure beyond those anticipated, or result in the shutdown of certain of the Group's facilities. In the event the Group incurs significant additional unbudgeted expenditure, or experiences shutdowns of Group facilities as a result of the above, this could have a material adverse effect on the Group's business, financial condition and results of operations (even if permitted under the terms of the debt restructuring agreements).

A violation of environmental or health and safety laws relating to a mine, refinery, smelter or other plant, or failure to comply with the regulations or instructions of relevant environmental or health and safety authorities could lead to, among other things, a temporary shut down of all or a portion of a mine, refinery, smelter or other plant; the loss of a right to mine or operate a refinery, smelter or other plant; confiscation of manufactured goods; and/or the imposition of other costly compliance procedures and/or legal action or other claims from individuals who have been affected. Several of the Group's Russian subsidiaries do not at this time have certain licences and permits required for some of their operations. In addition, various Russian subsidiaries of the Group hold certain licences and environmental permits, which expire on 31 December 2009 or 1 January 2010. While the relevant companies have applied for new licences or permits or are in the final stages of preparation for the application for such licences or permits, certain of these may not be replaced with new licences or permits prior to the expiry of the existing ones. The Directors view the renewal process as largely procedural and administrative and believe that, notwithstanding any delay, these

licences and permits will ultimately be replaced. Under Russian law, temporary shut down or, in certain cases, confiscation of manufactured goods may be imposed as a sanction for the absence of such licences or permits, although such sanctions are not usually applied in such cases in practice. To date, enforcement by Russian authorities of the existing environmental or health and safety laws has been somewhat inconsistent, with much discretion resting on the part of the regulators and prosecutors. However, this trend may change and enforcement may become stricter. In September 2009, a red mud basin of one of the Group's mothballed facilities, the Eurallumina refinery, was sequestrated and its environmental permit for production operations and management of the red mud basin was suspended owing to failure to comply with instructions of the Italian Ministry for the Protection of the Environment (the "Italian Environmental Ministry"). See "Business — Litigation — Italian Environmental Ministry". If environmental or health and safety authorities require the Group to shut down all or a portion of a mine, refinery, smelter or other plant, or impose other penalties or implement costly compliance measures, whether pursuant to new or existing environmental or health and safety laws or other regulations, such measures could have a material adverse effect on the Group's business, financial condition and results of operations. While the Group has experienced several temporary shutdowns of smaller facilities or minor portions of facilities since 1 January 2006, none of the Group's major facilities has been shut down for health or safety reasons to date or due to absence of the above-mentioned licences and permits.

In addition, even if the Group is in full compliance with applicable environmental and health and safety laws of the countries in which it operates, these requirements may not reflect international best practices in all respects. If it does not operate fully in accordance with such best practices, the Group may be subject to public criticism for its business practices in these countries despite being in full compliance with local law, which could damage the Group's reputation, result in certain clients facing pressure for doing business with the Group and/or affect its ability to obtain financing or the rate at which it obtains financing.

Ore Reserves and Mineral Resources data are only estimates and are inherently uncertain, and such Ore Reserves and Mineral Resources may be depleted more rapidly than anticipated

Ore Reserves and Mineral Resources data of aluminium producers are only estimates and are inherently uncertain. SRK has reviewed the available GKZ approved reserves compiled by the Group and has restated the Reserves and Resources in accordance with JORC as at 1 July 2009. See "Business — The Group's Operations — Alumina Division". The Group's estimations of Reserves and Resources as at 1 July 2009 may change substantially if new information subsequently becomes available or through the continued selective mining of better-than-average grades. Fluctuations in the price of commodities, variations in production costs and/or changes in recovery rates may also result in a revision of the Group's estimated Reserves. If such a revision were to indicate a substantial reduction in Reserves at one or more of its major production facilities, it could negatively affect the Group's business, financial condition and results of operations.

The Group's licences and concession rights to explore and mine Ore Reserves may be suspended, amended or terminated prior to the end of their terms or may not be renewed

The Group currently conducts its mining operations in the Russian Federation, Ukraine, Kazakhstan, Guinea and Guyana under exploration and production licences and concession agreements, which are due to expire between 2010 and 2033 (mining operations in Jamaica are currently suspended). The continued validity and extension of these licences and agreements are conditioned upon the Group's compliance with their terms, which generally include obligations for the restoration of the mined land, maintenance of a certain level of production, certain investment commitments and compliance with environmental laws. Generally speaking, the process for terminating a licence is complex, and involves provision of notice and a period of time to bring the mine into compliance. Nonetheless, the Group's failure to comply with any of these conditions could result in the suspension, amendment, termination or non-renewal of a mining licence or concession,

which may have a material adverse effect on the Group's business, financial condition and results of operations. The Group's mines in Jamaica currently have a backlog of land requiring restoration. The Jamaican Government has not taken any action to date, as the Group has developed and coordinated with such government a phased mine reclamation plan in compliance with the licence terms; however, the Jamaican Government may choose to take action in the future requiring the Group to restore the land, resulting in significant capital expenditure (which would be permitted under the debt restructuring agreements to the extent required for compliance with environmental laws).

Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates

Like other large multinational companies, the Group sells its products throughout the world and produces them in many countries. The Group has production facilities in Russia, where most of its fixed assets are located, Ireland, Jamaica, Ukraine, Italy, Sweden, Guinea, Guyana, Nigeria, Australia, Armenia, Kazakhstan and China. There are a number of risks associated with operating in some of these countries, including, but not limited to, those set forth below.

Political instability, changes in government or in economic policy and arbitrary government actions could adversely affect the Group's business and the value of investments in the Offer Shares

General. Some of the countries in which the Group's production facilities are located have experienced, and continue to experience, a great deal of political and social instability. Changes in government or in economic policy, unlawful, arbitrary or selective government action, official corruption or the occurrence of armed conflicts, territorial disputes, terrorist activities or social unrest could disrupt the Group's operations or increase the Group's costs.

Russia. Political conditions in Russia were highly volatile in the 1990s, as the national government sought to manage the difficult transition from a planned to a market economy and surrendered authority to the regions, but the political situation has stabilised since 2000 under the previous President, Mr. Vladimir Putin, and central authority has been restored. For example, the head of each sub-federal political unit (e.g., the governor of a region) is now nominated by the President and confirmed by the legislature of the relevant unit.

The most recent State Duma elections held on 2 December 2007 resulted in a further increase in the share of the aggregate vote received by United Russia and other political parties allied with the President, bringing that percentage to more than two thirds. The Russian presidential election was held on 2 March 2008 and resulted in Mr. Dmitry Medvedev, Mr. Putin's successor, being elected as the third President of the Russian Federation. On 7 May 2008, Mr. Medvedev was inaugurated as President, and, on 8 May 2008, Mr. Putin became Prime Minister. Although the new President has publicly announced that he will continue the former President's policies, there can be no assurance that significant changes in the economic and political environment will not occur. Shifts in governmental policy and regulation in Russia, which are less predictable than in many Western countries, could negatively affect the Russian economic and political environment in the near term.

In the international sphere, Russia has adopted a more assertive approach to the definition and pursuit of its interests. To some observers, Russia has appeared on several occasions to have used economic leverage or control over oil and gas supply to achieve political objectives. If Russia were to adopt restrictive economic measures against countries that are important to the Group's business, or if trade between Russia and such countries were otherwise to be interrupted for political reasons, the Group's business, financial condition and results of operations could be materially and adversely affected.

Over the past several years, Russia has been involved in conflicts, both economic and military, with other countries, including members of the Commonwealth of Independent States group of countries ("CIS"). On several occasions, this has resulted in the deterioration of Russia's relations

with other members of the international community, including the United States and various countries in Europe. For example, a military conflict in August 2008 between Russia and Georgia involving South Ossetia and Abkhazia has resulted in the deterioration of Russia's relations with certain other countries. The Russian stock exchanges experienced heightened volatility and significant overall price declines following these events. The emergence of new or escalated tensions between Russia and other countries, including any escalation of such conflicts, or the imposition of economic or other sanctions in response to the tensions, could negatively affect economies in the region, including the Russian economy.

In the economic sphere, the use of governmental power against particular companies or persons, for example through tax, environmental or prosecutorial authorities, could adversely affect Russia's economic climate and, if directed against the Group's companies, its substantial shareholders or its beneficial owners, it could also affect the Group's business, financial condition and results of operations. Russian authorities have recently challenged some Russian companies and prosecuted their executive officers and shareholders on tax evasion and related charges. In some cases, the results of such prosecutions and challenges have been significant claims against companies for unpaid taxes and the imposition of prison sentences on individuals. In the metals sector, public statements by the Russian Prime Minister in the summer of 2008 in relation to pricing techniques used by certain Russian steel companies caused a negative market reaction. Some observers have speculated that in certain cases these challenges and prosecutions were intended to punish, and deter, opposition to the government or the pursuit of disfavoured political or economic agendas. Some observers have also speculated that certain environmental challenges brought by Russian authorities in the oil and gas sector have been targeted at specific Russian businesses under non-Russian control, with a view to bringing them under state control. More generally, some observers have noted that takeovers in recent years of major private sector companies in the oil and gas, metals and manufacturing sectors by state-controlled companies following tax, environmental and other challenges may reflect a shift in official policy in favour of state control at the expense of individual or private ownership, at least where large and important enterprises are concerned.

As is the case for all international companies, the Company has dealings with the governments of, and is affected by the laws and regulations of, the countries where it operates. In the case of Russia, this involves, in the ordinary course of business, interaction from time to time with the relevant Russian governmental, regulatory and other authorities, including such authorities in respect of tax, railways and electricity, among others. As one of the largest employers in Russia, the Group has also maintained periodic communications with senior Russian government officials, including participation in industry-related government consultations on potential policy changes. During the global economic downturn in 2008, the Group experienced a liquidity shortage and (along with other eligible companies) was granted a loan by VEB of US$4.5 billion, a financial institution controlled by the Russian Government and used to support and develop the Russian economy. In addition, on 23 December 2009, Sberbank, in which the Central Bank of Russia holds a 57.6% interest, entered into the Sberbank Letter Agreement with the Company, stating an unconditional and irrevocable commitment to the Company to assume all rights, claims and obligations under the VEB Debt following a request from the Company, following which assumption the maturity date of the debt would be extended to 7 December 2013. As consideration for such assumption by Sberbank, a commission is payable in cash to Sberbank by the Company (the Company being subject to a best efforts obligation to pay such commission without breaching any of the Group's obligations under the international override agreement) or, failing which, by the Major Shareholders. The Directors believe that the Group has maintained a good relationship with the Russian Government and the relevant Russian governmental, regulatory and other authorities, although the Group may from time to time exercise its legal rights to challenge the decisions of such authorities, where the Group believes that such action is appropriate.

Nonetheless, and although the Company has sought to arrange its affairs in compliance with the law, including the tax laws, the Directors cannot exclude the possibility that, for the reasons described above, members of the Group may be charged with violations of law, such as tax evasion, that such charges may be upheld by a Russian court and that, as a result, the Group's assets in Russia may be subject to forfeiture or effective nationalisation.

Ukraine. The political environment in Ukraine in recent years has been particularly unstable, with frequent changes of government. Private enterprises, including the Group's businesses, can be affected by these political changes. The Group acquired the Nikolaev alumina refinery in a privatisation that was challenged in the past, and the Zaporozhye aluminium complex in a privatisation that is currently being challenged (see "Business — Litigation — ZAlK"). Political change in Ukraine could result in a revival or intensification of such challenges.

Nigeria. Over the past decade, Nigeria has suffered from political and social instability as rival religious, political and economic factions vied for power. Despite the election of a new president in 2007, Nigeria has experienced continuing violence, in particular around the oil-rich Niger Delta region. Militants have targeted foreign economic interests, including a number of large multi-national companies operating in that area, frequently using tactics such as kidnappings and armed robbery. In June 2007, militants attacked a residential community of the Group's employees at ALSCON in Nigeria, kidnapping six Group employees. These employees were released in October 2007. In December 2008, there was a further attack by a group of militants on a township of the Group's employees and two employees were kidnapped. These employees were released in February 2009. There are also risks relating to the ALSCON privatisation, which has been the subject of litigation in the past. In particular, legal proceedings were initiated in the United States in connection with tortious interference, unfair competition, and conspiracy to commit fraud in connection with such privatisation. These proceedings were conditionally dismissed on 23 March 2007. The claimant, however, retains the right to sue in Nigeria on the claims set forth in its original complaint. In accordance with this conditional dismissal, the defendant Group companies would be unable to challenge the Nigerian court's jurisdiction over the matter should the claimant proceeds to sue in Nigeria. For further information concerning these proceedings, see "Business — Litigation — BFIG".

Republic of Guinea. In 2006, pursuant to a transaction with the government of the Republic of Guinea, the Group acquired the Friguia bauxite and alumina complex in Guinea. Subsequently, the government of the Republic of Guinea has granted other mining companies tenure rights, overlapping with the area under which the Group conducts mining operations at the Friguia bauxite mine. In response, the Group is currently contemplating taking action to protect its rights. Further, in 2009, the government of the Republic of Guinea initiated proceedings against Russky Aluminy Ltd., the subsidiary of the Group incorporated in BVI (formerly Russkij Aluminij LLC, an entity incorporated in Delaware, USA) that acquired the Friguia bauxite and alumina complex from the Republic of Guinea, contending that the privatisation should be declared null and void, Friguia's shares should be transferred back to the government of the Republic of Guinea, compensation in the amount of US$1.0 billion should be paid to the government of the Republic of Guinea and that an expert should be appointed to determine the extent of the alleged loss suffered by the government of the Republic of Guinea. In addition, the government of the Republic of Guinea recently issued two decrees that may increase the potential for expropriation of mining assets in the Republic of Guinea. For further information concerning this proceeding, see "Business — Litigation — Republic of Guinea". In addition, the Republic of Guinea has been subject to political instability in the recent past.

Kazakhstan. In December 2008, UC RUSAL established a 50/50 joint venture with Samruk-Energo, a subsidiary of Samruk-Kazyna, a Kazakh state holding company, to jointly operate Bogatyr, one of the world's largest open-cast coal mines, and Severny mine, in the Ekibastuz coal basin. The establishment of the joint venture provides the Group with a hedge against exposure to increases in the tariffs charged by local independent electricity generators to the Group's Urals-based aluminium smelters. The Group's investment in the joint venture is subject to specific risks relating

to Kazakhstan. For example, the laws and regulations of Kazakhstan relating to foreign investment and subsurface use, among others, are still developing, and uncertainties or changes in the law could have an adverse effect on the Group's investment in the joint venture. With respect to laws governing subsurface rights, Article 71 of the Kazakhstan Subsurface Law provides the Republic of Kazakhstan with a pre-emption right in relation to the transfer of the Group's subsurface use rights. The exact scope of this law is uncertain, and no precedent exists to indicate how it may be applied.

Weaknesses in the legal systems and legislation of some of the countries in which the Group operates create an uncertain environment for investment and business activity and could subject the Group to material liabilities

Weaknesses in the legal systems and legislation of some of the countries in which the Group operates could create an uncertain environment for investment and for business activity. Many of these countries are still developing the legal framework required by a market economy. In many instances fundamental laws have only recently become effective. The limited experience of members of the judiciary and the difficulty of enforcing court decisions and governmental discretion in instigating, joining and enforcing claims could prevent the Group or its investors from obtaining effective redress in court proceedings, including in respect of expropriation or nationalisation.

The risks associated with the legal system of some of the countries in which the Group operates include:

- the untested nature of the independence of the judiciary and its immunity from economic, political and nationalistic influences;
- the inconsistencies among laws, decrees and governmental and ministerial orders and resolutions;
- the lack of judicial or administrative guidance on interpreting the laws;
- a high degree of discretion on the part of the governmental authorities;
- conflicting local, regional and federal laws and regulations;
- the relative inexperience of judges and courts in interpreting new legal norms;
- the unpredictability of enforcement of judicial orders and arbitral awards;
- substantial gaps in the legal framework due to the delay or absence of implementing regulations for certain legislation;
- expropriation and nationalisation of the Group's assets;
- alleged corruption within the judiciary and the governmental authorities; and
- bankruptcy procedures that are not well developed and are subject to abuse.

Any or all of these weaknesses could affect the Group's ability to enforce its legal rights in the relevant jurisdiction, including rights under its contracts, or to defend against claims by others in such jurisdiction.

Uncertainties relating to the tax systems of some of the countries in which the Group operates complicate the Group's tax planning and business decisions

The tax systems of some of the countries in which the Group operates are still evolving and, as such, are often confusing and difficult to interpret and apply. For example, Russian tax laws, regulations and court practice are subject to frequent changes and varying interpretation and inconsistent and selective enforcement. In some instances, although it may be viewed as contrary to Russian constitutional law, the Russian tax authorities have applied certain new taxes retroactively, issued tax claims for periods for which the statute of limitations had expired and reviewed the same tax period multiple times. Furthermore, it is possible that the current interpretation of the law or understanding of practice may change or, indeed, that the law may be changed with retroactive effect. In practice, Russian tax authorities generally interpret the tax laws in ways that do not favour taxpayers, who often have to resort to court proceedings to defend their position against the tax authorities. Moreover, court decisions in one jurisdiction of Russia may provide little, if any, precedent for other jurisdictions.

Taxes payable by Russian mineral companies are substantial and include, *inter alia*, income taxes, customs duties, excise duties, mineral extraction tax, value added tax, payroll related taxes, property taxes and other.

The Group's Russian subsidiaries are subject to periodic tax inspections that may result in tax assessments and additional amounts being owed by such subsidiaries for prior tax periods. Generally, tax declarations of the Group's Russian subsidiaries remain open and subject to inspection by tax and/or customs authorities for three calendar years immediately preceding the year in which the decision to conduct an audit is taken. However, the fact that a particular year has been reviewed by tax authorities does not preclude that year from further review or audit during the eligible three-year limitation period by a superior tax authority. Although on 17 March 2009, the Constitutional Court of the Russian Federation issued a decision preventing the Russian tax authorities from carrying out a subsequent tax audit for the same tax period as an initial audit if the court decision which was taken in respect of the tax dispute between the relevant taxpayer and the relevant tax authority covered taxation matters raised during the initial tax audit has not been revised or discharged, currently, it is unclear how this decision will be applied and followed in practice by the Russian tax authorities. In addition, on 14 July 2005 the Russian Constitutional Court issued a decision allowing the statute of limitations for tax liabilities to be extended beyond the three-year term set forth in the tax laws if a court determines that the taxpayer has obstructed or hindered a tax inspection. Moreover, recent amendments to the first part of the Tax Code, effective 1 January 2007, provide for the extension of the three-year statute of limitations if the actions of the taxpayer created insurmountable obstacles for the tax audit. Because none of the relevant terms is defined, tax authorities may have broad discretion to argue that a taxpayer has "obstructed", "hindered" or "created insurmountable obstacles" in respect of an inspection and to ultimately seek review and possibly apply penalties beyond the three-year term, and there is no guarantee that the tax authorities will not review the Group's compliance with applicable tax law beyond the three-year limitation period. In addition to the Group's substantial tax burden, these conditions complicate the Group's tax planning and related business decisions.

It is possible for changes to be made to the results of a prior tax audit if a repeat tax audit takes place. Repeat tax audits may be carried out by: 1) by the higher tax authorities monitoring the activities of the tax authorities which have performed the tax audit; or 2) the tax authorities who carried out the tax audit if a revised tax return for a lower amount of taxes is filed. Under the current tax legislation of Russia the limitation period for a repeat tax audit is three years immediately preceding the year in which the decision to conduct a repeat tax audit is taken. Therefore, repeat tax audits for the years 2006, 2007 and 2008 may be conducted by the Russian tax authorities in 2009. Tax audits for 2007 and 2008 were begun in March to May 2009 and have not yet been completed. This is in compliance with current Russian tax legislation which provides for a period for tax audit of up to six months, which period may be extended in the event of 'suspension', as provided by Russian tax

law. Suspension may occur due to the following reasons: 1) collection of documents from the counterparties; 2) collection of information from the foreign state authorities; 3) execution of expert examination (for instance, examination of document authenticity); 4) translation of documents into Russian. The above mentioned tax audits were suspended due to collection of documents from counterparties.

On 12 October 2006, the Plenum of the Supreme Arbitration Court of the Russian Federation issued Ruling No. 53 formulating the concept of "unjustified tax benefit", which is described in the ruling by reference to specific circumstances, such as absence of business purpose or transactions where the form does not match the substance, and which could lead to the disallowance of tax benefits resulting the transaction or the recharacterisation of the transaction. There has been very little further guidance on the interpretation of this concept by the tax authorities or courts, but it is likely that the tax authorities will actively seek to apply this concept when challenging tax positions taken by taxpayers in Russian courts. While the intention of this Ruling might have been to combat abuse of tax laws, in practice there is no assurance that the tax authorities will not seek to apply this concept in a broader sense than may have been intended by the Supreme Arbitration Court.

Financial statements of Russian companies are not consolidated for tax purposes under Russian law. As a result, each entity in the Group pays its own Russian taxes and may not offset its profit or loss against the loss or profit of another entity in the Group, which may result in higher taxes for the Group than if taxes were assessed on a consolidated basis. Intercompany dividends are subject to a withholding tax of 9%, if being distributed to Russian residents, subject to new provisions of the tax law described below, and 15%, if being distributed to non-Russian residents that are legal entities and organisations as well as to individuals who are not Russian tax residents, subject to benefits under double tax treaties. With effect from January 2008, the dividend income of Russian entities is exempt from taxation in Russia provided that the parent company owns not less than 50% of the shares of the subsidiary paying the dividends for a period of not less than 365 days as at the date the dividends are declared and provided that the consideration paid for the shares in the dividend paying company exceeded 500 million Roubles. In the case of foreign subsidiaries, the above exemption applies only if the subsidiary's jurisdiction of tax residency is not included in the list of offshore jurisdictions published by the Ministry of Finance of the Russian Federation. These tax requirements could impose additional tax burdens and costs on the Group's operations, including management resources.

The Russian Government, in its "Major Trends in Tax Policy for 2009 and 2010-2011 Planning Period", has proposed the introduction of consolidated tax reporting to enable the consolidation of the financial results of Russian taxpayers which are part of one group for corporate income tax purposes. At this stage, it is impossible to predict whether, when or how such consolidated tax reporting principles will be enacted.

The Group operates in various jurisdictions and includes companies incorporated outside of Russia. Russian tax laws do not provide for detailed rules on taxation of foreign companies in Russia or operations of Russian companies abroad. It is possible that with the evolution of these rules or changes in the approach of the Russian tax authorities, the Group might be subject to additional taxation in Russia in respect of its operations outside Russia.

Russian tax legislation in effect as of the date of this prospectus does not contain a concept of corporate tax residency (rather, the Russian domestic legislation recognises the concept of a taxpayer). Russian legal entities are taxed on their worldwide income whilst foreign legal entities are taxed in Russia on income attributable to their permanent establishment and on Russian source income, received by these foreign legal entities. The Russian Government, in its "Major Trends in Tax Policy in the Russian Federation for 2008-2010", has proposed the introduction to the domestic tax law of a concept of tax residency for legal entities. According to the proposals, a non-Russian entity would be deemed a Russian tax resident based on the place of its effective management and control and/or based on the residence of its shareholders. No assurance can be given as to whether and when these

amendments will be enacted, their exact nature, their interpretation by the tax authorities and possible impact on the Group. The Group cannot rule out that, as a result of the introduction of these changes to the Russian tax legislation, certain Group companies might be deemed to be Russian tax residents, subject to all applicable Russian taxes.

The above uncertainty related to Russian tax laws exposes the Group to significant fines and penalties and to enforcement measures, despite the Group's best efforts at compliance, and could result in a greater than expected tax burden. The Group's best estimate of the aggregate maximum of additional amounts that it is reasonably possible may become payable if its tax positions were not sustained at 30 June 2009 is US$516 million. See Note 34(a) to UC RUSAL's Accountants' Report.

It is likely that the tax legislation of some of the countries in which the Group operates will become more sophisticated in the future. The introduction of new tax provisions may affect the overall tax efficiency of the Group and may result in significant additional taxes becoming payable. Additional tax exposure could materially adversely affect the Group business, financial condition and results of operations. In addition, the tax authorities of some of the countries in which the Group operates may be taking a more assertive position in their interpretation of legislation and assessments, and it is possible that transactions and activities that have not been challenged in the past may be challenged. As a result, significant additional taxes, penalties and interest may be assessed.

The tax position of the Group is influenced by a number of agreements and rulings as between Group companies and relevant local, federal and national tax authorities that may provide preferential tax incentives to the Group. These agreements may include conditions that the particular Group company must satisfy in order for the agreements to be effective, including but not limited to minimum production volumes/sales of aluminium and minimum staff headcount in that jurisdiction. If these conditions are not satisfied by the Group companies then the agreements could cease to apply and the Group's tax position could be materially affected.

Given the cross-border nature of the Group's business and corporate structure, the Group's tax position is dependant on a number of taxation treaties between national governments. The existence and terms of these treaties are outside the control of the Group. Any termination or renegotiation of the terms of such treaties could have a material adverse impact on the tax position of the Group.

Legislation may not adequately protect against expropriation or nationalisation

Some of the countries in which the Group operates have enacted legislation to protect foreign investments and other property against expropriation and nationalisation without fair compensation, and the principles of international law are to similar effect. However, there is no assurance that such protections would be enforced. For information concerning a relevant legal proceeding in Guinea, see "Business — Litigation — Republic of Guinea". While the Group maintains political risk insurance with respect to its operations in Nigeria, it currently does not have political risk insurance with respect to its operations in Guinea, and expropriation or nationalisation of certain of the Group's assets in these and other jurisdictions could have a material adverse effect on the Group's business, financial condition and results of operations or on the value of the Offer Shares. In addition, expropriation or nationalisation of assets of a member of the Group could have adverse consequences under the terms of the Group's debt restructuring agreements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Events of Default".

Risks Relating to the Global Offering and Offer Shares

The Shares have not previously been listed, and, prior to the Global Offering, there has been no public market for the Shares. The initial Offer Price range offered to the public for the Offer Shares is the result of negotiations between the Company and the Joint Global Coordinators (on behalf of the Underwriters). You should not view the Offer Price that the Company and the Joint Global

Coordinators establish as any indication of the price that will prevail in the trading market. The market price for the Shares may decline below the Offer Price. The Company has applied to list and deal in the Shares on the Hong Kong Stock Exchange. However, a listing on the Hong Kong Stock Exchange does not guarantee that an active and liquid trading market for the Shares will develop or be sustained following the Global Offering or in the future.

The sale or availability for sale of substantial amounts of the Shares or equity-related securities could adversely affect their trading prices

Sales of a substantial amount of the Shares, or securities exercisable into or exchangeable for the Shares, if any, in the public market after the completion of the Global Offering, or the perception that these sales could occur, could adversely affect the market price of the Shares and could materially impair the Group's future ability to raise capital through offerings of the Shares or securities relating to the Shares. In connection with the Global Offering, the Company and existing Shareholders and each lender who receives Shares upon physical settlement of their fee warrants has agreed, among other things, not to sell Shares for six months after the Listing Date without the prior written consent of the Joint Global Coordinators. However, the Joint Bookrunners may release these securities from these restrictions at any time. A number of events could result in distressed sales of Shares. In the event that the currently pending implementation of the En+ debt restructuring is not concluded, En+ creditors could foreclose on the En+ debt and seek to realize against assets of En+, including Shares in the Company. In addition, En+ is expected to pledge 15% of the issued share capital of the Company to the lenders of En+ in connection with En+'s debt restructuring arrangements, and additional shares may be required to be so pledged to meet loan to value tests. Further, 5% of the issued share capital of the Company is expected to be pledged by En+, SUAL Partners, Glencore and Onexim on a pro rata basis in connection with the restructuring of the Company's obligations to VEB. Moreover, Shares may be sold in the event that there is a decision against Mr. Deripaska (or a settlement that has to be funded by Mr. Deripaska) in connection with the claim made against him by Mr. Cherney. See "— Risks Relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares". We cannot predict what effect, if any, significant future sales will have on the market price of the Shares.

In addition, failure to meet certain debt repayment targets under the Group's debt restructuring agreements would result in issuance of zero strike warrants that would have an immediate dilutive effect. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring". The sale of any Shares issued following exercise of these warrants could also have an adverse effect on the trading price.

The minimum trading board lot size for the Shares, as imposed by the Securities and Futures Commission, could affect the Shares' liquidity, trading volume and trading price in the secondary market after Listing Date.

The SFC is imposing a condition to the listing and trading of the Shares on the Hong Kong Stock Exchange requiring that the minimum trading board lot size of the Shares at and after listing of the Shares must be no less than the number of Shares that make up a minimum board lot trading value of HK$200,000 based on the Offer Price, or such other number of Shares as the SFC may from time to time specify by notice in writing to the Hong Kong Stock Exchange and the Company in response to any proposed corporate action in connection with the share capital of the Company which will or is reasonably likely to materially reduce the value of a board lot of Shares. The minimum trading board lot size of the Shares as at listing is large, relative to that of other shares traded on the Hong Kong Stock Exchange, and may increase in future. This minimum trading board lot trading value and the board lot size specified by the SFC from time to time could adversely affect the liquidity, trading volume and trading price of the Shares in the secondary market after Listing Date. The Joint Global

Coordinators are not obligated to make a market in the Shares and market making may be prohibited under or restricted by applicable law. Reduced liquidity may cause the trading price of the Shares to stay at a lower level than would otherwise develop. Details of the structure of the Global Offering are set out in "Structure of the Global Offering".

The liquidity and market prices of the Shares following the Global Offering may be volatile

The price and trading volume of the Shares may be highly volatile. The market price of the Shares may fluctuate substantially in response to, among others, the following factors:

- the Group's debt restructuring and its ability to service and reduce its debt;
- fluctuations in the Group's results of operations;
- changes in financial estimates by securities analysts;
- announcements of technological innovations by the Group or its competitors;
- investors' perception of the Group and the international investment environment;
- changes in pricing made by the Group, its competitors or providers of alternative products or services;
- the depth and liquidity of the market for the Shares; and
- general economic and other factors.

There is a risk of termination of the International Placing Agreement

The International Placing Agreement relating to the Global Offering can be terminated by the Joint Global Coordinators (on behalf of the Underwriters) up to (and including) the date of the settlement-delivery of the offered securities in certain circumstances (see "Underwriting"). In the case where the International Placing Agreement are terminated in such a manner, all negotiations that have taken place since the date of the first negotiation, regarding the Shares related to the Global Offering, would be retroactively cancelled, and each investor would be responsible for any damages or costs resulting from such a termination.

It may be difficult to serve process on and enforce legal judgments against the Company or its directors

The Company is a holding company organised under the laws of Jersey with business operations conducted through various subsidiaries. The Company will be registered as a non-Hong Kong company in Hong Kong under Part XI of the Companies Ordinance and will appoint an authorised representative to accept service on its behalf in Hong Kong. As a result, it will be possible for Hong Kong investors to effect service of process on the Company within Hong Kong.

The Directors reside outside Hong Kong in Russia, the United Kingdom, Switzerland and the United States of America. In these circumstances, Hong Kong investors will have to apply to the High Court in Hong Kong for leave to serve process outside Hong Kong. In the event that leave is granted, service may be effected in Russia, the United Kingdom, Switzerland and the United States in terms of the Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters to which the PRC on behalf of Hong Kong and the other states mentioned are parties.

Hong Kong has no bilateral reciprocal agreements or arrangements with any of Russia, Switzerland, the United Kingdom and the United States that provide for the recognition and enforcement of any judgments of the Hong Kong Courts. As a result, it may be difficult for Hong Kong investors to enforce any judgments of the Hong Kong courts against the Company or its Directors outside Hong Kong.

In preparation for the Global Offering, the Company has sought the following waivers from strict compliance with the relevant provisions of the Listing Rules and the Companies Ordinance:

MANAGEMENT PRESENCE IN HONG KONG: RULE 8.12 REQUIREMENTS

Pursuant to Rule 8.12 of the Listing Rules, the Company must have sufficient management presence in Hong Kong. This normally means that at least two of the Company's Executive Directors must be ordinarily resident in Hong Kong. The Group operates in 19 countries across five continents, the operation of the Group being managed from outside Hong Kong. The executive Directors of the Company are based outside Hong Kong and the Group does not, and in the foreseeable future, will not have any management presence in Hong Kong.

Accordingly, the Group has applied to the Hong Kong Stock Exchange for a waiver from strict compliance with the requirements under Rule 8.12 of the Listing Rules. In order to maintain effective communication with the Hong Kong Stock Exchange, the Company will put in place the following measures in order to ensure that regular communication is maintained between the Hong Kong Stock Exchange and the Company:

(a) The Company has appointed two authorised representatives pursuant to Rule 3.05 of the Listing Rules, who will act as the Company's principal channel of communication with the Stock Exchange and ensure that the Group complies with the Listing Rules at all times. The two authorised representatives are Mr. Oleg Deripaska, an executive Director, and Wong Po Ying, Aby, the Hong Kong Company Secretary. The Hong Kong Company Secretary is ordinarily resident in Hong Kong. Each of the authorised representatives will be available to meet with the Stock Exchange within a reasonable time frame upon the request of the Stock Exchange and will be readily contactable by telephone, facsimile and email (if applicable). The Company will be registered as a non-Hong Kong company under the Companies Ordinance. The Hong Kong Company Secretary will also be authorised to accept service of legal process and notices in Hong Kong on behalf of the Company.

(b) Each of the authorised representatives has means to contact all members of the Board of Directors (including the independent non-executive Directors) and of the senior management team promptly at all times as and when the Hong Kong Stock Exchange wishes to contact the directors for any matters. To enhance the communication between the Hong Kong Stock Exchange, the authorised representatives and the Directors, the Company will implement a policy that (i) each executive Director, non-executive Director and independent non-executive Director will provide their respective office phone numbers, mobile phone numbers, fax numbers and email addresses (if applicable) to the authorised representatives; and (ii) all the executive Directors, non-executive Directors and independent non-executive Directors and authorised representatives will provide their office phone numbers, mobile phone numbers, fax numbers and email addresses (if applicable) to the Hong Kong Stock Exchange.

(c) In addition, all Directors have confirmed that they possess valid travel documents to visit Hong Kong for business purposes and would be able to come to Hong Kong and meet the Stock Exchange within a reasonable period of time.

In compliance with Rule 3A.19 of the Listing Rules, the Group has appointed Somerley Limited as compliance adviser to act as the alternate channel of communication with the Hong Kong Stock Exchange for the period commencing on the date of the initial listing of the shares of the Company on the Main Board of the Hong Kong Stock Exchange and ending on the date on which the Company complies with Rule 13.46 in respect of its financial results for the first full financial year commencing after the date of its initial listing.

CONNECTED TRANSACTIONS

Members of the Group have entered into certain transactions which would constitute continuing connected transactions of the Company under the Listing Rules following the completion of the Global Offering. The Company has received from the Hong Kong Stock Exchange a waiver from strict compliance with the announcement and independent shareholders' approval requirements set out in Chapter 14A of the Listing Rules for such continuing connected transactions. Further details of such continuing connected transactions and the waiver are set out in "Connected Transactions" in this prospectus.

EXEMPTION AND WAIVER FROM CERTAIN REQUIREMENTS REGARDING PROPERTY VALUATION REPORT

We currently own about 336 parcels of land with an aggregate site area of approximately 39,900 hectares and lease about 800 parcels of land with an aggregate site area of approximately 26,500 hectares, and use in perpetuity about 90 parcels of land with an aggregate site area of approximately 2,800 hectares, and such properties are located in Russia, Armenia, China, Guinea, Guyana, Ireland, Italy, Jamaica, Sweden and Ukraine. We currently also own 18,681 buildings and land improvements with an aggregate gross floor area ("GFA") of approximately 9,100,000 square meters, and these buildings are located in Russia, Armenia, China, Guinea, Guyana, Ireland, Italy, Jamaica, Nigeria, Sweden and Ukraine.

Owing to the substantial number of properties and buildings we own or lease, we have applied to the SFC for an exemption and the Hong Kong Stock Exchange for a waiver from strict compliance with certain of the valuation report requirements contained in paragraph 34 of Part II of the Third Schedule to the Hong Kong Companies Ordinance and Rules 5.01 and 5.06 and paragraph 3(a) of Practice Note 16 of the Hong Kong Listing Rules, respectively, on the grounds that:

(a) it would be unduly burdensome to provide valuations for all of our properties and buildings; and

(b) for those properties and buildings which we procure a valuation, it would be unduly burdensome for us to reproduce the full valuation report in this prospectus.

The Directors confirm that (1) all properties owned or leased by the Group which are located in Mainland China, and (2) all properties owned or leased by the Group, on which the facilities which are the most important to the business of the Group have been built or are being built, and those which are located in proximity to such facilities and which are necessary for their operation, as well as those which are identified as being properties of significant size or importance, together with all buildings constructed on top of such properties ("Valuation Properties"), have been valued by American Appraisal and such valuation is set out in a report prepared in full compliance with the requirements of the Third Schedule of the Companies Ordinance and the Listing Rules. For the purpose of identifying properties falling within category (2), qualitative and quantitative metrics reflecting production capacity, revenue, operating or non-operating status, and the Group's plans regarding future use, were applied on a non-cumulative basis to all distinct business units in the alumina and aluminium divisions of the Group, being a group essentially engaged in the production of primary aluminium, in order to capture all potential higher production capacity and all lower cost higher margin operations. Valuation was then carried out on all properties owned or leased by such distinct business units, and all core buildings and improvements, and certain specified additional buildings and improvements, which are constructed on such properties.

The exemption in respect of not undertaking a valuation of the other properties and buildings owned or leased by the Group, and in respect of not reproducing in this prospectus the full valuation report for the properties and buildings which are being valued, has been granted by the SFC under section 342A(1) of the Hong Kong Companies Ordinance, and the corresponding waiver has been granted by the Hong Kong Stock Exchange under the Listing Rules, subject to the following conditions:

(a) a summary valuation report in respect of the Valuation Properties, which has been prepared on the basis of the full valuation report mentioned above, shall be set out in this prospectus — please refer to the summary valuation report which is reproduced as Appendix V to this prospectus;

(b) the following information shall be set out in this prospectus — please refer to the summary valuation report which is reproduced as Appendix V to this prospectus:

    (1) the detailed criteria for selecting properties to be excluded from valuation, a generic description of all properties and those which are excluded from valuation; and

    (2) the aggregate number, book value by classification and percentage of consolidated total assets of the Group represented by the book value of (i) the properties and buildings owned and leased by the Group; (ii) the Valuation Properties; and (iii) the properties and buildings owned and leased by the Group which have not been valued;

(c) a copy of the full valuation report in respect of the Valuation Properties in English only shall be made available for inspection — please refer to Appendix IX under the section headed "Documents for Inspection";

(d) this prospectus contains statements that the Directors have confirmed that:-

    (1) the properties excluded from the portfolio of Valuation Properties individually and collectively are not crucial to the Company's operations;

    (2) there has been no significant acquisition or disposal from the portfolio of the properties of the Group since 30 June 2009; and

(e) particulars of the exemption and waiver as the case may be shall be disclosed in this prospectus.

Excluded properties

Properties that do not fall under any of the following categories have been excluded from the valuation:

(A) **Properties in the PRC**

Properties owned or leased (the "*Properties*") by the Group in the PRC together with all buildings and improvements thereon.

(B) **Properties with Crucial Facilities**

Other Properties, on which the facilities which are the most important to its business have been built or are being built, and identified by using the following method:

(1) Identify Distinct Business Units

(A) Identify the divisions which are critical to the business of the Group as the producer of primary aluminum (Critical Divisions). These would be the Alumina Division and the Aluminum Division, accounting for about 97% of Group revenue for the first six months of 2009. The divisions which represent non-core business of the Group, i.e. downstream operations, generating only about 3% of Group revenue for the first six months of 2009, are excluded.

(B) Identify all the distinct business operating units within such Critical Divisions of the Group which are the most important in terms of production capacity, revenue, operating or non-operating status, and the Group's plans regarding future use (Distinct Business Units). Such qualitative and quantitative metrics are applied on a non-cumulative basis in order to capture all potential higher production capacity and all lower cost higher margin operations. Upon testing aggregate production capacity and aggregate contribution to revenue, it was found that the 16 Distinct Business Units represented about 62% of alumina and about 90% of aluminum production capacity of the Group and that the revenue from the aluminum smelters operated by Distinct Business Units represented about 94% of total Group revenue.

(2) Identify all buildings and improvements located on the Properties of the Distinct Business Units which are of the following nature (Core and Proximate Buildings and Improvements):

(A) for mines: (i) shafts and mine workings; (ii) collar houses; (iii) winder buildings; (iv) other buildings and improvements critical for production;

(B) for alumina refineries: (i) crushing and milling buildings; (ii) digestion buildings; (iii) red and white filtration buildings; (iv) evaporation buildings; (v) slag storages; (vi) chimney stacks; (vii) other buildings and improvements critical for production;

(C) for aluminium smelters: (i) pot rooms; (ii) foundry buildings; (iii) anode paste production, anode baking and assembly production buildings; (iv) other buildings and improvements critical for production; and

(D) for cryolite plants: (i) furnaces building; (ii) hydrofluoric acid production building; (iii) gas purification facilities; (iv) aluminum sulfate production building; (v) other buildings and improvements critical for production.

(3) Check the aggregate net book value of the Properties of all the Distinct Business Units and the Core and Proximate Buildings and Improvements.

(C) **Other Significant and Important Properties**

Other Properties, which were identified as being properties of significant size or importance, using the following method:

(1) Identify all buildings and improvements located on the Properties of the Distinct Business Units which support the operations of the Core and Proximate Buildings and Improvements and are of the following nature (Additional Buildings and Improvements):

(A) for mining operations: (i) administrative buildings; (ii) locker rooms; (iii) mechanical shop building; (iv) warehouses; and (v) other significant buildings and improvements;

(B) for alumina refineries: (i) boiler houses; (ii) administrative buildings; (iii) buildings for storage of raw materials and final products; (iv) red mud ponds; (v) cooling towers; (vi) stacks; (vii) other significant buildings and improvements;

(C) for aluminium smelters: (i) boiler houses; (ii) slag storages; (iii) transformer substations; (iv) railways; (v) repair shop buildings; (vi) stacks; (vii) other significant buildings and improvements; and

(D) for cryolite plants: (i) administrative buildings; (ii) slime storage; (iii) warehouses; (iv) final product storage; (v) other significant buildings and improvements.

(2) Check what is the aggregate net book value of the Additional Buildings and Improvements. Upon calculation it was found that such buildings and improvements accounted for another 18% of the net book value of the Group's real property, making a total of 68.2% of the net book value of the Group's real property under valuation after adding the PRC Properties and the Properties and the Core and Proximate Buildings and Improvements described in paragraph (B)(3) above.

Details and description of properties and buildings that have not been valued

	Aggregate net book value (Note)		
Usage of properties and buildings	**(US$)**	**% of the consolidated total assets of the Group**	**Number of properties and buildings (Note)**
Smelters	441,173,511	1.96%	9,711
Refineries	194,744,702	0.86%	5,290
Other Production Facilities in Current Use	101,578,489	0.45%	497
Non-Core Downstream Operations	101,332,113	0.45%	391
Production Facilities in the PRC	0	0.00%	0
Production Facilities in Indefinite Suspension	0	0.00%	1,593
TOTAL	**838,828,815**	**3.72%**	**17,482**

Note: Based on the Company's IFRS unaudited data as of 30 September 2009

Details and description of properties and buildings that have been valued

Usage of properties and buildings	Aggregate net book value (Note) (US$)	% of the consolidated total assets of the Group	Number of properties and buildings (Note)
Smelters	1,107,625,392	4.91%	833
Refineries	296,387,037	1.32%	587
Other Production Facilities in Current Use	0	0.00%	0
Non-Core Downstream Operations	0	0.00%	0
Production Facilities in the PRC	4,662,109	0.02%	119
Production Facilities in Indefinite Suspension	0	0.00%	0
TOTAL	**1,408,674,538**	**6.25%**	**1,535**

Note: Based on the Company's IFRS unaudited data as of 30 September 2009

Details and description of all properties and buildings of the Group

Usage of properties and buildings	Aggregate net book value (Note) (US$)	% of the consolidated total assets of the Group	Number of properties and buildings (Note)
Smelters	1,548,798,903	6.87%	10,542
Refineries	491,131,739	2.18%	5,875
Other Production Facilities in Current Use	101,856,940	0.45%	497
Non-Core Downstream Operations	101,332,113	0.45%	391
Production Facilities in the PRC	4,662,109	0.02%	119
Production Facilities in Indefinite Suspension	0	0.00%	1,593
TOTAL	**2,247,503,353**	**9.97%**	**19,017**

Note: Based on the Company's unaudited IFRS data as of 30 September 2009

The Directors are of the view that the excluded properties and buildings are individually and collectively not crucial to the Company's operations and their exclusion from the prospectus of valuation information will not prejudice the interests of the investing public and will not adversely and materially impact the ability of prospective investors to assess the operations, financial condition, results and business prospects of the Group. The Directors also confirm that there has been no significant acquisition or disposal from the portfolio of the properties of the Group since 30 June 2009. The Company is not a property development company and the vast majority of the excluded properties and buildings are in the nature of purpose-built industrial properties that have no alternative use and cannot be disposed off in a piecemeal manner. Such properties are largely located in remote areas and have no development value. Excluded properties and buildings had an aggregate net book value of approximately US$706 million as at 30 June 2009, or approximately 3.17% of consolidated total assets of the Group, as stated in its audited accounts for the six months ended 30 June 2009, of US$22,219 million. On an individual basis, the highest net book value assigned to an excluded property or building was US$15 million or 0.067% of such consolidated total assets. Further details with respect to excluded properties and buildings may be found under the section entitled "Land and Properties" of this prospectus, including a summary description of use of such properties.

PUBLIC FLOAT REQUIREMENTS

Rule 8.08(1)(a) of the Listing Rules requires that at least 25.0% of the issuer's total issued share capital must at all times be held by the public. We have applied to the Hong Kong Stock Exchange to request the Hong Kong Stock Exchange to exercise, and the Hong Kong Stock Exchange has confirmed that it will exercise, its discretion under the Listing Rules to accept a lower public float percentage of the Company of the higher of: (i) 10% of the Company's Shares, and (ii) the percentage of public shareholding that equals HK$6 billion at the Listing Date, as the minimum percentage of public float of the Company. The above discretion is subject to the condition that the Company will make appropriate disclosure of the lower prescribed percentage of public float in this prospectus and confirm sufficiency of the above-mentioned public float in its successive annual reports after the listing.

In the event that the public float percentage falls below the minimum percentage prescribed by the Stock Exchange, the Directors and the controlling shareholder will take appropriate steps which include a further issue of equity and/or the substantial shareholders of the Company placing some of their Shares to independent third parties, to ensure the minimum percentage of public float prescribed by the Stock Exchange is complied with.

MINIMUM NUMBER OF SHAREHOLDERS REQUIREMENT

In view of the SFC requirements for the offer of Shares in Hong Kong to be by way of placing only and the subscription price or purchase price payable by each investor as described under paragraph 2(c) of the SFC Conditions (as defined below) to be a minimum of HK$1 million, the Company has applied to the Hong Kong Stock Exchange for a waiver from strict compliance with (a) the requirement under Listing Rule 8.08(2) that there should be at least 300 shareholders in the public tranche as at Listing Date, and (b) the requirement under paragraph 4 of Appendix 6 to the Listing Rules that there must be not less than 3 shareholders for every HK$1,000,000 placed in the Global Offering, and the Stock Exchange has granted the waiver subject to (i) the SFC imposing as a condition to listing that the offer for subscription or purchase of the Offer Shares in Hong Kong will be conducted by way of placing only; and (ii) that the Company would have a minimum of 100 Shareholders upon listing.

CONFIRMATION OF JERSEY AS AN ACCEPTABLE JURISDICTION

On 7 March 2007, the Hong Kong Stock Exchange and the SFC published a Joint Policy Statement Regarding the Listing of Overseas Companies (the "JPS") aimed at facilitating the listing of overseas companies in Hong Kong. The JPS requires companies incorporated outside Hong Kong and other recognised jurisdictions seeking a primary listing on the Hong Kong Stock Exchange to demonstrate that they are subject to standards of shareholder protection at least equivalent to those required under Hong Kong law. Rule 19.05(1)(b) of the Listing Rules provides that the Hong Kong Stock Exchange reserves the right, in its absolute discretion, to refuse a listing of securities of an overseas issuer if the Hong Kong Stock Exchange is not satisfied that the overseas issuer is incorporated or otherwise established in a jurisdiction where the standards of shareholder protection are at least equivalent to those provided in Hong Kong, and that the Hong Kong Stock Exchange may permit a listing subject to the overseas issuer making such variations to its constitutive documents as the Hong Kong Stock Exchange may require.

A summary of the Articles of Association of the Company is set out in Appendix VII of this prospectus.

The Company applied for confirmation, and the Hong Kong Stock Exchange has confirmed, that Jersey, the jurisdiction in which the Company is incorporated, is acceptable as an approved jurisdiction for the purpose of the listing of the Company.

DIRECTORS' RESPONSIBILITY FOR THE CONTENTS OF THIS PROSPECTUS

This prospectus includes particulars provided in compliance with the Hong Kong Companies Ordinance, the Securities and Futures (Stock Exchange Listing) Rules and the Listing Rules for the purpose of giving information to the public with regard to the Group. The Directors collectively and individually accept full responsibility for the accuracy of the information contained in this prospectus. The Directors confirm, to the best of their knowledge and belief, and having made all reasonable enquiries in this respect, that there are no other facts the omission of which would make any statement in this prospectus misleading.

INFORMATION ON THE GLOBAL OFFERING

The Offer Shares are offered or sold by way of placing solely on the basis of the information contained and representations made in this prospectus and on the terms and subject to the conditions set out herein. No person is authorised to give any information in connection with the Global Offering or to make any representation not contained in this prospectus, and any information or representation not contained herein must not be relied upon as having been authorised by the Company, the Joint Sponsors, the Joint Bookrunners, the Underwriters, any of their respective directors, agents, employees or advisers or any other party involved in the Global Offering.

Pursuant to section 6(3)(b) of the Securities and Futures (Stock Market Listing) Rules, the Securities and Futures Commission is imposing the following conditions ("SFC Conditions") to the listing of the Shares on the Hong Kong Stock Exchange:

1. The provisions of the Management, Supervision and Internal Control Guidelines ("ICG") and the Code of Conduct for Persons Licensed by or Registered with the SFC ("Code") apply to the placing of the Offer Shares and must be complied with by intermediaries placing the Offer Shares in Hong Kong.

2. The offer for subscription or purchase of the Offer Shares in Hong Kong will be conducted by way of placing only. Where the Offer Shares are placed in Hong Kong, subscribers for or purchasers of the Offer Shares must be limited to:

   (a) persons falling under paragraphs (a) to (i) of the definition of "professional investors" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (where the provisions specified in paragraph 15.5 of the Code may be waived);

   (b) persons falling under paragraph (j) of the definition of "professional investors" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (where the provisions specified in paragraph 15.5 of the Code may be waived in relation to a person provided that the intermediary placing the Offer Shares in Hong Kong has, in respect of that person complied with paragraphs 15.3 and 15.4 of the Code); or

   (c) other clients of an intermediary provided that the subscription price or purchase price payable by each client is a minimum of HK$1 million and the intermediary complies with the requirements in respect of suitability set out in paragraph 5.2 of the Code.

3. The intermediaries placing the Offer Shares in Hong Kong confirm to the Joint Sponsors and the Company that condition 2 above has been fulfilled in respect of Offer Shares placed by them.

4. The Joint Sponsors confirm in writing to the SFC and the Hong Kong Stock Exchange by 1700 hours Hong Kong time on the business day immediately preceding the Listing Date that condition 2 above has been fulfilled.

5. The trading board lot size of the Shares at and after listing of the Shares must be no less than the number of Shares that make up a minimum board lot trading value of HK$200,000 based on the Offer Price, or such other number of Shares as the SFC may from time to time specify by notice in writing to the Hong Kong Stock Exchange and the Company in response to any proposed corporate action in connection with the share capital of the Company which will or is reasonably likely to materially reduce the value of a board lot of Shares.

6. The conditions being imposed by the SFC for not objecting to the listing are set out in full in this prospectus.

Details of the structure of the Global Offering, including its conditions, are set out in the section headed "Structure of the Global Offering".

RESTRICTIONS ON OFFER AND SALE OF THE OFFER SHARES

No action has been taken to permit a public offering of the Offer Shares in Hong Kong or any other jurisdiction, or the distribution of this prospectus in any jurisdiction other than Hong Kong. Accordingly, this prospectus may not be used for the purpose of, and does not constitute an offer or invitation in any jurisdiction or in any circumstances in which such an offer or invitation is not authorised or to any person to whom it is unlawful to make such an offer or invitation. The distribution of this prospectus and the offering and sale of the Offer Shares in other jurisdictions are subject to restrictions and may not be made except as permitted under the applicable securities laws of such jurisdictions pursuant to registration with or authorisation by the relevant securities regulatory authorities or an exemption therefrom.

APPLICATION FOR LISTING OF THE SHARES ON THE HONG KONG STOCK EXCHANGE

We have applied to the listing committee of the Hong Kong Stock Exchange for the authorisation to list, and the permission to deal in, our Shares in issue, and for our Shares to be issued pursuant to the Global Offering (including any Shares which may be issued pursuant to the exercise of the Over-allotment Option).

Aside from the concurrent listing of Global Depositary Shares on the Professional Segment of Euronext Paris, no part of our Shares is listed on or dealt in on any other stock exchange and no such listing or permission to list is being or proposed to be sought in the near future.

REGISTER OF MEMBERS AND STAMP DUTY

The Company's principal register of members will be maintained by our principal registrar, Ogier Corporate Services (Jersey) Limited, in Jersey, and the Company's Hong Kong register of members will be maintained by our Hong Kong Share Registrar, Computershare Hong Kong Investor Services Limited, in Hong Kong.

Dealings in our Shares registered on our Hong Kong Share Registrar will be subject to Hong Kong stamp duty. See the section entitled "D. Other Information — 7. Taxation of Holders of Shares — (a) Hong Kong" in "Appendix VIII — Statutory and General Information" to this prospectus.

PROFESSIONAL TAX ADVICE RECOMMENDED

Potential investors in the Global Offering are recommended to consult their professional advisers if they are in any doubt as to the taxation implications of subscribing for, purchasing, holding or disposing of, and dealing in our Shares (or exercising rights attached to them). None of us, the Joint

Global Coordinators, the Joint Sponsors, the Joint Bookrunners, the Underwriters, any of their respective directors or any other person or party involved in the Global Offering accepts responsibility for any tax effects on, or liabilities of, any person resulting from the subscription, purchase, holding or disposal of, dealing in, or the exercise of any rights in relation to, the Offer Shares.

STRUCTURE OF THE GLOBAL OFFERING

You may find details of the structure of the Global Offering, including its conditions, in the section entitled ''Structure of the Global Offering'' in this prospectus.

CURRENCY TRANSLATIONS

Unless otherwise specified, amounts denominated in US$ have been translated, for the purpose of illustration only, into Hong Kong dollars in this prospectus at the following rates:

HK$7.76: US$1.00

No representation is made that any amounts in US$ can be or could have been at the relevant dates converted at the above rates or any other rates or at all.

LANGUAGE

If there is any inconsistency between the names of any of the entities mentioned in this prospectus which are not in the English language and their English translations, such foreign language names shall prevail and vice versa.

ROUNDING

Any discrepancies in any table between totals and sums of amounts listed therein are due to rounding.

DIRECTORS

Name	Residential Address	Nationality
Executive Directors		
Oleg Deripaska	64 Severnaya Street, Oktyabrsky Khutor, Ust-Labinsk District, Krasnodar Territory, Russia	Russian
Petr Sinshinov	19 Bakhrushina Street, Building 2, apt. 12 Moscow, Russia	Russian
Tatiana Soina	50 Gilyarovskogo St., apt. 70, Moscow, Russia	Russian
Non-executive Directors		
Victor Vekselberg (Chairman)	19 Bakhrushina St., Building 2, apt. 15, Moscow, Russia	Russian
Dmitry Afanasiev	Tallinskaya Street, 8, apt. 34, St. Petersburg, Russia	Russian
Len Blavatnik	15B Kensington Palace Gardens, London W8 4QG U.K.	U.S.A.
Igor Ermilin[(1)]	Bolshaya Gruzinskaya Str. 20 Apt. 84, Moscow 123242, Russia	Russian
Ivan Glasenberg	Gehrimoosweg 6, 8803 Rüschlikon, Switzerland	Australian
Vladimir Kiryukhin	Admiral Nakhimov Street, Building 14, apt. 25 Kuparvna, Zheleznodorozhny, Russia	Russian
Alexander Popov	Novokosinskaya Str. 13, Building 2, apt. 49, Moscow 111673 Russia	Russian
Dmitry Razumov	Malaya Filevskaya 56/20 Moscow 121433, Russia	Russian
Jivko Savov	37a St. John's Wood Terrace, London NW8 6JL U.K.	U.K.
Vladislav Soloviev	3.1.1 Sormovskaya St. 109444 Moscow, Russia	Russian
Anatoly Tikhonov	Slavyanskiy Bulvar 9-1 apt. 180, 121352, Moscow, Russia	Russian

Name	Residential Address	Nationality
Independent Non-executive Directors		
Barry Cheung Chun-yuen[1]	Apartment 12C, Pearl Garden 7 Conduit Road, Mid-Levels Hong Kong	Chinese
Peter Nigel Kenny	Chemin Sous-Bois 7, 1166 Perroy Vaud, Switzerland	U.K.
Philip Lader	151 Meeting Street Suite 600 Charleston SC 29401, U.S.A.	U.S.A.
Elsie Leung Oi-sie	Flat A, 4/F Hoover Mansion, 16 Oaklands Path, Hong Kong	Chinese

Note:

(1) Appointment effective from the Listing Date.

PARTIES INVOLVED IN THE GLOBAL OFFERING

Joint Global Coordinators and Joint Sponsors	BNP Paribas Capital (Asia Pacific) Limited 59/F - 63/F, Two International Finance Centre 8 Finance Street Central Hong Kong Credit Suisse (Hong Kong) Limited 45/F Two Exchange Square 8 Connaught Place Central Hong Kong
Joint Bookrunners	BNP Paribas Capital (Asia Pacific) Limited 59/F - 63/F, Two International Finance Centre 8 Finance Street Central Hong Kong Credit Suisse (Hong Kong) Limited 45/F Two Exchange Square 8 Connaught Place Central Hong Kong Merrill Lynch International 2 King Edward Street London EC1A 1HQ United Kingdom

Merrill Lynch Far East Limited
15/F Citibank Tower
3 Garden Road
Central
Hong Kong

BOCI Asia Limited
26/F, Bank of China Tower
1 Garden Road
Central
Hong Kong

Nomura International plc
Nomura House
One St Martin'-le-Grand
London EC1A 4NP
United Kingdom

Renaissance Securities (Cyprus) Limited
Arch. Makariou III
2-4, Capital Center
9th Floor
Nicosia, 1065
Republic of Cyprus

Savings Bank of the Russian Federation
19 Vavilova Street
117997 Moscow
Russia

VTB Capital plc
14 Cornhill
London EC3V 3ND
United Kingdom

Joint Lead Managers

ABN AMRO Bank N.V. (London branch)
250 Bishopsgate
London EC2M 4AA
United Kingdom

CLSA Limited
18/F, One Pacific Place
88 Queensway
Hong Kong

ING Bank N.V., London Branch
60 London Wall
London EC2M 5TQ
United Kingdom

NATIXIS
30 Avenue Pierre Mendès France
75013 Paris
France

	Société Générale 29, boulevard Haussmann 75009 Paris France
	CJSC "Investment Company "Troika Dialog" 4, Romanov Pereulok 125009 Moscow Russia
	UniCredit CAIB Securities UK Ltd. Moor House 120 London Wall London EC2Y 5ET United Kingdom
Co-Lead Managers	Liberum Capital Limited CityPoint, 10th Floor One Ropemaker Street London EC2Y 9HT United Kingdom
	Macquarie Capital Securities Limited Level 18, One International Finance Centre 1 Harbour View Street Central Hong Kong
Financial Adviser to the Company	N M Rothschild & Sons (Hong Kong) Limited 16th Floor, Alexandra House 18 Chater Road Central Hong Kong
Legal Advisers to the Company	*As to Hong Kong Law:* Sidley Austin Level 39, Two International Finance Centre 8 Finance Street Central, Hong Kong
	As to English, United States and French Law: Cleary Gottlieb Steen & Hamilton LLP City Place House 55 Basinghall Street London EC2V 5EH United Kingdom
	Cleary Gottlieb Steen & Hamilton LLP 12, rue de Tilsitt 75008 Paris France

As to Russian Law:
Egorov, Puginsky, Afanasiev & Partners
40 B.Ordynka Str., Bld. 4, suite 320
Moscow 119017
Russian Federation

As to English Law:
Ashurst LLP
Broadwalk House
5 Appold Street
London
EC2A 2HA
United Kingdom

As to French Law:
Bredin Prat
130, rue du Faubourg Saint-Honoré
75008 Paris
France

As to Jersey Law:
Ogier
Whiteley Chambers
Don Street
St Helier JE4 9WG
Jersey

As to PRC Law:
Jun He Law Offices
Shanghai Kerry Centre, 32nd Floor
1515 Nanjing Road West
Shanghai 200040
China

As to Guinea Law:
Cabinet D' Avocats "BAO & Fils"
Immeuble Alima
3e Etage
Quartier Boulbinet
Commune de Kaloum
1926 Conakry
Guinea

As to Ukraine Law:
Asters Law Firm
Leonardo Business Center
19-21 Bohdana Khmelnytskoho Street
Kyiv 01030
Ukraine

Legal Advisers to the Underwriters	*As to English, Hong Kong and United States Laws:* Linklaters 10th Floor, Alexandra House Chater Road Hong Kong *As to Russian Law:* Linklaters CIS Paveletskaya Sq. 2 bld. 2 Moscow 115054 Russian Federation *As to French Law:* Linklaters LLP 25 rue de Marignan 75008 Paris France
Joint Reporting Accountants	ZAO KPMG Member of the Chamber of Auditors of Russia Naberezhnaya Tower Complex, Block C 10 Presnenskaya Naberezhnaya Moscow, 123317 Russia KPMG Certified Public Accountants 8th Floor, Prince's Building 10 Chater Road, Central Hong Kong
Property Valuer	American Appraisal China Limited 1506 Dah Sing Financial Centre 108 Gloucester Road, Wanchai Hong Kong
Technical Advisers	Hatch Associates Limited 9th Floor, Portland House Bressenden Place London SW1E 5BH United Kingdom SRK Consulting (UK) Limited 5th Floor, Churchill House 17 Churchill Way Cardiff, CF10 2HH United Kingdom CRU Strategies Limited 31 Mount Pleasant London WC1X OAD United Kingdom

Principal place of business	Themistokli Dervi, 12 Palais D'Ivoire House P.C. 1066, Nicosia Cyprus
Registered office in Jersey	Whiteley Chambers Don Street St Helier JE4 9WG Jersey
Place of business in Hong Kong registered under Part XI of the Hong Kong Companies Ordinance	15th Floor, Entertainment Building 30 Queen's Road Central Hong Kong
Company's Website	www.rusal.com (information contained on this website does not form part of this prospectus)
Jersey Company Secretary	Ogier Corporate Services (Jersey) Limited Whiteley Chambers Don Street St Helier JE4 9WG Jersey
Hong Kong Company Secretary	Wong Po Ying, Aby *ACIS, ACS*
Authorised Representatives	Mr. Oleg Deripaska, Executive Director 64 Severnaya Street, Oktyabrsky Khutor Ust-Labinski District Krasnodar Territory Russian Federation Wong Po Ying, Aby Flat 7A, Block 26 South Horizons Apleichau Hong Kong
Audit Committee	Dr. Nigel Kenny (*Chairman)* Mr. Philip Lader Ms. Elsie Leung Mr. Alexander Popov Mr. Dmitry Razumov
Remuneration Committee	Mr. Philip Lader *(Chairman)* Dr. Nigel Kenny Mr. Barry Cheung (with effect from the Listing Date) Mr. Len Blavatnik Mr. Vladislav Soloviev

Corporate Governance and Nominations Committee	Mr. Philip Lader *(Chairman)* Dr. Nigel Kenny Mr. Barry Cheung (with effect from the Listing Date) Mr. Ivan Glasenberg Mr. Vladislav Soloviev
Jersey Principal Share Registrar and Transfer Office	Ogier Corporate Services (Jersey) Limited Whiteley Chambers Don Street St Helier JE4 9WG Jersey
Joint Reporting Accountants and Joint Auditors	ZAO KPMG Naberezhnaya Tower Complex, Block C 10 Presnenskaya Naberezhnaya Moscow, 123317 Russia KPMG 8th Floor, Prince's Building 10 Chater Road, Central Hong Kong
Hong Kong Share Registrar	Computershare Hong Kong Investor Services Limited Shops 1712-1716 17th Floor, Hopewell Centre 183 Queen's Road East Wanchai, Hong Kong
Compliance Adviser	Somerley Limited 10th Floor, The Hong Kong Club Building 3A Chater Road, Central Hong Kong
Principal Bankers	Sumitomo Mitsui Banking Corporation 99 Queen Victoria Street London EC4V 4EH United Kingdom ING Bank N.V. Bijlmerplein 888, Amsterdam The Netherlands 1102 MG BBVA 108 Cannon Street London, EC4N 6EU United Kingdom

Société Générale
SG CIB
CAFI/NAT/CIS
189, rue d'Aubervilliers
75886 Paris Cedex 18
France

Bayerische Landesbank
Brinner Strasse 18
D-80333 Munich
Germany

Calyon
Broadwalk House
5 Appold Street
London
EC2A 2DA
United Kingdom

BNP Paribas (Suisse) SA
Place de Hollande 2
CH-1211
Geneva 11
Switzerland

Unicredit Group
Arabellastrasse 14
D-81925 Munich
Germany

Bank of Tokyo Mitsubishi UFJ, Ltd.
12-15 Finsbury Circus
London, EC2M 7BT
United Kingdom

Natixis
68/76 Quai de la Rapée
75012 Paris
France

The following information relating to the aluminium markets and industry overview has been provided for background purposes only. The information has been extracted from a variety of sources released by public and private organisations. Except as otherwise stated, information appearing below under the headings "Supply and Demand", "Costs", "Expectations for the Remainder of 2009 and 2010" and "Long-term Outlook" has been taken from CRU, an independent business analysis and consultancy group focused on the mining, metals, power, cables, fertiliser and chemicals sectors, and beliefs, estimates, expectations and forecasts expressed below are those of CRU. CRU was engaged by the Group to provide an independent assessment of the aluminium and alumina market and such report has been used for the preparation of this section titled "Industry and Market Overview". The Group believes that the sources of this information are appropriate sources for such information and has taken reasonable care in extracting and reproducing such information. The Group has no reason to believe that such information is false, inaccurate or misleading or that any fact has been omitted that would render such information false, inaccurate or misleading. The information has not been independently verified by the Group, the Joint Sponsors, the Joint Bookrunners, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy.

Overview

The aluminium industry is the world's second largest metals industry, after steel. The world consumption of primary aluminium in 2008 was estimated by CRU at 37.4 million tonnes. Primary aluminium is made from alumina, which is predominantly made from bauxite. Primary aluminium is further transformed to create various semi-fabricated products — rolled sheet, coil and plate, extruded bars and sections, wire-rod, castings and forgings — before final use in manufacturing.

Aluminium has a relatively short history as an industrial metal. Its widespread use only became viable in the last decades of the nineteenth century with the discovery of the Hall-Héroult process for the electrolytic smelting of aluminium and the Bayer process for the production of alumina. Prior to these discoveries, aluminium was a semi-precious metal. The twin processes are still in use today as the main (indeed almost exclusive) processes for producing aluminium and alumina.

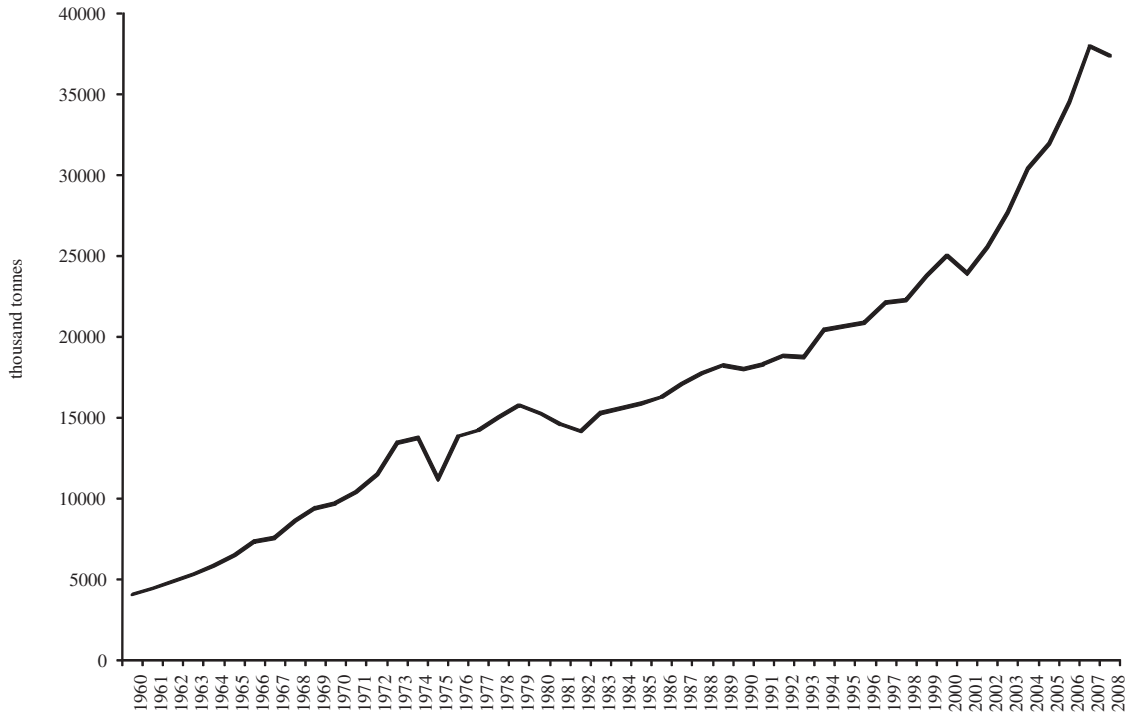
Applications of aluminium increased in number rapidly during the Second World War. Civil applications then quickly grew between 1945 and 1970, by which time the uses of aluminium were very broadly based. The main uses include transport (road vehicles, aircraft, railcars and marine uses), packaging (drink cans, aluminium foil), construction (windows, doors, cladding, facades), electrical (cable, wire), consumer durables and general engineering. The key properties of aluminium that allow this wide array of applications are its light weight, high strength to weight ratio, good electrical conductivity and machinability. Aluminium faces competition with a variety of materials, depending on the application. Its main substitutes are steel (in transport, construction, packaging and engineering), plastics (in packaging and construction) and copper (in electrical applications and heat exchangers).

Aluminium is an abundant element in nature, its main commercial ore being bauxite. Bauxite is largely found in tropical, or previously tropical, areas of the world, with the main global resources being located in Guinea, Australia, Brazil, India and Jamaica. Mining bauxite is a simple operation, and the cost of bauxite currently forms only a small proportion of the total cost of producing primary aluminium. From bauxite, aluminium is produced in a two-stage process. First, bauxite is processed in an alumina refinery to produce alumina (Al_2O_3), an oxide of aluminium. Then, alumina is processed into aluminium in an electrolytic smelter. The main costs of converting bauxite into alumina are energy (in the form of process steam and fuel for calcination), labour and caustic soda. For conversion of alumina into aluminium, the main costs are power, labour and carbon products (coke and pitch). The cost of production relative to the cost of freight tends to favour the processing of alumina close to the source of bauxite and the processing of aluminium close to a source of low-cost power.

Demand and Supply

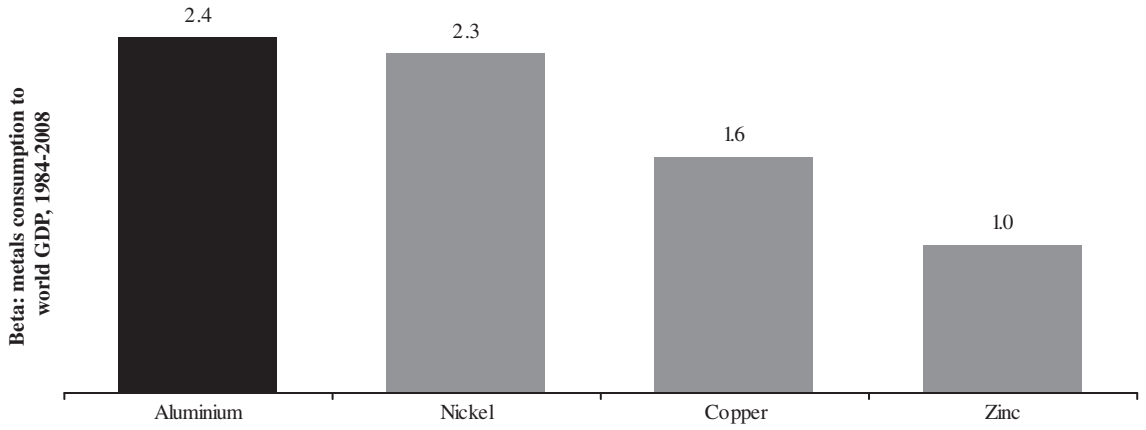
Worldwide consumption of primary aluminium grew from 4.1 million tonnes in 1960 to 37.4 million tonnes in 2008. The rate of growth of the demand for primary aluminium has varied over time. Rapid growth in the period up to 1974 (the time of the first global oil price "shock") was followed by a period of slower growth in the following two decades. In the last 10 years, consumption grew at an average annual growth rate of 5.2%, fuelled by strong demand from emerging markets, and especially from the "BRIC" countries (Brazil, Russia, India and China). Primary consumption in 2008 was down by 1.5% on the 2007 level, as the global recession began to take effect in the final three months of the year, continuing through most of the first quarter of 2009. The industry cycle reached the bottom in the first quarter of 2009, but global consumption increased by 11.1% quarter-on-quarter in the second quarter of 2009, fuelled especially by re-stocking in China especially and the impact of incentives on durable good and vehicle purchases and production. Third quarter demand is expected to be 17.5% higher than that for the first quarter and, in the second half of 2009, year-on-year consumption growth is expected at -0.2%.

The following chart shows demand for primary aluminium from 1960 to 2008:



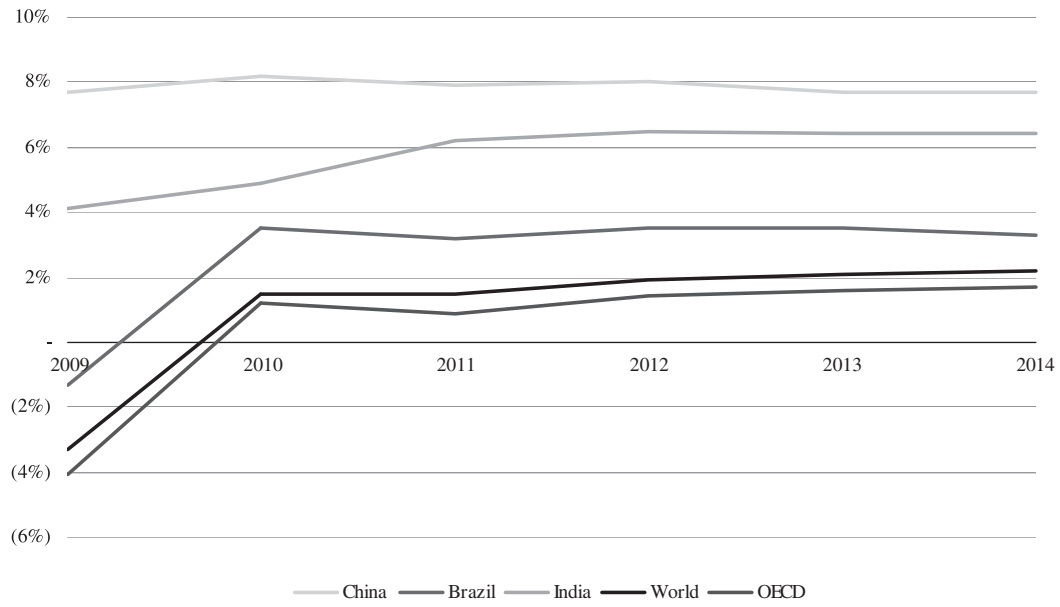
Source: CRU

Historically the demand for aluminium has grown in excess of global GDP. The chart below shows the sensitivity of metals consumption to world GDP growth for 1984 to 2008. It illustrates that aluminium was more leveraged to changes in GDP growth than nickel, copper and zinc.



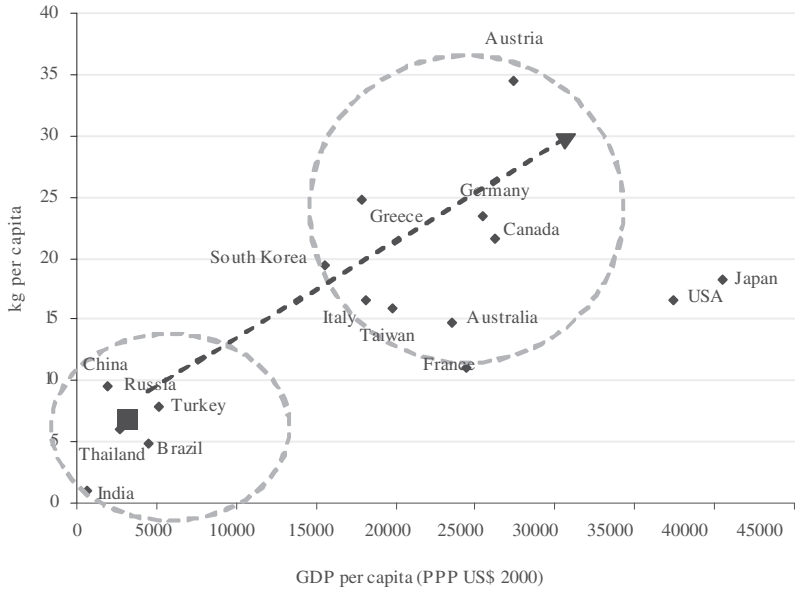
Source: CRU

The evolution of world GDP is expected to be positive, especially as the GDP per capita growth of China, India and Brazil exceeds that of developed nations. The chart below illustrates that, according to the Economist Intelligence Unit, the expected GDP growth per capita for China, Brazil and India through 2014 is substantially higher than that of OECD countries and the world.



Source: Economist Intelligence Unit, 2 December 2009

The chart below summarises the relation between per capita consumption of aluminium and GDP per capita in countries with different degrees of economic development. As illustrated in the chart below, countries with currently lower levels of GDP per capita (lower left circle) generally, on a per capita basis, consume lower levels of aluminium in comparison to countries with higher levels of GDP per capita (upper right circle). As the GDP per capita of countries in the lower left circle, such as China, India and Brazil, increases, the amount of aluminium on a per capita basis they consume are expected to increase toward the level shown by the countries in the upper right circle.



Source: CRU

Growth in aluminium consumption in 2009 has so far been concentrated in Asia, and in particular in China, which benefited from the strong performance of the automotive sector, combined with government stimulus measures which have proved to be more effective and more immediate than many programmes announced in developed countries. Car production in China grew by 90% year-on-year in August 2009, while investment in the real estate sector rose by 11.6% over the first seven months of 2009. Demand for primary aluminium in China has recovered from the low point of early 2009, and CRU expects it to reach 13.4 million tonnes for the year, an increase of 6.2% over 2008.

Excluding China, global primary aluminium consumption is expected to grow through 2009. CRU expects the demand in the fourth quarter to be 18.7% higher than demand in the first quarter. In developed markets, investor sentiment has benefited from a streak of improved economic data in some of the major countries. In the United States, there have been improvements in the housing market data for prices, new starts and sales, while the "cash for clunkers" programme has reinvigorated the automotive sector. Europe showed an improvement in economic sentiment following the announcement that France and Germany were out of recession, thanks especially to the rebound in the automotive sector. Unemployment has however still not started to decrease in the United States and Europe, creating uncertainty on the pace of the recovery.

Excluding China, there has been some evidence of improved demand in some of the Asian emerging economies during the second quarter of 2009 in particular, certainly on a quarter-on-quarter basis. In India, which is expected to become an important country for aluminium consumption, CRU expects growth in demand for primary aluminium to reach 11.8% in the second half of 2009.

In terms of the relative importance of different geographical regions in aluminium consumption, until the late 1980s consumption was dominated by North America, Western Europe, Japan and the Soviet Union. Since 1990 the main changes in global consumption have been the rapid growth of consumption in China and the rest of South East Asia, and the rapid decline and then recovery of a number of Eastern European countries' consumption. In 2008 China's consumption was estimated at 12.6 million tonnes, which comes to 33.7% of the world's primary aluminium consumption.

In terms of end uses, the largest single sector is transport, which accounted for 34% of demand in the developed world and 16% in the developing world in 2008. Construction was more prominent in the developing world, with 27% of demand, compared with 17% in the developed world. Foil stock and packaging made up 22% of demand in the developed world and 14% in the developing world. The remainder is made up of electrical applications (7% in the developed world and 17% in the developing world), consumer goods (5% in the developed world, 8% in the developing world), machinery and equipment (9% in the developed world, 10% in the developing world) and other minor uses.

The following table shows the geographic breakdown of primary aluminium demand for the years 2003-2009

						2008		2009	
	2003	2004	2005	2006	2007	H1	H2	H1	H2
	('000 tonnes)								
China	5,151	6,066	7,162	8,752	12,071	6,362	6,241	6,130	7,261
North America	6,388	7,039	7,006	7,026	6,359	3,097	2,770	2,115	2,431
Europe	7,016	7,299	7,389	7,736	8,089	3,895	3,496	2,655	2,968
Latin America	1,057	1,216	1,343	1,395	1,526	838	820	767	810
India	798	858	977	1,106	1,204	656	583	646	652
Japan	2,381	2,471	2,408	2,480	2,409	1,239	1,081	799	913
South & East Asia	2,305	2,639	2,689	2,752	2,709	1,370	1,170	1,042	1,222
Rest of World	2,633	2,850	3,006	3,255	3,615	1,921	1,882	1,628	1,757
World	27,728	30,439	31,980	34,501	37,981	19,377	18,042	15,781	18,013

Source: CRU

Until 1974, aluminium production occurred primarily in the main aluminium consuming countries of Western Europe, the United States, Japan and the current CIS. Between 1974 and 1989 the importance of these areas as sources of production declined as new smelters were built in countries with low-cost power — in Latin America, Australia, the Middle East and Canada. From 1989 to the current day these trends continued, but the Middle East and Southern Africa supplanted Australia and Latin America as fast-growing producers. The biggest change since 1989 has been the rapid growth of China as a producer. China is currently the largest single producing country in the world based on annual production. While China relies primarily on thermal coal and therefore does not benefit from low power costs, it has been able to increase its production to feed its rapidly growing domestic market due to low capital and labour costs. In 2008, China's production was estimated at 13.7 million tonnes which constitutes 34% of the world's primary aluminium production, estimated at 40.1 million tonnes. In 2008, it is estimated that China was a net exporter of 0.5 million tonnes, but in the first three quarters of 2009, it is estimated that it imported 1.35 million tonnes. This is partially explained by buyers taking advantage of an arbitrage opportunity between the LME and SHFE prices as well as stock replenishment. Going forward, China is expected to record only limited surplus or to revert to a net import position. This is due to the expected growth in demand (from 14.8 million tonnes in 2010

to 18.5 million tonnes in 2012 according to CRU) and the high cost of thermal coal which local smelters predominantly use. CRU estimated that the average power tariffs paid by Chinese aluminium smelters in 2008 were US$52 per MWh, compared to a world average of US$38 per MWh (the Group's average power tariff in 2008 was US$24 per MWh). Depleting domestic bauxite resources in China are not expected to be a constraint upon aluminium production before 2012, but in the longer term CRU expects a greater proportion of bauxite or alumina to be imported by China.

In the context of the sharp reduction in demand that took place in the last quarter of 2008 and the first quarter of 2009, aluminium and alumina producers have reacted by mothballing and idling capacity. It is estimated that by the end of June 2009, 9.2 million tonnes of existing primary aluminium capacity and 17.4 million tonnes of existing alumina refining capacity were idled. In previous down cycles where significant cutbacks occurred, a price increase generally followed in the following year. In 1974-75, 30% cutbacks were implemented at all major producers, and prices rose by 26% in 1975, whereas an organised curtailment through a memorandum of understanding in 1992-93 led to a price increase of 58% in 1994-95. However, in 1981-82, cutbacks occurred only at high cost plants, which led to increasing deliveries into LME warehouses and prices were only 5% higher as late as 1985. In this cycle, currently idled capacity stands at 8.6 million tonnes per year ("tpy") as of the fourth quarter of 2009, following restarts in China. Around 5.5 million tpy of capacity are expected to be permanently mothballed in the medium term, for reasons including the closure of low amperage cells in China, the inability to secure acceptable power tariffs and substitution by more competitive new greenfield and brownfield expansions both in China and places such as the Middle East and/or India.

The following table shows a geographic breakdown of aluminium production, capacity and capacity utilisation for the years 2003-2009:

Production	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009[1]**
				('000 tonnes)			
China	5,517	6,646	7,812	9,324	12,574	13,695	13,377
North America	5,495	5,110	5,382	5,333	5,642	5,782	4,739
Europe	4,416	4,651	4,712	4,543	4,654	4,975	3,908
Latin America	2,276	2,357	2,391	2,494	2,556	2,660	2,518
Middle East & Africa	2,756	3,196	3,503	3,781	3,843	3,829	4,197
Rest of world	7,557	7,922	8,169	8,438	8,848	9,190	8,724
World	**28,017**	**29,883**	**31,970**	**33,913**	**38,117**	**40,131**	**37,462**

Capacity	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009[2]**
				('000 tonnes)			
China	6,633	8,889	10,286	11,504	13,975	16,672	19,634
North America	6,982	6,507	6,734	6,733	6,684	6,756	6,757
Europe	4,538	4,733	4,834	4,902	4,912	5,260	5,319
Latin America	2,390	2,388	2,425	2,529	2,604	2,757	2,777
Middle East & Africa	3,078	3,525	3,852	4,050	4,196	4,378	4,795
Rest of world	7,841	8,217	8,437	8,694	9,035	9,517	9,983
World	**31,462**	**34,258**	**36,568**	**38,412**	**41,405**	**45,339**	**49,265**

Utilisation Rate	2003	2004	2005	2006	2007	2008	2009[2]
China	83%	75%	76%	81%	90%	82%	68%
North America	79%	79%	80%	79%	84%	86%	70%
Europe	97%	98%	97%	93%	95%	95%	73%
Latin America	95%	99%	99%	99%	98%	96%	91%
Middle East & Africa	90%	91%	91%	93%	92%	87%	88%
Rest of world	96%	96%	97%	97%	98%	97%	87%
World	**89%**	**87%**	**87%**	**88%**	**92%**	**89%**	**76%**

Source: CRU

Notes:

1 Production data for 2009 is based on reported data through to the third quarter of 2009 and on CRU estimates thereafter.

2. Capacity and utilisation rate data for 2009 is based on CRU estimates, in particular for the second half of the year.

Costs

CRU estimates that the average Aluminium Business Costs (as defined in "Presentation of Certain Cost Information") for all aluminium smelters rose by 14% from the 2007 levels to reach US$2,072 per tonne in 2008. However, the average Aluminium Business Costs conceal a large variation in costs between different smelters, from a minimum of US$1,316 per tonne to a maximum of US$2,911 per tonne in 2008.

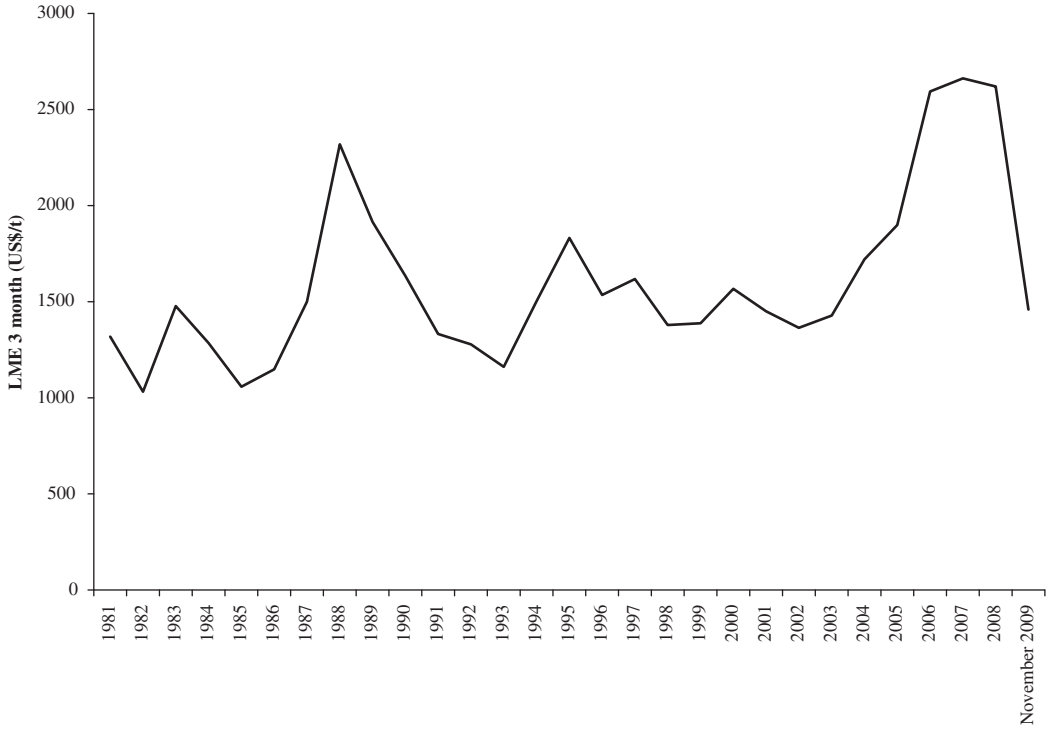
The industry cost structure is expected to fall sharply in 2009 as high cost producers leave the market and the cost of key inputs falls, notably alumina (which is mainly bought on long term contracts linked to primary aluminium prices) and power (which is metal-linked in some contracts). For the first half of 2009, the average Aluminium Business Cost was estimated at US$1,413 per tonne. However, CRU believes the sharp drop in industry operating costs observed in 2009 is a temporary correction and expects average industry operating costs to rise over the coming years, with the expected increase in energy costs an important factor. In 2008, alumina accounted for 38.6% of average Aluminium Business Costs at aluminium smelters, power for 26.8% and carbon materials 12.4%. In comparison, in 2008, alumina accounted for 37.4% of average Aluminium Business Costs at UC RUSAL aluminium smelters, power for 19.3% and carbon materials 15.9%. The largest source of variation between smelters is in their power costs. In that context, producers relying on structurally low cost hydropower electricity, such as UC RUSAL, should improve their competitive positioning on that basis compared to other producers.

According to CRU, the Long Run Marginal Cost ("LRMC") of aluminium, which is the cost of greenfield smelter construction and operation including a reasonable economic return, was US$1,990 per tonne in 2009. CRU determined the LRMC estimate as the average full economic costs of five regions or countries that are attractive for smelter investment. These regions/countries are China, India, Middle East & North Africa, Russia and Southeast Asia. However, greenfield investments are not restricted to these regions, with Greenland, Africa and South America also being candidates for new greenfield investment. Canada and the Middle East remain attractive regions for brownfield investments through expansion to existing hydro and gas powered smelters respectively.

Prices

An important aspect of aluminium prices is cyclical behaviour. The global aluminium prices are subject to potentially pronounced price cycles.

The following chart shows aluminium 3-month LME prices from 1981 to 30 November 2009.



Source: CRU

During the early and mid-1980s, aluminium prices were highly volatile; reaching a low of US$1,032 per tonne in 1982, immediately followed by a high of US$1,477 per tonne in 1983. This volatility was a result of large swings in demand during the entry into and exit out of the recession of the early 1980s. To illustrate, the aluminium price decreased by 2.6% during 1982 and such decrease was followed by an increase of 8.3% in 1983. To a certain extent, production costs, specifically energy, were also affected by the fallout from the second oil crisis in 1979.

The late 1980s saw the beginning of a period of economic prosperity. Borrowing rates in the US had increased dramatically, raising interest rates, which in turn increased the value of the dollar relative to other currencies and caused costs at producers outside of the USA to escalate. Concurrently, a resurgence in demand for aluminium increased pressure on a supply base that was suffering from a lack of investment in new aluminium capacity, leading to a market deficit of 2.7 million tonnes, 16% of the total market, by 1988 and a price of US$2,319 per tonne; more than double the 1985 price of US$1,058 per tonne.

As the 1990s began, recessionary conditions constrained primary aluminium demand growth. As this recession was nearing its trough in 1991 the Soviet Union collapsed; causing an increase in aluminium exports from former Soviet producers with little or no domestic market to sell to (domestic consumption dropped by 33.4% between 1991 and 1993). These factors combined to suppress demand growth to just 3.0% between 1989 and 1993. Prices responded to the market imbalances by dropping from US$1,634 per tonne in 1990 to US$1,161 per tonne by 1993.

A short-term recovery was seen in 1994 and 1995, a result of a production decrease of 3.1% from 1993 to 1994, and subsequent inventory drawdown as demand grew by 9.0% over the same period. The peak price of US$1,832 per tonne in 1995 was a result of speculative investment from funds, supported by agreements to limit shipments of ex-Soviet aluminium to the West. End-users increased inventories to protect against further price rises, thereby adding further price support.

In 1996, destocking of the inventories built up over the previous two years caused prices to drop again; falling from US$1,832 per tonne in 1995 to $1,535 per tonne by 1996. A minor recovery was seen in 1997, to US$1,618 per tonne; however, this was immediately followed by the Asian financial crisis, which caused a sharp drop in Asian purchasing and had a knock-on effect elsewhere, reducing prices to US$1,379 per tonne by 1998. By 1998 the bottom of the mini-cycle had been reached and prices firmed, led by increased consumer demand from Asia and elsewhere, totalling a 12.1% demand increase by 2000. This rise continued until 2001 when the end of the dot com boom caused a small US-led recession; and demand decreased by 4.5%.

During the period from 1981 to 2004, the nominal 3-month LME prices averaged US$1,468 per tonne. However, annual average prices varied from a low of US$1,032 per tonne in 1982 to a high of US$2,319 per tonne in 1988. In the 1990s, the cycle was less marked, but prices varied from a low of US$1,161 per tonne in 1993 to a high of US$1,832 per tonne in 1995. Between 1996 and 2004, annual average prices remained within a relatively narrow band (by historical standards) of US$1,364 to US$1,721 per tonne. The years ended 31 December 2005, 2006 and 2007 have seen the most substantial increase in aluminium prices since the late 1980s, with an annual average price for the year ending on 31 December 2007 of US$2,662 per tonne. The beginning of the last major price rise was in 2003, driven by the emergence of China as a major consumer of aluminium. Chinese demand increased by 160% between 2003 and 2008. Intensive growth of LME prices continued in the first half of 2008 with 3-month LME prices reaching the highest point in July (US$3,122 per tonne). In terms of real prices, that was still below the peaks of 1980 and 1988, when real prices exceeded US$3,500 per tonne. Despite the extraordinary growth in the first half of the year, the LME 3-month price annual average in 2008 was slightly lower than in 2007: US$2,621 per tonne. The global financial and economic crisis resulted in aluminium prices falling continuously until the end of 2008 and through the first quarter of 2009, when the 3-month LME price averaged US$1,396 per tonne. Since then, aluminium prices have recovered strongly and the 3-month LME price averaged US$1,965 per tonne in August 2009, before easing back to US$1,867 per tonne in September 2009.

Expectations for the Remainder of 2009 and 2010-2012

CRU believes that the first quarter of 2009 marked the bottom of the industry cycle, in terms of demand for primary aluminium and prices. Since then, both measures have improved sharply: in the third quarter of 2009 demand is expected to be 17.5% higher than the first quarter and LME 3-month prices in the third quarter of 2009 averaged 31.5%, or US$440 per tonne more than in the first quarter of 2009.

Several factors are expected to impact the sector for the remainder of 2009 and 2010 and the aluminium prices during the period:

- Demand. In 2010, CRU expects primary aluminium consumption growth of around 9% after a 9.7% fall in 2009. About 45% of the global growth in demand is expected to be attributable to China, corresponding to a growth rate in the region of 10%. Similarly, all other geographical areas are expected to record strong growth levels: 8% in North America and around 5% in Western Europe, as confidence returns in the mature markets and around 10% in India and Southeast Asia. Demand in South America is expected to grow by around 8% in 2010.

- Supply. It is still unknown whether there will be new smelter capacity coming onstream or being restarted in 2010, but CRU expects total production to grow less than demand, thereby reducing the surplus in the market. Factors affecting the variations in available supply include (i) the possible restart of some of the mothballed facilities and the level of facilities expected to be permanently mothballed (the latter estimated by CRU at 2.9 million tpy in 2010), (ii) the ramp-up of greenfield and brownfield projects, especially in the Middle-East and in India and (iii) possible production cuts from high cost operations, especially as a result of higher energy prices.

- Trading. Another key driver would be the impact of positive investor sentiment from funds and the impact of traders locking-in metal prices in financing deals, thereby mitigating high LME stock levels.

  - The economic downturn resulted in a considerable accumulation of inventory, as the industry closures and cutbacks were insufficient to balance the abrupt drop in primary demand. Total reported stocks, comprising LME and Nymex stocks, producer stocks reported to the IAI and stocks in Japanese ports totalled 6.0 million tonnes at the end of the third quarter of 2009. CRU estimates that there were 3.4 million tonnes of unreported stocks at the same time, bringing total world stocks to 9.4 million tonnes, the equivalent of 99 days of consumption, compared with 71 days of consumption at the end of 2008 and 35 days of consumption at the end of 2007.

  - CRU expects the level of reported stocks to increase slightly in 2010-11 and to peak at 6.9 million tonnes in 2012. As the first wave of new supply from greenfield smelters is absorbed by rising demand, stocks are expected to start to fall back; CRU expects 6.5 million tonnes in reported stocks at the end of 2014, and steeper reductions in unreported stocks.

  - While inventories will put some downward pressure on the LME aluminium price over the next two years, CRU believes that the impact should be mitigated considerably by the volumes tied up in stock financing deals. Stock financing has been profitable for most of 2009 because of the shape of the LME forward curve, low interest rates and the discounts on warehouse rents. An unreported (but estimated by CRU to be significant) proportion of the 4.6 million tonnes in LME warehouses at the end of November 2009 is involved in such transactions, meaning that the balance available immediately to the aluminium industry is much less than the full volume of current stock. This has been evident in the fourth quarter of 2009: despite record inventories, the 3-month LME price increased from US$1,914 per tonne in October to US$1,982 per tonne in November, and reached US$2,164 per tonne on 7 December 2009. Spot metal premiums, which reflect the availability of physical material, are estimated by CRU at US$135 per tonne in Japan at mid-December 2009, compared to an annual average of US$69 per tonne in 2007 and US$80 per tonne in 2008.

  - In the medium term, there are also changing patterns of supply and demand which CRU believes imply a requirement for higher stock levels: a large proportion of aluminium consumption in China and other emerging economies, where distribution networks and supply chain processes are not yet fully optimised; and European and North American smelter closures, meaning that metal consumers need to import material from other regions, the distance between supplier and consumer is greater and therefore more stocks are required near the consumer to compensate for the longer supply chain.

Competing Producers

With 11.3 million tonnes of alumina production in 2008 (on an attributable basis), the Company had a 13% share of global production of alumina according to CRU estimates.

With 4.4 million tonnes of primary aluminium production in 2008 (on an attributable basis), CRU estimates that the Company had a 11% share of global production of aluminium.

The Group's principal competitors are other major international aluminium producers, including Alcoa, Rio Tinto Alcan, Chalco, Norsk Hydro, Hindalco and BHP Billiton. Rankings of alumina and aluminium production for 2008 by major company are shown below. These are on the basis of equity share, rather than by control[1]. On this basis, in 2008 UC RUSAL is estimated to have been the largest producer of both aluminium and alumina. The Company is moderately long in alumina.

CRU estimates of alumina production by equity share, 2008 (million tonnes)

	Production	Rank	Share of total production
UC RUSAL	11.3	1	13%
Chalco	10.3	2	12%
Alcoa	9.5	3	11%
Rio Tinto Alcan	7.6	4	9%
Alumina Ltd	5.8	5	7%
BHP Billiton	4.5	6	5%
Vale	2.9	7	3%
Weiqiao	2.5	8	3%
Chiping Xinfa	2.5	9	3%
Hydro Aluminium	2.3	10	3%

Source: CRU

CRU estimates of primary aluminium production, by equity share, 2008 (million tonnes)

	Production	Rank	Share of total production
UC RUSAL	4.42	1	12%
Rio Tinto Alcan	4.06	2	10%
Alcoa	3.99	3	10%
Chalco	2.64	4	7%
Hydro	1.68	5	4%
BHP Billiton	1.24	6	3%
Dubal	0.90	7	2%
Aluminium Bahrain	0.87	8	2%
Century	0.80	9	2%
China Power Inv. Corp.	0.75	10	2%

Source: CRU

Primary aluminium and alumina are both "commodity" products, being largely homogenous and readily tradable. In the case of primary aluminium, producers receive the same benchmark price (determined on the London Metals Exchange, and in the case of China, the Shanghai Futures Exchange), subject to premiums for location and precise purity, alloy and shape. Alumina is not traded on an exchange, but the market for spot or formula-based contracts is reasonably transparent and is well-reported by industry analysts.

(1) AWAC (estimated 2008 production of 14.4 million tonnes of alumina) is a 60:40 joint venture between Alcoa and Alumina Ltd, although CRU reports that Alcoa is usually regarded as having 100% control over the business.

In a commodity industry, competition is principally on the basis of costs. The premiums available for service or quality (assuming a minimum acceptable level) are modest in comparison. The main source of competitive advantage in primary aluminium is sustainably low cost electricity. The main sources of competitive advantage in alumina are access to bauxite with a low delivered cost, and low cost energy.

Major barriers to entry into the aluminium business include the substantial capital expenditures and time required to construct aluminium smelters and alumina refineries (including the time for feasibility analysis and financing). A second major barrier is the need to secure access to sustainably low-cost energy supplies and raw materials.

The Group's low electricity, labour and other costs resulted in Aluminium Business Costs of US$1,832 per tonne in 2008, compared with an industry average of US$2,072 per tonne, according to CRU. This ranked the Group in the second quartile of the aluminium industry cost curve, according to CRU. At the same time, smelters representing approximately 65% of the Group's output (primarily the Group's major Siberian smelters) were in the first quartile on the industry cost curve in 2008, according to CRU, with small-scale smelters dispersed along the cost curve.

As for all aluminium producers, electricity is a significant part of the Group's cash costs of production. The Group's aluminium smelters benefit from access to low-cost and clean electricity. In 2008, approximately 80% of the Group's aluminium was produced by its Siberian smelters, which rely on low-cost hydro generation as their principal source of electricity. In 2008, the production-weighted average price paid by the Group's smelters for electricity was US$0.0192/kWh in Siberia, US$0.0355/kWh in the Urals region and US$0.0473/kWh in the European region of Russia (excluding the Urals region), as compared to a weighted average price of US$0.0376/kWh paid by the world's aluminium producers, according to CRU.

Longer-term Outlook

There are a number of structural developments that are expected to shape the aluminium industry in the longer term, and can be considered as longer term opportunities to an incumbent producer.

Availability of low-cost energy

A step increase in future power costs and/or carbon taxes is a possibility. Smelters and refineries face competition for power sources and/or environmental regulation, including carbon emissions abatement policies. Since the start of the EU Greenhouse Gas Emission Trading Scheme in 2005, other countries have discussed the implementation of similar schemes. The impact of a wider roll-out in carbon emissions regulation will be to increase the cost base in certain countries. How much of a structural upward shift it causes will depend on the extent to which it is applied to the likely regions for new smelting capacity, such as the Middle East, North Africa and Russia. However, even if these regions avoid carbon taxes or limits, there is expected to be an increased demand for new capacity to replace capacity that becomes uneconomic in locations such as Europe, benefiting companies with access to growth opportunities in locations with sustainable low cost energy in stranded markets.

Opportunities to exploit energy resources in some regions may not be as abundant as in the recent past. For example, policy in the Middle East has been to invest in energy-intensive industries and in due course, to invest downstream in semis production in order to create regional clusters of manufacturing strength. Beyond a five-year horizon, it is unclear whether the main gas producing countries of Qatar, Iran and Abu Dhabi will continue to invest in aluminium smelters to diversify their industrial base. The alternatives include selling LNG at what are likely to be higher prices, or investing in other energy-intensive metals and chemicals.

Continued strong rates of industrialisation and urbanisation may place further strain on China's energy resources, creating import opportunities for non-Chinese suppliers. Higher energy prices would affect domestic smelters directly (through power costs) and indirectly (through the cost of raw materials such as domestically produced alumina and carbon materials, as well as freight costs), making them less competitive against imports. Moreover the government is likely to resume its policy of containing aluminium industry development during the long term.

Demand

Growth in China has dominated the industry over the past decade, and the country still offers enormous potential for further aluminium demand growth. Other countries, and especially India, also offer a particularly strong growth potential. India constitutes a major opportunity for the aluminium industry, fuelled by an increasing number of inhabitants expected to live in urban conditions (rising from a current 286 million to 575 million by 2030, according to the UN Development Programme).

Higher energy prices and more stringent regulation on carbon emissions also encourage light-weighting in the automotive sector, which may present attractive opportunities for substitution from steel to aluminium. The substitution trend is already well-established: according to the Aluminum Association, the average aluminium content of vehicles in North America in 2009 is estimated at 148 kilograms ("kg"), up 20% compared to the average content of 123 kg in 2002. Average aluminium content has increased by 25% in the EU over the same period.

However, structurally high energy prices can pose some downside risks. If energy prices increase so much as to result in "demand destruction" in the wider economy, that will affect long term growth rates for aluminium consumption. Some input prices (for example carbon products and raw material freight) are highly exposed to energy prices.

More generally, advances in competing materials to aluminium, such as plastics and composites, could result in greater substitution away from aluminium than forecast in the long term: for example, if technological advances permitted the widespread use of composites in the automotive and aerospace industries.

Bauxite resources

A lack of available bauxite to Chinese refineries could act as the most severe constraint on the Chinese alumina sector. There is huge uncertainty surrounding the long-term sustainability of bauxite supplies from Indonesia, including the possibility that the Indonesian government may stop bauxite exports in order to foster a domestic aluminium industry. Similarly, there are concerns about the longevity of domestic bauxite supplies. Unless major new Chinese resources are discovered, the availability and cost of bauxite will increasingly present a hurdle to entry for new participants and restrict the potential opportunities for expansions at existing operations. This is likely to exert upward structural pressure on the long run price of alumina and therefore aluminium.

Beyond China, a general decline in bauxite grades is also a possibility. As existing operations reach the end of their mine life, they are generally being replaced by deposits that previously had been considered unattractive to mine owing to higher costs. This is due to the fact that they contain lower grade material and/or are located in less accessible regions.

Technology

In smelting, continual improvements to increase the amperage of cells will improve metal output productivity and reduce operating costs. It is believed that the introduction of inert anode technology could reduce the long run marginal cost by as much as 10-30%. However, there are still many material, operational, design, fabrication, metal purity, energy savings, and productivity issues that need to be fully resolved before inert anodes can reach full commercialisation.

A potential downside risk to long term primary aluminium prices arises if Chinese producers increase the export of their technology to countries that would provide them with access to cheaper power, for example Indonesia, Iran, Saudi Arabia and parts of Africa. The combination of low cost energy and low cost Chinese technology and construction techniques could reduce the long run marginal cost for primary aluminium.

REPORTS COMMISSIONED FROM CRU

The Company commissioned CRU, an independent business analysis and consultancy group focused on the mining, metals, power, cables, fertiliser and chemicals sectors to provide an independent assessment of the aluminium and alumina market and such report has been used for the preparation of this section titled "Industry and Market Overview".

The parameters and assumptions of CRU's reports reflect its understanding of the prevailing international aluminium markets at the time of preparation of the reports. The historical market data are generated through the analysis of relevant data such as production, trade and consumption that are prepared by various governmental and industry associations such as the Aluminum Association (which serves the United States and Canada) and the European Aluminum Association. For some countries, published data may not be available or up-to-date, in which case it is necessary to make estimates based on regular contact (e.g., via telephone interviews and in-person meetings) with industry participants such as producers, consumers and traders, as well as secondary sources such as conference presentations and news articles. Market forecasts are driven by CRU's own in-depth, macro-economic platforms that present CRU's view of the key demand drivers such as gross domestic product and industrial production on a country-by-country and key sector basis. CRU then seeks views from its industry contacts on factors such as intensity of use in key end-use sectors and inventory changes, and combines these with its macro-economic outlook and long experience of the shape of cycles in the industry to come up with a forecast. The terms of engagement in respect of the report prepared by CRU are primarily standard terms including consulting fees, payment method, timing of completion of the report and confidentiality terms. The consulting fees, amounting in the aggregate to not more than US$98 thousand, were paid by the Company. Such fees were determined under normal commercial terms after arms' length negotiations.

History and Development

UC RUSAL traces its history to the early 1990s when Mr. Deripaska, the Company's CEO and the beneficial owner of En+, a Controlling Shareholder of the Company, started his business as a commodities agent and broker at the Moscow Trade Stock Exchange (Moskovskaya Tovarnaya Birzha (MTB)) and then at the Russian Commodities and Raw Materials Exchange (Rossiyskaya Tovarno-Syryevaya Birzha (RTSB)), dealing in a wide range of commodities, including aluminium. His work included trading with major Russian aluminium smelters.

Between 1991 and 1994, companies set up by Mr. Deripaska started investing trading profits in the then substantially undervalued shares of Sayanogorsk aluminum smelter ("SAZ"), one of the newest and most modern aluminium plants built in Soviet times (1980-1985) with an annual capacity of around 220,000 tonnes per year. SAZ was privatized in 1992 and its shares were sold to potential investors through tenders and auctions. A secondary market in SAZ shares also began to develop. At this time a group called Transworld Group ("TWG") was a significant player in the aluminum business in Russia. In the summer of 1994, TWG also started buying shares of SAZ, and by the fall of 1994 both the companies controlled by Mr. Deripaska and TWG had enough shares to elect Mr. Deripaska as the General Director of SAZ. In addition, TWG and the companies controlled by Mr. Deripaska began extensive trading operations with SAZ through a 50/50 joint venture. While the joint venture came to an end in early 1998, the companies controlled by Mr. Deripaska increased their shareholdings in SAZ to a controlling stake through additional acquisitions of shares.

Since then, gradual strategic acquisitions and growth projects have led to the creation of the world's largest aluminium producer, based on production in 2008, and one of the largest alumina producers, based on production in 2008:

- In 1997, as part of a general restructuring of the companies controlled by Mr. Deripaska, Sibirsky Aluminium was established to manage aluminium and alumina assets acquired by companies related to Mr. Deripaska. By 2000, Sibirsky Aluminium managed, among other aluminium-related assets, majority interests in the Sayanogorsk aluminium smelter, the Sayana foil mill and a fabricating plant in Samara, Russia, and a minority interest in the Nikolaev alumina refinery in Ukraine.

- In 2000, Sibirsky Aluminium and Millhouse Capital agreed to manage jointly the aluminium and alumina assets they controlled. At that time, Millhouse Capital managed majority interests in the Bratsk aluminium smelter, the Krasnoyarsk aluminium smelter and the Achinsk alumina refinery in Russia.

- By 2002, Sibirsky Aluminium and Millhouse Capital were managing controlling stakes in the Armenal foil mill in Armenia and the Belaya Kalitva metallurgical plant and Novokuznetsk aluminium smelter in Russia, and also took under management the Friguia bauxite and alumina complex and Bauxite of Kindia Company in Guinea.

- In 2003, companies related to Mr. Deripaska increased their stake in those companies under common management to 75% by acquiring half of the interest managed by Millhouse Capital. Later in that year, those companies under common management were restructured under a British Virgin Islands holding company, Rusal Holding Limited (referred to as RUSAL in this prospectus), which was subsequently renamed Rusal Limited and redomiciled in Jersey. In Ukraine, RUSAL increased its share in the Nikolaev alumina refinery to 98%.

- In 2004, the consolidation of RUSAL's ownership by companies related to Mr. Deripaska was completed with the acquisition of the remaining 25% equity interest in RUSAL managed by Millhouse Capital. At this time, RUSAL made the strategic decision to focus on the upstream business and began disposing of its downstream assets, including the sale of its fabricating division to Alcoa Inc. in January 2005. This divestiture process was largely completed in 2006 with the distribution of certain aluminium construction plants and other non-core assets to companies controlled by RUSAL's beneficial owner.

- From 2004 to 2006, RUSAL acquired several strategically important assets. In 2004, RUSAL acquired a 90% interest in the Boxitogorsk alumina refinery in Russia and increased its holding in the Nikolaev alumina refinery to 100%. In 2005, RUSAL bought a 50% stake in the Komi alumina project from SUAL and became its partner in the project, which involved the construction of an integrated bauxite and alumina complex in Russia's Komi Republic. In the same year, RUSAL completed the acquisition of a 20% equity interest in one of the world's largest alumina refineries in terms of production capacity, Queensland Alumina Limited, located in Queensland, Australia. RUSAL's joint venture partner in Queensland Alumina Limited is Rio Tinto.

- In 2005, RUSAL purchased assets of a cathode plant in Lingshi County of Shanxi Province, China. In 2006, RUSAL acquired assets of the Aroaima Mining Company in Guyana, acquired the remaining equity interest in the Friguia bauxite and alumina complex in Guinea, completed an extensive retrofit of the Armenal foil mill and commissioned the Khakas aluminium smelter in Russia — one of the most advanced aluminium production facilities in the world. RUSAL also acquired a 56.16% equity interest in the Italian alumina refinery, Eurallumina. In May 2006, RUSAL and RusHydro signed a co-operation agreement for the construction of the Boguchanskaya hydropower plant (HPP) and the Boguchansky aluminium smelter. RUSAL increased ownership in the Bratsk, Krasnoyarsk, Sayanogorsk and Novokuznetsk aluminium smelters to 100% through buyouts of the residual minority interests in November 2006, 100% ownership of the Achinsk and Boksitogorsk alumina refineries and the Russian National Aluminium and Magnesium Institute ("VAMI") through squeeze-out of the residual minority interests in November 2006 and a 100% ownership interest of Sayanal through squeeze-out of the minority interest in June 2007.

- In December 2006, RUSAL acquired through a privatisation process a 77.5% equity interest in the Aluminium Smelter Company of Nigeria (ALSCON). The Group acquired a further 7.5% equity interest in ALSCON from MAN Ferrostaal AG in January 2008.

- In late March 2007, RUSAL completed the acquisition of SUAL and the Glencore Businesses and the three businesses were all combined under UC RUSAL. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — The Acquisition of SUAL and the Glencore Businesses". This acquisition expanded RUSAL's asset base to include the Irkutsk, Urals, Kandalaksha, Bogoslovsk, Nadvoitsy, Pikalyovo, Volgograd and Volkhov aluminium smelters in Russia, the Zaporozhye aluminium complex in Ukraine, the Pikalyovo alumina refinery in Russia, the North Urals bauxite mines in Russia and the Urals foil mill in Russia, all part of SUAL; and the Aughinish refinery in Ireland, a 93% equity interest in the Windalco refineries and bauxite mines and a 65% equity interest in the Alpart refinery and bauxite mine, all in Jamaica, and the remaining 43.84% equity interest in the Eurallumina alumina refinery in Italy, as well as the Kubikenborg aluminium smelter in Sweden, all comprising the Glencore Businesses. This transaction completed the fifteen-year process of consolidating the Russian aluminium industry, and created the world's largest aluminium producer (based on production in 2008).

- In November 2007, the Group signed a cooperation agreement with Samruk-Energo, a subsidiary of Samruk-Kazyna, on the creation of a 50/50 joint venture in respect of the operation of the LLP Bogatyr Komir, the largest coal mining company in Kazakhstan, with an annual production of approximately 40 million tonnes of coal.

- In April 2008, the Group completed the acquisition from Onexim of a 25% plus one share equity interest in Norilsk Nickel, the world's largest nickel and palladium producer (based on production in 2008, according to CRU). The acquisition allowed the Group to diversify its asset base. The consideration for the shares in Norilsk Nickel was partially paid in cash and partially in shares. As a result, Onexim acquired a 14% equity interest in the Company. See "Substantial Shareholders". Following the acquisition of the equity interest in Norilsk Nickel, the Company is entitled to representation by four out of a total of 13 directors on the board of directors of Norilsk Nickel. The Company does not, however, have operational or management control over Norilsk Nickel. In addition, the Group nominates the First

Deputy General Director responsible for the operational matters of Norilsk Nickel. See also "Risk Factors — Risks related to the Group and its Business — The Group does not have operational or management control over Norilsk Nickel and other material joint ventures". For information relating to Norilsk Nickel, see "Business — Norilsk Nickel and Material Joint Ventures". In April 2008, the Company also acquired assets of another cathode plant in Taigu County of Shanxi Province, China, which have been integrated into the existing cathode plant in Lingshi County of Shanxi Province, China.

The Group has historically adopted the policy of fully integrating assets it acquires and controls under centralised operational and management control. The Group has achieved increased production and efficiency in most of its acquired facilities through so-called production "creep" (improvements achieved through targeted improvements to key processes), as well as by undertaking key modernisation and expansion projects. The Directors believe that this history of acquisitions and expansion in Russia and other challenging markets and its cost cutting initiatives developed in response to the recent aluminium and financial market collapse uniquely position the Group to recover strongly from the crisis and strengthen its position.

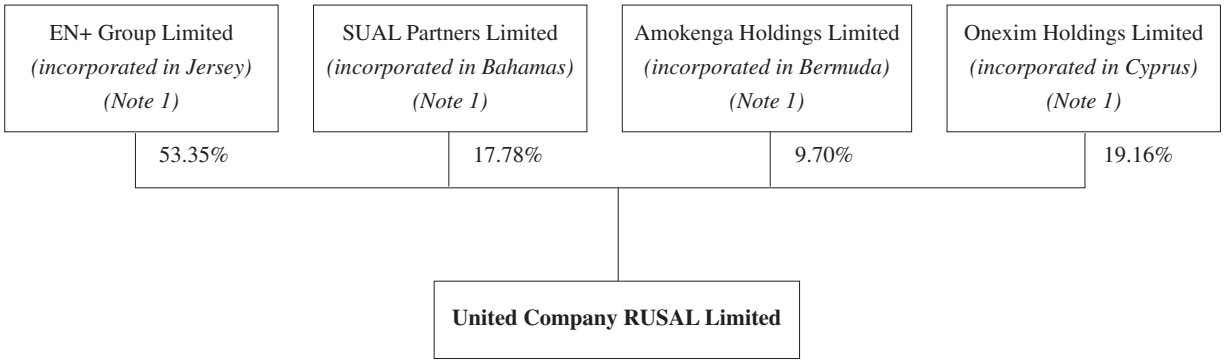
The consolidation of the Group's assets involved a number of hostile transactions. Civil actions were brought in various jurisdictions by individuals and legal entities in relation to the acquisitions of interests in certain Russian assets, including the Sayanogorsk, Krasnoyarsk and Novokuznetsk aluminium smelters, and contracts to which such assets and smelters were parties, including with respect to the repudiation of such contracts. The claims included allegations, in some instances, of improper manipulation of the Russian court system, fraud, corruption and violence. In each case, the proceedings have been terminated, either by final judgment/award or settlement agreement and release. In no such case did any such final judgment/award or settlement agreement hold, conclude or otherwise acknowledge that any of such allegations had been proven or were true. Moreover, no criminal charges have been brought against any UC RUSAL or Group directors, officers, employees, shareholders or individual beneficial owners in connection with any of these matters. In addition, there is ongoing litigation relating to acquisitions through privatisations in Ukraine (see "Business — Litigation — ZAlK"), the Republic of Guinea (see "Business — Litigation — Republic of Guinea") and Nigeria (see "Business — Litigation — BFIG"). For a description of a commercial dispute brought by Mr. Cherney against Mr. Deripaska relating to an alleged contract said to have been made around the time of the combination of the aluminium businesses managed by Sibirsky Aluminium (in which businesses Mr. Cherney claims to have held an ownership interest) and those of Millhouse Capital, see "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares". Mr. Cherney's claims regarding the early history of the Group and the nature of his ownership interest in the aluminium businesses managed by Sibirsky Aluminium are set out in the extracts from the 3 July 2008 decision on the jurisdiction of English courts over this matter included in Appendix X to this prospectus. Save as disclosed in this prospectus, during the three years ended 31 December 2008, the six months ended 30 June 2009 and the period from 1 July 2009 to the date of this prospectus, there were no proceedings brought against the Group or settled by the Group relating to or involving allegations of fraud, corruption or perversion of justice.

Shareholding and Corporate Structure

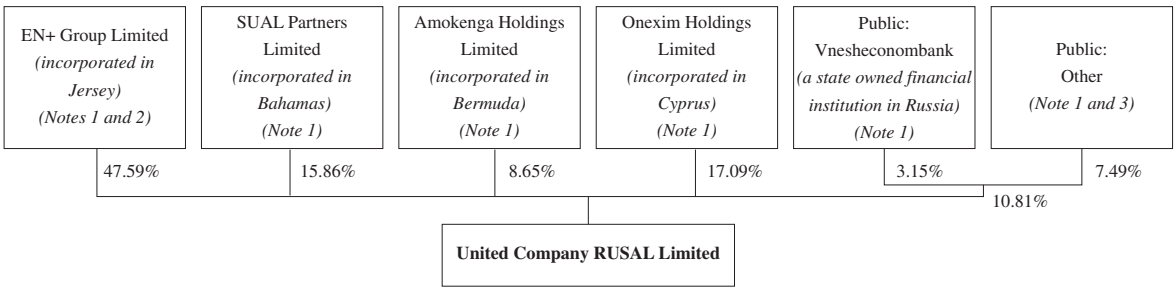
The Group operates and/or owns 16 aluminium smelters located in Russia, Ukraine, Sweden and Nigeria. Three of the Group's smelters each produce over 500 thousand tonnes of primary aluminium per annum. Two of these, the Bratsk aluminium smelter and the Krasnoyarsk aluminium smelter in Siberia, are the largest aluminium smelters in the world, based on production, and each produces close to one million tonnes of primary aluminium per annum. The Group operates and/or owns 13 alumina refineries, located in Russia, Ireland, Jamaica, Ukraine, Italy and Guinea, with an additional joint venture project in Australia, eight bauxite mining complexes, located in Russia, Jamaica, Guinea and Guyana, one nepheline syenite mine in Russia, one fluorite mine in Russia, two coal mines in Kazakhstan and two quartzite mines in Russia and Ukraine. In addition, the Group also operates and/or owns three powder metallurgy plants in Russia, three silicon smelters in Russia and Ukraine, three secondary aluminium plants in Russia, three aluminium foil mills in Armenia and Russia, two cryolite plants in Russia and one cathode plant in China.

Shareholding structure

The following chart illustrates the Group's shareholding structure as of the date of this prospectus:



The following chart sets out the shareholding structure of the Group immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised.



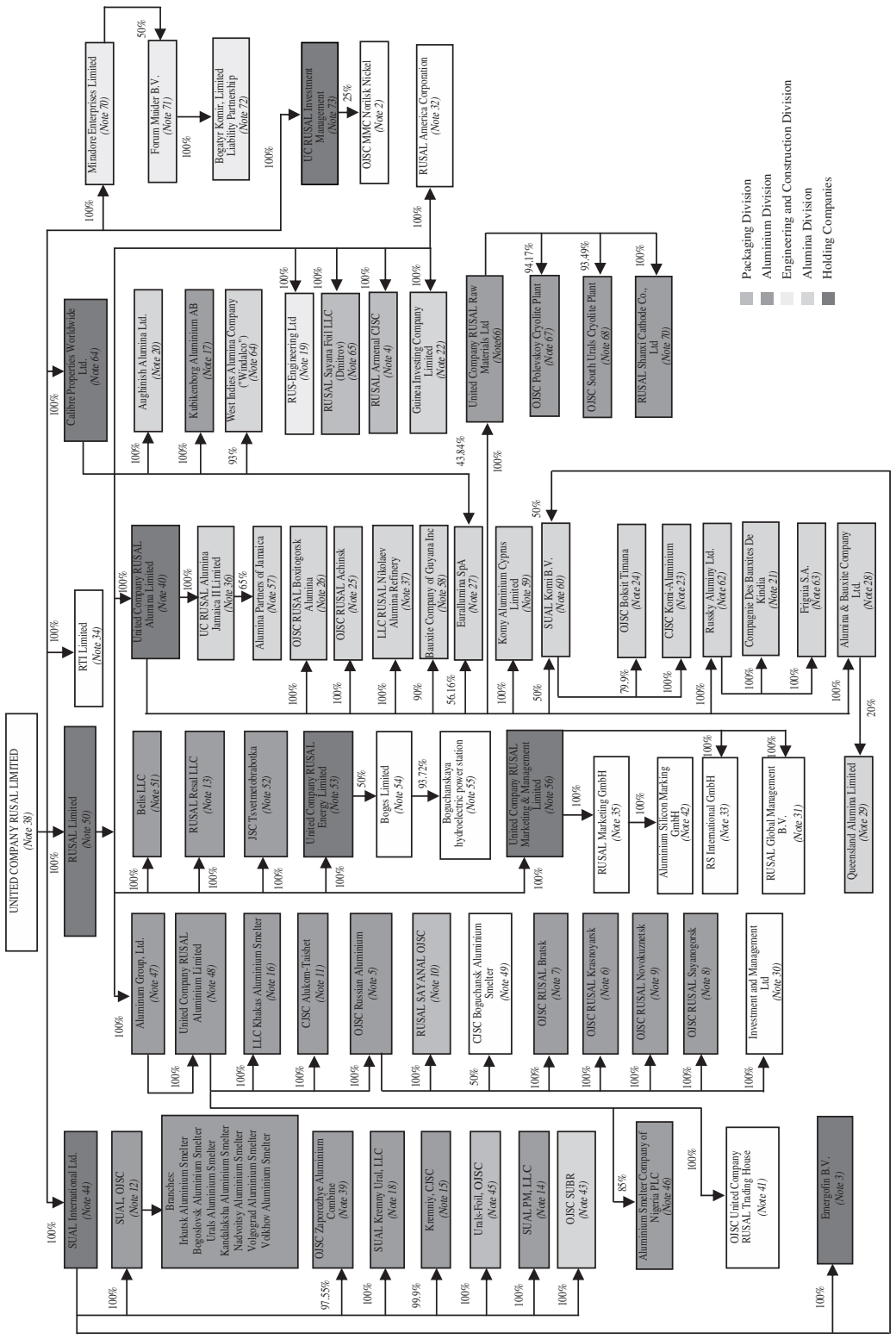
Notes:

1) Please refer to the "History and Business Development" section for changes in the shareholding structure of United Company RUSAL Limited since 26 October 2006, when it was incorporated. For details of the existing substantial shareholders, please refer to the section headed "Substantial Shareholders". The shareholding percentages shown here are with the underlying assumptions that (a) there have been no changes to the interests of the existing shareholders in the Company, (b) there have been no equity conversions of any kind other than conversion of deferred consideration owed to Onexim in accordance with the restructuring arrangements and (c) no bonus Shares have been issued to the management of the Company (see "Directors and Senior Management — Future Compensation of Directors and Senior Management"). The warrants issued by the Company to its international restructuring lenders entitling them to 1% of the Company's fully diluted share capital as at the date of effectiveness of the override agreement may be settled in cash. If any such lenders elect not to exercise this cash settlement option, the warrants will be automatically converted into Shares on the date of the Global Offering, subject to lock-up arrangements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Warrants". International lenders holding fee warrants representing 0.73% of the Company's share capital have exercised their cash settlement option and accordingly, immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised and no bonus Shares have been issued to management of the Company, the public would hold 10.81% of the issued share capital of the Company, of which VEB would hold 3.15% and the international lenders would hold 0.17%. The 3.15% interest of VEB in the issued share capital of the Company after completion of the Global Offering, assuming the Over-allotment Option is not exercised and no bonus Shares have been issued to management of the Company, will be considered to form part of the public float of the Company. During the override period, under the terms of the international override agreement, the Company may be obliged to issue equity compensation warrants to its international lenders representing equity in specified percentages, totaling up to 4.25%, of the fully diluted share capital of the Company as at the relevant warrant issue date.
2) For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.
3) Includes shares to be sold in the form of GDSs in the International Placing. The GDSs are to be issued by The Bank of New York Mellon, as depositary, pursuant to a deposit agreement to be entered into between the Company and the Depositary. Each GDS will represent 20 Shares. Pursuant to the Deposit Agreement, the Shares represented by the GDSs will be held with the Custodian, for the benefit of the Depositary. The Custodian will be the registered holder of such Shares in the share register of the Company. The number of GDSs to be sold in the International Placing will be determined by the Joint Global Coordinators following pricing of the Global Offering.

Corporate Structure

The following chart sets out the simplified corporate structure of the Group as at the date of this Prospectus. The corporate structure of the Group will be the same immediately following completion of the Global Offering.

Simplified Corporate Structure of the Group (Note 1)



Notes

1) The subsidiaries and associated companies of United Company RUSAL Limited as shown in the structure chart here include the subsidiaries which principally affected the results, assets and liabilities of the Group as set out on in Note 36 to the UC RUSAL Accountants' Report and the associated companies which principally affected the results of the Group as set out Note 19 to the UC RUSAL Accountants' Report. Please also note that not all wholly owned intermediate holding companies are shown in the chart and there are approximately 500 subsidiaries in total in the Group
2) OJSC MMC Norilsk Nickel was incorporated in Russia on 4 July 1997
3) Emergofin BV was incorporated in the Netherlands on 28 February 2000
4) CJSC Rusal Armenal was incorporated in Armenia on 17 May 2000
5) OJSC Russian Aluminium was incorporated in Russia on 25 December 2000
6) OJSC RUSAL Krasnoyarsk was incorporated in Russia on 16 November 1992
7) OJSC RUSAL Bratsk was incorporated in Russia on 26 November 1992
8) OJSC RUSAL Sayanogorsk was incorporated in Russia on 29 July 1999
9) OJSC RUSAL Novokuznetsk was incorporated in Russia on 26 June 1996
10) OJSC RUSAL SAYANAL was incorporated in Russia on 29 December 2001
11) CJSC Alucom-Taishet was incorporated in Russia on 18 September 2000
12) OJSC SUAL was incorporated in Russia on 26 September 1996
13) LLC RUSAL Resal was incorporated in Russia on 15 November 1994
14) SUAL-PM LLC was incorporated in Russia on 20 October 1998
15) CJSC Kremniy was incorporated in Russia on 3 August 1998
16) LLC Khakas Aluminium Smelter was incorporated in Russia on 23 July 2003
17) Kubikenborg Aluminium AB was incorporated in Sweden on 26 January 1934
18) SUAL-Kremniy-Ural LLC was incorporated in Russia on 1 March 1999
19) RUS-Engineering Ltd was incorporated in Russia on 18 August 2005
20) Aughinish Alumina Ltd was incorporated in Ireland on 22 September 1977
21) Compagnie Des Bauxites De Kindia S.A. was incorporated in Guinea on 29 November 2000
22) Guinea Investing Company Limited was incorporated in the BVI on 16 July 1999
23) CJSC Komi Aluminium was incorporated in Russia on 13 February 2003
24) OJSC Boksit Timana was incorporated in Russia on 29 December 1992
25) OJSC RUSAL Achinsk was incorporated in Russia on 20 April 1994
26) OJSC RUSAL Boxitogorsk Alumina was incorporated in Russia on 27 October 1992
27) Eurallumina SpA was incorporated in Italy on 21 March 2002
28) Alumina & Bauxite Company Limited was incorporated in the BVI on 3 March 2004
29) Queensland Alumina Limited was incorporated in Australia on 28 October 1963
30) Investments and Management Ltd was incorporated in Russia on 6 December 2002
31) Rusal Global Management B.V. was incorporated in the Netherlands on 8 March 2001
32) Rusal America Corporation was incorporated in the USA on 29 March 1999
33) RS International GmbH was incorporated in Switzerland on 22 May 2007
34) RTI Limited was incorporated in Jersey on 27 October 2006
35) Rusal Marketing GmbH was incorporated in Switzerland on 22 May 2007
36) UC RUSAL Alumina Jamaica II Limited was incorporated in Jamaica on 16 May 2004
37) LLC RUSAL Nikolaev Alumina Refinery was incorporated in Ukraine on 16 September 2004
38) United Company RUSAL Limited was incorporated in Jersey on 26 October 2006
39) OJSC Zaporozhye Aluminium Combine was incorporated in Ukraine on 30 September 1994
40) United Company Rusal Alumina Limited was incorporated in Cyprus on 22 April 2004
41) OJSC United Company RUSAL Trading House was incorporated in Russia on 15 March 2000
42) Aluminium Silicon Marketing GmbH was incorporated in Switzerland on 20 November 2000
43) OJSC SUBR was incorporated in Russia on 24 October 1996
44) SUAL International Ltd. was incorporated in Bahamas on 20 September 2002
45) Urals-Foil OJSC was incorporated in Russia on 31 March 2003
46) Aluminium Smelter Company of Nigeria Plc. was incorporated in Nigeria on 24 November 1989
47) Aluminum Group Ltd. was incorporated in BVI on 4 March 2004
48) United Company RUSAL Aluminium Ltd was incorporated in Cyprus on 29 October 2004
49) CJSC Boguchansk Aluminium Smelter was incorporated in Russia on 26 July 2006
50) RUSAL Limited was incorporated in BVI on 7 May 2003 and re-registered in Jersey on 23 May 2005
51) Belis LLC was incorporated in Russia on 8 August 1999
52) JSC Tsvetmetobrabotka was incorporated in Russia on 28 June 2002
53) United Company RUSAL Energy Limited was incorporated in Cyprus on 18 March 2005
54) Boges Limited was incorporated in Cyprus on 26 October 2006
55) Boguchanskaya hydroelectric power station was incorporated in Russia on 19 June 1996
56) United Company RUSAL Marketing and Management Limited was incorporated in Cyprus on 3 July 2006
57) Alumina Partners of Jamaica ("Alpart") was incorporated in Jamaica on 15 February 2006
58) Bauxite Company of Guyana Inc. was incorporated in Guyana on 22 November 2004
59) Komy Aluminium Cyprus Limited was incorporated in Cyprus on 13 September 2005
60) SUAL Komi B.V. was incorporated in the Netherlands on 12 February 2003
61) Timan Engineering LLC was incorporated in Russia on 19 October 2005
62) Russky Aluminy Ltd. was incorporated in USA on 28 July 2000 and re-registered in BVI on 11 September 2006
63) Friguia S.A. was incorporated in Guinea on 02 August 2005
64) West Indies Alumina Company ("Windalco") was incorporated in Jamaica on 1 June 2001
65) RUSAL Sayana Foil LLC (Dmitrov) was incorporated in Russia on 5 January 2001
66) United Company RUSAL Raw Materials Limited was incorporated in Cyprus on 30 August 2004
67) OJSC Polevskoy Cryolite Plant was incorporated in Russia on 13 January 1993
68) OJSC South Urals Cryolite Plant was incorporated in Russia on 19 February 1993
69) RUSAL Shanxi Cathode Co., Ltd was incorporated in China on 22 September 2005
70) Miradore Enterprises Limited was incorporated in Cyprus on 23 September 2004
71) Forum Muider B.V. was incorporated in the Netherlands on 25 October 1991
72) Bogatyr Komir, Limited Liability Partnership was incorporated in Kazakhstan on 24 March 1997
73) UC RUSAL Investment Management was incorporated in Russia on 22 December 2008

OVERVIEW

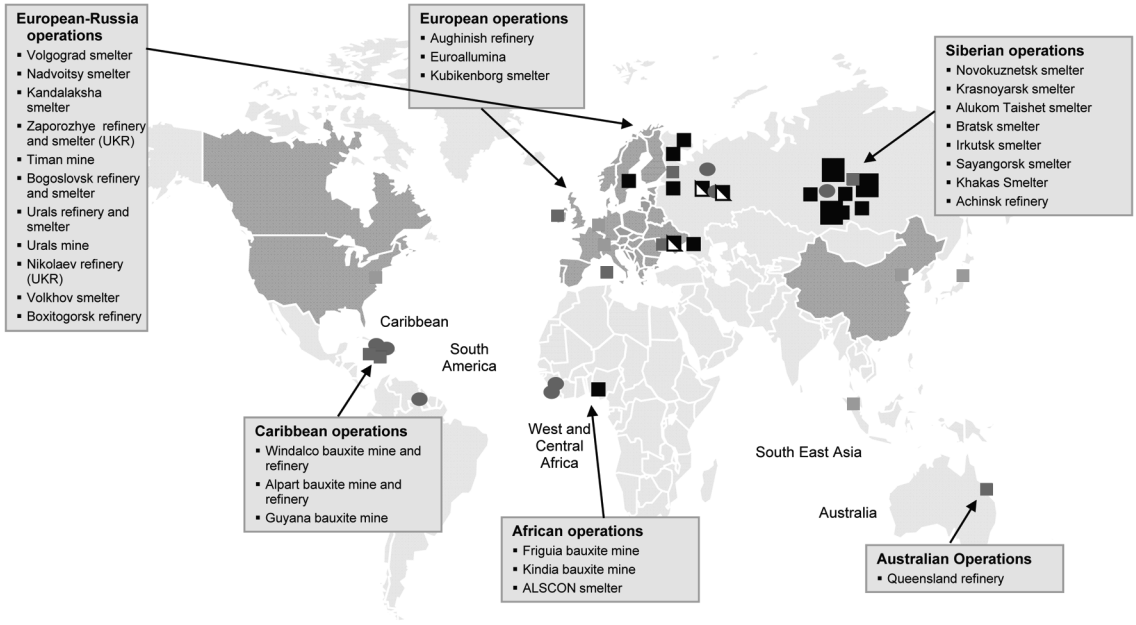
The Group is the world's largest producer of aluminium, producing 4.4 million tonnes and 2.0 million tonnes in 2008 and the first half of 2009, respectively, and accounting for approximately 12% and 11% of global output in those periods, according to CRU. The Group's business is focused on the upstream segment of the industry — the production and sale of primary aluminium (including alloys and value-added products, such as aluminium sheet ingot and aluminium billet). Within its upstream business, the Group is vertically integrated to a high degree, having secured supplies of bauxite and having the capacity to produce alumina in excess of its current requirements. The Group's own bauxite production was sufficient to cover approximately 71% and 78% of its alumina production in 2008 and the first six months of 2009, respectively, with additional bauxite being purchased under medium- and long-term contracts to cover the Group's alumina-long position. The Group is the world's largest producer of alumina, producing approximately 11.3 million tonnes and 3.7 million tonnes in 2008 and the first half of 2009, respectively and accounting for 13% and 10% of global output in those periods, according to CRU. To produce 4.4 million tonnes and 2.0 million tonnes of aluminium in 2008 and the first half of 2009, respectively, the Group required approximately 8.6 million tonnes and 3.4 million tonnes of alumina.

With the onset of the global economic downturn in the second half of 2008, some of the key end-user sectors for the aluminium industry (including automotive and transportation, construction, electrical engineering) suffered a sharp contraction of demand. This resulted in surplus supply of aluminium in the market and decline in the price of the metal and intermediate products such as alumina (see "Industry and Market Overview"). In response, the Group decided to reduce output at some of its older and higher-cost production facilities, as did many other leading companies in the industry globally, and restructured its debt. The Directors expect reductions in its aluminium and alumina production of approximately 11% and 36%, respectively, in 2009 as compared to 2008 (calculated by comparing the production for the year ended 2008 against the annualised production for the first half of 2009, adjusted to take into account the idling of capacity that has occurred to date). Output reduction measures have effectively balanced the Group in terms of its alumina requirements and contributed to optimisation of financial performance due to lower production and maintenance costs. As the evidence of economic recovery emerges, the Group retains the flexibility to re-start its mothballed capacity to take advantage of improved market conditions.

The Group's revenue was US$15,685 million for the year ended 31 December 2008 and US$3,757 million for the six months ended 30 June 2009. A cost curve produced by CRU ranked the Group's 2008 aggregate aluminium operations in the second quartile of world production of primary aluminium.

The Group has evolved over the past decade through acquisitions and organic growth, culminating in the acquisition in March 2007 of SUAL, then one of the world's ten largest producers in the aluminium business, and certain of the aluminium and alumina businesses of Glencore, a company specialising in the production and processing of metals and the trading of metals, oil and agricultural products. The Group has operations in 19 countries across five continents, with more than 75,000 employees, and despite recent developments in the global financial markets, has significant opportunities for growth through a number of modernisation programmes and approved projects in various stages of development in all parts of the aluminium upstream value chain, including energy.

The following map shows the location of the Group's principal operations:



Source: CRU, UC RUSAL

■ Major regional sales offices ● UC RUSAL bauxite mines ■ UC RUSAL aluminium smelters

■ UC RUSAL Alumina refineries ◥ UC RUSAL combined alumina and aluminium facilities

The Group's operations are divided into the following four business divisions:

- Aluminium;
- Alumina;
- Engineering and Construction; and
- Packaging.

In February 2009, in response to the global economic downturn, the Company implemented a comprehensive program designed to reduce costs, optimise the production process and strengthen the Company's position on the global market. See "— Strengths and Strategies — Strengths — Secure and sustainable low cost position and power advantage". In order to facilitate the achievement of the Group's strategic goals, promote long-term growth and maintain the Group's competitiveness, the Group has previously developed and continued to implement its own production and management system, known as the "RUSAL Business System". See "— Strengths and Strategies — Strengths — Experienced management team and world class corporate governance".

The aluminium and alumina divisions form the Group's upstream aluminium business, which is its principal focus, and includes the Group's primary aluminium, alumina and bauxite production. In 2009, as part of the management system optimisation program, the former materials division became part of the aluminium division.

The engineering and construction division implements the Group's construction and modernisation projects and provides for substantial internal Engineering Procurement Construction Management ("EPCM") capabilities. It also manages the Group's coal mining assets, while the downstream packaging division includes the production of foils.

In addition, in 2009 two new management units were created — the transportation directorate, responsible for identifying the most effective routes and logistical schemes, and for implementing a programme designed to fully utilise new rolling stock and avoid transportation delays, and the executive directorate, which supervises and coordinates all ongoing cost-cutting activities.

STRENGTHS AND STRATEGIES

Strengths

The Directors believe that the Group's competitive strengths uniquely position it to benefit from the attractive fundamentals of the global aluminium industry.

Global scale and reach

As the world's largest aluminium producer, accounting for 12% of global output in 2008, with a primary focus on the upstream aluminium segment, the Group is among the world's largest pure-play aluminium companies. With an established presence in 19 countries, the Group is able to capture opportunities arising from both a global platform and a local reach, enabling it to identify and participate in growth markets globally. The Group has a well-diversified sales platform covering the United States and Japan with a strategic focus on Europe and on high-growth markets, such as South East Asia and China.

The Group's scale also provides a number of distinct operational advantages to its aluminium and alumina divisions, including greater bargaining power with key providers of transportation, logistical and engineering services and with raw material suppliers. The Group's global reach allows it to actively manage the flow of aluminium products, alumina and other raw materials within the Group in order to optimise capacity utilisation at the Group's smelting and refining operations and to manage transportation, energy and other operational costs.

During the recent global economic downturn and the resulting contraction in the aluminium industry, the Group has been able to actively manage its production profile by reducing or mothballing capacity at its least cost-effective smelters and refineries and, at the same time, maintaining optimal utilisation rates at its lower cost facilities.

The Group's diverse operational base and global reach also enhance the Group's ability to develop and implement proprietary technologies, such as RA-300 and RA-400, and compete globally for the best operational, managerial and financial expertise and human capital.

Secure and sustainable low cost position and power advantage

The Group's low electricity, labour and other costs resulted in Aluminium Business Costs of US$1,832 per tonne in 2008, compared with an industry average of US$2,072 per tonne and US$1,285 per tonne in the first half of 2009, compared with an industry average of US$1,413 per tonne in the same period, in each case according to CRU. This ranked the Group in the second quartile of the aluminium industry cost curve, according to CRU. At the same time, smelters representing approximately 65% of the Group's output (primarily the Group's major Siberian smelters) were in the first quartile on the industry cost curve in 2008, according to CRU, with small-scale smelters dispersed along the cost curve.

As for all aluminium producers, electricity is a significant part of the Group's cash operating costs. The Group's aluminium smelters benefit from access to low-cost and clean electricity. In 2008, approximately 80% of the Group's aluminium was produced by its Siberian smelters, which rely on low-cost hydro generation as their principal source of electricity. In those parts of Siberia where these

smelters are located, the Group is generally the principal consumer of electricity, and there are few, if any, alternative sources of significant demand. In addition to meeting its electricity needs through hydropower stations (in 2008, hydropower accounted for approximately 79% of the Group's energy consumption), the Group also obtains electricity from thermal generators.

The Directors believe that access to low-cost and relatively abundant hydro generation will allow the Group to retain its current competitive position on the global cost curve going forward, as environmental concerns and competition for energy sources continue to put pressure on the cost base of other aluminium producers that rely more on thermal or gas power.

To support the sustainability of the Group's operations during the global economic downturn, in February 2009, the Group implemented a comprehensive program designed to reduce costs, optimise the production process and strengthen the Company's position as one of the world's most cost-efficient aluminium producers. The program includes the following measures:

- reducing aluminium output and alumina production by lowering output at least cost-efficient smelters and closing the Group's least cost-efficient refineries, which is expected to result in reductions in its aluminium production and alumina production of approximately 11% and 36%, respectively, in 2009 as compared to 2008 (calculated by comparing the production for the year ended 2008 against the annualised production for the first half of 2009, adjusted to take into account idling of capacity completed to date);

- seeking to further reduce aluminium production costs through more effective management of raw materials and energy supplies, optimised transport and logistics services including lower reshipment rates at ports, decreased freight rates, increase in the use of private-owned carriers in the supply chain, which is expected to result in a 20% reduction in tariffs in 2009 as compared to 2008;

- reduction in overheads and decrease in personnel expense in the first half of 2009 as compared to the second half of 2008, accompanied by a 16% headcount reduction in the second quarter of 2009 as compared to the first quarter of 2009; and

- significant revision of discretionary investment plans, with a contemplated 69% reduction in capital expenditure in 2009 as compared to 2008.

Focus on higher margin upstream business

The Group's business is focused on the production and sale of upstream products, principally primary aluminium (including alloys and value added products, such as aluminium sheet ingot and aluminium billet), which accounted for 76.9% and 84.1% of the Group's revenues in 2008 and the first six months of 2009, respectively. The Directors believe that the Group's upstream focus enables it to benefit from the higher margins generally available to upstream aluminium businesses (compared to downstream business). Within its upstream business, the Group seeks to improve margins further by expanding sales of alloys and value added products to end customers and distributors (as opposed to sales of commodity primary aluminium to global traders). More than half of the Group's aggregate volume of primary aluminium sales in 2008 was of alloys and other value added products, representing approximately 52% of the Group's revenue.

To consolidate its focus on the upstream segment, RUSAL disposed of its fabricating division to Alcoa in 2005 and certain of its aluminium construction plants and other non-core assets, including its can production facilities, prior to its acquisition of SUAL and certain of the aluminium and alumina assets of Glencore. SUAL also disposed of most of its downstream assets prior to the acquisition. Sales of downstream products such as foil accounted for less than 1.7% of the Group's revenues in 2008.

High degree of vertical integration

The Group benefits from a high degree of vertical integration within its upstream business, with primary aluminium production backed by a significant long position in alumina capacity. In aggregate, the Group produced approximately 11.3 million tonnes of alumina in 2008, purchased approximately 1.8 million tonnes and consumed approximately 8.6 million tonnes, reflecting in a long position of approximately 4.5 million tonnes. Of the Group's 11.3 million tonnes of alumina production in 2008, 72% was produced outside Russia and 58% outside the CIS. The Group's own bauxite production was sufficient to cover approximately 71% and 78% of its alumina production in 2008 and the first six months of 2009, respectively, with additional bauxite being purchased under medium- and long-term contracts.

In connection with the reduction of its aluminium production, and also in response to the declines in alumina prices, due to the global economic downturn starting in the second half of 2008, the Group reduced its alumina output in order to balance production along the value chain and minimise losses at some of its least cost-efficient facilities, such as its geographically remote Jamaican operations and its Eurallumina refinery in Sardinia, Italy. As a result, the Group produced approximately 3.7 million tonnes of alumina in the first six months of 2009 and expects its full-year 2009 alumina output to be 7.2 million tonnes, or 36% lower than in 2008. As market conditions continue to improve, the Group's mothballed alumina capacity can be gradually re-started to accommodate future increases in aluminium production and/or new smelting projects as they come on stream. The Group's long position in alumina capacity helps ensure security of supply for the potential expansion of the Group's aluminium production capacity in the future.

The long position in alumina capacity is supported by the Group's bauxite and nepheline syenite Resource base. At 1 July 2009, according to SRK, the Group had aggregate JORC bauxite Mineral Resources (dry) of 1,835 million tonnes, of which 611 million tonnes were Measured, 626 million tonnes were Indicated and 598 million tonnes were Inferred. Included in these bauxite Resources are JORC Proved and Probable bauxite Ore Reserves of 384 million tonnes (dry), of which 147 million tonnes were Proved and 238 million tonnes were Probable. For the six months ended 30 June 2009 and the year ended 31 December 2008, the aggregate attributable bauxite production from the Group's mines was 6.1 and 19.1 million tonnes (wet), respectively.

In addition to the Group's alumina production from its bauxite resources, at Achinsk it produces alumina from nepheline syenite and limestone. At 1 July 2009, according to SRK, the Group had aggregate nepheline syenite JORC Mineral Resources of 63 million tonnes, of which 9 million tonnes were indicated and 54 million tonnes were Inferred. Included in these Resources were 9 million tonnes of Probable Ore Resources. The Achinsk complex also had 90 million tonnes of limestone JORC Mineral Resources in the Indicated category, which included 13 million tonnes of Probable Ore Reserves, as at 1 July 2009.

The Group has also taken measures to partially secure supply of other major inputs used in aluminium production. For example, the Company owns a cathode plant in China, which has been fully integrated into the Group operating structure and allowed the Company to source internally approximately 100% of its cathode requirements in 2008 and 55% in the first half of 2009.

Proximity to China, the largest aluminium consumer in the world

With more than 80% of its total aluminium production located in Siberia, the Group's production base is in direct proximity to China and other key Asian markets. The geographical location of the Group's smelters and its competitive cost structure positions it to become one of the main external suppliers to China, where demand for aluminium has been constantly growing. The Group enjoys the following key strategic advantages that position it well vis-à-vis the growing markets of China:

- low-cost large production capacity based on clean hydro power, whereas most Chinese producers rely mainly on more expensive thermal-powered operation units;
- existing and prospective capacity is concentrated in direct proximity to China; and
- ability to transport large volumes of products by rail or sea to the key aluminium consumer markets in China.

Such competitive advantages also apply to other attractive Asian markets in which the Group intends to continue developing, such as India. The Group supplied a sizeable proportion of its products to the Asian market, representing 21% of its revenue in 2008. Sales to China, while minimal in 2008, are expected to increase to 5% of the Group's revenue in 2009, and the Group's target is to expand sales to China to 10% of revenue by 2015.

Proprietary R&D and leading internal EPCM expertise

The acquisition of SUAL in late March 2007 represented the culmination of a process through which the Group consolidated over 70 years of Russian know-how and research and development in the aluminium industry. Within the Group's Engineering and Construction Division, its Engineering and Technology Centre ("ETC") provides the core of its R&D function. A centre specialising in aluminium was established in 2002 in Krasnoyarsk, while a centre specialising in alumina was formed in St. Petersburg and a centre specialising in design was established in Irkutsk, in each case in 2006. The ETC also has pilot project sites for aluminium and alumina at the Sayanogorsk aluminium smelter and the Nikolaev alumina refinery, respectively. During the period from 2006 to 2008, UC RUSAL spent over US$137 million on R&D.

Approximately 70% of the Group's primary aluminium is produced at smelters using Söderberg technology and the remaining 30% is produced with pre-baked technology. Smelters using Söderberg technology produce greater levels of emissions and generally have a higher environmental impact than pre-bake technology, which is the latest technology used in the industry.

The ETC has devoted considerable R&D attention to modernising the Group's Söderberg cells. Improved environmental performance of Söderberg cells would allow the Group's facilities to continue production over the long term with relatively low ongoing capital expenditure. Since 2002, the Group has been conducting research and trials to reduce the emissions of Söderberg cells to the level of pre-bake technology in a project referred to as Clean Söderberg Technology. The Group has developed technical solutions and is now seeking to develop commercially viable applications. Also, the production of colloidal anode paste has started on a commercial scale and is currently capable of supplying four potrooms (352 cells). The Group intends to utilise its Clean Söderberg technology at its two largest aluminium smelters: Bratsk and Krasnoyarsk. The Clean Söderberg Technology project will also have the benefit of increasing capacity. See "— The Group's Operations — Engineering and Construction Division".

The Group has undertaken modernisation programmes to improve its existing Söderberg potlines (such as alumina point feeding, new dry-scrubbing gas treatment centres and conversion of Söderberg pots to dry anode technology) to reduce costs, improve efficiency and to lessen environment impact.

A modernisation programme has been implemented at the Krasnoyarsk aluminium smelter, the second largest smelter of the Group. Following implementation of the programme, annual production capacity of the smelter has been increased by approximately 91 thousand tonnes and dust and fluoride emissions have been significantly reduced.

The Group has also installed advanced pre-bake, cleaner technology in certain of its smelters, which improves productivity, results in less capital expenditure per tonne of production and lowers operating expenses such as personnel, maintenance and repair costs. Using the Sayanogorsk aluminium smelter as a testing centre, the Group has developed a new baked anode/high amperage process that uses RA-300 and RA-400 cells, and plans to install RA-500 cells in the near future. By increasing throughput, installing new generation RA cell technology with higher amperage improves productivity, resulting in less capital expenditure per tonne of production, and also lowers ongoing operating expenses such as personnel, maintenance and repair costs. In the development and implementation of the Group's technologies, such as RA-300, RA-400, RA-500 and Clean Söderberg, the Company considers environmental impact, reduction of consumption rates, increased capacity and output of pots, which enables the introduction of new capacity to be more efficient in terms of cash operating costs. RA-300 cells were first put into operation on a pilot basis in December 2003 and RA-400 cells in December 2005. A variant of the RA-300 cell technology was selected for the Khakas aluminium smelter adjacent to the Sayanogorsk aluminium smelter, which has the lowest aluminium cash operating cost of the Group's smelters, and has now been installed on an industrial scale. The technology is also expected to be installed at the Boguchansky aluminium smelter. Currently, sixteen RA-400 cells are operating on a pilot basis at the Sayanogorsk aluminium smelter, and it is expected that RA-400 cells will be used at the Taishet aluminium smelter. See "— The Group's Operations — Aluminium Division — Approved Projects within the Aluminium Division". A prototype of RA-500 cells has also been developed, and it is expected that eight of these cells will be installed on a pilot basis at the Sayanogorsk aluminium smelter in the near future. The Group has also developed shell digestion technology for alumina refining that allows the processing of low-quality bauxite that requires particularly high temperatures to dissolve.

Many other of the world's largest aluminium companies are also developing their own specific form of pre-bake technology.

In addition to its R&D function, the Group's Engineering and Construction Division provides fully integrated, internal EPCM capabilities, offering a wide range of tailored services on a global scale to the various operations within the Group. The Group's first EPCM team was established in 2005. Comprising approximately 9,500 employees and engineers, the team has two scientific institutes (RUSAL-Vami in Saint-Petersburg and Sibvami in Irkutsk) and currently services projects in Russia, Ukraine, Guinea and Nigeria. The Directors believe that the Group's ability to manage all aspects of a project, including equipment manufacturing, project design, construction and repair and maintenance, and to do so throughout the world, enables it to execute its projects faster and more cost-effectively than its competitors. The advantages of the Group's EPCM function are illustrated by the development of advanced proprietary technology, RA-400, to be used in the construction of the Taishet smelter. Incorporating novel design elements, the new RA-400 technology is expected to help reduce environmental impact, extend service life, improve efficiency and reduce consumption of raw materials as well as improve the magnetohydrodynamic parameters of pots.

Strategic investments

Over the recent years, UC RUSAL has made two significant investments. To diversify its exposure to other metals, it acquired a stake of 25% plus one share in Norilsk Nickel. In addition, to provide a natural energy hedge, it created the 50/50 coal joint venture LLP Bogatyr Komir with the Kazakhstan state-controlled national welfare fund Samruk-Kazyna.

Acquisition of a 25% plus one share interest in Norilsk Nickel

In April 2008, the Group completed the acquisition from Onexim of a 25% plus one share stake in Norilsk Nickel, the world's largest nickel and palladium producer (based on production in 2008, according to CRU) and one of the leading producers of platinum and copper. In addition, it produces a variety of by-products, such as cobalt, chromium, rhodium, silver, gold, iridium, ruthenium, selenium, tellurium and sulfur. According to CRU, in 2008, Norilsk Nickel's market share was 20.5% in the global production of refined nickel and 48.6% in the global production of palladium[1]. It is also one of the top four producers of platinum[1], with a 10.7% market share in global production and a leading producer of copper, with a 2.7% market share in global production, according to CRU. As a strategic investor in Norilsk Nickel, UC RUSAL has significant exposure to Norilsk Nickel's suite of commodities, which upon a recovery in the global markets, may potentially reduce volatility of cash flows and offer additional growth opportunities.

LLP Bogatyr Komir 50/50 joint venture with Samruk Holding in Kazakhstan

In December 2008, UC RUSAL established a 50/50 joint venture with Samruk-Kazyna to jointly operate Bogatyr, one of the world's largest open-cast coal mines, and Severny mine, in the Ekibastuz coal basin. The acquisition provides UC RUSAL with a growth platform in energy production capacity and a strategic energy hedge through thermal coal.

The Ekibastuz coal basin, one of the largest in the CIS, is located in the Pavlodar region of Kazakhstan, 22 kilometers from the town of Ekibastuz. LLP Bogatyr Komir extracts coal at the Severny (in operation since 1955) and Bogatyr (in operation since 1970) opencast mines as part of this joint venture with Samruk-Kazyna. The Bogatyr and Severny opencast mines have approximately 1.0 billion tonnes in Proved and Probable Coal Reserves (JORC) and approximately 2.4 billion tonnes of measured and indicated Mineral Resources (JORC) as at 1 July 2009. The combined production of the two mines in 2008 was 46 million tonnes per annum, which was approximately 42% of the total annual coal output from Kazakhstan. The largest consumers of the Ekibastuz coal are Kazakh and Russian power-plants. As of 30 June 2009, the production facilities of Bogatyr and Severny employed over 7,000 people.

Experienced management team and world class corporate governance

The Group has a highly skilled and experienced team of managers with proven industry expertise and an impressive track record of managing growth through acquisitions and organic growth in challenging environments. Starting with a few small investments in the early 1990s in the privatised and fragmented Russian aluminium industry, members of the Group's management team created the world's largest aluminium company, operating in 19 countries, in slightly more than a decade. They did this through acquisitions, culminating in the acquisition of SUAL and the Glencore Businesses in late March 2007, and through expanding the capacity and improving the efficiency of the Group's smelters and other facilities. From 2000 to 2008, management integrated a number of plants in various jurisdictions, including the Novokuznetsk aluminium smelter and the Boxitogorsk alumina refinery in Russia, the Nikolaev alumina refinery in Ukraine, the Alumina Company of Guinea, which operates the Friguia alumina refinery in the Republic of Guinea, and the Eurallumina refinery in Italy. In the first half of 2009, the Group's management implemented a series of significant crisis management measures to counteract the impact of the global financial downturn and falling aluminium prices including responsible production curtailment and active reduction of operating costs and debt restructuring. See "History and Corporate Structure — History and Development".

Even while privately held, the Group has adopted international standards of corporate governance. RUSAL began the implementation of corporate governance standards and processes based on international best practices a number of years ago with, for example, the introduction of a Code

[1] Excluding Stillwater Mining production

of Ethics in February 2005. Also in 2005, in order to allocate management resources more effectively and to facilitate day-to-day decision-making on various Company projects, several management committees consisting of senior and mid-level management were formed. The committees' objectives are to ensure that matters are properly referred to the Chief Executive Officer and the Board of Directors and to enhance the oversight over Company project management and general corporate matters. In early 2006, following due diligence performed by the International Finance Corporation ("IFC") and European Bank for Reconstruction and Development ("EBRD") in connection with the proposed financing of a project, the Company memorialised its intent to follow the corporate governance and disclosure guidelines set forth in a plan agreed with the IFC and EBRD. By the end of 2006, the corporate governance and nominations committee and the audit committee of the Board were established and, in March 2007, two independent directors were appointed. Currently, in addition to those committees, the Board has in place, inter alia, a remuneration committee and a health, safety and environmental committee. A third independent director, Mr. Simon Thompson, was appointed at the end of 2007 and resigned in 2009. Two further independent directors, Ms. Elsie Leung Oi-sie and Mr. Barry Cheung Chun-yuen, were appointed in November 2009 and with effect from the Listing Date, respectively.

On the management level, the Company has an Executive Committee consisting of the Company's key executives, including its Chief Executive Officer, who serves as Chairman of the committee and six management committees, the corporate governance and capital markets committee, the debt restructuring committee and management committees of each of the aluminium, alumina, engineering and construction and packaging divisions, all of which report to the Executive Committee. See "Directors and Senior Management — Committees".

The Company plans to continue to develop in this area and to adhere to internationally recognised standards of corporate governance, transparency, disclosure and accountability for publicly traded companies.

Strategies

Building on the strengths described in the previous section, the Group's management is pursuing and will pursue the following strategies over different timeframes. Once the Group has reduced its restructured debt and subject to its restructuring agreements, the Group expects to be in a position to promptly restart projects currently on hold and take advantage of a more favourable macro-economic environment and improved global aluminium markets. The Group's flexible growth platform allows the Group to respond quickly to changes in broader market conditions by accelerating or slowing down implementation of the Group's growth projects.

Maintain sustainable low-cost positioning through continuous cost reduction

The Group's average Aluminium Business Costs were US$1,832 per tonne in 2008, compared with an industry average of US$2,072 per tonne in the same period, and US$1,285 per tonne in the first half of 2009 as compared to the industry average of US$1,413 per tonne in the same period, in each case according to CRU. To a large extent this cost advantage is due to the Group's access to sources of low-cost power. The Group measures its competitiveness, among others, on the basis of its position on the global cost curve.

In April 2007, the Russian Government established guidelines for the share of electricity production volumes to be sold on the wholesale electricity market under regulated tariffs during the period from 1 January 2007 to 31 December 2010. During the period from 1 July to 31 December 2009, the share of electricity supplied under regulated tariffs is from 45% to 50% of the total electricity produced but this share is expected to gradually decrease to 15% to 20% by 1 July 2010. Beginning on 1 January 2011, all electricity production is expected to be supplied to industrial users under free

market prices. Electricity tariffs for industrial users have risen since 2007, and are expected to further rise following deregulation, as a result of price liberalisation and growth in demand. To mitigate potential increases in electricity prices, the Group is pursuing a multi-pronged strategy that includes, within the constraints imposed by its debt restructuring agreements:

- improving energy efficiency through the installation of enhanced production technology and adoption of better operating methods for the Group's existing technology, such as RA-300, RA-400 and Clean Söderberg Technology;

- seeking to secure supply for its existing smelters, particularly in Siberia, through long-term contracts with energy generating companies controlled by beneficial owners of the substantial shareholders, the State and independent investors;

- seeking to build smelter-generation complexes in regions in which low-cost captive energy sources are available, such as the Boguchansk project; and

- seeking to invest in selective energy-related assets, such as coal and power generating facilities, as a potential hedge against increased energy costs (such as the LLP Bogatyr Komir 50/50 joint venture).

The Group's immediate objective is to secure power supply to the smelters accounting for slightly more than 80% of its current aluminium production. The implementation of the Group's strategy varies by region.

In Siberia, the Group has entered into long-term supply contracts for its key Bratsk, Krasnoyarsk and Irkutsk aluminium smelters with Irkutsk Joint Stock Power and Electricity Company ("Irkutskenergo") and JSC Krasnoyarskaya Hydro-Power Plant ("Krasnoyarskaya HPP"), two electricity suppliers controlled by the beneficial owner of En+, a Controlling Shareholder of the Company. The Bratsk, Krasnoyarsk and Irkutsk aluminium smelters accounted for approximately 53% of the Group's aggregate aluminium production in 2008 and 56% in the first half of 2009. For a description of the long-term contracts, see "— Energy Supply — Security of Power Supply".

With respect to its Urals-based smelters, which accounted for approximately 7% of the Group's aggregate aluminium production in 2008, the Group plans to hedge its exposure to increases in the tariffs charged by local independent electricity producers through its interest in the LLP Bogatyr Komir in Kazakhstan, which supply coal to the Urals region. See "— Energy Supply".

The Kubikenborg smelter in Sweden has in place a long-term power contract valid until 2016. ALSCON in Nigeria has its own gas-fired power plant, and the Group has concluded a 20 year take or pay gas contract with Nigerian Gas Company to supply gas to that power plant.

With respect to new aluminium smelters that the Group intends to commission in the medium to long term, the Group's strategy will be to secure electricity supply through either long-term electricity supply contracts or self-generation. In the case of the self-generation option, the Group will be looking for partnership opportunities with a leading local or global strategic player in the power generation sector. For example, the BEMO project includes a hydropower station for supplying the new smelter being built with electricity. RusHydro is a 50% partner in the project.

For further information, see "Aluminium Division — Approved projects within the Aluminium Division — Medium-term — Taishet Aluminium Smelter", and "Aluminium Division — Principal Aluminium Smelters — Irkutsk Aluminium Smelter".

Maintain active and responsive production management

During the recent economic downturn the Group responded to weakening demand and pricing environment by actively reducing production volumes at its least cost-effective facilities. Compared to 2008 levels, the Group's aluminium and alumina production in 2009 is expected to decrease by 11% and 36%, respectively (calculated by comparing the production for the year ended 2008 against the annualised production for the first half of 2009, adjusted to take into account idling of capacity that has occurred to date).

Production cuts and/or facility shutdowns allow the Group to actively respond to oversupply situations whenever they occur. By reducing output at higher cost facilities, the Group is able to maintain high utilisation rates at its core low-cost smelters located in Siberia. The Group's management has prepared comprehensive action plans for a number of least cost-effective facilities that allow the Group to adjust its output and/or idle excess capacity to quickly adapt to changes in demand.

Debt reduction through cash flow management

The Group's debt as at 30 June 2009 included US$13,690 million under 54 syndicated and bilateral loans with Russian and international lenders. On 7 December 2009, the Group signed an international override agreement with 65 international banks and in November and December 2009, the Group signed agreements on the restructuring of its debt with five Russian and Kazakh banks. Further, on 30 October 2009, the Company signed an amendment agreement with VEB. The restructuring agreements extend the final maturity under the Group's loans by four years (with the exception of the loan from VEB, which is extended until 29 October 2010). The international lenders have provided a commitment to provide refinancing for a further three-year period following the override period subject to a number of conditions being met as at the end of the override period. In addition, the Russian and Kazakh lenders (excluding VEB) have provided soft commitments to provide refinancing for a further three-year period following the override period. Interest and principal repayments under the restructuring agreements are linked to the Group's performance. The restructuring agreements limit the Group's ability to pay dividends, pursue mergers and acquisitions or make capital expenditure. For further information on the debt restructuring agreements, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring".

The Group's management considers reduction of the Group's leverage as a key priority in the near and medium term. In addition to the cost management programs described above, the Group's management also intends to monitor opportunities presented by the debt markets to refinance the Group's existing debt obligations under more favourable terms.

Maintain leadership in the global aluminium industry in terms of market share and position on the cost curve

Completion of Boguchanskaya Hydropower Plant

One of the key conditions discussed in the Group's debt restructuring process was that the Group would retain BEMO and would be permitted to fund capital expenditure for Phase 1 up to US$300 million but would be obliged to refinance by completion through non-recourse debt or, failing which, through additional equity or asset disposal proceeds. This would allow the Group to secure electricity through a self-generated long-term electricity contract for the smelter. The Group also intends to seek partnership opportunities with a leading local or global strategic player in the power generation sector.

Medium term strategies

Exploit proximity to China/Asia and increase sales to China

The Chinese economy continues to be one of the key drivers in global demand for aluminium. The Group's aim is to become one of the main external suppliers for Chinese consumers of primary aluminium, leveraging on its close proximity to the Asian markets and low-cost large production capacity. The Group's marketing strategy aims to increase the percentage of the Group's total revenue derived from sales to Asia from 21% in 2008 to 29% by 2015, with a target 10% of its total revenue in 2015 derived directly from China.

Completion of advanced projects with attractive fundamentals

In the medium term, once the Group has reduced its restructured debt and subject to its restructuring agreements, the Group can quickly resume construction of the 588 thousand tonne per annum Boguchansky smelter and the 750 thousand tonne per annum Taishet smelter if there is a rebound in market conditions. The Group also has a number of attractive brownfield and greenfield bauxite/alumina development opportunities with specific projects including the 413 thousand tonne per annum expansion of the Friguia alumina complex in Guinea and expansion of capacity at the Nikolaev alumina refinery (NGZ). Moreover, there is an opportunity for expansion of the ALSCON smelter.

Kindia (Guinea)-2

The Kindia (Guinea)-2 project is a brownfield development to secure additional bauxite production for the Group. The Kindia Mine in Guinea is operated by Compagnie des Bauxites de Kindia ("CBK") which rents and has the exclusive use of these fixed and certain movable assets from Société des Bauxites de Guinée (SBK). The Kindia Mine has 38.2 million tonnes of Proved and Probable Ore Reserves in accordance with the JORC Code. A significant proportion of the proved and probable reserves of Kindia are attributed to Kindia-2. The Kindia-2 project supports the Group's ore reserves and production at Kindia-2 is expected to increase to 3.8 million tonnes per annum by 2012. The increase in production of bauxite is intended to be shipped predominantly to the Company's Nikolaev refinery, Ukraine.

Long term strategy

In the longer term, the Group has several projects under consideration: greenfield bauxite / alumina opportunities in South East Asia (Vietnam and Indonesia), project Dian Dian in Guinea (a bauxite and alumina complex with a proposed alumina production capacity of approximately 5.1 million tonnes per annum), and construction of a power plant and up to approximately 600 thousand tonnes per annum aluminium smelter in Libya.

M&A growth options

The Group is not contemplating material acquisitions of assets or companies in the near term. Under the terms of the Group's debt restructuring agreements, except if certain restrictive conditions are met, the Group's ability to pursue M&A opportunities is limited. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Restructuring". Once in a position to do so, the Group's management will consider opportunistic M&A options that would reinforce the Group's position as a low-cost vertically integrated primary aluminium player and enable it to gain further exposure to growth markets and segments.

Important decision factors for prospective acquisitions in the aluminium smelting segment would be a potential target's position on the cost curve and access to captive and low-cost electricity. Despite the Group's current long position in alumina capacity, the Group's management will be screening attractive bauxite mining and alumina refinery acquisition opportunities that would allow the Group to maintain its self-sufficiency in alumina and support future production increases in the aluminium segment.

THE GROUP'S OPERATIONS

As the world's largest producer of aluminium and alumina based on production in 2008, the Group has operations in 19 countries across five continents. Some of the Group's bauxite mines, refineries and smelters are geographically close to each other, and in a few cases form part of the same complex. Proximity of facilities results in significant transport cost savings.

The Group's Aluminium Business Costs in 2008 were US$1,832 per tonne, compared to an industry average of US$2,072 per tonne in 2008 and US$1,285 per tonne in the first half of 2009, compared with an industry average of US$1,413 per tonne in the same period, according to CRU. A cost curve produced by CRU ranked the Group's 2008 aggregate aluminium operations in the second quartile of world production of primary aluminium. The Group's strong position on the primary aluminium cost curve is primarily due to its access to competitively priced energy. In-house alumina production and low labour costs are additional factors that contribute to the Group's relatively low production cost.

The Group's Alumina Business Costs in 2008 were US$328 per tonne compared to an industry average of US$264 per tonne in 2008, and US$235 per tonne in the first six months of 2009, according to CRU. A cost curve produced by CRU ranked the Group's 2008 aggregate alumina operations in the fourth quartile of world production of alumina.

The Group's Aluminium and Alumina Business Costs fell considerably in the first half of 2009, as the Group implemented a cost reduction programme. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Certain Factors affecting the Group's Results of Operations — Cost Reduction".

The Group's operations are divided into the following four business divisions:

- Aluminium;
- Alumina;
- Engineering and Construction; and
- Packaging.

Aluminium Division

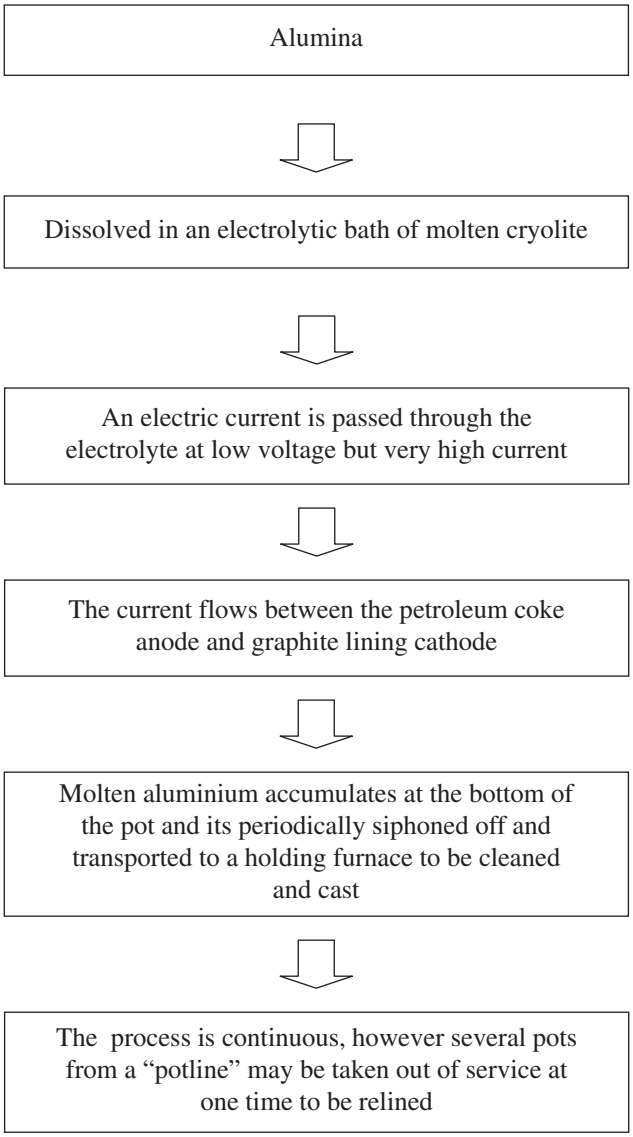
The Group operates 16 aluminium smelters. The aluminium smelting assets of the Group are located in four countries: the Russian Federation (13 plants), Ukraine (one plant), Sweden (one plant) and Nigeria (one plant). Three of the Group's smelters each produce over 500 thousand tonnes of primary aluminium per annum. Two of these, the Bratsk aluminium smelter and the Krasnoyarsk aluminium smelter, located in Siberia, are the largest aluminium smelters in the world in terms of production capacity and each produces close to one million tonnes of primary aluminium per annum. The aggregate aluminium production from the Group's smelters in 2008 was 4.4 million tonnes (and 2.0 million tonnes in the first six months of 2009). The Group's smelters ran at full or near full capacity over the three-year period from 2006 to 2008. See "— Capacity and Utilisation". The Group has increased the installed capacities of its key aluminium smelters through the installation of additional cells, improved operating practices, enhanced technology and modernisation that have led to higher efficiency and amperages and longer cell life.

To address the consequences of the global economic downturn and the deterioration of the aluminium market in 2008 and 2009, the Company introduced a number of measures, including cutting aluminium production volumes. See "— Strengths and Strategies — Strengths — Secure and sustainable low cost position and power advantage". Production was reduced at unprofitable facilities which significantly reduced the Group's average aluminium production costs. Aluminium production was reduced by 10% in the first six months of 2009 as compared to the first six months of 2008. This enabled the Group to reduce average aluminium production costs by 28% within the first six months of 2009 as compared to the same period in 2008.

The Group's Aluminium Division is managed on a day to day basis by the Director of the Aluminium Division under the supervision of the Chief Executive Officer. Each of the Group's aluminium smelters has its own managing director who reports to the Director of the Aluminium Division. Each such managing director is highly qualified and has substantial experience in the aluminium industry.

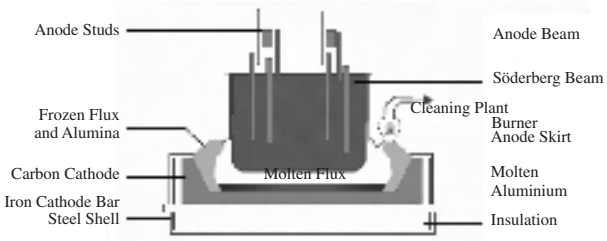
Production process of aluminium

The chart below illustrates the production process of aluminium by the Hall-Heroult process. The two major types of technology involved in the electrolysis are Söderberg technology and Pre-bake technology:

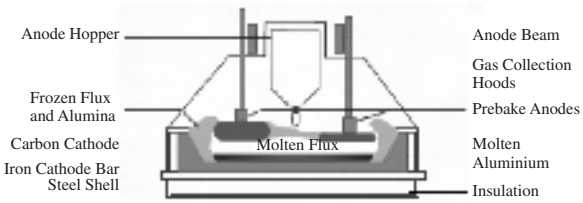


Söderberg technology uses a continuous anode which delivered to the pot in the form of a paste, and which bakes in the pot itself.

Söderberg technology



Pre-bake technology



Pre-bake technology uses multiple anodes in each pot, which are pre-baked in a separate facility and attached to rods that suspend the anodes in the cell. The newest primary aluminium production facilities use a variant on pre-bake technology called Centre Worked Pre-bake Technology (CWPB). This technology uses multiple point feeders and other computerised controls for precise alumina feeding. A key feature of CWPB plants is the enclosed nature of the process. Fugitive emissions from the pots are very low, less than 2% of the generated emissions. The balance of the emissions is collected inside the pot itself and carried away to very efficient scrubbing systems, which remove particulates and gases.

The table below shows the aluminium production of each facility. Also shown is approximate production attributable to Söderberg and pre-bake production technology, the two main types of aluminium smelting technology.

Saleable Aluminium Production from Smelting Operations (kt)

		Total Smelter Production (kt)				
			Year ended 31 December			
Asset[1]	**Commis-sioning**	**Six months ended 30 June 2009**	**2008**	**2007**	**2006**	**Technology**
Russia — Siberia						
Bratsk Aluminium Smelter (BrAZ)	1966	488	1,002	989	979	VSS
Krasnoyarsk Aluminium Smelter (KrAZ)	1964	471	1,000	987	949	VSS/PFPB
Sayanogorsk Aluminium Smelter (SAZ)	1985	261	537	533	523	PFPB
Novokuznetsk Aluminium Smelter (NkAZ)	1943/1959[2]	128	320	317	315	HSS/VSS[2]
Irkutsk Aluminium Smelter (IrkAZ)	1962	169	358	297	297	VSS
Alukom-Taishet Aluminium Smelter	2003	2	10	11	10	PFPB
Khakas Aluminium Smelter (KhAZ)	2007	147	297	173	1	PFPB
Russia — Other						
Bogoslovsk Aluminium Smelter (BAZ)	1945	62	186	184	184	HSS
Volgograd Aluminium Smelter (VgAZ)	1959	73	166	162	158	VSS
Urals Aluminium Smelter (UAZ)	1939	46	134	134	133	HSS/SWPB
Nadvoitsy Aluminium Smelter (NAZ)	1954	28	81	81	80	HSS/PFPB
Kandalaksha Aluminium Smelter (KAZ)	1951	28	75	75	74	HSS
Volkhov Aluminium Smelter (VAZ)	1932	6	24	24	23	SWPB
Ukraine						
Zaporozhye Aluminium Smelter (ZALK)	1949	36	113	113	113	HSS
Sweden						
Kubikenborg Aluminium (KUBAL)	1943	33	112	122	117	VSS/PFPB
Nigeria						
ALSCON	1997	2	9	0	0	PFPB
TOTAL PRODUCTION		**1,980**	**4,424**	**4,202**	**3,958**	
Approximately Attributed To:						
HSS Technology		179	594	585	583	
VSS Technology		1,201	2,633	2,629	2,580	
Pre-bake Technology		599	1,197	987	795	

Notes:

(1) The table presents total production of the plants, each of which is a consolidated subsidiary of the Group. The Group has 100% equity ownership in each of the plants, except for the Zaporozhye aluminium smelter, in which the Group has a 97.6% interest, and ALSCON, in which the Group has a 85.0% interest, in each case as at 15 September 2009.

(2) NkAZ1 and NkAZ2, respectively.

Capacity and Utilisation

The table below shows the estimated saleable aluminium capacity and capacity utilisation of each facility. Saleable aluminium capacity is defined as the estimated volume of cast aluminium which could be produced at the facility within the period defined, irrespective of whether the plant is operating or fully/partially idle. The aluminium smelters generally operated at full or near-full capacity for the period 2006 to 2008. This level of capacity utilisation is typical for well operated aluminium smelters. The reduction in capacity utilisation in the first half of 2009 reflects the closure of smelting capacity by the Group to address the consequences of the global economic downturn and the deterioration of the aluminium market.

	Total Plant Saleable Aluminium Capacity (kt)[1]				Total Smelter Capacity Utilisation			
	Six months ended 30 June	Year ended 31 December			Six months ended 30 June	Year ended 31 December		
Asset	**2009**	**2008**	**2007**	**2006**	**2009**	**2008**	**2007**	**2006**
Russia — Siberia								
Bratsk Aluminium Smelter (BrAZ)	497	1,006	995	986	98.1%	99.6%	99.4%	99.3%
Krasnoyarsk Aluminium Smelter (KrAZ)	494	1,008	995	956	95.4%	99.2%	99.2%	99.3%
Sayanogorsk Aluminium Smelter (SAZ)	265	542	538	527	98.5%	99.1%	99.0%	99.3%
Novokuznetsk Aluminium Smelter (NkAZ)	170	322	320	318	74.9%	99.3%	99.2%	99.2%
Irkutsk Aluminium Smelter (IrkAZ)	225	360	300	299	75.4%	99.3%	99.0%	99.3%
Alukom — Taishet Aluminium Smelter	6	11	11	11	35.7%	88.2%	99.3%	92.5%
Khakas Aluminium Smelter (KhAZ)	148	297	173	1	99.9%	100.0%	100.0%	100.0%
Russia — Other								
Bogoslovsk Aluminium Smelter (BAZ)	84	187	185	185	73.6%	99.4%	99.3%	99.2%
Volgograd Aluminium Smelter (VgAZ)	84	168	164	160	87.1%	99.1%	99.0%	99.2%
Urals Aluminium Smelter (UAZ)	78	134	134	133	58.7%	99.4%	99.5%	99.5%
Nadvoitsy Aluminium Smelter (NAZ)	38	81	81	81	73.3%	99.6%	99.3%	99.2%
Kandalaksha Aluminium Smelter (KAZ)	37	76	75	75	75.3%	99.2%	99.7%	99.7%
Volkhov Aluminium Smelter (VAZ)	12	24	24	24	46.6%	99.1%	99.1%	99.2%
Ukraine								
Zaporozhye Aluminium Smelter (ZALK)	57	114	114	114	63.5%	99.0%	99.1%	99.0%
Sweden								
Kubikenborg Aluminium (KUBAL)	51	128	122	118	65.3%	87.4%	99.9%	99.5%
Nigeria								
ALSCON[2]	48	96	n/a	n/a	4.3%	9.8%	n/a	n/a
TOTAL	**2,293**	**4,556**	**4,233**	**3,987**	**86.3%**	**97.1%**	**99.3%**	**99.3%**

Notes:

(1) Saleable aluminium capacity is the weight of the aluminium which, it is estimated, could be produced within the period defined. It includes the capacity of the existing plant, irrespective of whether the plant is operating or idle. Capacity is shown on a total plant basis and irrespective of ownership.

(2) UC RUSAL finalised the purchase of a 77.5% equity interest in ALSCON in February 2007. As the impact of the acquisition on the financial results of the Group for the year ended 31 December 2007 was not significant, no capacity for 2006 or 2007 is therefore provided.

The Group's six largest aluminium smelters accounted for 79% and 84% of its aggregate aluminium production for the year ended 31 December 2008 and the six months ended 30 June 2009, respectively. A summary description of each of the Group's principal aluminium smelters is set out below. The capacity data provided indicates the capacity for 2008. In recent years, the Group operated at or near capacity, which generally increased over time with respect to each aluminium smelter due to productivity, technological and other improvements. In accordance with cost-saving measures (see "— Strengths and Strategies — Strengths — Secure and sustainable low cost position and power advantage"), the Group shutdown capacities of some of its facilities, including the following aluminium smelters, Alukom-Taishet (100% of the smelter's capacity was shutdown as at 30 April 2009), Zaporozhye (75% of the smelter's capacity was shutdown as at 30 June 2009), Volkhov (50% of the smelter's capacity was shutdown as at 30 June 2009), Nadvoitsy, Kandalaksha, Bogoslovsk and Novokuznetsk (35% of each smelter's capacity was shutdown as at 30 June 2009). Two HSS potlines at Urals aluminium smelter commissioned in 1941-1942 were permanently shutdown (35% of the smelter capacity) and have been torn down as part of the Company's environmental policy.

Principal Aluminium Smelters

Bratsk Aluminium Smelter. The Bratsk aluminium smelter is the largest producer of primary aluminium in the world in terms of production capacity, accounting for approximately 25% of aluminium production in Russia and, according to CRU estimates, approximately 2.7% of the world's output in 2008, with a total saleable aluminium production capacity in 2008 of 1,006 thousand tonnes per annum.

- Alumina source — various refineries, including the Group's Urals, Achinsk, Friguia, Nikolaev and QAL alumina refineries, and third party sources, with alumina from each source being processed in potrooms dedicated to such source, which promotes the stability of the production process;

- Energy source — electrical power is supplied primarily by the Bratsk hydroelectric power station owned and operated by Irkutskenergo, which is controlled by the beneficial owners of En+. The Bratsk hydroelectric power station is situated on the Angara River approximately 8 miles from the Bratsk aluminium smelter. The grid connecting the power station to the smelter is owned by the Group. In 2008, the smelter consumed approximately 75% of the power generated by the Bratsk hydroelectric power station, which currently operates at below full capacity.

The Bratsk aluminium smelter is located approximately 15 km by road from the town of Bratsk in the Irkutsk region in Siberia.

The Bratsk aluminium smelter has direct rail links to the nearby Trans-Siberian rail system, providing ready means for materials and end products transportation. Pitch and coke for use in the on-site anode paste production facilities are supplied by a variety of sources from China and from within the Russian Federation, and cathode blocks are sourced from China.

The small settlement, Chekanovsky, is located close to the smelter and, under a federal plan and an agreement signed with the local communities in March 2007, the residents will be relocated out of this town to Bratsk and other communities for health and safety reasons at an anticipated cost of US$20 million. The relocation is expected to be completed in 2012. See "Risk Factors — Risks relating to the Group and its Business — The Group operates in an industry that gives rise to health, safety and environmental risks".

Krasnoyarsk Aluminium Smelter. The Krasnoyarsk aluminium smelter is the second largest smelter in the world in terms of production capacity and accounts for approximately 24% of aluminium production in Russia and, according to CRU estimates, approximately 2.43% of global output in 2008, with a production capacity in 2008 of 1,008 thousand tonnes per annum.

- Alumina source — various refineries, including the Group's Achinsk and Bogoslovsk alumina refineries, and third party sources (supplies from each refinery are provided to dedicated potrooms for better production performance);

- Energy source — electrical power is provided via the Krasnoyarskenergo grid. Krasnoyarskenergo obtains electricity in part from the Krasnoyarskaya HPP, which is controlled by the beneficial owner of En+ and is situated on the Yenisei River approximately 45 km from the smelter. The capacity of the power station is in excess of current local requirements.

The Krasnoyarsk aluminium smelter is located on the outskirts of the city of Krasnoyarsk, which is located on the Trans-Siberian railway and other major rail routes, providing good rail access for the supply of materials and delivery of finished products.

The Krasnoyarsk aluminium smelter has just finished implementing a modernisation programme, which is expected to reduce hazardous emissions of hydrogen fluoride, tarry matters and benzapyrene by 1.5 times, 2.7 times and 2.5 times, respectively, for every tonne of aluminium produced. The programme commenced in 2004 and was completed in September 2009. The total capital expenditure for the project was approximately US$296 million, excluding VAT.

The Krasnoyarsk aluminium smelter has a single anode paste plant on-site that produces the anode paste required for the Söderberg cells. The smelter also has three potrooms pre-bake cells, for which anodes are purchased from the Sayanogorsk aluminium smelter and Chinese suppliers. Pitch and coke for use in the production of anode paste at the on-site anode paste plant are delivered by rail from a variety of sources within the Russian Federation and China.

Sayanogorsk Aluminium Smelter. The Sayanogorsk aluminium smelter is the third largest aluminium producer in Russia in terms of production capacity, which in 2008 constituted 542 thousand tonnes per annum.

- Alumina source — the Nikolaev alumina refinery;

- Energy source — electrical power for the Sayanogorsk smelter used to be provided via the independent Khakasenergo grid, which was supplied by the Sayano-Shushenskaya hydroelectric power plant, situated on the Yenisei River approximately 50 km from the smelter. Following a major accident at Sayano-Shushenskaya HPP in August 2009, alternative power suppliers have been located to ensure supply of electricity to the affected smelters. The accident resulted in temporary loss of production from eight cells (less than 3% of total production), but the smelter resumed operating at normal capacity within a short timeframe. See "Risk Factors — Risks relating to the Group and its Business — The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations".

The Sayanogorsk aluminium smelter is located on the outskirts of the town of Sayanogorsk, Khakasia Republic in southern Siberia, approximately 75 km south of the regional capital city of Abakan. The town has good rail access for the supply of materials and delivery of finished products.

The Sayanogorsk aluminium smelter is a relatively modern aluminium production facility, which utilises pre-baked anode technology throughout. The Sayanogorsk smelter has its own carbon facilities, including a recently constructed baking furnace for the Khakas aluminium smelter. The furnace has reached its full capacity of 15,000 tonnes of anodes per month, allowing the Group to meet the demand for anodes of both the Sayanogorsk aluminium smelter and the Khakas aluminium smelter in full. The smelter receives the required pitch from suppliers within the Russian Federation and coke from a variety of suppliers in the Russian Federation and China. In addition to metals produced, Sayanogorsk also produces liquid aluminium, which is transferred to SAYANAL, one of the Group's packaging plants, located adjacent to the Sayanogorsk smelter.

Khakas Aluminium Smelter. The Khakas aluminium smelter is the first Russian smelter constructed in over 20 years and is the largest construction project in the Russian aluminium industry since Soviet times. The smelter was constructed by the Group adjacent to the Sayanogorsk aluminium smelter as its fifth potline.

- 2008 Capacity — 297 thousand tonnes per annum;
- Alumina source — QAL, Australia;
- Energy source — electrical power for the Khakas smelter used to be provided via the Khakasenergo grid, which was supplied by the Sayano-Shushenskaya hydroelectric power plant. Following a major accident at Sayano-Shushenskaya HPP in August 2009 alternative power suppliers have been located to ensure supply of electricity to the affected smelters. See "Risk Factors — Risks relating to the Group and its Business — The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations".

Engineering for the smelter commenced in August 2004, and construction began in March 2005. Commissioning of the smelter was undertaken in four phases. The first metal production at Khakas occurred in late November 2006, and the last pot came on line in October 2007, at which point the smelter became operational. The project was fully implemented by the Group's own Engineering, Procurement, Construction and Management ("EPCM") team and the smelter utilises state-of-the-art technology developed by UC RUSAL, including pre-bake anodes. At the end of 2008, the Khakas aluminium smelter reached its full capacity of approximately 297 thousand tonnes per annum. The gas treatment centres at the smelter exceed global environmental standards. The total capital expenditure for the construction of the smelter constituted US$710.3 million.

Irkutsk Aluminium Smelter. The Irkutsk aluminium smelter is one of the oldest aluminium smelters in Siberia.

- 2008 Capacity — 360 thousand tonnes per annum;
- Alumina source — the Achinsk alumina refinery, Bogoslovsk alumina refinery, Urals alumina refinery and third party sources;
- Energy source — electrical power is supplied primarily by Irkutskenergo (which is controlled by the beneficial owners of En+) via the regional grid. The grid is supplied by three primary hydroelectric plants at Irkutsk, Bratsk and Ust-Ilimsk and supplemented by a series of smaller hydro and thermal power stations located around the province.

The Irkutsk aluminium smelter is situated 1.7 km from the town of Shelekhov, around 22 km to the northwest of the city of Irkutsk. The east-west Siberian railway runs 2 km east of the facility.

The Group is currently in the process of completing the IrKAZ-5 Project, which involves the construction of a fifth aluminium smelting potline using high amperage pre-bake technology developed by SibVAMI. After the commissioning of the new potline, the total capacity of the smelter is expected to increase by approximately 169 thousand tonnes, to approximately 466 thousand tonnes per annum. Baked anode blocks for the new potline will be procured from China and delivered to the smelter by rail. Construction of IrKAZ-5 commenced in 2005, and the project first produced metal in 2007. 77% of 300 kA PFPB cells, gas treatment centres and a new casthouse have been commissioned and the full commissioning of the remaining cells is scheduled to occur by the end of 2009. The total capital expenditure for the construction of the project is currently estimated at approximately US$617 million, excluding VAT, of which US$561 million had been spent as of 30 June 2009.

The Irkutsk aluminium smelter is currently served by two railway stations adjacent to the production facilities (Zavodskaya and Goncharovo). The smelter receives pitch and coke for the production of anode paste by rail from a variety of sources within the Russian Federation.

Novokuznetsk Aluminium Smelter. The Novokuznetsk aluminium smelter comprises two separate and relatively independent smelter sites, although for management, sales, accounting and maintenance purposes the sites are considered to be one integrated smelter operation.

- 2008 Capacity — 322 thousand tonnes per annum;
- Alumina source — the Urals alumina refinery and third party sources;
- Energy source — electrical power for the smelter is purchased from the wholesale energy market.

Both production sites are located in Novokuznetsk, which is situated in the Kemerovo Region along the Tom' River. Each of the two production sites at the smelter has a dedicated casthouse and its own anode paste production facility. Calcined coke for the anode paste plant is delivered by rail from suppliers from the USA, India and Argentina. The plant receives pitch from a Novokuznetsk supplier by rail.

Approved Projects within the Aluminium Division

The Group is currently undertaking the following projects within the constraints imposed by its debt restructuring agreements. See "Financial Information — Liquidity and Capital Resources — Debt Restructuring".

Boguchanskoye Energy and Metals Project (BEMO Project). In May 2006, RUSAL and RusHydro (previously HydroOGK), controlled by the Russian Government, entered into a cooperation agreement to jointly construct the Boguchanskoye Energy and Metals Complex. BEMO is ultimately intended to involve the construction of the 3,000 MW Boguchanskaya hydropower plant (HPP) on the Angara River and the approximately 588 thousand tonnes per annum Boguchansky aluminium smelter 8 kilometres southeast of Tayozhniy, in the Krasnoyarsk region. At the date of this prospectus, only capital expenditure relating to the HPP is permitted under the terms of the Group's debt restructuring agreements. For further information concerning the BEMO Project, see "— Norilsk Nickel and Material Joint Ventures — Material Joint Ventures — Boguchanskoye Energy and Metals Project (BEMO Project)".

Medium-Term — Taishet Aluminium Smelter. The first stage of the 750 thousand tonne per annum Taishet aluminium smelter is expected to be commissioned in 2011, and the entire plant is expected to reach full capacity in 2014. Construction at the Taishet aluminium smelter began in April 2007. The

Taishet aluminium smelter will comprise four potrooms equipped with state-of-the-art RA-400 cells developed by the Group's Engineering and Technology Centre. The total capital expenditure for the Taishet aluminium smelter (excluding construction of the anode plant) is currently estimated at approximately US$1,987 million, excluding VAT, of which US$495 million, excluding VAT, had been spent as of 30 June 2009. The construction has been temporarily suspended in view of the current market downturn. The debt restructuring agreements generally prohibit the Group from incurring capital expenditure in relation to this project through the end of the override period but permit the Group to fund development of the project on a project finance (non-recourse) basis or through certain equity investments in the project. The Group is in the process of negotiating project financing from various international lenders, including with support from export credit agencies in Japan and Korea and potential participation of Korean and Japanese equity investors in the project. The Group is also considering integration of the project with the BEMO project.

The Taishet aluminium smelter is located in the outskirts of Taishet in Siberia, on the East Siberian rail route, in the Irkutsk region of the Russian Federation, situated approximately midway between Bratsk and Krasnoyarsk.

Medium-Term-ALSCON. ALSCON is located at Ikot Abasi in the Akwa Ibom State of Nigeria and was initially conceived in 1981 by the government of Nigeria to take advantage of the abundant gas reserves in the region. Construction of the smelter was completed by Ferrostaal AG and Reynolds International and first metal produced in 1997, but the smelter was closed in June 1999 for lack of working capital. The Group acquired a 77.5% ownership stake in ALSCON in February 2007. The Group has entered into a long-term take or pay gas contract with Nigerian Gas Company that is necessary for production at ALSCON and resumed production at the smelter in February 2008. In 2010, it is expected that an additional 54 cells will become operational and that it will also produce its own anode.

ALSCON is currently a loss-generating asset and is not expected to become profitable until a capital investment program has been completed with the smelter reaching its full capacity of 197 thousand tonnes per annum. A feasibility study for internal investment approval was completed in September 2008. The program requires an investment of approximately US$298 million over the period of 2009-2011, of which US$76 million had been spent as of 30 June 2009. The debt restructuring agreements generally prohibit the Group from incurring capital expenditure in relation to this program through the end of the override period but permit the Group to fund the program on a project finance (non-recourse) basis or through certain equity investments in the project. The Group is currently considering a disposal of 50% of its interest in ALSCON to a strategic investor.

Production of Other Aluminium Products or Other Materials Related to Aluminium Production

In addition to the production of primary aluminium, the Group also has facilities for the production of a number of other aluminium products, including aluminium powder, silicon and secondary aluminium and it produces other materials related to aluminium production.

The Group has two cryolite plants and one cathode plant, which produce essential materials for the aluminium production process. The Group also has a number of anode production facilities, which are integrated with certain aluminium smelters.

Aluminium fluoride, cryolite and fluoride concentrate. Both of the Group's cryolite plants, OJSC Polevskoy Cryolite Plant and OJSC South Urals Cryolite Plant, are located in the Russian Federation. The main products of the cryolite plants are cryolite and aluminium fluoride, which are both used in the aluminium production process at the Group's smelters. The plants' cryolite production more than meets the demand for the product by Group aluminium smelters, with the excess production sold to third parties. In 2008, the two plants produced approximately 75% (and in the first six months of 2009, approximately 70%) of the Group's demand for non-granulated aluminium fluoride. In July 2008, operations of certain Polevskoy Cryolite Plant facilities were temporarily suspended for a period of

less than 30 days due to violations of industrial safety requirements, following which operations were resumed. The main supplier of fluoride (CaF_2) concentrate (FF-90) for production of cryolite and aluminium fluoride is Yaroslavskaya Gorno-Rudnaya Company, which is held by the Group together with UK RGRK on a 50/50 basis. The Yaroslavskaya Gorno-Rudnaya Company holds the Yaroslavsky mine, which is the largest fluoride mine in the world.

Cathodes. The Group's demand for cathode blocks for regular repair is 31 to 45 thousand tonnes per annum depending on relining schedule and cell life cycle. The Group's cathode plant located in China, Shanxi RUSAL Cathode Co. Ltd., currently has a capacity for production of cathode blocks of more than 15 thousand tonnes per annum and is undergoing an expansion and modernisation programme to increase production capacity to 19.8 thousand tonnes per annum. In March 2008, the Group acquired assets of another cathode plant in Taigu County of Shanxi Province, China which have been integrated into Shanxi RUSAL Cathode Co. Ltd., and such integration has increased the Group's production of cathodes by up to 15 thousand tonnes of cathode blocks annually. Upon completion of Shanxi RUSAL Cathode Co. Ltd. expansion program, including the integrated assets of the cathode plant in Taigu County, the Group's production of cathodes is expected to increase up to 40.7 thousand tonnes of cathode blocks annually. The expanded facility is expected to come on line by the end of 2012. The Group purchases the remainder of its cathodes requirement from the Novosibirsk Electrode Plant and Ukranian Graphite. The Group is currently considering options to increase its cathode blocks production capacity through further acquisitions and/or joint ventures.

Anodes. Although a number of the Group's aluminium smelters (including Khakas, Sayanogorsk and ALSCON) have captive anode-shops capable of producing sufficient anodes to meet their requirements, the Group currently does not have sufficient anode production capacity to meet its overall demand for anodes.

The table below shows the production data from each cryolite and cathode facility.

Cryolite, Aluminium Fluoride and Cathode Production (kt)

		Total Plant Production			
		Six months ended 30 June 2009	Year ended 31 December		
Asset [1]	Product		2008	2007	2006
Polevskoy Cryolite Plant	Cryolite	0.7	4.0	4.0	5.5
	Alum. Fluoride	7.5	36.3	35.0	36.2
South Urals Cryolite Plant	Cryolite	2.4	6.4	7.0	9.0
	Alum. Fluoride	21.6	56.7	55.0	53.1
Shanxi RUSAL Cathode Co. Ltd.	Cathodes	10.3	14.6	15.4	11.2

Note:

(1) The table presents total production of the plants, each of which is a consolidated subsidiary of the Group. The Group has 94.17% equity ownership in OJSC Polevskoy Cryolite Plant, 93.49% equity ownership in OJSC South Urals Cryolite Plant, 100% equity ownership in Shanxi RUSAL Cathode Co. Ltd., which has a branch located in Taigu County of Shanxi Province, China in each case as at 15 September 2009.

Aluminium Powder Metallurgy. The Group has three aluminium powder metallurgy plants, and the aggregate aluminium powder production from the Group's plants was 18.7 thousand tonnes in 2008 and 6.7 thousand tonnes in the first six months of 2009.

Silicon Smelting. The Group has three silicon smelters. The aggregate attributable silicon production from the Group's plants was 58.0 thousand tonnes in 2008 and 9.0 thousand tonnes in the first six months of 2009. The Group uses most of this silicon in the production of alloys. The Group is currently considering a disposal of all or part of its silicon assets. These assets are non-core to the Group's business, and such disposal would not be expected to have a material impact on its operations.

Secondary Aluminium. The Group has three secondary aluminium plants, and the aggregate attributable secondary aluminium production from the Group's plants was 28.7 thousand tonnes in 2008 and 10.0 thousand tonnes in the first six months of 2009.

Alumina Division

The Group's Alumina Division comprises both the alumina refineries involved in alumina production and the mining assets of the Group.

Alumina Production

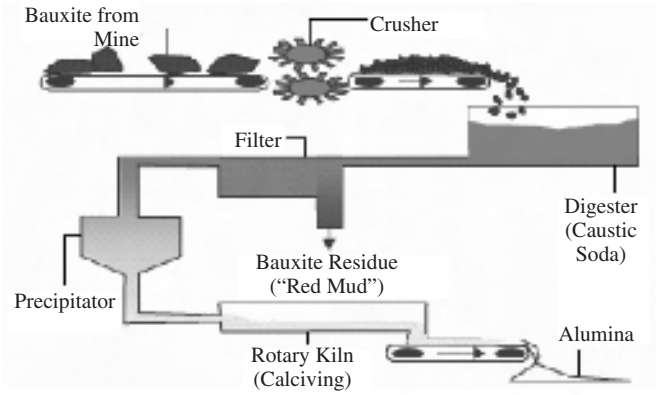
The Group has 13 alumina refineries. In recent years, the Group has substantially increased its refining capacities by means of new acquisitions and increased holdings in existing assets. See "History and Corporate Structure — History and Development". The alumina refineries of the Group are located in six countries: Ireland (one plant), Jamaica (two plants), Ukraine (two plants), Italy (one plant), the Russian Federation (four plants) and Guinea (one plant). In addition, the Group holds a 20% equity stake in Queensland Alumina Limited, the second largest alumina refinery in the world in terms of production capacity. Most of the Group's refineries have ISO9001 certified quality control systems, ten refineries and QAL have been ISO14001 certified for their environmental management and three have received OHSAS18001 certification for their health and safety management system.

The aggregate alumina production from the Group's plants was 11.3 million tonnes for the year ended 31 December 2008 and 3.7 million tonnes for the six months ended 30 June 2009.

As part of the cost-cutting measures implemented in response to the global economic downturn and aimed at increasing the Group's efficiency, the Company optimised alumina production through suspension of its operations at Alpart and Windalco (Jamaica), Eurallumina (Italy) and ZALK (Ukraine), and by decreasing production volumes at Aughinish (Ireland) by 39.5%, at AGK (Russia) by 16.6% and at BGZ (Russia) by 26.4% in 2009 according to the Company's estimates. Alumina production in the first six months of 2009 was reduced by 36% (on an annualised basis, adjusted to take into account the idling of capacity that has occurred to date) as compared to the first six months of 2008. See also "— Strengths and Strategies".

Production process of alumina

The chart below illustrates how alumina is produced from bauxite. Approximately four tonnes of bauxite are required to produce two tonnes of alumina; while approximately two tonnes of alumina are required to produce one tonne of aluminium. The workflow of the Bayer process is set out in the flowcharts below:



Bauxite washing and grinding

↓

Dissolving bauxite in caustic soda in a digester

↓

Filtering of the bauxite residues

↓

Precipitating the remaining sodium aluminate

↓

Calcining the sodium aluminate at 1,000ºC

↓

Alumina

The table below shows the contribution from each facility. Also shown is approximate production attributable to the Bayer process, sinter process and nepheline process.

Alumina Production from Refining Operations (kt)

	Attributable Refinery Production[2]				
	Six months ended 30 June	Year Ended 31 December			
Asset[1]	**2009**	**2008**	**2007**	**2006**	**Process**
Ireland					
Aughinish Alumina	565	1,890	1,803	1,816	Bayer
Jamaica					
Alpart[3]	148	1,074	1,044	1,023	Bayer
Windalco (Ewarton and Kirkvine Works)[3]	153	1,159	1,154	1,129	Bayer
Ukraine					
Nikolaev Alumina Refinery (NGZ)	733	1,446	1,420	1,410	Bayer
Zaporozhye Alumina Refinery (ZALK)[3]	29	227	236	262	Bayer and sinter
Italy					
Eurallumina[3]	92	1,045	1,069	1,103	Bayer
Russia					
Bogoslovsk Alumina Refinery (BAZ)	500	1,084	1,100	1,100	Bayer and sinter
Achinsk Alumina Refinery (AGK)	452	1,069	1,082	1,073	Nepheline
Urals Alumina Refinery (UAZ)	349	730	731	726	Bayer and sinter
Pikalyovo Alumina Refinery (PGZ)[4]	—	73	255	218	Nepheline
Boxitogorsk Alumina Refinery (BGZ)	60	156	165	149	Sinter
Guinea					
Friguia Alumina Refinery	272	593	527	530	Bayer
Joint Venture — Australia					
Queensland Alumina Ltd. (QAL) (proportion attributable to UC Rusal)	385	769	763	774	Bayer
TOTAL PRODUCTION THE GROUP'S PRO RATA SHARE OF QAL PRODUCTION	**3,738**	**11,317**	**11,347**	**11,313**	

Notes:

(1) The Group has 100% equity ownership in each of the assets, except for the Alpart refinery, in which the Group has a 65% interest, the Windalco-Ewarton and Windalco-Kirkvine refineries, in each of which the Group has a 93% interest, the Zaporozhye alumina refinery (ZALK), in which the Group has a 97.6% interest, and Queensland Alumina Ltd. (QAL), in which the Group has a 20% interest, in each case as at 15 September 2009. Alpart and Windalco are consolidated by the Group on a proportionate basis as they are jointly controlled assets and operations. Accordingly, the production data set forth above represents the Group's pro rata share of Alpart and Windalco's production. Zaporozhye alumina refinery is a fully consolidated subsidiary of the Company, so the attributable production is presented on a 100% plant production basis to reflect UC RUSAL's effective control of the finished product. QAL is consolidated on an equity basis and accordingly the data shown is the proportion attributed to UC RUSAL based on its equity ownership.

(2) Includes calcined and hydrate alumina. Aughinish alumina refinery produced 64,260 tonnes of hydrate in 2008. Eurallumina produced 71,054 tonnes of hydrate in 2008. Windalco (Ewarton and Kirkvine combined) produced 32,297 tonnes of hydrate in 2008. Nikolaev alumina refinery produced 27,843 tonnes of hydrate in 2008. Bogoslovsk alumina refinery produced 35,281 tonnes of hydrate in 2008. Achinsk alumina refinery produced 12,166 tonnes of hydrate in 2008. Urals alumina refinery produced 9,146 tonnes of hydrate in 2008 and Boxitogorsk alumina refinery produced 60,157 tonnes of hydrate in 2008. ZAlK produced 1,390 tonnes of hydrate in 2008. QAL, Alpart and Friguia produce calcined alumina only.

(3) Production was temporarily suspended in the first six months of 2009.

(4) Pikalyovo alumina refinery was sold to Basel-Cement in 2008.

The Group's six largest alumina refineries in terms of production accounted for 68% and 80%, respectively, of its aggregate alumina production for the year ended 31 December 2008 and for the six months ended 30 June 2009. A summary of each of the Group's principal alumina refineries is set out below. The capacity data provided indicates the capacity for 2008. Through 2008, the Group operated at or near capacity, which before 2008 has generally increased over time with respect to each alumina refinery due to productivity, technological and other improvements. In 2009, however, the Group reduced output of its alumina refineries to adjust to the decrease in demand for aluminium.

Alumina is predominantly produced through the purification of bauxite to aluminium oxide using the Bayer process, though several other processes exist. All of the Group's refineries process bauxite, with the exception of the Achinsk alumina refinery, which uses nepheline ore as the feedstock. The Group is progressively upgrading and modernising its alumina refining equipment to improve the alumina quality, yield, physical properties and raw material consumption.

Principal Alumina Refineries

Aughinish Alumina Refinery. The Aughinish alumina refinery is the Group's largest alumina refinery in terms of production capacity.

- 2008 production — 1.89 million tonnes per annum;
- Bauxite sources — Compagnie des Bauxites de Guinea (CBG) in Guinea and Mineracao Rio do Norte (MRN) in Brazil;
- Alumina deliveries — to the Group smelters and third parties;
- Energy source — all of the refinery's electricity and steam requirements are sourced from an on-site combined heat and power (CHP) plant, which was commissioned in January 2006. Currently, the CHP plant generates steam and electricity for the refinery and supplies surplus energy to the local grid.

The refinery is situated on Aughinish Island on the south side of the Shannon estuary between Askeaton and Foynes, 32 km downstream from Limerick City, Ireland.

The Aughinish alumina refinery has a research and development programme supported by extensive links with the Irish government, Limerick University and various industry bodies. The refinery has successfully obtained external funding for a variety of research activities, and the programme has led to enhancements in the operation of the refinery, especially in the areas of digestion and calcining.

The Aughinish alumina refinery is served by a captive deep-water terminal in the Shannon Estuary for both the import of materials and the export of finished product. Currently, Aughinish is operated on a reduced production mode as one of the precipitation trains has been removed from operations. If it were to become necessary, Aughinish could return to full capacity after a two-month period required for preparation.

Nikolaev Alumina Refinery. The Nikolaev alumina refinery is the second largest producer of alumina in the CIS in terms of production capacity.

- 2008 production — 1.45 million tonnes per annum;
- Bauxite source — several sources, predominantly Compagnie des Bauxites de Kindia ("CBK"), but also from Bauxite Company of Guyana Inc. ("BCGI") and the Weipa mine in Australia;
- Alumina deliveries — to a number of smelters within the Group, including the Bratsk aluminium smelter, Krasnoyarsk aluminium smelter and the Sayanogorsk aluminium smelter, as well as to third parties;
- Energy source — approximately two-thirds of the refinery's electricity needs are met by the national grid, the remainder being supplied by the refinery's own generating facility. The Nikolaev alumina refinery power station is also used to generate steam for the refinery. The main fuel used by the captive power station is natural gas, heavy fuel oil being used only as a standby/backup energy source.

The Nikolaev alumina refinery is located on the Yuzhny (Southern) Bug river, approximately 30km upstream from the Black Sea coast in Ukraine, and approximately 25km from the town centre of Nikolaev.

The Nikolaev alumina refinery is undertaking an expansion project that is expected to increase plant production from 1.4 million tonnes per annum to 1.7 million tonnes per annum. The Group is contractually obligated to produce alumina at the Nikolaev refinery in amount of not less than 1.6 million tonnes not later than 2012. The total capital expenditure is estimated at US$155 million, including value-added-tax, of which US$125 million has been incurred as of 30 June 2009. Consistent with the terms of its debt restructuring agreements, the Group intends to spend US$2.2 million to increase alumina production to 1.5 million tonnes in 2010 and to then suspend the expansion projects through the end of the override period. The Group will need (and expects to receive) a waiver from its contractual counterparty in connection with that suspension.

The refinery also includes a hydrometallurgical facility that produces gallium metal.

Bogoslovsk Alumina Refinery. The Bogoslovsk alumina refinery, part of the Bogoslovsk alumina and aluminium complex, is the fourth largest producer of alumina in the CIS in terms of production capacity.

- 2008 production — 1.08 million tonnes per annum;
- Bauxite source — Timan and North Urals bauxite mines;
- Alumina deliveries — to a number of smelters within the Group, including the on-site Bogoslovsk smelter and the Kandalaksha, Nadvoitsy and Volgograd aluminium smelters;

- Energy source — electricity is supplied by several wholesale market suppliers via the regional grid, which is operated by Sverdlovskenergo. A third-party owned off-site thermal power station also produces electrical power, as well as steam and hot water for the town and plant. The calciner kilns and the sintering kilns are fired by natural gas supplied by Uralnorthgas with heavy fuel oil used for standby supply/backup.

The Bogoslovsk alumina and aluminium complex is situated in the centre of the town of Krasnoturyinsk, located in the Ural Mountains, approximately 370km to the north of Ekaterinburg in the Sverdlovsk region.

Achinsk Alumina Refinery. The Achinsk alumina refinery is one of the largest alumina refineries in Russia in terms of production capacity.

- 2008 production — 1.07 million tonnes per annum;
- Nepheline and limestone sources — Kiya Shaltyr nepheline mine and the adjacent Mazulsky limestone quarry, which are leased by Achinsk alumina refinery;
- Alumina deliveries — to Krasnoyarsk, Bratsk, Irkutsk and Volkhov aluminium smelters;
- Energy source — captive thermal power plant on site. Currently, the plant also purchases power from Krasnoyarskenergosbyt to supplement its own supply. The captive power station also meets the steam and hot water requirements of the refinery and the town of Achinsk.

The Achinsk alumina refinery is located in Siberia close to Krasnoyarsk on the Bank of Chulym river.

The Achinsk alumina refinery also produces sodium carbonate, potassium carbonate and aluminium sulphate as principal by-products. In 2007, the refinery undertook an expansion project to increase capacity for alumina production by 57 thousand tonnes per annum. The project included reducing bottlenecking at the alumina refinery, as well as modernising and increasing the capacity of the power plant and soda production. The total capital expenditure for the project constituted US$90.7 million, excluding VAT. The Group is currently undertaking additional minor works relating to such expansion.

The Achinsk alumina refinery is also undertaking a soda quality improvement project, expected to be completed in 2009. The capital expenditure for the soda quality improvement project is estimated at US$9.6 million including VAT (as a result US$9.9 million has been incurred as of 30 June 2009). The Achinsk alumina refinery also started a turbine construction project, which has been recently mothballed. The estimated capital expenditure for the turbine project is US$43 million including VAT (of which US$41.2 million has been incurred as of 30 June 2009).

Other Alumina Refineries

Urals Alumina Refinery. The Urals alumina refinery, part of the Urals alumina and aluminium complex, is the fourth largest producer of alumina in the CIS in terms of production capacity.

- 2008 production — 0.73 million tonnes per annum;
- Bauxite source — the Timan and North Urals bauxite mines;
- Alumina deliveries — to a number of smelters within the Group, including the on-site Urals smelter and the Novokuznetsk, Irkutsk, Volgograd, Bratsk and Volkhov aluminium smelters;

- Energy source — electricity is supplied by the regional grid. A third-party owned off-site thermal power station also produces electrical power, as well as steam and hot water for the town and plant. The calciner kilns and the sintering kilns are fired by natural gas supplied by Uralnorthgas, with heavy fuel oil used for standby supply/as a backup.

The Urals alumina and aluminium complex is situated in the town of Kamensk-Uralskiy, located approximately 100 km to the south-east of Ekaterinburg in the Sverdlovsk region.

Friguia Alumina Refinery. The Friguia alumina refinery, located in the town of Friguia in the Republic of Guinea, is approximately 160 km northeast of the capital and main port of Conakry. The adjoining Friguia mine, operated by Friguia S.A., a wholly owned subsidiary of the Group, is located on the Fouta Djalon plateau in the northwest of Guinea, about 105 km from Conakry, and is fully vertically integrated with the Friguia alumina refinery where its entire production is delivered. There are currently no facilities to export bauxite from the mine or the Conakry alumina loading point.

- 2008 production — 0.59 million tonnes per annum;
- Bauxite source — the integrated Friguia mine;
- Alumina deliveries — to the Bratsk aluminium smelter;
- Energy source — a captive power plant on site supplies electricity and steam to the refinery and the town of Friguia. There is no standby/backup power source via an external grid.

In 2009, the government of the Republic of Guinea initiated proceedings against the Group contending, among other things, that the privatisation of the Friguia bauxite and alumina complex should be declared null and void and compensation in the amount of US$1.0 billion should be paid to the government of the Republic of Guinea. If the Government of the Republic of Guinea is successful, the Group may be required to pay damages and/or return its shares in Friguia to the Government of the Republic of Guinea. In addition, the government of the Republic of Guinea recently issued two decrees that may increase the potential for expropriation of mining assets in the Republic of Guinea. See "Risk Factors — Risks relating to the Group and its Business — Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Legislation may not adequately protect against expropriation or nationalisation" and "— Litigation — Republic of Guinea".

Queensland Alumina Limited ("QAL"). QAL is the second largest alumina refinery in the world in terms of production capacity, located in Gladstone in the State of Queensland, Australia. For further information concerning QAL, see "— Norilsk Nickel and Material Joint Ventures".

Alpart. Alumina Partners of Jamaica ("Alpart") is the Group's second largest alumina refinery in terms of production and is a joint venture between UC RUSAL Alumina and Norsk Hydro. The Group has a 65% equity ownership in Alpart, with the remaining stake being held by Norsk Hydro. Alpart's financial statements are consolidated on a proportionate basis in the Group's consolidated financial statements as it is a jointly controlled asset and operation.

As a cost-cutting measure, production was temporarily suspended in May 2009 for at least 12 months.

- 2008 production — 1.07 million tonnes per annum (attributable);
- Bauxite source — the integrated Alpart bauxite mine;
- Alumina deliveries — to the Group facilities and third parties;

- Energy source — electrical power and steam is provided by a dedicated co-generating powerhouse. The boilers in the powerhouses are fired by heavy fuel oil. There is no tie-in to the national grid.

Alpart is situated in the plains of St. Elizabeth, some 5 km from the village of Nain in Jamaica. The mining operations and site offices are located near Mandeville in the Manchester District, some 70 km west from Kingston, Jamaica.

The refinery is connected to its port, Port Kaiser, by a dedicated railway. Port Kaiser services Alpart for the movement of bulk material, primarily alumina, fuel oil and caustic. Bauxite from the Alpart bauxite mine is transported to the refinery by a 17 km belt conveyer. Alpart also envisages recovering bauxite from the Malvern Plateau and it is planned to either construct a cable belt from the Malvern plateau or to utilise subcontracted road haulage to deliver the bauxite to the refinery.

Alpart holds one mining licence, one exploration licence and a contract to mine under a further licence owned by a third-party company. Excluding this licence, 55% of the surface rights within the Alpart licences are owned by either Alpart or the Jamaican government, which makes these areas immediately accessible for mining under the terms of the licences. The remaining 45% are privately owned, which will require prior land acquisition and possible resettlement of residents before commencement of mining. The third-party agreement allows the mining of 25 million dry metric tonnes from the Jamalco licence area before the year 2014, with an option to extend the agreement. In addition, in 2005, Alpart entered into a 30-year agreement with the Jamaican government requiring the government to guarantee suitable quantities and qualities of bauxite Resource areas to meet the plant requirements for the period of the agreement.

Based on the restarting plan developed by the Company, the plant is expected to be able to resume production within three months from the date on which it is decided to restart operations.

Windalco-Ewarton and Windalco-Kirkvine Works. Ewarton Works and Kirkvine Works are both part of the West Indies Aluminium Company (Windalco). The Group has 93.0% equity ownership in each of Ewarton Works and Kirkvine Works, with the remaining stake held by Jamaica Bauxite Mining Limited, representing the Jamaican government. Windalco's financial statements are consolidated on a proportionate basis in the Group's consolidated financial statements as it is a jointly controlled asset and operation.

As a cost-cutting measure, production was temporarily suspended in April 2009 for at least 12 months.

- 2008 production — 1.16 million tonnes per annum (attributable);
- Bauxite source — the integrated Ewarton and Kirkvine bauxite mines;
- Alumina deliveries — to third parties;
- Energy source — steam and electricity are provided by an on-site co-generating powerhouse for each of the Ewarton and Kirkvine Works. The boilers in the powerhouses are fired by heavy fuel oil. There is also a tie-in to the Jamaican national grid.

Ewarton Works is situated about 10km north of the market town of Linstead, and about 5km south of the town of Ewarton in Jamaica. Kirkvine Works is situated in the hilly regions of the centre of Jamaica, some 15km from Mandeville. The Ewarton mining operations are located in the St. Catherine's District, approximately 40km north of Kingston, and the Kirkvine mining operations are located near the Alpart operations in the Manchester District, approximately 70 km west of Kingston.

Windalco holds two mining licences and one exploration licence. The majority of the surface rights for the Windalco licences are privately owned by third parties, which will require prior land acquisition and possible resettlement of residents before commencement of mining. In 2001, Windalco entered into a 30-year agreement with the Jamaican government requiring the government to guarantee suitable quantities and qualities of bauxite Resource areas to meet the plant requirements for the period of the agreement.

In June 2006, a ten-year mining contract was signed between Windalco and Washington Group International (WGINT) for exploration, drilling, mine development, post-mining reclamation and stockpile management. The Group has agreed to pay US$3.6 million per annum over the next two years to compensate WGINT for suspension of production at these works. Windalco remains responsible for maintaining community relations and the long-term mine plan.

Based on the restarting plan developed by the Company, the plant is expected to be able to resume production within three months from the date on which it is decided to restart operations.

Eurallumina Refinery. Eurallumina is the largest alumina refinery in Italy and one of the largest producers of alumina in Europe.

As a cost-cutting measure, production was temporarily suspended in March 2009 for at least 12 months. Further, in September 2009, one of its red mud basins was sequestrated and its environmental permit for production operations and management of the red mud basin was suspended. See "— Litigation — Italian Environmental Ministry".

- 2008 production — 1.05 million tonnes per annum;
- Bauxite source — the Weipa mine in Australia and the Kindia mine in the Republic of Guinea;
- Alumina deliveries — to a number of smelters within the Group and third parties;
- Energy source — steam for the refinery is generated in three high sulphur fuel oil fired boilers, and all of the electricity supplied to the refinery comes from the Italian national grid.

Eurallumina is located in Portoscuso, on the southwest coast of Sardinia, Italy.

Subject to the release of Eurallumina's red mud basin from sequestration and the reinstatement of its environmental permit and based on the restarting plan developed by the Company, the plant is expected to be able to resume production within three months from the date on which it is decided to restart operations.

Mining

The Group's mining assets comprise 16 mines and mine complexes, including eight bauxite mines, two quartzite mines, one fluorite mine, two coal mines, one nepheline syenite mine and two limestone mines. The Company jointly operates two coal mines with Samruk-Kazyna under a 50/50 joint venture, LLP Bogatyr Komir. The aggregate attributable bauxite production from the Group's mines for the six months ended 30 June 2009 and for the year ended 31 December 2008 was 6.1 and 19.1 million tonnes, respectively. The table below sets forth the attributable production of the mines in which the Group has interests for the six months ended 30 June 2009 and the years ended 31 December 2006, 2007 and 2008.

			Production			
				Year ended 31 December		
Mining Asset	**Location**	**UC RUSAL[1] Interest (%)**	**Six months ended 30 June 2009**	**2008**	**2007**	**2006**
Bauxite (Mt Wet)[6]						
Alpart	Jamaica	65[2]	0.3	3.2	2.9	3.3
North Urals	Russia	100	1.6	3.3	3.4	3.3
Windalco — Ewarton	Jamaica	93[3]	0.1	2.0	1.9	2.1
Windalco — Kirkvine	Jamaica	93[3]	0.1	1.9	1.8	1.9
Timan	Russia	80[4]	1.0	1.9	1.9	2.4
Friguia	Guinea	100	0.9	2.0	1.7	1.9
Kindia	Guinea	100	1.4	3.2	3.0	3.1
Bauxite Co. De Guyana (BCGI)	Guyana	90[5]	0.7	1.6	1.9	1.2
Total Bauxite Mining (Mt Wet)			**6.1**	**19.1**	**18.5**	**19.2**
Nepheline Process Mines (Achinsk)						
Kiya Shaltyr Nepheline Syenite (Mt Wet)	Russia	100	2.2	4.8	4.9	5.1
Mazulsky Limestone (Mt)	Russia	100	3.1	7.4	6.9	6.9
Limestone (Mt)						
Petropavlovsky Limestone	Russia	100	0.4	1.0	1.0	1.0
Quartzite (kt)						
Cheremshansk	Russia	99.91	95	230	199	208
Glukhovsky	Ukraine	97.55	4	55	51	55
Total Quartzite (kt)			**99**	**285**	**250**	**233**
Fluorite (kt)						
Yaroslavsky	Russia	50[7]	441	799	899	807
Coal (Mt)						
LLP Bogatyr Komir	Kazakhstan	50[8]	7.1	23.05	19.2	20.8

Notes:

(1) Beneficial ownership as at 15 September 2009.

(2) The remaining 35% is held by Norsk Hydro.

(3) The remaining 7% is held by Jamaican Bauxite Mining Limited, representing the Jamaican government.

(4) Approximately 20% is indirectly held by the Komi Republic, while minority shareholders hold an immaterial interest.

(5) The government of Guyana retains ownership of 10% in BCGI.

(6) Alpart and Windalco are consolidated on a proportionate basis as they are jointly controlled assets and operations. The Group's interests in Alpart and Windalco are 65% and 93%, respectively. Accordingly the bauxite production data set forth above represents the Group's pro rata share of Alpart and Windalco's respective production. The total production of the Group's fully consolidated subsidiaries is included, even if there are minority interests. Accordingly, the total production of Timan and BCGI is included, even though the Group's interests in Timan and BCGI are approximately 80% and 90%, respectively.

(7) The remaining 50% is held by OOO RGRK, which is the managing entity.

(8) The Company jointly operates the Bogatyr and Severny coal mines with Samruk-Kazyna under a 50/50 joint venture established in December 2008. LLP Bogatyr Komir is consolidated on an equity basis and accordingly the data shown is the proportion attributed to UC RUSAL based on its equity ownership.

Most of the Group's deposits located in Russia and Guinea have been explored and prospected in accordance with the Former Soviet Union "Classification and Estimation Methods for Reserves and Resources". This procedure establishes the nature of evidence required to ensure compliance with the Committee of Reserves of the Ministry of National Resources of the Russian Federation (the "GKZ" classification). The Group's GKZ approved reserves have been restated in compliance with the Prospectus Directive and the Prospectus Rules, in conjunction with the recommendations of the Committee of European Securities Regulators ("CESR") and in accordance with the criteria for internationally recognised reserve and resource categories of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). The table below sets forth the aggregate JORC Ore Reserves and Mineral Resources for the mines in which the Group has interests and the Dian-Dian bauxite project as at 1 July 2009.

		Mineral Resources[(1) (2) (3) (4) (5)] (Dry Mtonnes)						Ore Reserves[(1) (5) (6) (7) (8)] (Dry Mtonnes)					
Mining Asset	**Location**	**Measured**		**Indicated**		**Inferred**		**Proved**		**Probable**		**Total Proved and Probable**	
		Tonnage (Mt)	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**
Bauxite													
Alpart	Jamaica	15.2	43.0	40.7	40.7	38.0	45.3	0.0	0.0	0.0	0.0	0.0	0.0
Windalco-Ewarton	Jamaica	17.1	42.3	18.2	42.4	11.2	43.6	0.0	0.0	0.0	0.0	0.0	0.0
Windalco-Kirkvine	Jamaica	11.6	42.5	27.5	42.1	0.5	43.6	0.0	0.0	0.0	0.0	0.0	0.0
Kindia[(9)]	Guinea	0.0	0.0	37.9	39.5	61.6	37.8	0.0	0.0	38.2	39.2	38.2	39.2
Friguia	Guinea	36.8	40.8	142.4	43.0	152.6	43.2	37.3	40.0	77.8	41.7	115	41.1
Bauxite Co. De Guyana (BCGI)	Guyana	3.6	51.5	41.3	58.0	4.2	52.7	2.3	49.7	3.3	52.3	5.6	51.2
North Urals	Russia	11.8	55.4	180.4	55.2	113.5	55.7	7.3	51.6	83.0	50.9	90.3	51.0
Timan	Russia	113.1	49.4	67.1	49.9	0.0	0.0	99.7	54.8	35.4	57.1	135	55.4
Dian-Dian Project	Guinea	401.9	48.1	70.2	45.7	216.6	47.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Bauxite		**611**	**47.7**	**626**	**48.1**	**598**	**46.9**	**147**	**50.8**	**238**	**46.9**	**384**	**48.4**
		Tonnage (Mt)	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**	**Tonnage (Mt)**	**Al_2O_3 (%)**
Nepheline Process (Achinsk)													
Kiya Shaltyr Nepheline Syenite	Russia	0.0	0.0	8.9	26.9	54.2	27.2	0.0	0.0	8.7	26.3	8.7	26.3
		Tonnage (Mt)	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**
Mazulsky Limestone	Russia	0.0	0.0	90.1	54.4	0.0	0.0	0.0	0.0	12.8	53.8	12.8	53.8
		Tonnage (Mt)	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**	**Tonnage (Mt)**	**CaO (%)**
Limestone													
Petropavlovsk (North Urals)	Russia	15.6	55.0	6.9	54.9	0.0	0.0	13	54	6	54	19	54

Mining Asset	Location	Mineral Resources[(1) (2) (3) (4) (5)] (Dry Mtonnes)						Ore Reserves[(1) (5) (6) (7) (8)] (Dry Mtonnes)					
		Measured		Indicated		Inferred		Proved		Probable		Total Proved and Probable	
		Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)
Quartzite													
Cheremshansk	Russia	0.4	99.0	1.6	99.0	35.1	99.0	0.2	99.0	0.8	99.0	1.0	99.0
Glukhovsky	Ukraine	1.1	99.0	7.9	99.0	0.3	99.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Quartzite		**1.5**	**99.0**	**9.5**	**99.0**	**35.4**	**99.0**	**0.2**	**99.0**	**0.8**	**99.0**	**1.0**	**99.0**
		Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)
Fluorite													
Yaroslavsky	Russia	3.3	52.7	17.1	37.2	1.5	39.7	0.0	0.0	0.5	27.4	0.5	27.4
		Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)	
Coal													
Bogatyr	Kazakhstan	2,276		170		484		288		742		1,030	

Notes:

(1) The mines' individual Mineral Resources and Ore Reserves are further detailed in the Independent Technical Report in Appendix VI.

(2) Mineral Resources are recorded on an unattributable basis, equivalent to 100% ownership.

(3) Mineral Resources tonnages include Ore Reserve tonnages presented in the Ore Reserve Statement.

(4) Mineral Resources are reported as dry weight (excluding moisture).

(5) The alumina grades are presented as available alumina, as opposed to total alumina.

(6) Tonnages are based on ore mined as per UC RUSAL's production plans.

(7) Ore Reserves are recorded on an unattributable basis, equivalent to 100% ownership.

(8) Ore Reserves are reported as dry weight (excluding moisture).

(9) The Kindia Probable Ore Reserve has been converted from the Indicated Mineral Resource, during which process applicable loss and dilution factors have been applied. This has resulted in a marginal increase in the Probable Ore Reserve versus Indicated Mineral Resource tonnage.

At 1 July 2009 the Group had aggregate JORC bauxite Mineral Resources of 1,835 million tonnes, of which 611 million tonnes were Measured, 626 million tonnes were Indicated and 598 million tonnes were Inferred. Included in these Mineral Resources are JORC Proved and Probable bauxite Ore Reserves of 384 million tonnes (dry), of which 147 million tonnes were Proved and 238 million tonnes were Probable. For purposes of determining the JORC Mineral Resources and Ore Reserves of the Group's mines and projects, SRK has assumed that the Group will renew or otherwise extend for the life of the mine the exploration and production licences and concession agreements currently covering such mine or project. For definitions of "Measured Mineral Resources", "Indicated Mineral Resources", "Inferred Mineral Resources", "Proved Ore Reserves" and "Probable Ore Reserves", see "Glossary of Technical Terms".

Security of supply of high quality bauxite at adequate volumes and cost competitive prices for current and projected alumina facilities is an important task for the Group. Additional exploratory work is being undertaken to find new deposits of bauxite in the existing operational bauxite mining areas of the Group and new project areas.

Each of the Group's mining assets is operated under one or more licences.

The Alpart, Windalco-Ewarton, Windalco-Kirkvine and Friguia bauxite mines are discussed above under "— The Group's Operations — Alumina Division" together with their respective integrated alumina refineries. A summary description of the Group's bauxite mines that do not have integrated on-site alumina refineries is set out below.

Kindia Bauxite Mine. The Kindia bauxite mine ("Kindia") in Guinea is operated by Compagnie des Bauxites de Kindia (CBK), which is wholly owned by the Group. The Kindia deposits are located in southeast Guinea, 90 km northeast of the capital city of Conakry and 32 km southwest of the local administrative town of Kindia. The bauxite produced at the mine is transported by rail to the Conakry port and shipped predominantly to the Group's Nikolaev alumina refinery in Ukraine. Mining at the site is governed by a convention between the Guinean government and the Group, which was signed in November 2000 and is valid for a period of 25 years. The government of the Republic of Guinea recently issued two decrees that may increase the potential for expropriation of mining assets in the Republic of Guinea. See "Risk Factors — Risks relating to the Group and its Business — Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Legislation may not adequately protect against expropriation or nationalisation".

Guyana Bauxite Mine. Bauxite Company of Guyana Inc. (BCGI) was established in 2004 pursuant to an agreement on bauxite mine development in Guyana between RUSAL and the government of Guyana. The government of Guyana retains 10% of ownership of BCGI, with the remaining 90% owned by the Group. The mining operations are located some 200 km south of the capital of Guyana, Georgetown. BCGI hold mining permits for a number of deposit areas, including Kwakwani, 20 Green Creek, 16 Bissuaruni (left and right banks), Souwari, 22 Kurubuka and the "Aroaima Property" encompassing the north, south and west deposits.

Commencing on 22 November 2009, BCGI has been experiencing a strike that has led to temporary suspension of production (through 7 December 2009).

Approved Projects within the Alumina Division

Kindia Bauxite Mine (Kindia-2). Mine production from the Kindia Bauxite Mine (Republic of Guinea) is anticipated to increase up to 3,800 thousand tonnes per annum by 2012. By 2012, the crushing plant at Debele is due to become obsolete and the Group does not expect to replace it. This would require that the production tonnage from the Kindia deposits be mined using Wirtgen surface miners entirely, which would produce a product of a size that does not require subsequent crushing. Additional surface miners will be purchased. The capital expenditure estimated to be required for the project amounts to US$76 million including value-added tax, of which US$24 million had been spent as of 30 June 2009. The debt restructuring agreements generally prohibit the Group from incurring capital expenditure in relation to this project through the end of the override period but permit the Group to fund the program on a project finance (non-recourse) basis or through certain equity investments in the project. The Company intends to seek financing for this project in a manner consistent with the debt restructuring agreements.

Engineering and Construction Division

One of the Group's most significant competitive advantages is its in-house EPCM (Engineering, Procurement, Construction, Management) structure, embodied by the Engineering and Construction Division ("ECD"), which was established by RUSAL in July 2005. Historically, aluminium companies used to implement engineering and construction projects using their own resources. The outsourcing of these services has resulted in the emergence of engineering and construction service companies. When RUSAL faced the challenge of implementing large-scale projects amidst its global expansion, the contract engineering and construction companies were unable to meet its needs as efficiently or in as timely a manner as RUSAL could itself by drawing on its over 70 years of Russian know-how. The Group therefore resumed its past practice by using in-house resources for the implementation of its engineering and construction projects. The key advantage of the Group's in-house EPCM structure is its ability to provide comprehensive R&D and engineering and construction services, resulting in the reduction of capital expenditure at all stages of planning and implementation of the Group's investment projects.

The major functional areas of the ECD are as follows:

- extensive R&D activities and development of advanced aluminium and alumina production technologies;
- implementation of complex engineering and construction projects with an EPCM approach; and
- maintenance, repair and replacement of process equipment at all Group facilities.

Technology

The ECD develops process solutions for new production assets, as well as for facilities undergoing modernisation and expansion. The ECD has the Engineering and Technology Centre ("ETC") in Krasnoyarsk, the Engineering and Technology Centre for Alumina Production ("Alumina ETC") in St. Petersburg and a centre specialising in design (SibVAMI) in Irkutsk.

The ETC in Krasnoyarsk was established in 2002 and is responsible for the development of new aluminium production technologies, reduction pre-bake technologies, such as RA-300, RA-400 and RA-500, and for improving the Group's Söderberg technology and developing technologies aimed at reducing the cost of production. The Group is installing advanced pre-bake, cleaner technology in certain of its smelters, particularly in its new projects. Using the Sayanogorsk aluminium smelter as a testing centre, the Group has developed a new baked-anode/high-amperage process that uses RA-300 and RA-400 cells, and plans to install RA-500 cells in the near future. RA-400 cell technology also has been recently modernised to increase productivity by 6% (RA-400T). By increasing throughput, installing new generation RA cell technology with higher amperage improves productivity, resulting in less capital expenditure per tonne of production, and also lowers ongoing operating expenses such as personnel, maintenance and repair costs. RA-300 cells were first put into operation on a pilot basis in December 2003 and RA-400 cells in December 2005. A variant of the RA-300 cell technology was selected for the Khakas aluminium smelter adjacent to the Sayanogorsk aluminium smelter, and has been installed on an industrial scale. The technology is also expected to be installed at the Boguchansk aluminium smelter. Currently, sixteen RA-400T cells are operating on a pilot basis at the Sayanogorsk aluminium smelter, and it is expected that RA-400T cells will be used at the Taishet aluminium smelter. A prototype of RA-500 cells has also been developed, and it is expected that eight of these cells will be installed on a pilot basis at the Sayanogorsk aluminium smelter in 2010. The Group has also been developing aluminium production technology using vertical inert electrodes which is expected to fully avoid the emission of greenhouse gases and reduce the cost of production by 15 to 20% and construction capital expenditure by 30 to 40%.

In addition to pre-bake technologies, the ETC in Krasnoyarsk has also devoted considerable R&D attention to improving the environmental performance of the Group's Söderberg cells, which produced approximately 80% of the Group's aluminium in 2008. Improved environmental performance of Söderberg cells would allow the Group's facilities to continue production over the long term with relatively low ongoing capital expenditure. Since 2002, the Group has been conducting research and trials to reduce the emissions of Söderberg cells to the level of pre-bake technology in a project referred to as "Clean Söderberg Technology". The Group has developed technical solutions and is now seeking to develop commercially viable applications. There are currently five test cells in operation at the Krasnoyarsk aluminium smelter, and a new project has been approved to install Söderberg cells with improved environmental performance at the Krasnoyarsk aluminium smelter (in aggregate 352 cells) and to finance the production of colloidal anode paste on a commercial scale. The Group intends to utilise its Clean Söderberg Technology at its two largest aluminium smelters: Bratsk and Krasnoyarsk, as well as at the Novokuznetsk and Irkutsk aluminium smelters. The Clean Söderberg Technology project will also have the benefit of increasing capacity.

The Alumina ETC was established in 2003 and is responsible for the development of high-yield and low-cost alumina production technologies and the design of high capacity equipment for new generation alumina refineries. It has successfully developed the high temperature shell-and-tube digestion technology for the Komi alumina project, the reliability and performance of which has been confirmed by international experts. New types of alumina production equipment and process flow are currently being tested at special sites at the Nikolaev alumina refinery and the Urals aluminium smelter.

Engineering and Project Feasibility Studies

The engineers and other specialists working within the ECD perform a thorough assessment of technical solutions and capital expenditures through all phases of each investment project, starting from potential construction site examination, selection of process technologies, determination of optimal transportation and production infrastructure, down to manpower planning and conceptual design. An Engineering Department has been established within ECD to perform these tasks and works with the other engineering centres within the ECD, including RUSAL VAMI, the Technology Engineering Centre, and the SibVAMI.

The largest of these, RUSAL VAMI, was initially founded as a research institute in 1931 and was acquired by RUSAL in 2003. The institute, together with the Engineering Department within the ECD, provides a full range of services, including raw materials research, project and process development for enterprises working with aluminium, alumina and magnesium, and participation in all stages of greenfield as well as expansion and modernisation projects. More than 40 industrial enterprises for the production of aluminium, magnesium and carbon products have been constructed on the basis of project and maintenance services rendered by RUSAL VAMI in the former USSR, China, Turkey, Egypt, India, Israel and the former Yugoslavia. RUSAL VAMI has over 460 patents and licenses its proprietary technologies for alumina, aluminium and magnesium production.

Construction

During the execution of projects, the ECD acts as the EPCM contractor to the Group. The ECD performs a full range of activities related to execution, including detailed design documentation, purchase of equipment, and services construction and equipment installation management, commissioning and start-up activities and production ramp-up.

The ECD's ability to provide centralised full EPCM services, which are essential for large-scale EPCM projects in Siberia, Western Europe, Africa and other parts of the world, presents a major competitive advantage for the Group and provides strong support for the Group's existing assets and expansion plans on a global scale. The advantages of the ECD's EPCM capabilities are illustrated by the construction of the Group's Khakas smelter. Work commenced on the facility in March 2005, the first metal production was brought on line in December 2006, and the smelter became fully operational in November 2007. Capital expenditure in the Khakas project was US$2,415 per tonne of installed RA-300 aluminium smelting capacity. See "— The Group's Operations — Aluminium Division — Principal Aluminium Smelters".

Packaging Division

While the Group focuses on the upstream segment of the industry, its downstream assets nonetheless comprise a profitable niche business for the Group. The Group has three aluminium foil mills. The Sayanal and Urals foil facilities are located in the Russian Federation, and ARMENAL is located in Armenia. The Sayanal foil mill is the largest foil producer in Russia in terms of production capacity, with a maximum production capacity of 39.5 thousand tonnes of foil per annum in 2008. ARMENAL has undergone a modernisation programme and will reach its full capacity of 24 thousand tonnes per annum by 2010. Capital expenditure for the programme totalled US$70 million, excluding VAT.

The Group can produce aluminium foil with thicknesses ranging from 7 to 240 micron, 3003 aluminium alloy strap, aluminium ingots and a broad range of alufoil-based flexible packaging and household products. All facilities are certified under ISO 9001-2000 quality management standard, except for ARMENAL, which is being prepared to such certification after modernisation. SAYANAL additionally is certified according to the ISO 14001 environmental management services.

The aggregate aluminium foil and packaging material production from the Group's plants was 68.5 thousand tonnes for the year ended 31 December 2008 and 29.1 thousand tonnes for the six months ended 30 June 2009. The table below shows the contribution from each facility.

Aluminium Foil and Packaging Production (kt)

	Total Plant Production			
	Six months ended 30 June 2009	Year ended 31 December		
Asset[1]		**2008**	**2007**	**2006**
SAYANAL	14.4	40.6	39.5	38.3
Urals Foil	5.1	15.0	16.1	15.6
ARMENAL[2]	9.7	12.9	12.3	0.9
Total production	**29.1**	**68.5**	**67.8**	**54.8**

Notes:

(1) The Group has 100% equity ownership in each of the assets as at 15 September 2009.

(2) ARMENAL incurred production problems and high costs early in its operation, after RUSAL first acquired partial ownership of the plant. After RUSAL became the sole owner of ARMENAL in 2003, an extensive retrofit of the plant was undertaken, the final stage of which was completed in October 2006. The growth in production in 2007 is primarily due to the ARMENAL foil mill being commissioned upon completion of the modernisation project.

The Group exports its downstream products to 46 countries on five continents and delivers them to 40 regions of the Russian Federation. The Group is the largest foil producer in Russia, with an estimated market share of 49% in Russia, 6.7% in Europe and 1.7% globally in 2008, based on the Group's compilation of data from the European Aluminium Foil Association. Despite the falling global demand for primary aluminium, foil products still remain in demand in virtually every area of their application.

ENERGY SUPPLY

The Russian Government has and continues to implement reforms of the power sector aimed at moving from a regulated to a market-based system. The effect of the post-regulation pricing structure is still under discussion, however electricity tariffs for industrial users are expected to rise. To mitigate potential increases in electricity prices, the Group is pursuing a multi-pronged strategy intended to:

- secure supplies for its existing smelters, particularly in Siberia, through long-term contracts with energy generating companies controlled by beneficial owners of the substantial shareholders, the State and independent investors;

- build smelter-generation complexes in regions in which low-cost captive energy sources are available; and

- invest in selective energy-related assets as a potential hedge against increased energy costs.

Power Market Regulation in the Russian Federation and Ukraine

In the Russian Federation and Ukraine, current regulations prescribe the approval of energy prices by relevant regulatory bodies for specified periods of time. All current power contracts at the Group's smelters in the Russian Federation and Ukraine run from 1 January 2009 to 31 December 2009, with the exception of the Bogoslovsk, Urals, Novokuznetsk, Krasnoyarsk, Bratsk, Irkutsk, Sayanogorsk, Khakas and Volgograd aluminium smelters, which purchase power on the open wholesale market.

Electricity prices in Russia are partly regulated by the Russian Government. The Russian Government controls hydro and nuclear power generation, and regulates tariffs through the Federal Service for Tariffs ("FST"). Reforms of the state electricity system began in the mid-1990s, when the electricity market was divided into the national wholesale market, organised by price zones, and the local retail market. The national wholesale market was further divided into two segments, one regulated by the FST with the other being a free market segment characterised by online trading and significant price fluctuations. The local retail markets have been fully controlled by the regional energy commissions (RECs), who have tariff-setting authority based on the FST benchmark tariffs. Tariffs are set in Roubles and have increased at least in line with inflation, though some of the former SUAL smelters have experienced more significant increases.

In April 2007, the Russian Government established guidelines for the share of electricity production volumes to be supplied on the wholesale electricity market under regulated tariffs during the period from 1 January 2007 to 31 December 2010. That share is from 45% to 50% during the period of 1 July to 31 December 2009 and is expected to gradually decrease to 15 to 20% by 1 July 2010. Beginning on 1 January 2011, all electricity production volumes are expected to be supplied to industrial users under free market prices. Once deregulation has occurred, electricity tariffs for industrial users are expected to rise as a result of electricity price liberalisation and demand growth. See "Risk Factors — Risks Relating to the Group and its Business — The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations".

Security of Power Supply

The aluminium smelting process is energy intensive and requires access to a continuous energy supply. Electricity consumption is proportionate to the aluminium produced, and so an increase in the volume of aluminium produced by a smelter will result in a corresponding increase in the electricity consumed by the smelter.

The Group's Siberian smelters, accounting for approximately 80% of its production in 2008, obtain their energy mainly from low-cost hydropower stations with few, if any, alternative sources of significant demand. The lack of alternative demand for the power stations is a result of two key factors; there are few consumers requiring a sufficient scale of electricity to compete with the demand of the Group, and it is difficult economically to transport electricity over the grid to more distant consumers. At the same time, there are few significant suppliers of electricity in Siberia. As a result, the Siberian power stations and the Group's Siberian smelters are interdependent. Elsewhere, the Group relies more heavily on thermal power. To the extent the Group relies on thermal power, its electricity costs are affected by the prices of the fuel used by the generators, in particular natural gas and coal. Natural gas prices in Russia are regulated by the Russian Government, but deregulation is expected and price rises are anticipated. In 2008, gas prices increased up to approximately US$92 per thousand cubic metres, which constituted a 24.5% increase as compared to the gas price for 2007. It is expected that in 2010 average gas price will increase for another 26.5% as compared to approximately US$106.7 per thousand cubic metres in 2009.

In August 2009, a major accident occurred at the Sayano-Shushenskaya hydroelectric power plant in Siberia, which was the main supplier of electricity to the Group's Sayanogorsk and Khakas aluminium smelters. According to preliminary estimates by the owners of the power plant, it may take up to four years to fully restore the station's previous production capacity. The accident resulted in a temporary cessation of power supplies to the Sayanogorsk and Khakas aluminium smelters and SAYANAL and a reduction in power supplies to the Krasnoyarsk and Novokuznetsk aluminium smelters. The Group estimates that losses incurred as a consequence of the accident amounted to approximately RUR41.6 million (approximately US$1.33 million at the exchange rate of the Central Bank of Russia as of 30 June 2009). The accident at the Sayano-Shushenskaya hydroelectric power plant has led to changes to the main power supply source for the Sayanogorsk and Khakas aluminium smelters. Currently, nearly all of the electricity for the Sayanogorsk and Khakas aluminium smelters is transferred from the Krasnoyarsk and Kemerovo regions (by several 500kV overhead lines). Though all of the affected smelters have secured alternative electricity supplies and are working at normal capacity, and although the Russian Government has indicated its intention to control the price of electricity in the region to minimise any potential negative effect of the accident, there is a risk that electricity costs could increase. Further, in view of the effect of the accident on the industry and consumers in the region in general, the Russian Government may inquire whether production cuts are possible or necessary to alleviate the pressure on the regional electricity supply system, in particular, during peak seasons. To mitigate any negative effect from possible production cuts, the Company may need to consider production cuts and rerouting electricity supplies to its more cost efficient facilities, though no production cuts are currently anticipated. See "Risk Factors — Risks Relating to the Group and its Business — The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations".

The following table shows the current electricity supply arrangements at the Group's smelters in the Russian Federation and Ukraine. As of the date of this prospectus, the Group has entered into long-term electricity supply contracts for its Bratsk, Krasnoyarsk and Irkutsk aluminium smelters with two energy suppliers, Irkutskenergo and Krasnoyarskaya HPP, controlled by the beneficial owner of En+, a controlling shareholder of the Company. The electricity supplied by Irkutskenergo and Krasnoyarskaya HPP to the Bratsk, Krasnoyarsk and Irkutsk aluminium smelters accounted for approximately 53% of its aluminium production in 2008 and 57% in the first half of 2009.

Smelters	Production for the year ended 31 December 2008 (kt)	Principal Source of Power	Average cost 2008 (US$/mWh)[1]	Average cost first half 2009 (US$/mWh)[2]	Current status of power supply	Supplied wholly or partially by related party
Existing Smelters						
Russia — Siberia						
Bratsk Aluminium Smelter	1,002	Hydro	16.6	15.2	Wholesale contracts. Separate agreements with grid and market service providers.	Yes
Krasnoyarsk Aluminium Smelter	1,000	Hydro	19.0	21.6	Wholesale contracts. Separate agreements with grid and market service providers.	Yes

Smelters	Production for the year ended 31 December 2008 (kt)	Principal Source of Power	Average cost 2008 (US$/mWh)[1]	Average cost first half 2009 (US$/mWh)[2]	Current status of power supply	Supplied wholly or partially by related party
Sayanogorsk Aluminium Smelter	537	Hydro	19.4	16.6	Wholesale contracts. Separate agreements with grid and market service providers.	Yes
Novokuznetsk Aluminium Smelter	320	Thermal	27.1	25.5	Wholesale contracts. Separate agreements with grid and market service providers.	Yes
Irkutsk Aluminium Smelter	358	Hydro	19.8	14.7	Wholesale contracts. Separate agreements with grid and market service providers.	Yes
Alukom Aluminium Smelter	10	Hydro	n.a	n.a	The plant became a branch of the Bratsk Aluminium Smelter in the second half of 2007. Power supply arrangements of BrAZ equally apply.	No
Khakas Aluminium Smelter	297	Hydro	19.2	18.0	Wholesale contract. Separate agreements with grid and market service providers.	No
Russia — Other						
Bogoslovsk Aluminium Smelter	186	Thermal	35.3	33.8	Wholesale contracts. Separate agreements with grid and market service providers.	Yes
Volgograd Aluminium Smelter	166	Hydro	46.4	31.8	Wholesale contracts. Separate agreements with grid and market service providers.	No
Urals Aluminium Smelter	134	Thermal	35.8	34.0	Wholesale contracts. Separate agreements with grid and market service providers.	No
Nadvoitsy Aluminium Smelter	81	Hydro	38.4	27.5	Annual retail contract with Karelskaya Energosbytovaya Kompaniya.	No
Kandalaksha Aluminium Smelter	75	Hydro/ Nuclear	31.1	22.5	Annual retail contract with Kolskaya Energosbytovaya Kompaniya.	No

Smelters	Production for the year ended 31 December 2008 (kt)	Principal Source of Power	Average cost 2008 (US$/mWh)(1)	Average cost first half 2009 (US$/mWh)(2)	Current status of power supply	Supplied wholly or partially by related party
Volkhov Aluminium Smelter	24	Hydro	37.6	19.1	Annual retail contract with Peterburgskaya Sbytovaya Kompaniya.	No
Ukraine						
Zaporozhye Aluminium Smelter	113	Nuclear/ Thermal	68.1	49.3	Annual retail contract with Zaporozhyeoblenergo.	No
Sweden						
Kubikenborg Aluminium Smelter	112	Hydro/ Nuclear	46.7	41.0	Contract with Vattenfall until 2016.	No
Approved Projects						
Russia — Siberia						
Taishet Aluminium Smelter	n.a.	n.a.	n.a.	n.a.	n.a.	No
Nigeria						
ALSCON	9	Thermal	n.a.	15.1	20 year take or pay contract with Nigerian Gas Company to supply gas to gas turbine	No
Total	**4,424**					

Notes:

(1) Electricity tariffs include transmission and generation

(2) Converted from LC/MWh to US$/MWh at the exchange rate of 31.5 RUR/US$ for January 2009; 35.8 RUR/US$ for February 2009; 34.7 RUR/US$ for March 2009; 33.6 RUR/US$ for April 2009; 32.1 RUR/US$ for May 2009 and 31.0 RUR/US$ for June 2009.

All of the Group's smelters in the Russian Federation and Ukraine, except for the Kandalaksha aluminium smelter, have at least two independent power transmission routes to the smelter switchyard, each of which is capable of providing the full power requirements of the smelter in the event of loss or damage to the other transmission line.

Electricity tariffs of the Group's aluminium smelters

The electricity tariff is made up of a regulated component and a market component. The tariff in respect of the regulated component is set by the government and is expected to increase by 7.6% in 2010. The tariff paid in respect of the market component varies according to each of the Group's aluminium smelters. The Group has adopted different strategies in different regions to manage its exposure to electricity price increases.

Siberia-based smelters

In order to secure the Group's electricity supply and respond to proposed regulatory changes, the Group entered into long-term electricity supply contracts for its Krasnoyarsk aluminium smelter, Bratsk aluminium smelter and Irkutsk aluminium smelter in Siberia in November and December 2009. The tariffs under these long-term contracts are linked to the LME aluminium price through formulae described below. These tariffs apply to that portion of the electricity supply that is subject to market pricing, which is expected to increase until it reaches 100% on 1 January 2011. The cost of transmission is charged separately, defined annually and is expected to increase in line with inflation. For 2009, transmission tariffs were 25 kopeck/kWh for the Krasnoyarsk aluminium smelter, 16 kopeck/kWh for the Bratsk aluminium smelter and 17 kopeck/kWh for the Irkutsk aluminium smelter.

The long-term contracts set forth maximum amounts of electricity and power to be supplied each year and the tariffs under the contracts entered into by Bratsk aluminium smelter and Irkutsk aluminium smelter do not apply to any electricity and power supplied to such smelters in excess of such maximum amounts. In addition, under the long-term contracts, the smelters are required to indemnify the electricity suppliers against any expenses that may arise as a result of additional tax which may be imposed by Russian tax authorities if they consider the price under the applicable contract to be significantly lower than the market price for the goods supplied.

The Group's other Siberian smelters will not benefit from long-term contracts. As a result, their electricity tariffs will not be linked to the LME price. Nonetheless, the Directors believe that the interdependence described above between electricity suppliers and smelters in Siberia should limit the impact of price increases as the regulatory regime evolves towards market pricing.

The discussion below includes a discussion of certain long-term electricity supply contracts that the Group has entered into with Krasnoyarskaya HPP and Irkutskenergo, which are subsidiaries of En+, a Controlling Shareholder of the Company. En+ has informed the Company that: En+ operates its electricity assets as a business unit referred to as EuroSibEnergo, or "ESE"; En+ has pledged shares in Krasnoyarskaya HPP and Irkutskenergo in support of certain debt facilities within the ESE business unit; En+ has pledged certain shares of Krasnoyarskaya HPP in support of a debt facility of a company under common control with Krasnoyarskaya HPP; and 25% of the shares of the holding company of the ESE business unit will be pledged to creditors of En+ in connection with the current restructuring of En+ indebtedness. If an event of default were to occur under any of the relevant debt facilities, and if the lenders were to foreclose on the interests of En+ in Krasnoyarskaya HPP and Irkutskenergo pledged under such facilities, it could result in a situation in which those entities are no longer under common control with the Company. The Company believes, however, that the long-term contracts with Krasnoyarskaya HPP and Irkutskenergo referred to below would remain enforceable even in such a situation, and that such a situation therefore would not have a material adverse effect on the Company.

Krasnoyarsk Aluminium Smelter

On 4 December 2009, the Krasnoyarsk aluminium smelter entered into a long-term contract with Krasnoyarskaya HPP, an electricity supplier controlled by En+, a Controlling Shareholder of the Company, for a duration of 11 years from 2010 to 2020.

The tariff per kWh for the Krasnoyarsk aluminium smelter is expected to be determined separately for the 50% of the consumed electricity denominated in Roubles and the 50% of the consumed electricity denominated in US$. In both cases the tariff is calculated under the long-term contract as follows:

$$Tb + \left(0.7 * (Pa-Pb) * V * \frac{(Tfr - Tb) * E}{(Tfr - Tb) * E + (Pa - Pb) * V}\right) / E$$

where Tb equals the initial (base) price (11.012 kopecks/kWh and 0.367 c/kWh for calculations in Roubles and US$, respectively);

Tfr equals the average weighted fixed-ratio price for electricity at the market in the preceding quarter (which is capped at 49.8 kopecks/kWh and 1.66c/kWh, respectively);

Pa equals the average London Metal Exchange price for aluminium in the preceding quarter (the minimum amount of which, for the purposes of calculations, is fixed at 54,000 Roubles/tonne and US$1,800/tonne, respectively);

Pb equals the basic aluminium price (54000 Roubles/tonne and US$1,800/tonne, respectively);

V equals aluminium production volume; and

E equals electricity consumption.

The tariff has a floor under the contract which increases annually as follows:

Contract floor	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Kopecks/kWh	11.32	11.90	12.46	12.99	13.54	14.11	14.71	15.34	15.99	16.67	17.38
c/kWh	0.42	0.44	0.46	0.48	0.50	0.52	0.54	0.57	0.59	0.62	0.64

The premium of the actual LME reference price against a base price of US$1,800 per tonne results in an increase in the tariff. The change in the tariff is linked to the LME price in a way that is non-linear. As a consequence, the tariff is effectively capped at c. 36 kopecks/kWh. For illustrative purposes, assuming a RUR/USD exchange rate of 30 RUR/1 USD (which is the assumption in the long term contract for the Krasnoyarsk aluminium smelter), the following table demonstrates what the LME linked tariff at different aluminium prices would be as at January 2010.

LME price (US$/t)	1800	1850	1950	2050	2150	2250	2500	3000	3500	4000
Contract price (kopecks/kWh)	11.0	16.1	22.1	25.6	27.8	29.4	31.8	34.0	35.1	35.7

Bratsk Aluminium Smelter

On 1 December 2009, the Bratsk aluminium smelter entered into a long-term contract with Irkutskenergo, an electricity supplier controlled by En+, a Controlling Shareholder of the Company, for a duration of nine years from 2010 to 2018.

The tariff per kWh for the Bratsk aluminium smelter under the long-term contract is calculated by multiplying the net cost of electricity generation by 1.125. The net cost of electricity generation (S) is calculated as follows:

$$S = \left(\frac{16{,}995 * (0.85 * S_{hydropower\ plant} + 0.15 * S_{CHP}) + (P_{consumption} - 16{,}995) * S_{remainder})}{P_{consumption}} \right) * \frac{CPI}{100\%}$$

where $S_{hyropower\ plant}$ equals the net cost of the electrical energy transmitted through the buses of the hydropower plant in the previous year;

S_{CHP} equals the net cost of the electrical energy transmitted through the buses of the CHP plant in the previous year;

$P_{consumption}$ equals the power consumption during the accounting year (within the limits set out in the contract);

$S_{remainder}$ equals $\frac{S_{hydropower\ plant} * 0.15 * P_{hydropower\ plant} + S_{CHP} * (P_{CHP} - 22{,}660 + 0.85 * P_{hydropower\ plant})}{P_{hydropower\ plant} + P_{CHP} - 22{,}660}$;

$P_{hydropower\ plant}$ equals the electrical energy transmitted through buses of the hydropower plant in the previous year;

P_{CHP} equals the electrical energy transmitted through buses of the CHP plant in the previous year; and

CPI equals the consumer price index in the previous year.

If the LME price exceeds the levels stated in the following table, the tariff will be increased by A, where A equals 0.035 * max (0; (Pr_m - Pr_t)); Pr_m equals the average weighted LME price for aluminium in the quarter preceding the accounting quarter and Pr_t equals the maximum LME price in the respective year as follows:

US$/t	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pr_t	1,949	1,990	2,002	1,998	1,987	1,976	2,000	2,000	2,000

The tariff has a floor under the contract of c. 15.57 kopecks/kWh and a ceiling of c. 34.89 kopecks/kWh, which is adjusted annually for the consumer price index in the previous year. For every US$1 that the LME reference rate exceeds the thresholds specified in the table above, the tariff per kWh will increase by 0.035 kopecks. If the reference LME price per tonne is US$100 higher than the threshold, the Aluminium Cash Operating Cost increases by approximately US$19.12 per tonne (at the exchange rate of the Central Bank of Russia as of 30 June 2009).

Irkutsk Aluminium Smelter

On 15 November 2009, SUAL entered into a long-term contract for supply of electricity to Irkutsk aluminium smelter with Irkutskenergo, an electricity supplier controlled by En+, a Controlling Shareholder of the Company, which is for a duration of nine years from 2010 to 2018.

The tariff per kWh for the Irkutsk aluminium smelter under the long-term contract is calculated by multiplying the net cost of electricity generation by 1.125. The net cost of electricity generation (S) is calculated as follows:

$$S = \left(\frac{5{,}665 * (0.85 * S_{hydropower\ plant} + 0.15 * S_{CHP}) + (P_{consumption} - 5{,}665) * S_{remainder})}{P_{consumption}} \right) * \frac{CPI}{100\%}$$

where $S_{hyropower\ plant}$ equals the net cost of the electrical energy transmitted through the buses of the hydropower plant in the previous year;

S_{CHP} equals the net cost of the electrical energy transmitted through the buses of the CHP plant in the previous year;

$P_{consumption}$ equals the power consumption during the accounting year (within the limits set out in the contract);

$S_{remainder}$ equals $\frac{S_{hydropower\ plant} * 0.15 * P_{hydropower\ plant} + S_{CHP} * (P_{CHP} - 22{,}660 + 0.85 * P_{hydropower\ plant})}{P_{hydropower\ plant} + P_{CHP} - 22{,}660}$;

$P_{hydropower\ plant}$ equals the electrical energy transmitted through buses of the hydropower plant in the previous year;

P_{CHP} equals the electrical energy transmitted through buses of the CHP plant in the previous year; and

CPI equals the consumer price index in the previous year.

If the LME price exceeds the levels stated in the following table, the tariff will be increased by A, where A equals 0.035 * max (0; (Pr_m - Pr_t)); Pr_m equals the average weighted LME price for aluminium in the quarter preceding the accounting quarter and Pr_t equals the maximum LME price in the respective year as follows:

US$/t	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pr_t	1,949	1,990	2,002	1,998	1,987	1,976	2,000	2,000	2,000

The tariff has a floor under the contract of c. 15.57 kopecks/kWh and a ceiling of c. 43.30 kopecks/kWh, which is adjusted annually for the consumer price index in the previous year. For every US$1 that the LME reference rate exceeds the thresholds specified in the table above, the tariff per kWh will increase by 0.035 kopecks. If the reference LME price per tonne is US$100 higher than the threshold, the Aluminium Cash Operating Cost increases by approximately US$18.53 per tonne (at the exchange rate of the Central Bank of Russia as of 30 June 2009).

Urals-based smelters

With respect to its Urals-based smelters, which accounted for approximately 7% of the Group's aggregate aluminium production in 2008, the Group plans to hedge its exposure to increases in the tariffs charged by local independent electricity producers through its interest in the LLP Bogatyr Komir in Kazakhstan, which supply coal to the Urals region. For further information concerning the LLP Bogatyr Komir, see "— Norilsk Nickel and Material Joint Ventures".

Other smelters

Smelters in other regions of the CIS, which accounted for less than 20% of the Group's aggregate aluminium production in 2008, such as those in Russia's northwest, Volgograd and Ukraine, operate in a more challenging environment, as demand is significant and forecast to grow. At present the Group is evaluating captive gas- or coal-fired power generation as an alternative source of power for these smelters.

The Kubikenborg aluminium smelter has a long-term power contract valid until 2016. ALSCON in Nigeria has its own gas-fired power plant, and the Group has concluded a 20-year take or pay gas contract with the Nigerian Gas Company, effective from February 2007. According to the contract the Group agreed to take or pay for a specific amount of gas at a price fixed for the first year and escalating annually based on LME prices for aluminium.

Moreover, the Group is working to improve its energy efficiency through the installation of improved production technology and the adoption of better operating methods for the Group's existing technology.

Approved Projects relating to the Energy Supply

Approved energy projects are described together with the associated aluminium smelters. See "— The Group's Operations — Aluminium Division — Approved Projects within the Aluminium Division — Boguchanskoye Energy and Metals Project (BEMO Project)".

SALES AND DISTRIBUTION

As a result of the global economic slowdown and reduced demand for aluminium the Group's sales strategy has been refined to achieve closer interaction with end-users to create new value-added products that meet the specific requirements of the Group's customers, further improve customer service and the quality of its products. At the same time the Group's main objective in 2009 has been to increase profitability by improving its sales system, decreasing its working capital requirements and cutting costs. The Group's goal is to sell its entire production capacity in a combination of annual and spot contracts and to sell as many value added products, such as primary foundry alloys, billets, slabs, wire rod and high purity aluminium, as possible. About 50% of the primary aluminium produced by the Group is sold through annual and longer-term contracts. Sales of value added products tend to have higher margins than the Group's other products, though the Group maintains flexibility to switch its production from value added products to other products based on market conditions.

The volume of value added products produced by the Group has increased from 2,178 million tonnes in 2007 to 2,216 million tonnes in 2008, highlighting the successful implementation of this strategy. Due to the recent changes to the financial and metal markets, the volume of value added products sold in the first six months of 2009 has decreased to 901 million tonnes as compared to 1,181 million tonnes in the same period in 2008, in line with the general decline in Group sales in 2009.

Value added products comprised approximately 52% of the Group's aggregate attributable saleable aluminium production in 2008 (and 45% in the first six months of 2009). The Group attempts to fix maximum possible level of premiums guided by the market level of premiums in each region.

The Group has an established marketing and distribution infrastructure. The Group's two principal trading arms are RUSAL Marketing GmbH, which deals with exports to customers outside of the Russian Federation and acts as agent of RTI Limited, and OJSC United Company RUSAL Trading House, which deals with sales within the Russian Federation. The Group has a trading entity in the United States and a subsidiary in Japan.

UC RUSAL has in place tolling arrangements, which are similar in form to those adopted by other major international companies. UC RUSAL has followed a tolling strategy for the following reasons:

- a substantial portion of UC RUSAL's alumina is sourced from outside Russia and processed by smelters in Russia;
- a majority of third-party sales of aluminium products are outside Russia; and
- Russian law permits such arrangements.

Pursuant to international tolling arrangements, a tolling company registered and subject to taxation in Switzerland and acting upon instructions of the principal trading company of the Group, purchases materials, such as alumina, and arranges for their delivery to manufacturers, such as aluminium smelters, in another country for processing into end products, such as primary aluminium, in consideration of a tolling (or processing) fee. The title to the materials and end products is not transferred to the manufacturers and, therefore, where tolling is employed, the shipment of raw materials and end products into and out of the country of the manufacturer is not characterised as an import/export operation and is not subject to local import/export duties. The tolling company and the manufacturer are taxed on their respective profits in their respective countries of tax residence. UC RUSAL's tolling arrangements involve the processing by smelters in Russia of alumina produced outside Russia and purchased by Group trading companies outside Russia for sale of aluminium outside Russia. The Group utilises tolling arrangements as its key material, alumina, is sourced primarily from outside Russia, while the production of aluminium takes place mostly within Russia. In addition, the majority of the Group's third party sales of aluminium products are outside Russia.

Alumina used for the production of aluminium under tolling arrangements in Russia is obtained from a variety of sources, primarily the Group's alumina operations in the Republic of Guinea, Australia, Ireland and Jamaica, as well as third party sources. The alumina is transferred to the Russian aluminium plants by the Group's trading entities. The aluminium produced in Russia under these tolling arrangements is sold on to the Group's trading entities and thereon to end-user customers throughout the world. Key markets include the European Union, Japan, Korea, South East Asia and North America. Tolling has significantly simplified the administration required for crossborder transactions. Tolling arrangements are permitted under Russian law. See "Risk Factors — Risks Relating to the Group and its Business — The Group benefits significantly from its low effective tax rate, and changes to the Group's tax position may increase the Group's tax liability and affect its cost structure".

The following table shows the Group's revenues by product for the six months ended 30 June 2009 and the years ended 31 December 2008 and 2007. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations".

Products	Six months ended 30 June 2009		Year ended 31 December 2008		Year ended 31 December 2007	
	(Mln. US$)	(%)	(Mln. US$)	(%)	(Mln. US$)	(%)
Primary aluminium and alloys (including secondary alloys, silicon and aluminium powder)	3,160	84.1	12,057	76.9	10,747	79.0
Alumina	169	4.5	1,948	12.4	1,503	11.1
Sales of semi-finished products and foil	104	2.8	271	1.7	270	2.0
Other revenue, including chemicals and energy	324	8.6	1,409	9.0	1,068	7.9
Total	**3,757**	**100**	**15,685**	**100**	**13,588**	**100**

Large scale end-customers of the Group include Norsk Hydro, Alcoa, Novelis, Kibar, Impol and Elval. Smaller customers and customers in countries such as Korea and Japan are serviced via certain distributors, as is customary in the region. The Group also makes sales through traders and deals with a select number of traders, a principal one of which is Glencore. The Group makes LME deliveries through traders.

During the six months ended 30 June 2009, approximately 21% of the Group's primary aluminium and alloys sales was made directly to end-customers, and 79% through traders. In the year ended 31 December 2008 approximately 54% of the Group's primary aluminium and alloys sales was made directly to end-customers, and 46% through traders. The increase in the amount sold to traders during the first half of 2009 was in line with the Group's strategy to expedite cash collections and improve its working capital position. The Group's ten largest end-user customers accounted for approximately 36%, 34% and 15%, respectively, of the Group's sales of primary aluminium and alloys for the years ended 31 December 2007 and 2008 and the six months ended 30 June 2009, and the Group's five largest end-user customers accounted for approximately 30%, 25% and 11.5%, respectively, of the Group's sales of primary aluminium and alloys for the years ended 31 December 2007 and 2008 and the six months ended 30 June 2009. Norsk Hydro ASA, the Group's largest end-user customer in the years ended 31 December 2007 and 2008, accounted for approximately 13% and 12%, respectively, of the Group's sales of primary aluminium in this period. Glencore, one of the Group's largest customers, accounted for approximately 7%, 9%, 10% and 21% respectively of the Group's sales of primary aluminium for the years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009.

The aggregate percentages of total cost of sales attributable to the Group's five largest suppliers for the years ended 31 December 2006, 2007, 2008 and six months ended 30 June 2009 were for each period less than 30% of the Group's total cost of sales.

The main industry sectors that use the Group's aluminium products are construction, packaging and transportation (automotive and aerospace). Within Russia, the Group focuses on downstream metal processors (rolling mills, extruders), cable producers and companies in the auto industry. On a global scale, the Group markets and sells its products primarily in the European, Japanese/Korean, South East Asian and North American markets, and the Group has established offices in China, Japan and the United States. The following table shows the Group's revenues in different geographic regions from sales of aluminium, aluminium alloys, silicon and aluminium powders for the six months ended 30 June 2009 and the year ended 31 December 2008 and 2007 (on a pro forma basis). See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations".

Geographic Region	Six months ended 30 June 2009		Year ended 31 December			
			2008		2007 (pro forma)	
	(Mln. US$)	(%)	(Mln. US$)	(%)	(Mln. US$)	(%)
Europe	1,704	51.7	5,498	44.3	4,904	44.4
CIS	333	10.1	2,729	22	2,808	25.5
America	472	14.3	1,250	10.1	1,227	11.1
Asia	781	23.7	2,928	23.5	2,084	18.9
Other	8	0.2	16	0.1	2	0.1
Total	**3,298**	**100**	**12,420**	**100**	**11,025**	**100**

As a condition to obtaining anti-monopoly approval in Russia for RUSAL's acquisition of SUAL and the Glencore Businesses, the Group is required to notify the Russian regulatory authorities of any change in the prices of its products above a permitted range and, subject to certain exceptions, of acquisitions of more than a 10% interest in entities, which supply products to the Russian market with annual revenues for such supply greater than equal to RUR2.5 billion (approximately US$80 million at the exchange rate of the Central Bank of Russia as of 30 June 2009). In addition, for 20 years following the acquisition, the Group cannot charge a price for primary aluminium higher than a price calculated pursuant to a formula primarily based on the LME price and transportation costs when entering into agreements with Russian purchasers. The Group also may not undertake "unsubstantiated" actions to reduce or limit production (with the exception of modernisation) of its Russian subsidiaries during such 20-year period without obtaining the preliminary consent of the regulatory authorities. See "Risk Factors — Risks Relating to the Group and its Business — The Group is subject to certain requirements under Russian anti-monopoly laws". In addition, during such 20-year period, the Group must maintain or increase (with certain exceptions) the production of the Group's Russian subsidiaries, unless it receives the prior consent of the regulatory authorities, satisfy the demand on the Russian market at reasonable prices, particularly with respect to products of which the Group is the sole Russian producer (to the extent possible), offer non-discriminatory terms to all purchasers on Russian commodities markets, and not increase the price of foil and certain other products by more than 5% each quarter or 20% each year. The Group is also expected to continue investing in the foil production facilities with a view to improving the quality and the world competitiveness of the product. For a period of five years following the acquisition, the Group is also required to provide the regulatory authorities with quarterly price and volume reports for aluminium and half-yearly price and volume reports for alumina and bauxite. In addition, the Group was required to investigate the establishment of a Russian trading exchange for the sale of the Group's products within three years of effective date of the acquisition. The Group completed its investigation and issued a report to FAS on 1 October 2009, concluding that there is no economic basis for the establishment of a trading exchange for the Group's products in Russia at the present time.

The Group's strong customer relations reflect the quality of its product and reliability of its supply through established logistic channels. Of the liquid aluminium produced by the Group's smelters, the vast majority is LME-grade with an aluminium content of 99.7% or higher. 54% of the Group's production was sold under direct contracts to its customers in 2008, with the remainder sold to global and regional traders. Contract terms generally are for a period of one year and provide for annual extensions. Part of the metal was sold pursuant to spot contracts. The Group also has a number of long-term supply contracts for primary aluminium and alloys with industry leaders such as Hydro, Alcoa, Glencore and Novelis, which link prices to LME prices. The Company believes it can offer its major customers significant amounts of metal for periods as long as seven years at stable prices. For example, in October 2009 the Company entered into an agreement to supply 1.68 million tonnes of aluminium to China-based Norinco between 2010 and 2016. Contracts with a period of greater than one year typically require payment against release of bill or lading in Russian port or on delivery; the Group normally does not extend credit (except in countries such as the United States where it is an industry norm and selectively for sales of value added and other products or to long-term, well-known customers) or enter into take or pay contracts. Typically, prices in both annual and longer-term contracts are calculated based on a formula connected to market prices, i.e., the LME price of aluminium. Prices are determined on a case-by-case basis following negotiations with each purchaser, so there are instances where short-term contracts are entered into for a fixed price and the LME-linked formula may vary depending on the purchaser, specific contract features (such as volume and duration) as well as the type and quality of the metal.

Sales of primary aluminium and alloys are made at prices directly linked to LME quoted prices and increased by a premium or decreased by applicable discounts. The premium depends on the market, product type, quantity, brand reputation, terms of delivery payment terms, quotation period and current market trend. Within Russia and CIS, the prices of primary aluminium and alloys for all customers are linked to LME prices and increased by a premium, which can be renegotiated monthly. The Group's average realised price per tonne of aluminium is generally higher than that quoted on the LME due to inclusion of certain alloys in the Group's products (allowing a premium over LME quotations to be earned), higher grade aluminium, supply and demand dynamics in particular markets, financing costs and the inclusion of certain transportation services in the final price. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Certain Factors Affecting the Group's Results of Operations — Certain Factors Affecting Results of Operations — Demand for and Price of Aluminium and Alumina".

Currently, the Group does not hedge its exposure to aluminium or alumina prices, though it may consider such mitigation in the future. It does hedge sales to the United States and sales made from its Kubikenborg smelter. The objective of the Group's hedging of its sales to the United States and from its Kubikenborg aluminium smelter is to achieve the average LME official cash price for the month of production. After the Group has entered into an agreement for physical sale of aluminium, it hedges the physical sale forward on the LME. At a suitable time in the future it unwinds the forward long hedge by selling the cash average of production.

NORILSK NICKEL AND MATERIAL JOINT VENTURES

Norilsk Nickel

The Company holds a more than 25% stake in Norilsk Nickel and accounts for it on the equity basis. The following information and related data concerning Norilsk Nickel in this prospectus, and Norilsk Nickel's audited consolidated financial statements the year ended 31 December 2008 and unaudited condensed consolidated financial statements for the six months ended 30 June 2009 included in Appendix II to this prospectus, have been extracted or reproduced based on publicly available information published by Norilsk Nickel. The Directors believe that the sources of this information are appropriate sources for such information and has taken reasonable care in extracting and reproducing such information. The Directors have no reason to believe that such information is

false, inaccurate or misleading or that any fact has been omitted that would render such information false, inaccurate or misleading. The information has not been independently verified by the Group, the Joint Sponsors, the Joint Bookrunners, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy. In addition, neither Norilsk Nickel nor its auditors have been involved in the preparation of this prospectus.

Norilsk Nickel is an open joint-stock company incorporated in Dudinka, located in the Krasnoyarsk Territory of the Russian Federation. According to Norilsk Nickel's annual report to shareholders for the year ended 31 December 2008:

- Norilsk Nickel is the world's largest producer of nickel and palladium and one of the leading producers of platinum and copper. It also produces various by-products, such as cobalt, chromium, rhodium, silver, gold, iridium, ruthenium, selenium, tellurium and sulphur.

- Norilsk Nickel is involved in prospecting, exploration, extraction, refining and metallurgical processing of minerals, as well as in production, marketing and sale of base and precious metals.

- Norilsk Nickel's production facilities are located on four continents and in the following six countries Russia, Australia, Botswana, Finland, the United States of America and South Africa.

In Russia, Norilsk Nickel's shares are traded on the Moscow Interbank Currency Exchange ("MICEX") and the Russian Trading System ("RTS").

In addition to the Company, according to publicly available information, other significant shareholders in Norilsk Nickel as of 26 May 2009 were V.O. Potanin with 25%, Norilsk Nickel's subsidiaries with 8.55% and VEB with 3.68%. The Bank of New York International Nominees as nominal holder and depository for Norilsk Nickel's ADR program holds 25.4% and others hold 13.25%.

The Group has pledged 25% plus one share in Norilsk Nickel as collateral to secure the Group's indebtedness to VEB.

For additional information in respect of Norilsk Nickel and the Group's investment, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — The Acquisition of a 25% plus one share stake in Norilsk Nickel and Subsequent Impairment" and the Norilsk Nickel audited financial statements at "Financial Statements of Norilsk Nickel" which have been extracted from publicly available information and are set out in Appendix II.

Material Joint Ventures

The following discussion relates to certain joint ventures and equity investments that the Group deems to be material. The accounts of such joint ventures and equity investments are consolidated on the equity basis in the Group's consolidated financial statements included elsewhere in the prospectus.

Boguchanskoye Energy and Metals Project (BEMO Project)

In May 2006, RUSAL and RusHydro, a company controlled by the Russian Government, entered into a cooperation agreement to jointly construct the Boguchanskoye Energy and Metals Complex ("BEMO"). The BEMO project is ultimately intended to comprise the construction of the 3,000 MW Boguchanskaya hydropower plant ("Boguchanskaya HPP") on the Angara River and the

approximately 588 thousand tonnes per annum Boguchansky aluminium smelter eight kilometres southeast of Tayozhniy, in the Krasnoyarsk region. At the date of this prospectus, only capital expenditure relating to the Boguchanskaya HPP up to a certain threshold is permitted under the terms of the Group's debt restructuring agreements.

In 2006, RUSAL and RusHydro spent approximately US$101.3 million, excluding VAT, on preliminary work and engineering for both the smelter and the Boguchanskaya HPP. In 2007, RUSAL and RusHydro spent approximately US$222 million, excluding VAT, for construction of the hydropower plant. The banking feasibility study for the project was approved in 2007. In addition, the partners procured commitments for the project from major contractors and significant preparatory works were completed at the end of 2007.

The Group's capital expenditure for the Boguchanskaya HPP is currently estimated at approximately US$725 million, excluding VAT, of which US$366 million had been spent as of 30 June 2009. The debt restructuring agreements permit the Group to incur capital expenditure, within certain limits, during the override period in relation to this project. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Capital Expenditure Restrictions".

The Russian Federation's Investment Fund will finance the necessary infrastructure (whose costs are not included in the project budget). State authorities have allocated approximately US$1.4 billion for the comprehensive development of the Lower Angara region development programme, which is managed by the Council of the Administration of the Krasnoyarsk Region. These funds will be spent on new power transmission lines, roads and railways necessary for the complex and other local plants and industries. Construction of infrastructure units commenced in 2007 and is expected to be completed by 2011 in accordance with the construction schedule approved by the Russian Government. The Russian Federation Investment Fund's projected budget for construction of new power transmission lines for the BEMO project in 2009 was approximately RUR7.8 billion.

The proposed smelter is expected to contain two potlines (672 cells), each utilising the RA-300 technology. The project is divided into two stages, with the first start-up complex scheduled for completion by 2013 and the second by the end of 2015. The debt restructuring agreements generally prohibit the Group from incurring capital expenditures in relation to this project through the end of the override period but permit the Group to fund the project on a project finance (non-recourse) basis or through certain equity investments in the project. UC RUSAL is currently negotiating the financing of the project with several banks and potential co-investors to complete the construction of the first start-up complex earlier than 2013 (as the case may be, in 2012). The Group's capital expenditure for the aluminium smelter is currently estimated at approximately US$717 million, excluding VAT, of which approximately US$126 million, excluding VAT, had been incurred as of 30 June 2009.

Queensland Alumina Limited (QAL)

In 2005, RUSAL completed the acquisition of a 20% equity interest in Queensland Alumina Limited ("QAL"), one of the world's largest alumina refineries, in terms of production capacity, with annual production of approximately 3.84 million tonnes of smelter grade alumina for the year ended 31 December 2008. The refinery is located on 80 hectares of a 400 hectare site on the south-east outskirts of the city of Gladstone in the State of Queensland on the east coast of Australia. The alumina refinery is owned and operated by the joint venture, a consortium of Rio Tinto Alcan, which owns 80% and the Group, whose equity ownership is 20%. QAL produces alumina on a toll basis (a tolling charge per tonne of alumina produced is applied to recover the costs of processing, including operating, maintenance, raw materials, energy and administration) for two companies, Rio Tinto Aluminium and UC RUSAL. Each joint venture partner supplies the refinery with bauxite from the Weipa mine, in northern Queensland, in return for product alumina in proportion to its respective equity in the alumina refinery.

LLP Bogatyr Komir

Pursuant to contractual arrangements entered into in connection with the Group's acquisition of SUAL in 2007, the Group acquired the right to receive a 100% interest in LLP Bogatyr Komir subject to the pre-emptive rights of the Kazakh government. In November 2007, the Group signed a cooperation agreement with Samruk-Energo, a subsidiary of Samruk-Kazyna, a Kazakh state holding company, pursuant to which the Bogatyr mines would be operated by LLP Bogatyr Komir, a 50/50 joint venture between the Group and Samruk-Energo. In April 2008, the share purchase agreement, whereby the Group sold 50% of its equity interest in LLP Bogatyr Komir to Samruk-Energo, took effect and, consequently, the Kazakh government waived its pre-emptive rights in respect of the LLP Bogatyr Komir. LLP Bogatyr Komir produces approximately 40 million tonnes of coal annually, has approximately 1.0 billion tonnes of Proved and Probable Reserves (JORC) and has Measured and Indicated Mineral Resources of approximately 2.4 billion tonnes. LLP Bogatyr Komir generated sales of US$685 million in 2008. Sales are divided evenly between Russia and Kazakhstan.

TRANSPORTATION

The Group has transportation arrangements in place to ensure that its facilities can receive the necessary materials and that its products can reach its customers. All production assets of the Group are located so that they can access major railway networks, ports and other transportation infrastructure facilitating the transportation of materials and products.

The Group's primary means of transporting its materials and products is by railway, which carries approximately 85% of the materials received by the Group and approximately 90% of the products it ships. The Russian rail network, although old and not comparable with modern systems in terms of equipment and signalling, has been maintained to a sufficient level to ensure a relatively efficient rail infrastructure. It is controlled by JSC Russian Railways, a wholly owned entity of the Russian Federation, which currently has a monopoly over infrastructure, locomotives and most freight businesses.

Russian railway tariffs are currently regulated by the government and consist of two parts: infrastructure costs and carriage costs. The Group benefits from favourable rail tariffs on certain routes, and protection from rate increases, pursuant to Russian Railway Tariff Regulations adopted in 2003 and 2004 and an implementing agreement entered into in 2004 between a former RUSAL entity and the railway operator, JSC Russian Railways. Under these regulations and the implementing agreement, the infrastructure component of the railway tariff for transportation on specified routes of certain materials is fixed in Roubles at the level prevailing at 1 October 2003 subject to conversion into US dollars at an average RUR/USD exchange rate for the preceding quarter until December 2011, provided that increasing annual volume levels are met. Subject to the possibility of early termination by either party before any calendar year end, the agreement is automatically renewed on an annual basis.

The tariffs set by the Railway Tariff Regulations and implemented by the agreement are applicable to the transportation of current and future production of the former RUSAL Russian aluminium smelters and alumina refineries. These regulations and the implementing agreement do not apply to the former SUAL facilities.

In 2008, the Group agreed with JSC Russian Railways to fix the infrastructure component of transport tariffs generally applicable to specific types of raw materials and products at 2008 levels subject to a certain diminishing factor with subsequent annual increases indexed in accordance with general annual tariff indexation. Such fixed transport tariffs would apply to the principal types of raw materials and products usually transported by the Group, rather than particular entities or transportation routes, and thus would indirectly benefit the entire Group. The Group intends to continue the negotiation process in relation to the fixed transport tariffs in 2010. Once the negotiations are finalised it is expected that new regulations will have to be issued by the state tariff service in

order to give effect to the new tariffs. Upon entry of the new tariffs into force, the Railway Tariff Regulations and the implementing agreement will terminate. Until then, the Group expects that the Railway Tariff Regulations and the implementing agreement with JSC Russian Railways will continue to apply. As an alternative, the Group is also discussing with JSC Russian Railways the possibility of extending the current agreement to SUAL and new production facilities with the simultaneous extension of its term until 2020.

Furthermore, the Group is currently in the process of negotiating a 30% discount to the infrastructure component of the tariff to apply if the LME price falls below US$1,650 per tonne. While this has been approved by JSC Russian Railways, it remains subject to approval by the FST.

The infrastructure component of the tariff, which is fixed as described above, represents approximately 85% of the tariff, while the carriage component accounts for the remainder. The carriage component is not stipulated for in the implementing agreement and is not subject to the ongoing negotiations with JSC Russian Railways. The carriage component is subject to indexation to the rate of inflation, which is typically undertaken annually. Currently, the Russian Government is contemplating plans to increase competition through the privatisation of the rolling stock owned by JSC Russian Railways, which could influence the carriage costs portion of the tariff. Although it is more likely that the government will limit any increase in the carriage component of the tariff until December 2010 so as not to exceed the inflation rate, the pricing structure for the rail industry, should deregulation occur, would be difficult to determine and the Group could be subject to tariff increases. See "Risk Factors — Risks relating to the Group and its Business — The Group depends on the provision of uninterrupted transportation services and access to state-owned infrastructure for the transportation of its materials and end products across significant distances, and the prices for such services (particularly rail tariffs) could increase".

The Group's costs related to its shipments may be increased, when the cargo flow resumes, as a result of a shortage of railcars and logistical problems. To mitigate this risk, the Group may need to consider the acquisition of its own rolling stock for cargo transport.

The Group's primary aluminium and value added products delivered abroad are mainly transported by rail and delivered at seaports. The Group ships its exports to end customers through a number of Russian and Ukrainian ports depending on the location of a particular customer. Costs related to railway transportation of aluminium to the port are incurred by the Group, while further costs of transportation are incurred either by the Group or by the customer, depending upon the type of contract and delivery terms. Products for the northwestern markets are shipped through St. Petersburg and Murmansk, products for the southern markets are shipped through Temryuk and Novorossiysk and products for the eastern markets are shipped through Nakhodka, Vanino and Vladivostok, with more than 90% of the Group's products shipped to the New Port in St. Petersburg, the Vanino in Khabarovsky and the Novorossiysk in Krasnodarsky Krai. To secure timely delivery of materials and finished products when the cargo flow resumes, the Group will consider developing its own port facilities.

In April 2008, the Group signed a memorandum of cooperation with JSC "Ust-Luga Company", the developer of Ust Luga trade sea port, to jointly construct the complex, which will consist of two terminals designed to transport aluminium and alumina at Ust Luga trade sea port. The complex is expected to have an initial shipment capacity of 3.5 million tonnes of alumina imports and 2.6 million tonnes of aluminium exports. The Group's investments into the construction of the complex are estimated to be at approximately US$300 million. The Ust Luga project has been suspended due to the current reduction in the cargo flows. The Group is also considering development opportunities in Novorossiysk, St. Petersburg and Russia's Far East.

The following tariffs applied to railway transportation between the Krasnoyarsk, Bratsk, Khakas and Sayanogorsk aluminium smelters and the St. Petersburg, Novorossiyisk and Vanino ports in September 2009:

Aluminium (US$/t) September 2009	St Petersburg	Novorossiyisk	Vanino	Alumina (US$/t) September 2009	St Petersburg	Novorossiyisk	Vanino
Krasnoyarsk Aluminium Smelter	45.61	50.52	n.a.	Krasnoyarsk Aluminium Smelter	43.92	n.a.	n.a.
Bratsk Aluminium Smelter	55.90	57.39	51.44	Bratsk Aluminium Smelter	48.48	n.a.	42.12
Khakas Aluminium Smelter	44.51	n.a.	n.a.	Khakas Aluminium Smelter	n.a.	n.a.	49.07
Sayanogorsk Aluminium Smelter	45.10	55.25	n.a.	Sayanogorsk Aluminium Smelter	n.a.	n.a.	n.a.

Transportation outside of Russia and the CIS is managed by offshore trading companies. The Group manages its transportation (i) through transportation units located at each of its production facilities, which are responsible for the maintenance of the railway track owned by each facility and for day-to-day management of various transportation issues, and (ii) through subdivisions of UC RUSAL's management company, which are responsible for organising the transportation of the Group's products and materials in Russia and abroad. Agreements with the main railroads, carriers and seaports for transportation of the Group's products and materials are in place.

QUALITY CONTROL AND CERTIFICATION

The Group adheres to strict internal and industry-wide quality standards. In 2008, 72% of its aggregate aluminium production originated from LME certified plants. The following plants are approved for LME metal contracts: Krasnoyarsk aluminium smelter, Sayanogorsk aluminium smelter, Novokuznetsk aluminium smelter, Bratsk aluminium smelter, Irkutsk aluminium smelter, Bogoslovsk alumina and aluminium complex, Volgograd aluminium smelter, Kandalaksha aluminium smelter, Nadvoitsy aluminium smelter, Urals alumina and aluminium complex and Kubikenborg aluminium smelter. Nearly all of the Group's aluminium smelters and alumina refineries have been ISO 9001 certified and certain plants have also received ISO/TS 16949 certification, which governs the application of ISO 9001 to suppliers of the automotive industry.

ENVIRONMENTAL, HEALTH AND SAFETY MATTERS

As with other natural resources and mineral processing companies, the Group's operations create hazardous and non-hazardous waste, effluent emissions into the atmosphere, water and soil and safety concerns for its workforce. Consequently, the Group is required to comply with a range of health, safety and environmental ("HSE") laws and regulations. The Group believes its operations are in compliance in all material respects with the applicable HSE legislation of the Russian Federation, its

regions and the countries and regions where the Group's plants are situated and intends to upgrade where feasible to comply with international standards. The Group's annual cost of compliance with such laws and regulations was US$166.34 million and US$107.3 million in the years ended 31 December 2007 and 2008, respectively, and is forecasted to be US$47.5 million for the year ended 31 December 2009. However, the Group also incurs fines for minor violations of environmental rules and regulations. These were US$0.03 million, US$0.04 million and US$0.05 million in the years ended 31 December 2007 and 2008 and the six months ended 30 June 2009, respectively.

The Group considers health and safety a fundamental value that is central to its business. To this end, the Group has formulated a series of health and safety principles, policies and guidelines and established a health and safety management system. The purpose of these initiatives is to eliminate any harm caused to employees at all stages of its production activity. In addition, the Group has engaged companies such as DuPont Safety Resources and Det Norske Veritas, world recognised leaders in safety programme deployment, to assist in the development and installation of safety policies, programmes, standards, practices and procedures. In January 2008, Det Norske Veritas certified that the health and safety management system of the Company's major aluminium production facilities complies with Occupational Health and Safety Specification (OHSAS) 18001. Ten of the Group's sites and facilities are already OHSAS 18001 certified and it is the objective of the Group to acquire OHSAS 18001 certification for all of its operating facilities.

Care for the health of Group employees is a key element of the Group's social policy. The Group provides a full range of medical services for its employees and promotes a healthy lifestyle. The Group emphasises preventive medicine and the reduction of lost working time resulting from occupational illnesses through corporate medical centres it has established in most regions where the Group operates.

Health and safety is an ongoing process and the programmes covering each area are updated and improved upon continuously, based on changing regulations and business need. Reports covering performance are generated daily, weekly, monthly and annually, according to regulatory and Group reporting requirements. In the event of an injury or accident, as mandated by local law, an investigation is carried out to determine causation and corrective action. Group safety standards also require an internal investigation to determine causation and any behavioural deficiencies that contributed to the incident.

Lost Time Injury Frequency Rate ("LTIFR") is used to gauge internal safety performance and to benchmark the Group or individual plants against peers or alternative industries. The Group calculates LTIFR as a sum of fatalities and lost time injuries per 200,000 man-hours, which is the method used by most of its direct competitors and data-gathering agencies. In 2008, the LTIFR rate for the Group decreased to 0.18 compared to a level of 0.19 in 2007, both of which are lower than the LTIFR of 0.32 per 200,000 hours worked reported by the International Aluminium Institute in Safety Performance Benchmarking Report 2008 for the industry as a whole for 2006-2008. In 2009, the Group aims to reduce the LTIFR by at least 5%. Another indicator of the Group's improved safety measures is the general reduction in the number of fatalities over time, although the fatality rate tends to fluctuate widely. In 2006, there were six fatal accidents involving employees and five involving contractors. In 2007, there were 19 fatal accidents involving employees and three involving contractors. In 2008, the number of fatal accidents involving employees reduced to eight and the number of fatalities involving contractors was four. In respect of the 26 fatal accidents that have occurred from the period beginning 1 January 2007 and ending 30 June 2009, the total compensation paid by the Group was approximately US$1 million.

The Group has also taken steps to lessen the environmental impact of its operations and comply with all applicable environmental laws and regulations. A violation of environmental laws or failure to comply with the regulations or instructions of relevant environmental authorities could lead to, among other things, a temporary shut down of all or a portion of a mine, refinery, smelter or other plant; the loss of a right to mine or operate a refinery, smelter or other plant; and/or the imposition of other costly compliance procedures. See "Risk Factors — Risks Relating to the Group and its Business — The Group operates in an industry that gives rise to health, safety and environmental risks".

The Group's mines, refineries, smelters and other plants located in Russia are subject to statutory limits on air emissions and the discharge of liquids and other substances. Russian authorities may permit, in accordance with the relevant Russian laws and regulations, a particular Group facility to exceed statutory emission limits, provided that the Group develops a plan for the reduction of the emissions or discharge and pays a levy based on the amount of contaminants released in excess of the limits. Fees are assessed on a sliding scale in accordance with the relevant laws and regulations: the lowest fees are imposed for pollution within the statutory limits, intermediate fees are imposed for pollution within the individually approved limits, and the highest fees are imposed for pollution exceeding such limits. In 2007 and 2008 and the first six months of 2009, such fees constituted US$29.7 million, US$29.4 million and US$8.2 million, respectively. It is within the discretion of the Russian authorities to permit pollution in excess of the statutory limits, and any request may be denied. Moreover, the payment of fees for exceeding these limits does not relieve the Group from its responsibility to take environmental protection measures and undertake restoration and clean-up activities. In addition, some of the Group's sites benefit from higher limits on air emissions, as agreed with the authorities, on the condition that modernisation programmes will be completed at those sites.

A study undertaken on behalf of the Group in 2008-2009 estimates the capital expenditure the Group would have to make over a five-year period to address known and potential environmental, health and safety and social issues, at the level of US$5 million or more per issue per site. The estimate does not include costs relating to the decommissioning of redundant equipment associated with any Group asset, or any decommissioning or closure costs, including restoration costs, or charges that may be required as a result of changes in specifications of plant operation. The study estimates that, when adjusted for probability, the Group's most likely case scenario would entail aggregate capital expenditure of US$1.2 billion and its reasonable worst-case scenario would entail an aggregate capital expenditure of US$1.3 billion.

The study aggregates issues of various probabilities, including remote. The Company believes that actual required capital expenditure will be several orders of magnitude less than those indicated in the study. Environmental, health and safety and social programs are budgeted under the Company's overall capital expenditure budgets. The amounts required to address environmental, health and safety and social programs are expected to range from approximately US$40 million to US$80 million annually over the next five years. Annual capital expenditure to address environmental, health and safety and social programs is determined based on a number of factors, including capital expenditure spend in past years, an analysis of and expectations for upcoming projects and requirements, and consideration of applicable rules and regulations and expenditures required in order to ensure compliance. Such capital expenditure is to some extent required under environmental laws, and therefore permitted under the terms of the debt restructuring agreements, and to some extent discretionary on the part of the Company. Under IFRS, the Company is not required to make, and accordingly has not made, any provision in its financial statements for this future capital expenditure.

The study concluded that most of this capital expenditure would pertain to the reduction of air emissions from the Group's aluminium smelters. The Group is undertaking large-scale modernisation projects at a number of its facilities, including the Bratsk aluminium smelter, which are expected to improve environmental standards as well as increase production. The Krasnoyarsk aluminium smelter finished implementing a modernisation programme in September 2009, which is expected to reduce

emissions and increase production. The study also identified the soil and groundwater conditions at a number of the Group's sites as potential environmental issues that may require material capital expenditure by the Group, in the form of on- and off-site soil and groundwater remediation, such as the conditions existing at the Eurallumina refinery due to past contamination by industrial facilities in the Sulcis-Iglesiente region. In September 2009, one of Eurallumina's red mud basins was sequestrated and its environmental permit for production operations and management of the red mud basin was suspended owing to failure to comply with instructions of the Italian Ministry for the Protection of the Environment (the "Italian Environmental Ministry"). See "Business — Litigation — Italian Environmental Ministry". Eurallumina is realising a phased decontamination project as part of the general plan of the Sardinian government applicable to all industrial enterprises in the region. The main social issue reflected in the study concerns the possible relocation of communities from the sanitary protection zones surrounding some of the smelters, including the relocation of residents located close to the Bratsk aluminium smelter to the town of Bratsk. Under a federal plan and an agreement signed with local communities in March 2007, residents in the Chekanovsky settlement, located close to the Bratsk aluminium smelter, will be relocated to the town of Bratsk and other communities for health and safety reasons at an anticipated cost to the Group of US$20 million (which has been fully provided for in UC RUSAL's Accountants' Report). The relocation is expected to be completed in 2011. The Group may be responsible for the costs of relocating inhabitants from the sanitary protection zones surrounding its smelters. Any such relocation could also have a negative impact on the reputation of the Group. According to the report, the Urals aluminium smelter has over 17,500 inhabitants residing within the site's sanitary protection zone, along with accompanying social infrastructure. The study estimates that if the residents were required to be resettled (the study indicates that there is a 1 to 10% probability that this will be required), direct costs to the Group would be US$160 million in the most likely case and US$200 million in the reasonable worst-case. Also according to the study, the sanitary protection zone at the Bogoslovsk aluminium smelter has approximately 50,000 people resident within it. The Group is planning to implement a modernisation programme that is expected to reduce the size of the sanitary protection zone at the site. Approximately 5,500 people could be resident inside the reduced sanitary protection zone, and the study estimates that if such residents need to be resettled (the study indicates that there is a 1 to 10% probability that this will be required), direct costs to the Group would be US$48.5 million in the most likely case and US$60 million in the reasonable worst-case scenario. If the Group is required to incur such costs, it will be required to do so by environmental law and therefore permitted to do so under the terms of the debt restructuring agreements.

The Group is committed to investigating practicable remedies to address the key environmental, health and safety issues that it faces, according to the respective Performance Standards of the IFC, and to implement such remedies against a realistic timeframe. One of the Group's environmental priorities is to invest in the modernisation of Söderberg technology in order to reduce emissions of air pollutants. Overall, the Group's goal is to achieve, by 2017 or earlier if required by law or regulation, the air emission limits set by the laws of the countries in which it operates. However, currently at the boundary of the Krasnoyarsk aluminium smelter's sanitary protection zone, emissions exceed maximum permissible limits, and the site has advised the regulator that by 2015 it will achieve the permissible limits.

For the construction of the Khakas aluminium smelter (as well as for any of its large-scale projects), the Group initiated an environmental and social management plan that aimed to ensure that potential adverse environmental and social impacts were limited to acceptable levels not only in the construction phase, but also in the subsequent operation of the smelter.

In 2007, The Group signed a memorandum of understanding with the United Nations Development Programme (UNDP). The aim of the memorandum is the implementation of measures to minimise the impact on climate by reducing GHG emissions. The Group is actively participating in the International Aluminium Institute's activities related to GHG emissions and energy efficiency. The Group has achieved significant improvements in GHG emission reductions. For instance, the Group's aluminium smelters have reduced GHG emissions in 2008 by more than 30% compared to 1990.

The Group is a member of the National Carbon Union in Russia, a partnership of leading businesses created in July 2003 with the support of President Putin's administration. The National Carbon Union aims to create a regulatory structure for the control of greenhouse gas emissions and to develop a strategy for the application of the Kyoto protocol in Russia. The Group also participates in activities conducted by the Russian Ministry for Economic Development concerning the development of Russia's carbon market.

The Group is voluntarily aiming to reduce the level of greenhouse gases that its facilities emit and replace equipment that contains polychlorinated biphenyls (a pollutant that eventually will be prohibited under the Stockholm Convention on Persistent Organic Pollutants). Under the Convention such equipment may be used until 2025 and shall be then replaced with new polychlorinated biphenyls emission free equipment. The Group also expects to increase the proportion of bauxite mining land it rehabilitates annually, in line with the objectives set by the International Aluminium Institute. The Group further plans to strengthen its environment management systems. Fifteen aluminium smelters, nine alumina refineries, and QAL have already received ISO 14001 certification to date for their environmental management.

The Group's social performance is guided by the ten universal social and environmental principles of the UN Global Compact, which the Company is a signatory to. The Company measures its social performance in accordance with the requirements of the Global Reporting Initiative's Business Guide to the Sustainability Reporting Guidelines. The principles of the Global Reporting Initiative's reporting system are fully compatible with the principles of the UN Global Compact.

There has been no material environmental pollution incident at any of the Group's sites or facilities during the three years ended 31 December 2008 and the six months ended 30 June 2009.

OPERATIONAL HAZARDS AND INSURANCE

The Group's operations are subject to numerous operating risks, including geological conditions, seismic activity, climatic conditions, political unrest, terrorist or similar activities, interruption of power supplies, environmental hazards, technical failures, fires, explosions and other accidents at mines, refineries, smelters or other facilities. These risks and hazards could result in damage to production facilities, personal injury, fatalities, environmental damage, business interruption and possible legal liability.

In Russia, the Group maintains a mandatory policy covering employer's liability for death or injury to workers is maintained through the Russian state social insurance fund. The Group maintains third-party liability mandatory insurance for all of its vehicles and for hazardous objects registered with Russian state supervision agencies. The Group also maintains certain voluntary policies with Russian and international insurers, including property, business interruption and other commercial risks insurance for losses up to US$150 million per occurrence, cargo insurance for losses up to US$50 million, political risk insurance with respect to the Group's operations in Nigeria (which covers nationalisation) for losses up to US$130 million, kidnap and ransom insurance for losses up to US$3 million, general liability insurance worldwide for losses up to US$75 million, which covers, inter alia, product liability and sudden and accidental pollution.

EMPLOYEES

The following table sets forth the aggregate average number of people (full-time equivalents) employed by each division of the Group during each of the last three years ended 31 December 2008 and the six months ended 30 June 2009.

Division	Six months ended 30 June 2009	Year Ended 31 December		
		2008	2007	2006
Aluminium	34,615	36,959	46,802	16,244
Alumina	15,795	19,501	24,105	10,110
Engineering and Construction	23,520	25,325	17,273	13,089
Materials	—	2,551	3,109	377
Energy	13	26	17	—
Packaging	2,166	2,223	2,283	1,469
Managing Company	506	601	754	645
Others	2,277	2,722	2,803	1,932
Totals	**78,892**	**89,908**	**97,146**	**43,866**

In 2006, each of RUSAL, SUAL and Glencore and from 2007 through 2008, UC RUSAL has provided its employees with regular salary increases resulting in increasing payroll costs, although salaries have not increased in 2009. The Group aims to continue to improve productivity by streamlining its workforce, including by centralising R&D and production services functions through the Engineering and Construction Division.

Certain subsidiaries of the Group, or certain of their branches, have collective agreements with trade union representatives that primarily relate to social benefits in favour of their employees. The collective agreements have been entered into for terms of up to three years and apply to all employees of the relevant subsidiary or branch (which currently constitute 97% of the Group's employees).

The remuneration paid by the Group is based on an employee's qualifications and performance, as well as the complexity of his or her job. Wages for each employee are generally reviewed annually and revised in accordance with a performance assessment and local labour market conditions.

The UC RUSAL Personnel Policy and the UC RUSAL Corporate Code of Conduct govern the relationship between the Group and its staff. The Group's Corporate Code of Conduct strictly prohibits discrimination based on gender, race and religion and forbids any form of child, forced or indentured labour. The Code of Conduct, which is enforced through compliance procedures established by the Group, regulates the professional behaviour and business communications of all the Group's employees. In December 2007, the Group established and widely disseminated a "hot line" to report violations of the Code of Conduct and to answer employees' questions about the Code of Conduct and other corporate procedures. The Group emphasises the creation of favourable work and leisure conditions for its employees by offering social benefits, pension plans, cultural events and subsidised meals. The Group also assists its employees with career development and further education.

PROPERTY

As at 30 September 2009, the Group owned parcels of land with an aggregate site area of approximately 39,900 hectares and leases parcels of land with an aggregate site area of approximately 26,500 hectares, and uses in perpetuity parcels of land with an aggregate site area of approximately 2,800 hectares. These properties are located in Russia, Armenia, China, the Republic of Guinea, Guyana, Ireland, Italy, Jamaica, Sweden and Ukraine. The Group also currently owns 18,681 buildings with an aggregate GFA of approximately 9,100,000 square metres. These buildings are located in Russia, Armenia, China, Guinea, Guyana, Ireland, Italy, Jamaica, Sweden and Ukraine. See the Property Valuation in Appendix V to this prospectus.

INTELLECTUAL PROPERTY

Intellectual property rights are of importance to the Group. As of the Latest Practicable Date, the Group has registered 23 material trademarks, 37 material patents and 71 material domain names and has filed 4 material patents for registration.

The Group owns various patents in connection with its RA-300 technology, RA-400 technology and RA-500 technology, which are of significant importance to the Group. The RA-300 technology and the RA-400 technology relate to a new baked anode/high amperage process that uses RA-300 and RA-400 cells, and in the future will use RA-500 cells, to increase throughput, resulting in less capital expenditure per tonne of production of aluminium, and lower ongoing operating expenses such as personnel, maintenance and repair costs. Details of the Group's registered material patents are provided in the section headed "Statutory and General Information — Further Information about our Business — Intellectual Property Rights" in Appendix VIII to this prospectus.

LITIGATION

The Group is involved in litigation from time to time in the normal course of its business and operations.

The following tables show the number of outstanding (i) Russia and CIS and (ii) international claims against members of the Group for which the claim amount was between US$1 to US$20 million, US$20 to US$50 million or exceeded US$50 million as at 31 December 2006, 2007 and 2008 and 31 October 2009. Save for a claim concerning Eurallumina (see "— Italian Environmental Ministry"), all outstanding claims against members of the Group relate to civil proceedings. Because the duration of many of the proceedings exceeds one year, and as the number of claims outstanding is stated as at the relevant dates, a single claim may be captured on more than one date.

Russia and CIS

	Claim Amount		
As at	**US$1-20 million**	**US$20-50 million**	**> US$50 million[1]**
		(Number of cases)	
31 December 2006	2	0	1
31 December 2007	3	0	1
31 December 2008	2	0	1
31 October 2009	35	1	2

Note:

(1) For a table setting out the amount claimed by the claimant and the provisions made by the Group in respect of each claim for an amount greater than US$50 million. See "— Litigation — Liability and Provisions" below.

International

As at	Claim Amount		
	US$1-20 million	US$20-50 million	> US$50 million[(1)]
		(Number of cases)	
31 December 2006	2	2	1
31 December 2007	2	2	5
31 December 2008	2	2	4
31 October 2009	10	4	5

Note:

(1) For a table setting out the amount claimed by the claimant and the provisions made by the Group in respect of each claim for an amount greater than US$50 million. See "— Litigation — Liability and Provisions" below.

Save as set out below, no member of the Group is or has been involved in, nor, so far as the Group is aware, has, any pending or threatened governmental, legal or arbitration proceedings, during a period covering at least the previous 12 months which may have, or has had in the recent past, significant effects on the financial position or profitability of the Company and/or the Group. The Directors have, with the assistance of in-house legal counsel and external legal counsel, assessed the likely outcome of those proceedings set out below that remain unresolved. The Directors believe that the outcome of such proceedings will not have a materially adverse effect on the financial position or the operating results of the Group. None of the settled legal proceedings of the Company in the past has resulted in any material financial obligations and/or contractual restrictions on the Company's business operations that are still outstanding or effective as of the date of this prospectus.

In addition to the consequences noted below, an adverse outcome in litigation affecting a member of the Group could also have adverse consequences under the terms of the Group's debt restructuring agreements. In particular, an aggregate award of damages/fines against a Group member of US$50 million or more would constitute an event of default under these agreements. However, five of the claims described below (specifically Norden, CDH, ZAlK, Alfa Bank and Washington Group) are partially excluded from such arrangement. For full details, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Events of Default". For a description of the potential impact on the Group of litigation involving a beneficial owner of the Company, see "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska".

BFIG

Bancorp Financial Investment Group Divino Corporation ("BFIG") filed a complaint in the U.S. federal district court on 16 March 2006 against certain subsidiaries of the Group in connection with the acquisition by the Group of ALSCON. The complaint sought approximately US$2.8 billion against the defendants for claims of tortious interference, unfair competition, and conspiracy to commit fraud in connection with the privatisation of ALSCON. More specifically, BFIG alleged that the defendants conspired with the President of Nigeria and other high-ranking Nigerian government officials to disqualify BFIG's bid for ALSCON and thus secure the defendants' subsequent purchase of the facility. The complaint was dismissed by decision and order of the U.S. federal district court in New York dated 23 March 2007 on the ground that New York is not a convenient forum. The dismissal was conditional on the defendants' submission to the jurisdiction of the courts of Nigeria, waiver of service of process and waiver of any statute of limitations defence that would otherwise apply under Nigerian law with respect to the claims brought in the complaint. BFIG appealed the dismissal shortly thereafter. Early in July 2007 BFIG requested the lower court to reopen the decision dismissing the case on the basis of alleged newly discovered evidence to the effect that Nigeria should not be

considered an adequate alternative forum. The defendants opposed that request, and late in 2007 the lower court denied BFIG's request to reopen judgment. BFIG appealed that decision. Subsequently, both appeals were consolidated for the purpose of scheduling an oral hearing date. The joint appeal was heard on 24 October 2008 and by summary order dated 4 November 2008 the lower court's dismissal was affirmed. The dismissal of the complaint and affirmance of that decision means that BFIG may not reassert the claims set forth in its complaint in the U.S. In accordance with the terms of the conditional dismissal of 23 March 2007, BFIG does, however, retain the right to sue in Nigeria on the claims set forth in the complaint of 16 March 2006. Also, in accordance with the conditional dismissal, the defendant Group subsidiaries would be unable to challenge the Nigerian court's jurisdiction over the matter should BFIG proceed to sue in Nigeria. In principle, BFIG could also reassert such claims in any other court of competent jurisdiction outside the U.S., although to date, as far as the Company is aware, BFIG has not given any indication of its intention to do so, whether in Nigeria or elsewhere. Although a decision against the Group may have an adverse effect on the Group's ALSCON operations in Nigeria, including the potential loss of ALSCON and consequent loss of revenue, the Directors do not believe that any resulting liabilities will materially adversely affect the Group's financial position or its operations as a whole.

TadAZ

During 2003-2004, Elleray Management Limited, a Group member, was involved in a trading business with the Tajik Aluminium Plant ("TadAZ"), an enterprise owned by the Tajik government. This business was conducted through Hamer Investment Ltd. ("Hamer"), a joint venture with a third party, Ansol Limited ("Ansol"). The joint venture was engaged in supplying TadAZ with alumina (and other raw materials) and acquiring finished aluminium from TadAZ for resale. In December 2004, TadAZ suspended the delivery of primary aluminium to Hamer and repudiated the extension of the contract between TadAZ and Hamer for 2005, which effectively resulted in the termination of the joint business. As a result, proceedings in London began in early 2005 between TadAZ and Ansol et al and in which Ansol eventually made claims against certain Group members, as well as Mr. Deripaska, Director of the Company (by way of Part 20 Claims), claiming that they had violated alleged duties to the joint venture, and had conspired to usurp the business between Hamer and TadAZ. Following a hearing in 2006, the judge did not permit the Part 20 Claim to proceed against Mr. Deripaska (as he did not recognise him as a proper defendant in the case). The claim did, however, continue against the corporate defendants.

In the context of the same dispute, in 2006, Ansol and Ashton Investments Ltd. (a company associated with Ansol) brought an action in the High Court against OJSC Rusal and certain others including Mr. Deripaska, alleging that OJSC Rusal et al illegally obtained access to Ashton's computers in the UK and thereby obtained certain confidential documents relating to the above mentioned litigation pending in the UK. At a hearing at an early stage in the proceedings, the judge did not permit the action to proceed against Mr. Deripaska. The case did however proceed against the corporate defendants, The judge held that there was no evidence that Mr. Deripaska had any knowledge of the alleged activity.

All the above claims by Ansol and Ashton were settled in early 2007 and, as part of the settlement, the Group acquired 100% of Hamer.

In June 2007, Hamer filed a claim in arbitration in Switzerland against TadAZ for approximately US$256 million (plus interest and costs). This claim relates to unpaid trade receivables accumulated by TadAZ in favour of Hamer. TadAZ filed a counterclaim and indemnity claim against Hamer in this arbitration for approximately US$500 million in the aggregate, alleging that Hamer participated in and/or knowingly benefited from a fraudulent and corrupt scheme by Ansol to gain effective control over TadAZ resulting in its entry into unfavourable trading contracts from 2003 through 2004. The parties exchanged submissions and evidence and a final hearing date was scheduled for June 2009, but

did not take place, as in December 2008 the parties agreed in principle to settle this case, as well as the TadAZ and CDH cases noted below, for no consideration paid and no admission of liability. In November 2009, TadAZ reopened the Hamer arbitration, but subsequently, in December 2009, the parties agreed to stay the case again.

In July 2007, TadAZ also brought claims in the aggregate amount of approximately US$485 million against certain Company affiliates in the British Virgin Islands ("BVI"), certain of these claims being similar to those in the Swiss arbitration, as well as claims relating to the pre-Hamer period of 1996 through 2003. As a first line of defence, the defendants moved to dismiss the complaint on jurisdictional and venue grounds. A hearing on this motion took place on 15 — 17 July 2008, but before any decision was issued, this case, as noted above, was settled in principle and adjourned pending final settlement.

The settlement in principle in respect of the TadAZ cases as well as the CDH cases noted below has not yet been formalised by a final settlement agreement. The terms of the draft settlement agreement provide for the termination of the TadAZ cases, as well as the CDH cases noted below. Until a final settlement agreement has been duly concluded between the parties, each and any of the relevant cases could, in principle, be reopened, as in the case of the CDH case referred to below. Further, the settlement agreement will provide for certain agreements between the parties to be excluded from the settlement: however, the Group believes that it is unlikely that a dispute will arise in respect of these excluded agreements and, in any event, the excluded agreements are not material. The Directors do not believe that any resulting liabilities will materially adversely affect the Group's financial position or its operations as a whole.

CDH

A Group member is claimant in a Swiss arbitration commenced in June 2007 for US$56 million (plus interest and costs) against a trading company, CDH Investments Corp. ("CDH"), a BVI company related to OrienBank, a leading Tajik bank. CDH was a trading partner of TadAZ in 2005-2006. The claim is for lost profits and other damages incurred as a result of CDH's failure to perform under an alumina supply contract. The parties have exchanged submissions and evidence. A final hearing date was scheduled for March 2009, but did not take place, the parties having agreed to settle in principle and having adjourned the case pending final settlement.

In November 2007, CDH filed a request for arbitration in Sweden against the same Group member that is claimant in the above described Swiss arbitration, seeking US$53-120 million for alleged breach of a trading contract. After exchange of briefs and evidence the case was originally stayed as part of the settlement in principle described in "— TadAZ", but was recommenced by CDH in December 2009. Following a procedural conference on 21 December 2009, the arbitral tribunal set down various deadlines and dates in January, February, June and July 2010 for certain procedural steps to take place, including the filing of additional submissions and witness statements. An evidentiary hearing is currently scheduled for September 2010. The Directors do not believe that any resulting liabilities will materially adversely affect the Group's financial position or its operations as a whole.

Republic of Guinea

On or about 8 May 2009, the Republic of Guinea ("RG") filed a complaint in the court of first instance of Kaloum-Conakry, Guinea, against Russky Aluminy Ltd., a BVI subsidiary of the Group (formerly Russkij Alminij LLC, an entity incorporated in Delaware, USA). In the complaint the RG claims that the sale, in April-May 2006, of shares of Friguia, a company incorporated under the laws of the RG, to Russky Aluminy Ltd., should be declared null and void and that Friguia's shares should be transferred back to the RG. The complaint further requests compensation in the amount of

US$1,000 million and the appointment of an expert to determine the extent of the alleged loss suffered by the RG. There have been a number of hearings subsequent to the filing of the complaint, at which the Company has taken the position that the RG courts lack jurisdiction over the dispute, as the relevant agreement governing the share sale contains a valid and enforceable arbitration clause, according to which all relevant disputes are to be resolved by arbitration in Paris under the rules of the International Court of Arbitration of the International Chamber of Commerce ("ICC"). On 10 September 2009, the RG court ruled (the "Ruling") that (1) it had jurisdiction over the dispute; (2) the act of transfer of shares is null and void; (3) the shares are to be restituted to the RG; and (4) an expert is to be appointed to determine the measure of damages suffered by the RG. Only the fourth point of the decision entered into force upon issuance of the Ruling. The first three points of the Ruling were not to enter into force unless Russky Aluminy Ltd. failed to lodge an appeal of the Ruling within ten days of its issuance. Russky Aluminy Ltd. lodged such an appeal on 16 September 2009, whereupon the effectiveness of the first three points of the Ruling was suspended pending resolution of the appeal. The Guinean appellate court in Conakry set a hearing date for 15 December 2009, but such hearing did not take place for technical reasons. No new hearing date has yet been set. The Company intends to submit a brief at any subsequent appellate hearing essentially reiterating its prior position that the court in Guinea lacks jurisdiction so as to preserve the Company's right to arbitrate. Talks continue with the Guinean government about resolving the dispute out of court. In addition, the government of the Republic of Guinea recently issued two decrees that may increase the potential for expropriation of mining assets in the Republic of Guinea. See also "Risk Factors — Risks Relating to the Group and its Business — Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates". No provision is recognised for the claim made by RG in respect of Friguia as, following the lodging of an appeal by Russky Aluminy Ltd. against the Ruling, only the fourth point of the decision became effective and the Directors believe that the claim has no merit and the risk of any cash outflow in connection with this claim is low. See Note 34(c) to UC RUSAL's Accountants' Report. An adverse outcome for the Group may have an adverse effect on the Group's Friguia operations in the Republic of Guinea, including the potential loss of Friguia, consequent loss of revenue and loss of production of alumina, which is used in production of aluminium at the Bratsk aluminium smelter. The Company believes it could replace any such loss of alumina production with its own production from other facilities or through market purchases. The Directors do not believe that any resulting liabilities will materially adversely affect the Group's financial position or its operations as a whole.

Norden

RTI Ltd. ("RTI"), a Jersey subsidiary of the Group, is involved in several contract disputes with Norden A/S ("Norden"), a Danish shipowner, relating to seven contracts of affreightment entered into in late 2007 and 2008 for the shipment of bauxite. Early in 2009, Norden commenced arbitration in London for breach of the seven contracts and simultaneously obtained attachment of approximately US$98 million RTI's assets in New York by initiating litigation in the U.S. District Court for the Southern District of New York. Only about $2 million was ever arrested in fact; thereafter the case was dismissed without prejudice, the arrested funds being paid into the court pending the outcome of the London arbitration. Norden's claims in the seven London arbitrations are estimated to be in the amount of approximately US$90 million, including demurrage. At present, Norden has filed statements of claim in respect of the seven contracts. The Company has been contesting the claims and, simultaneously, has been engaged in settlement negotiations. The Directors do not believe that any resulting liabilities will materially adversely affect the Group's financial position or its operations as a whole.

ZAlK

In 1993, prior to the privatisation of OAO Zaporozhsky Aluminievii Kombinat, also known as Zaporozhye Aluminium Complex, ("ZAlK"), ZAlK's owner, the Government of Ukraine, decided to equip ZAlK to produce foil. Foil mill equipment (the "Equipment") was purchased for US$71.7

million, 15% of which was financed by ZAlK (US$10.9 million) and 85% (US$60.9 million) by Ukreximbank acting as agent of the Ukrainian Ministry of Finance. It was contemplated that ZAlK would repay the US$60.9 million loan granted by Ukreximbank (the "Loan") out of proceeds from foil sales scheduled to begin in 2000. However, the Equipment was never installed and foil production never began. In 2001, ZAlK was privatised. AVTOVAZ-Invest purchased a 68.01% stake in ZAlK at a public auction, the purchase being conditional on AVTOVAZ-Invest accepting ZAlK's debt in respect of the Loan (US$76.5 million, including interest and charges).

In September 2003, AVTOVAZ-Invest sued in the civil court of Ukraine for a declaration that its obligations under the Loan were discharged; such declaration was issued, and a confirmation was given that the Equipment was state property. This decision was affirmed on appeal. In November 2004, while appeal was pending, the Equipment was transferred to a state-owned entity formed specifically for the purpose of receiving the Equipment. However, in March 2006, the Ukrainian Supreme Court reversed the two lower-court decisions on the ground that the civil court lacked jurisdiction to hear such an action.

In April 2006, ZAlK sued in the commercial court of Ukraine for a declaration that the agreement in respect of the Loan was rescinded. Such a declaration was issued. The decision was affirmed at various levels of appeal: September and November 2006. The Supreme Court of Ukraine affirmed in February 2007.

In June 2006, while the above case was pending on appeal, the Zaporozhye tax inspectorate sued ZAlK in the Zaporozhye commercial court for payment of indebtedness under the credit extended under state guarantees and for forfeiture in the amount of approximately US$140 million. On 14 November 2007, the Zaporozhye Economic Court ruled in favour of ZAlK. The Tax inspectorate filed an appeal. On 8 December 2008, the Dnepropetrovsk Administrative Court of Appeal reversed the decision of the Zaporozhye Region Economic Court and upheld the State Tax Inspectorate's claim. ZAlK filed a cassation appeal with the Supreme Administrative Court of Ukraine. On 14 May 2009, the Supreme Administrative Court of Ukraine terminated the proceedings in the case for lack of jurisdiction of administrative courts to hear the case. The tax authority or the prosecutor's office may file a new claim but this time with the system of Ukraine's economic courts. The Directors do not believe that any resulting liabilities, including any judgment for payment of such indebtedness, will materially adversely affect the Group's financial position or its operations as a whole.

Further, in 2008, the General Attorney's Office of Ukraine filed a claim with the Kiev Commercial Court for the invalidation of a privatisation agreement for 68.01% of the shares in ZAlK concluded in March 2006. On 2 September 2008, the claim was rejected by the court due to lack of jurisdiction to hear such claim. In October 2008 and March 2009, both the Kiev Appellate Commercial Court and the Supreme Commercial Court rejected appeals of the General Attorney's Office of Ukraine due to failure to comply with the statute of limitation. Nevertheless, on 30 June 2009, the Supreme Court of Ukraine granted the appeal of the General Attorney's Office of Ukraine and transferred the case to the Kiev Commercial Appellate Court. On 29 September 2009, the Kiev Commercial Appellate Court dismissed the decision of the Kiev Commercial Court and returned the case back to the court to hear the case on the merits. ZAlK and its shareholder, Velbay Holdings Limited, have filed cassation appeals.

Alfa Bank

Alfa Bank filed two claims with the Arbitrazh Court of the City of Moscow for repayment of a loan, interest, and late penalties: one against SUAL for US$78,533,518, the other against Sayanogorsk Aluminum Smelter for US$12,652,373. In both cases Krasnoyarsk Aluminum Smelter was a co-defendant due to being a surety under the loan agreements with SUAL and Sayanogorsk Aluminum Smelter. In the first case, on 26 May 2009, the Arbitrazh Court of the City of Moscow held partially in favour of the claimant and ordered SUAL and Krasnoyarsk Aluminum Smelter to pay

US$73,812,587 (i.e., awarding a late penalty in the amount of approximately US$5 million less than claimed). On 7 August 2009, the Ninth Arbitrazh Appellate Court affirmed the lower court's decision. In the second case, on 11 June 2009 the Arbitrazh Court of the City of Moscow held partially in favour of the claimant and ordered Sayanogorsk aluminum smelter and Krasnoyarsk aluminum smelter to pay US$12,047,794 (i.e., awarding about US$600,000 less than claimed). On 10 September 2009, the Ninth Arbitrazh Appellate Court affirmed the decision of the Arbitrazh Court of the City of Moscow against Sayanogorsk Aluminum Smelter and Krasnoyarsk Aluminum Smelter. Based on the relevant court decisions Alfa Bank filed for bankruptcy of SUAL and Krasnoyarsk Aluminum Smelter on 24 September 2009. On the same date the debtors paid all the indebtedness to Alfa Bank claimed by it in the amount of approximately US$85,860,381. Based on that fact the Arbitrazh Court of Sverdlovsk Region and the Arbitrazh Court of Krasnoyarsk Region refused to accept Alfa Bank's bankruptcy petitions on 30 September 2009 and 1 October 2009, respectively. In October 2009, Alfa Bank filed appeals challenging the court's rulings. Each of the appeals was considered on 5 November 2009 and rejected.

In addition, in late October 2009, Alfa Bank filed two more claims with the Arbitrazh Court of the City of Moscow for repayment of penalties due to late repayment of the principal amount of debt and interest under the loan agreements described above: one against SUAL for approximately US$8,700,825, and the other against Sayanogorsk aluminium smelter for approximately US$1,762,169, both with Krasnoyarsk aluminium smelter as a co-defendant. On 18 November 2009, the Group and Alfa Bank entered into settlement agreements in respect of each of these claims, the first of which was approved by the Arbitrazh Court of the City of Moscow on 9 December 2009 and the second on 2 December 2009. Pursuant to the settlement agreements, the first claim was settled for approximately US$3,023,607 and the second for approximately US$487,415.

Italian Environmental Ministry

In September 2009, in proceedings involving an alleged violation of Article 434 of the Italian Criminal Code relating to the alleged failure of Eurallumina SpA ("Eurallumina") to comply with certain instructions of the Italian Environmental Ministry, a red mud basin of the Eurallumina refinery (and an ENEL hydraulic pump station, which is part of an electric power station and used by Eurallumina) became subject to sequestration. In addition, also in September 2009, an Italian regional Environmental Protection Department suspended Eurallumina's comprehensive environmental permit for production operations and management of the same red mud basin.

In connection with this matter, the Group expects that reclamation and water rectification measures are likely to be imposed. The Group's current best estimate of the cost of implementing such measures is approximately EUR3 million. In addition, Eurallumina could be ordered to pay environmental damages in connection with this matter. While such damages, if imposed, could potentially be significant (and could exceed US$50 million), due to the lack of clear precedent and the early stage of the proceedings, the Group is unable to estimate the likelihood that damages will be imposed or the amount of any such damages, if imposed.

Eurallumina intends to contest these claims. As Eurallumina has not been operational since the full closure of the plant in the first quarter of 2009, the proceedings have not affected operations at the plant or resulted in any loss of alumina production. The Directors do not believe that any resulting liabilities will materially adversely affect the Group's financial position or its operations as a whole.

In addition, on 2 December 2009, the European Court of Justice set aside a December 2007 judgment of the General Court of the European Union that had annulled a decision of the European Commission of December 2005. The European Court of Justice has referred the cases back to the General Court of the European Union for determination. In the event that the legality of the decision of the European Commission is finally confirmed, Eurallumina may be subject to a liability of EUR19.3 million for receipt of allegedly unlawful state aid. If this is the case, there is also a possibility that Italian tax authorities may recommence a claim (which was previously dismissed by

the Italian Court) in the amount of EUR7.7 million against Eurallumina. In the event that Eurallumina is ultimately found liable for the abovementioned sums, Eurallumina may also be liable to pay interest thereon. As the outcome of the above proceedings is uncertain, it is not presently possible to determine whether Eurallumina may be liable to pay such interest nor the amount of such potential interest, if liable.

Washington Group

On 1 April 2009, as part of the Group's cost-cutting measures, the Company suspended its operations at the West Indies Alumina Company ("Windalco"), an alumina refinery in which the Group holds a 93% equity interest. Upon the suspension of operations, Windalco stopped making payments and consuming services under two Mining and Transportation Contracts with Washington Group Jamaica Limited ("WGJL") under which WGJL provided exploration, drilling, mine development and post-mining reclamation stockpile management services. On 30 November 2009, WGJL gave notice of the commencement of the stepped dispute resolution procedure prescribed by the Mining and Transportation Contracts and claimed for, inter alia, US$54 million in damages resulting from alleged termination of the contracts and/or US$71 million in damages resulting from alleged breach of contractual obligations. On 28 December 2009 the Parties entered into a suspension agreement to suspend the Mining and Transportation Contracts through 31 December 2011. For the duration of the agreement WGJL has agreed to forebear from making the said claims and to waive the same provided that Windalco complies with the terms of the agreement. In the event that the contracts are not reinstated Windalco has agreed to pay certain termination fees. In addition, the Group will make an initial payment to WGJL and pay a monthly suspension fee.

Tax Claims

Certain Group companies are currently subject to tax claims. Tax claims have been issued against, inter alia, the following members of the Group: KrAZ in the amount of approximately US$56.5 million, BrAZ in the amount of US$24.1 million, SUAL in the amount of approximately US$48.2 million plus fines and penalties and NGZ in the amount of approximately US$7.6 million.

Liability and Provisions

The following table shows, in respect of the relevant claims above, (i) the amount claimed by the claimant in respect of such claim, not including all interest and costs, and (ii) the provision made by the Group in respect of such claims as at 30 June 2009.

Claimant	Amount of outstanding claim as at the date of this prospectus	Provision made for the claim as at 30 June 2009
BFIG	US$2,800 million	No specific provision made
TadAZ	US$985 million	No specific provision made
CDH	US$53-120 million	No specific provision made
RG	US$1,000 million	No specific provision made
Norden	US$90 million, including demurrage	US$25 million
ZAlK	US$140 million	US$14 million
Alfa Bank	—	No specific provision made
Italian Environmental Ministry	N/A	No specific provision made
Various tax authorities	US$136.4 million	No specific provision made

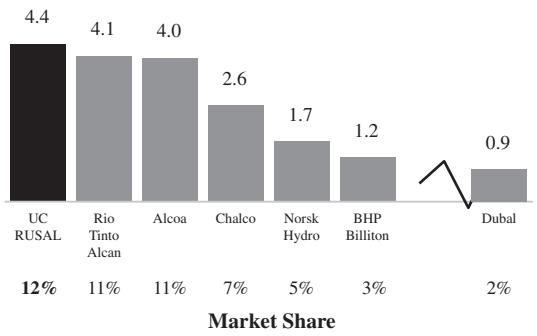
The Group recognises a provision for a legal claim where, as a result of a past event, the Group has a present legal obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligations. The Directors are of the opinion that adequate provisions have been made for each of the legal claims above. Neither the Company's Controlling Shareholders nor any of its other Shareholders, nor any beneficial owners thereof, have indemnified the Company for legal claims against the Group, or for legal claims against any shareholder of the Company or any beneficial owner thereof that might affect the Group.

COMPETITION

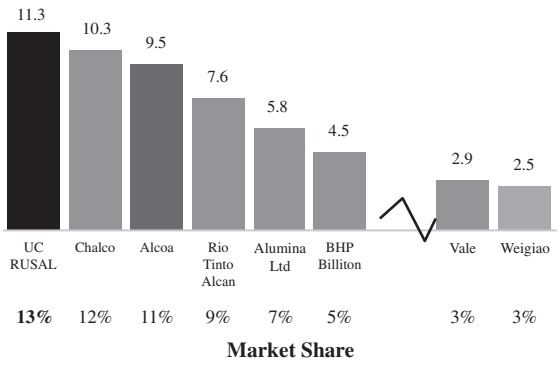
The Group's principal competitors are other major international aluminium producers, including Alcoa, Rio Tinto, Chalco, Norsk Hydro, Hindalco and BHP Billiton. The Group's competitive strengths and its strategy for maintaining a competitive position are set forth above under the heading "— Strengths and Strategies". Major barriers to entry into the aluminium business include the substantial capital expenditures and time required to construct aluminium smelters and the need to secure access to low-cost energy supplies and raw materials.

The following charts show the aluminium and alumina production of the Group and other major international aluminium producers in 2008 according to CRU.

Aluminium production 2008, mt



Alumina production 2008, mt



For further details in relation to the Group's competitive position, see "Industry and Market Overview — Competing Producers".

SELECTED FINANCIAL DATA OF THE GROUP

Set out below is the selected financial data of the Group as extracted from UC RUSAL's Accountants' Report included in Appendix I to this prospectus.

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
			(Mln. US$)		
CONSOLIDATED INCOME STATEMENT DATA					
Revenue	3,757	8,354	15,685	13,588	8,429
Cost of sales	(3,449)	(5,306)	(11,073)	(8,356)	(4,186)
Gross profit	**308**	**3,048**	**4,612**	**5,232**	**4,243**
Distribution expenses	(284)	(383)	(798)	(528)	(328)
Administrative expenses	(311)	(585)	(1,103)	(842)	(455)
Loss on disposal of property, plant and equipment	(7)	(8)	(56)	(97)	(5)
Impairment of non-current assets	(37)	(344)	(3,668)	—	—
Other operating expenses	(156)	(62)	(215)	(118)	(143)
Results from operating activities	**(487)**	**1,666**	**(1,228)**	**3,647**	**3,312**
Finance income	23	120	106	101	176
Finance expenses	(680)	(302)	(1,594)	(494)	(265)
Share of profits/(losses) and impairment of associates	348	79	(3,302)	(14)	(16)
Share of (losses)/profits and impairment of jointly controlled entities	(8)	40	(35)	(15)	(12)
Excess of the Group's share in net identifiable assets over the cost of acquisition	—	—	—	—	28
(Loss)/profit before taxation	**(804)**	**1,603**	**(6,053)**	**3,225**	**3,223**
Income tax	(64)	(194)	69	(419)	(336)
(Loss)/profit from continuing operations	**(868)**	**1,409**	**(5,984)**	**2,806**	**2,887**
Profit from discontinued operations (net of income tax)	—	—	—	—	10
Net (loss)/profit for the year/period	**(868)**	**1,409**	**(5,984)**	**2,806**	**2,897**
Attributable to:					
Shareholders of the Company	(868)	1,411	(5,952)	2,809	2,897
Non-controlling interests	—	(2)	(32)	(3)	—

	At 30 June	At 31 December		
	2009	2008	2007	2006
		(Mln. US$)		
CONSOLIDATED BALANCE SHEET DATA				
ASSETS				
Non-current assets				
Property, plant and equipment	6,201	6,602	10,429	4,514
Intangible assets	4,044	4,187	4,895	1,342
Interests in associates	7,566	7,536	443	442
Interests in jointly controlled entities	502	506	219	127
Financial investments	—	—	606	—
Loans to related parties	—	—	2	—
Deferred tax assets	44	59	105	33
Other non-current assets	51	43	63	182
Total non-current assets	**18,408**	**18,933**	**16,762**	**6,640**
Current assets				
Inventories	2,159	2,938	2,883	1,378
Loans to related parties	—	—	7	39
Trade and other receivables	1,388	1,426	2,150	954
Cash and cash equivalents	264	708	261	241
Total current assets	**3,811**	**5,072**	**5,301**	**2,612**
Total assets	**22,219**	**24,005**	**22,063**	**9,252**
EQUITY AND LIABILITIES				
Equity				
Share capital	—	—	—	—
Share premium	12,517	12,517	6,425	—
Other reserves	3,014	2,912	2,937	2,808
Currency translation reserve	(3,902)	(3,257)	366	2
Retained profits/(accumulated losses)	(8,552)	(7,684)	367	268
Total equity attributable to shareholders of the Company	**3,077**	**4,488**	**10,095**	**3,078**
Non-controlling interests	—	—	44	61
Total equity	**3,077**	**4,488**	**10,139**	**3,139**
Non-current liabilities				
Loans and borrowings	—	—	6,622	3,213
Provisions	388	393	465	156
Deferred tax liabilities	526	509	1,021	541
Other non-current liabilities	20	27	33	98
Bonds outstanding	—	—	—	228
Total non-current liabilities	**934**	**929**	**8,141**	**4,236**
Current liabilities				
Loans and borrowings	13,690	13,878	1,789	1,011
Bonds outstanding	—	—	245	108
Income tax payable	40	48	52	116
Trade and other payables	1,424	1,711	1,611	565
Deferred consideration	2,867	2,782	—	—
Provisions	187	169	86	77
Total current liabilities	**18,208**	**18,588**	**3,783**	**1,877**
Total liabilities	**19,142**	**19,517**	**11,924**	**6,113**
Total equity and liabilities	**22,219**	**24,005**	**22,063**	**9,252**
Net current assets/(liabilities)	**(14,397)**	**(13,516)**	**1,518**	**735**
Total assets less current liabilities	**4,011**	**5,417**	**18,280**	**7,375**

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
	(Mln. US$)				
CONSOLIDATED CASH FLOW STATEMENT DATA					
Net cash (used in)/generated from operating activities	(232)	1,878	3,017	3,346	2,790
Net cash used in investing activities	(61)	(5,271)	(5,802)	(2,853)	(584)
Net cash (used in)/generated from financing activities	(143)	3,379	3,250	(477)	(2,366)
Cash and cash equivalents at the end of year/period	239	237	685	247	229

Certain Non-IFRS Measures

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
	(Mln. US$, except for percentages and ratios)				
CERTAIN NON-IFRS MEASURES					
Adjusted EBITDA[1]	(144)	2,585	3,526	4,620	3,680
Adjusted EBITDA margin	(3.8)%	30.9%	22.5%	34%	43.7%
Net Debt[2]	13,426	13,024	13,170	8,395	4,319
SELECTED RATIOS					
Net Debt to Adjusted EBITDA	46.6:1[3]	2.5:1[3]	3.7:1	1.8:1	1.2:1

Notes:

(1) Adjusted EBITDA for any period is defined as results from operating activities adjusted for amortisation and depreciation, impairments charges and loss on disposal of property, plant and equipment. Adjusted EBITDA is presented as additional information because the Company believes that it is a useful measure for certain investors to determine the Company's operating cash flow and historical ability to meet debt service and capital expenditure requirements. Adjusted EBITDA is not a measure of financial performance under IFRS and should not be considered as an alternative to cash flows from operating activities, a measure of liquidity or an alternative to net profit as indicators of the Company's operating performance or any other measures of performance derived in accordance with IFRS. Because it is not an IFRS measure, Adjusted EBITDA may not be comparable to similarly titled measures presented by other companies. Adjusted EBITDA is different from Covenant EBITDA, which is relevant for the Group's restructuring agreements. For the definition of Covenant EBITDA and a reconciliation of Covenant EBITDA to consolidated profit before tax for the year ended 30 June 2009, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring".

(2) For any period presented, Net Debt is calculated as loans and borrowings (plus, as at 31 December 2006 and 2007, bonds outstanding) less any cash and cash equivalents as at the end of the period. Net Debt is presented as additional information because the Company believes that it is a useful measure for certain investors to determine the Company's operating cash flow and historical ability to meet debt service and capital expenditure requirements. Net Debt is not a measure of financial performance under IFRS and should not be considered as an alternative to a measure of liquidity or an alternative to other IFRS measures as indicators of the Company's operating performance or any other measures of performance derived in accordance with IFRS. Because it is not an IFRS measure, Net Debt may not be comparable to similarly titled measures presented by other companies. Net Debt differs from total net debt as it is defined in the Group's financial arrangements including the Group's debt restructuring agreements. For the definition of total net debt, see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring".

(3) For the purposes of calculating Net Debt to Adjusted EBITDA ratio for the period ended 30 June 2009 and 2008, Adjusted EBITDA was annualised by multiplying Adjusted EBITDA for the respective period by two. These ratios may not be indicative of what these ratios will be for the full fiscal year ending 31 December 2009. Net Debt to Adjusted EBITDA differs from total net debt to Covenant EBITDA for the purposes of the Company's debt restructuring agreements.

The following is a reconciliation of Adjusted EBITDA to the Group's results from operating activities for the periods presented:

	Six months ended 30 June		Year ended 31 December		
	2009	2008	2008	2007	2006
			(Mln. US$)		
Reconciliation of Adjusted EBITDA					
Results from operating activities	(487)	1,666	(1,228)	3,647	3,312
Add:					
Amortisation and depreciation	299	567	1,030	876	363
Impairment of non-current assets	37	344	3,668	—	—
Loss on disposal of property, plant and equipment	7	8	56	97	5
Adjusted EBITDA	(144)	2,585	3,526	4,620	3,680

Key operating Data

The table below provides selected aggregate attributable production information for the Group.

	Six months ended 30 June	Year ended 31 December		
Production	2009	2008	2007	2006
Primary aluminium (ktonnes)	1,980	4,424	4,202	3,958
Alumina (ktonnes)	3,738	11,317	11,347	11,313
Bauxite (mtonnes wet)	6.1	19.1	18.5	19.2

Notes:

(1) Alpart and Windalco are consolidated by the Group on a proportionate basis as they are jointly controlled assets and operations (the Group's interests in Alpart and Windalco are 65% and 93%, respectively). Accordingly, the alumina production data set forth above represents the Group's pro rata share of Alpart and Windalco's production. Zaporozhye alumina refinery is a fully consolidated subsidiary of the Company, so the attributable production is presented on a 100% plant production basis to reflect UC RUSAL's effective control of the finished product. QAL is consolidated on an equity basis and accordingly the data shown is the proportion attributed to UC RUSAL based on its 20% equity interest.

(2) Because Alpart and Windalco are consolidated on a proportionate basis, the bauxite production data set forth above represents the Group's pro rata share of Alpart and Windalco's respective production. The total production of the Group's fully consolidated subsidiaries is included, even if there are minority interests. Accordingly, the total production of Timan and BCGI is included, even though the Group's interests in Timan and BCGI are approximately 80% and 90%, respectively.

Capitalisation

The following table shows the Group's current and non-current loans and borrowings, deferred consideration and capitalisation as at 30 September 2009, (i) as adjusted to reflect the completion of the Group's debt restructuring; (ii) as further adjusted to reflect the Global Offering and the application of the proceeds thereof, in each case as though it had occurred on 30 September 2009; and (iii) assuming an Offer Price of HK$10.80 per Offer Share, being the approximate mid-point of the proposed offer price range of HK$9.10 to HK$12.50.

	As of 30 September 2009		
	Actual	As adjusted for restructuring[1][2]	As further adjusted for Global Offering and application of proceeds thereof
		(Mln. US$) (unaudited)	
Current loans and borrowings and deferred consideration			
Bank and other loans	13,638	1,777	—
Deferred consideration	2,915	501	219
Total current loans and borrowings and current deferred consideration[3]	**16,553**	**2,278**	**219**
Non-current loans and borrowings and deferred consideration			
Bank loans	—	11,376	11,271
Deferred consideration	—	541	541
Total non-current loans and borrowings and deferred consideration[3]	**—**	**11,917**	**11,812**
Total equity[4]	**3,697**	**6,055**	**8,219**[5]
Total capitalisation[6]	3,697	17,972	20,031

Notes:

(1) Current and non-current loans and borrowings and deferred consideration as adjusted to reflect the completion of the Group's debt restructuring are reflected at fair value, rather than contractual value. The allocation between current loans and borrowings and deferred consideration and non-current loans and borrowings and deferred consideration is on the basis of an estimate of what is expected to be repaid by 30 September 2010, based on the terms of the debt restructuring agreements. The maturity of the VEB Debt was extended to 29 October 2010 and the VEB Debt is therefore treated as non-current loans and borrowings.

(2) There is no fixed amortisation schedule of the debt repayment during the override period. The Directors estimated short term portions of bank and other loans payable and the deferred consideration as at 30 September 2009 to be US$1,777 million and US$501 million, respectively. The Group estimates the gain to be recognised on the extinguishment of debt as a result of this debt restructuring at US$485 million, net of various override fees and expenses of US$262 million and the gain to be recognised on the extinguishment of deferred consideration as a result of this restructuring at US$673 million, net of various restructuring fees and expenses of US$49 million. In addition, the Group estimates the fair value of new equity resulting from the conversion of a portion of deferred consideration into 6% of the Company's share capital at US$1,200 million.

(3) As at 31 October 2009 the indebtedness of the Group amounted to US$16,569 million, which included US$13,646 million of current loans and borrowings and US$2,923 million of current deferred consideration (including accrued interest) payable to Onexim. The amount stated does not take into account the effect of debt restructuring in December 2009 nor the effect of the Global Offering. The details of the securities and guarantees in relation to the Group's borrowings are stated on page 217 of this Prospectus.

(4) There was no material change in total equity of the Group between 30 September 2009 and 31 October 2009 in respect of share capital and share premium, which are not affected by the period results of the Group for the month of October 2009.

(5) In the event the offer is priced at the low end of the price range, the net proceeds would be US$1,814 million and resulting total equity would be US$7,869 million. In the event the offer is priced at the high end of the price range, the net proceeds would be US$2,513 million and resulting total equity would be US$8,568 million. If the Global Offering is priced above or below the mid-point of the proposed offer price range, the change in estimated net proceeds will be balanced by a change in bank loans and deferred consideration so total capitalisation will not vary as a result of a change to estimated net proceeds.

(6) The Group's total capitalisation is equal to the sum of non-current loans and borrowings and deferred consideration and total equity.

Balance sheet

As of 30 September 2009 and 30 June 2009, the Group's net current liabilities were approximately US$14,361 million and US$14,397 million, respectively, comprising the following:

	As of 30 September 2009	As of 30 June 2009
	(Mln. US$) (unaudited)	(Mln. US$)
ASSETS		
Current assets		
Inventories	2,132	2,159
Trade and other receivables	1,455	1,388
Cash and cash equivalents	298	264
Total current assets	**3,885**	**3,811**
Current liabilities		
Loans and borrowings	13,638	13,690
Income tax payable	53	40
Trade and other payables	1,414	1,424
Deferred consideration	2,915	2,867
Provisions	226	187
Total current liabilities	**18,246**	**18,208**
Net current liabilities	**(14,361)**	**(14,397)**

The Group's total assets were US$22.2 billion as of 30 June 2009, US$24.0 billion at 31 December 2008, US$22.1 billion at 31 December 2007 and US$9.3 billion at 31 December 2006. The decrease in total assets from 31 December 2008 to 30 June 2009 mainly resulted from decreases in inventories, cash and cash equivalents and property, plant and equipment. The increase in total assets from 31 December 2007 to 31 December 2008 mainly resulted from increases in interest in associates and jointly controlled entities, and cash and cash equivalents, partially offset by decreases in property, plant and equipment, and intangibles assets. The increase in total assets from 31 December 2006 to 31 December 2007 primarily resulted from the acquisitions of the SUAL and Glencore Businesses.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

A prospective investor should read the following review in conjunction with the rest of this prospectus, including the Accountants' Report and the notes thereto included elsewhere in this prospectus (see "Appendix I — Accountants' Report"), and should not rely solely on the information contained in this section. This discussion contains forward-looking statements that involve risks and uncertainties that could cause the Group's actual results to differ from those expressed or implied by such forward-looking statements. These risks and uncertainties are discussed in "Forward-Looking Statements" and "Risk Factors".

The following is a discussion of:

- the material factors that management believes are likely to affect the Group's financial condition and results of operations;
- the historical financial information of UC RUSAL for the six months ended 30 June 2009 and 2008 and for the three years ended 31 December 2008, 2007 and 2006 (including the financial information of RUSAL for periods prior to UC RUSAL's acquisition of SUAL and the Glencore Businesses); and
- the liquidity and capital resources of the Group.

As a result of the global economic downturn and a sharp decline in aluminium prices starting from September 2008 and continuing into 2009, as well as an increase in the Group's indebtedness in the first half of 2008, including its incurrence of indebtedness in April 2008 to finance its acquisition of a stake in Norilsk Nickel, the Group experienced a liquidity shortage and breached covenants under certain of its loan agreements. This gave rise to a material uncertainty casting a significant doubt over the Group's ability to continue as a going concern without successfully completing the restructuring of its financial indebtedness. This uncertainty has, however, been resolved by the completion of the Group's debt restructuring. For further information, see "— Restructuring" and "Liquidity and Capital Resources — Debt Restructuring".

Overview

The Group is the world's largest producer of aluminium, producing approximately 4.4 million tonnes and 2.0 million tonnes in 2008 and the first half of 2009, respectively, and accounting for approximately 12% and 11% of global output in those periods, according to CRU. The Group's business is focused on the upstream segment of the industry — the production and sale of primary aluminium (including alloys and value added products, such as aluminium sheet ingot and aluminium billet). Within its upstream business, the Group is vertically integrated to a high degree, having secure supplies of bauxite and having the capacity to produce alumina in excess of its current requirements. The Group's core smelters are located in Siberia, Russia, and benefit from access to low cost hydro generated electricity. This is a region where the Group is generally the principal consumer of electricity and there are few, if any, alternative sources of significant demand. In the first half of 2009, the Group reduced its alumina capacity to volumes sufficient for its internal use by suspending operations at some of its alumina refineries as part of its response to the downturn in aluminium industry production. The Group's own bauxite production was sufficient to cover approximately 71% and 78% of its alumina production in 2008 and the first six months of 2009, respectively, with additional bauxite being purchased under medium- and long-term contracts to cover the Group's alumina-long position. The Group is the world's largest producer of alumina, producing approximately 11.3 million tonnes and 3.7 million tonnes of alumina in 2008 and the first half of 2009, respectively

and accounting for 13% and 10% of global output in those periods, according to CRU. To produce approximately 4.4 million tonnes and 2.0 million tonnes of aluminium in 2008 and the first half of 2009, respectively, the Group required approximately 8.6 million tonnes and 3.4 million tonnes of alumina.

The Group's revenue was US$15,685 million for the year ended 31 December 2008 and US$3,757 million for the six months ended 30 June 2009. The Group reported a net loss of US$5,984 million for the year ended 31 December 2008 and US$868 million for the six months ended 30 June 2009.

The Group has evolved over the past decade through acquisitions and organic growth. In March 2007, RUSAL acquired SUAL, then one of the world's ten largest producers in the aluminium business, and certain of the aluminium and alumina businesses of Glencore, a company specialising in the production and processing of metals and the trading of metals, oil and agricultural products, creating the Group in its current form. The Group now has operations in 19 countries across five continents, with more than 75,000 employees.

The Group has four reporting business segments which are also the Group's strategic business units. These business units are managed separately. The business segments are as follows:

- Aluminium: the Aluminium segment is involved in the production and sale of primary aluminium and related products (and includes the repair and maintenance activities carried out by the Engineering and Construction business division);

- Alumina: the Alumina segment is involved in mining and refining of bauxite into alumina and sale of alumina;

- Energy: the Energy segment includes the Group companies and projects engaged in mining and sale of coal and generation and transmission of electricity produced from various sources. Where the generating facility is solely a part of an alumina or aluminium production facility it is included in the respective operating segment; and

- Mining and Metals: the Mining and Metals segment includes the Group's equity investment in Norilsk Nickel.

Other operations include the manufacturing of semi-finished products from primary aluminium for the transportation, packaging, building and construction, consumer goods and technology industries and for the activities of the Group's administrative centres. In 2006, 2007, 2008 and 2009, none of these segments met the quantitative thresholds required to be deemed reportable segments.

The Aluminium and Alumina segments are vertically integrated, whereby the Alumina segment supplies alumina to the Aluminium segment for refining and smelting and has limited sales of alumina outside the Group. Integration between the Aluminium, Alumina and Energy segments also includes shared servicing and distribution. Inter-segment pricing is determined on a consistent basis using market benchmarks (such as market prices for alumina).

The Aluminium segment accounted for approximately 79.7% and 88.4% of the Group's revenue for the year ended 31 December 2008 and for the six months ended 30 June 2009, respectively. The Group also presents revenue, capital expenditure and assets on a geographic segment basis. See Note 4(iii) to the UC RUSAL Accountants' Report.

For the year ended 31 December 2008 and for the six months ended 30 June 2009, segment result margins (calculated as a percentage of segment profit/(loss) to revenue from external customers per respective segment) from continuing operations were 8.5% and (9.8)% for the aluminium segment, 56.0% and (21.0)% for the alumina segment, 19.9% and 15.0% for the energy segment and 8.2% and (75.8)% for the other operations, respectively.

Restructuring

As a result of the global economic downturn and the sharp decline in aluminium prices starting from September 2008 and continuing into the first half of 2009, as well as an increase in the Group's indebtedness in the first half of 2008, including its incurrence of indebtedness in April 2008 to finance its acquisition of a stake in Norilsk Nickel, the Group experienced a liquidity shortage and breached covenants under most of its loan agreements. The Group's debt as at 30 June 2009 included US$13,690 million under 54 syndicated and bilateral loans with international and Russian lenders. The Group also had obligations to Onexim in the amount of US$2.7 billion plus accrued interest in respect of deferred consideration for the purchase of shares in Norilsk Nickel. In addition, the Company had US$260 million of off-balance sheet liabilities in relation to a guarantee of indebtedness of a joint venture.

On 11 March 2009, the Company and certain of its subsidiaries signed a standstill and waiver agreement with the international lenders whose exposures represented more than 75% of the Group's international debt, which allowed the Company to suspend principal repayments on its loans and borrowings and waived existing defaults and cross-defaults during the restructuring negotiation period. The standstill period initially was two calendar months and was further extended until completion of the debt restructuring on 7 December 2009.

On 7 December 2009, the Company and certain of its subsidiaries entered into an international override agreement with the Group's international lenders implementing a long-term restructuring of the Group's debt to its international lenders, providing for a stated maturity date on 6 December 2013, subject to earlier repayments out of excess cashflow and the proceeds of asset disposals and equity and subordinated and other debt fund raisings. In addition, in October, November and December 2009, the Company and certain of its subsidiaries entered into debt restructuring agreements in relation to various bilateral loans with Russian and Kazakh lenders providing for the long-term restructuring of these loans on broadly similar terms, except in the case of the loan agreement with VEB, which was extended for a shorter period. Further, on 1 December 2009, the Company entered into an amendment agreement in relation to a stock purchase agreement among the Company, Onexim and certain other parties relating to the acquisition of shares in Norilsk Nickel to restructure deferred consideration in the amount of US$2.7 billion plus interest accrued thereon. In accordance with the amendment agreement, the Company's obligations in respect of US$880 million plus interest accrued on the total amount of deferred consideration from 6 November 2009 until the date of effectiveness of the international override agreement (in the amount of approximately US$15 million) plus any interest capitalised thereon during the override period will be settled out of excess cashflow and other proceeds used to prepay debt (being proceeds of asset disposals or equity or debt fund raisings) during the term of the international override agreement. The remaining obligations were converted into Shares representing approximately 6% of the Company's share capital on the date of effectiveness of the international override agreement. The interest accrued until and including 5 November 2009 and a restructuring fee in an aggregate amount of US$275 million were or are to be paid in cash: US$160 million was paid by the Company on the date of the effectiveness of the international override agreement and US$115 million will be paid out of the proceeds of the Global Offering.

The following table summarises the Group's debt by major class of creditor as at the date of this prospectus, after the effective date of the debt restructuring agreements:

Creditors	Principal amount of debt outstanding as at the date of this prospectus (and after the debt restructuring has taken effect)
International lenders	US$7.4 billion[1]
Russian and Kazakh lenders	US$2.1 billion
VEB	US$4.5 billion
Onexim	US$895 million[2]
Total	US$14.9 billion

Note:

(1) Includes US$0.2 billion of contingent liabilities under payment instruments, including, without limitation, undrawn letters of credit.

(2) Does not include US$115 million that will be paid to Onexim from the net proceeds of the Global Offering. For further details, see "— Liquidity and Capital Resources — Debt Restructuring —Terms of Onexim Debt Restructuring".

The principal objective of the Company's Directors and management in negotiating the debt restructuring was to give the Company greater time and flexibility to meet its debt obligations in anticipation of aluminium price recovery. This has been achieved through the following arrangements:

- linking debt repayment obligations to the Company's ability to generate excess operating cash flow (subject to meeting certain cumulative debt repayment targets);
- allowing a portion of interest charges to be capitalised under a pay in kind arrangement; and
- converting into equity a substantial obligation to Onexim.

The debt restructuring has the following principal consequences for the Group:

- it extends the maturity of the restructured debt to November-December 2013, except for the debt to VEB which is extended to 29 October 2010;
- it provides for interest (consisting of cash and payment-in-kind components) to be payable generally at a floating base rate plus a variable margin that is dependent upon leverage;
- it contains an obligation to use excess cash flow and net proceeds raised from asset disposals and equity and subordinated and other debt fund raisings (including proceeds from the Global Offering) to repay outstanding indebtedness (and to sell shares in Norilsk Nickel in certain circumstances to repay debt owed to VEB);
- it significantly limits the Group's ability to incur additional indebtedness;
- it provides for the granting of additional security interests over assets of the Group;
- it restricts dividends and capital expenditure; and
- it obliges the Group to maintain specified financial ratios.

For further information with respect to the terms of the debt restructuring agreements, see "— Liquidity and Capital Resources — Debt Restructuring".

The Acquisition of a 25% plus one share stake in Norilsk Nickel and Subsequent Impairment

In April 2008, the Group completed the acquisition of a 25% plus one share stake in Norilsk Nickel from Onexim. The Group's investment in Norilsk Nickel is accounted for under the equity method, because UC RUSAL is able to exert significant influence over Norilsk Nickel. Under the equity method, the investment is initially recognised at cost and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The investor's share of profit or loss of the investee is recognised in the investor's income statement after purchase price allocation adjustments, if any (such as revaluation of property, plant and equipment of the investee at fair value on the date of acquisition and recognition of the mining assets). Distributions received from the investee reduce the carrying amount of the investment.

The Group's share in the profit/loss of Norilsk Nickel from the date of acquisition through 31 December 2008 was a loss of US$881 million and for the first six months of 2009 was a profit of US$42 million. In addition, following the sharp decline in demand for products of Norilsk Nickel in the fourth quarter of 2008, the Group recognised US$2,408 million in impairment charges related to its investment in Norilsk Nickel at 31 December 2008 of which US$308 million was reversed during the six month period ended 30 June 2009. For further information, see "— Results of Operations — Certain Factors Affecting Results of Operations — Impairment of non-current assets", and "— Results of Operations — Year ended 31 December 2008 compared to the year ended 31 December 2007 — Impairment of non-current assets" and Note 19(a) to UC RUSAL's Accountants' Report. The carrying value of the Group's investment in Norilsk Nickel is significantly influenced by foreign currency exchange rate movements which could have a material impact in future periods. See "Risk Factors — Risks Relating to the Group and its Business — The Group's results of operations in 2008 were significantly and adversely affected by impairment charges related principally to its property, plant and equipment and to its equity investment in Norilsk Nickel and by the Group's pro rata portion of loss suffered by Norilsk Nickel, and there can be no assurances that further impairment charges will not be necessary or that further losses related to the Norilsk Nickel investment will not occur".

The Acquisition of SUAL and the Glencore Businesses

In late March 2007, En+, SUAL Partners and Glencore and/or its subsidiaries contributed to UC RUSAL their respective interests in RUSAL, SUAL and the Glencore Businesses. The Company believes that the transfer to it of these respective interests in March 2007 was effective at the time. As discussed below, this transaction is treated for accounting purposes, and is described in this prospectus, as the acquisition of SUAL and the Glencore Businesses by RUSAL/UC RUSAL. The acquisition strengthened the Group's vertical integration by bringing together aluminium smelting and alumina production capacity, thereby reducing exposure to price movements.

Prior to UC RUSAL's acquisition of SUAL and the Glencore Businesses, RUSAL and SUAL disposed of selected downstream operations and other assets, enabling the Group to focus on the upstream aluminium business. On 29 December 2006, in connection with UC RUSAL's acquisition of SUAL and the Glencore Businesses, RUSAL transferred packaging, aluminium construction, magnesium and energy assets to its shareholder as a distribution. Similarly, in connection with the acquisition, SUAL consolidated under a separate holding company assets that would not be acquired by UC RUSAL, including a producer of semi-finished products, and sold this holding company in January 2007.

For accounting purposes, the contribution to UC RUSAL of RUSAL, SUAL and the Glencore Businesses has been treated as follows:

- the formation of UC RUSAL and its acquisition of RUSAL is considered to be a non-substantive transaction, meaning that UC RUSAL's consolidated financial history prior to 27 March 2007 is that of RUSAL; and

- the contribution to UC RUSAL of interests in SUAL and the Glencore Businesses is treated as a purchase of these entities on 27 March 2007.

Accordingly, the historical financial information of UC RUSAL for the year ended 31 December 2007 includes the trading results of SUAL and the Glencore Businesses with effect from 1 April 2007, and the UC RUSAL balance sheet as at 31 December 2007 consolidates SUAL and the Glencore Businesses. UC RUSAL's consolidated financial statements for the year ended 31 December 2008 and for the six month periods ended 30 June 2009 and 2008 include the results of operations and the financial position of the Group taken as a whole.

Certain Factors Affecting the Group's Results of Operations

Selected Operating and Financial Data

Historical Data

Set out below is selected operating and financial data for the years ending 31 December 2006 to 2008 and the first half of 2009 and the Company's minimum operational targets.

	Six months ended 30 June	Year ended 31 December		
	2009	**2008**	**2007**	**2006**
Aluminium and alumina price information				
Aluminium price per tonne quoted on the LME (US$ per tonne)[1]	1,422	2,620	2,662	2,568
Alumina price per tonne (US$ per tonne)[2]	196	341	343	436
Capacity				
Total plant saleable aluminium capacity (ktonnes)[3]	2,293	4,556	4,233	3,987
Primary aluminium production as % of total plant saleable aluminium capacity (Capacity utilisation)	*86.3%*	*97.1%*	*99.3%*	*99.3%*
Production				
Primary aluminium (ktonnes)	1,980	4,424	4,202	3,958
Alumina (ktonnes)	3,738	11,317	11,347	11,313
Bauxite (mtonnes wet)	6.1	19.1	18.5	19.2
Coal (mtonnes)	7.1	23.05	19.2	20.8
Selected income statement data (mln. US$)				
Revenue	3,757	15,685	13,588	8,429
Cost of sales	(3,449)	(11,073)	(8,356)	(4,186)
of which energy costs	(901)	(2,044)	(1,271)	(525)
Distribution expenses	(284)	(798)	(528)	(328)
Adjusted EBITDA	(144)	3,526	4,620	3,680
margin	*(3.8%)*	*22.5%*	*34.0%*	*43.7%*
Results from operating activities (excluding impact of impairment charges)	(450)	2,440	3,647	3,312
margin	*(12.0%)*	*15.6%*	*26.8%*	*39.3%*
Income tax expense	(64)	69	(419)	(336)
Selected cash flow statement data (mln. US$)				
Net cash flows generated from operating activities	(232)	3,017	3,346	2,790
Net cash flows used in investing activities	(61)	(5,802)	(2,853)	(584)
of which capex[4]	(69)	(1,348)	(1,684)	(867)

Notes:

(1) Represents the average of the daily closing prices for each period.

(2) The average alumina price per tonne provided in this table is based on the daily closing spot prices of alumina as reported by Datastream; Metal Bulletin. Approximately 10% to 15% of alumina is sold on the spot market, the rest being sold primarily on a contractual basis at prices that may differ from the then-prevailing spot prices. The spot prices provided herein therefore may not be representative of the alumina market generally.

(3) Saleable aluminium capacity is the weight of the aluminium which, it is estimated, could be produced within the period defined. It includes the capacity of the existing plant, irrespective of whether the plant is operating or idle. Capacity is shown on a total plant basis and irrespective of ownership.

(4) Capex defined as payment for the acquisition of property, plant and equipment.

As outlined in "Business — Strengths and Strategies — Strengths — High degree of vertical integration", the Company consumes a large proportion of the alumina it produces and the majority of the bauxite it mines. In 2008 the Company consumed approximately 8.6 million tonnes of alumina, of which 1.8 million tonnes was purchased from third parties in addition to the approximately 11.3 million tonnes produced internally. The Company's own bauxite production in 2008 was sufficient to cover approximately 71% of its alumina production.

Operational Outlook

Based on the updated base case assumptions (as described in "— Liquidity and Capital Resources — Debt Restructuring") and on the Company's historical operational and financial performance, the Directors believe that the Company's aluminium production and operating margins should reach levels similar to those achieved in 2008 (excluding the impact of impairment charges) from 2011. Assumed aluminium production and operating margin levels constitute forward-looking statements, involve significant risk and uncertainty and have been included herein pursuant to regulatory requirements. There can be no guarantee that these production and margin levels can be achieved or that such assumptions will prove to be correct or accurate. Actual operational and financial performance may be significantly worse than the Directors' updated base case assumptions, and as a result the Group's business and financial condition may be materially and adversely affected. Moreover, the updated base case assumptions include assumptions about a number of matters outside the Group's control, including prices for aluminium, alumina, electricity, transportation, raw materials and other inputs as well as general economic and market conditions and uninterrupted production. There are a number of risks, uncertainties and other factors that could cause the actual events, circumstances and developments to differ materially from these assumptions. See also "Forward-Looking Statements".

Certain Factors Affecting Results of Operations

The primary factor affecting the Group's results of operations is the demand for and price of aluminium (and, to a lesser extent, the demand for and price of alumina). Other important factors that have affected and are expected to continue to affect the Group's results of operations include the following:

- demand for and price of aluminium and alumina;
- prices of materials;
- electricity prices;
- transportation tariffs;
- effective tax rate;
- changes in foreign currency exchange rates;
- impairment of non-current assets;
- cost reductions; and
- impact of restructuring going forward.

The Group's results of operations, turnaround position and prospects for growth will also be affected substantially by the implementation of the debt restructuring agreed in late 2009 with substantially all its creditors following default on its indebtedness and the Group's ability to comply with the restructuring's deleveraging requirements.

Demand for and Price of Aluminium and Alumina

The Group's operating results are affected significantly by the demand for price of aluminium as quoted on the LME and, to a lesser extent, by the demand for and price of alumina. Aluminium prices were high relative to average historical prices from 2005 through the first half of 2008. The average price per tonne of aluminium as quoted on the LME increased from US$1,900 in 2005 to US$2,568 in 2006, or by 35%, to US$2,662 in 2007, or by 3.7% and then to US$2,836 in the first six months of 2008, or by 6.5%. The increase in the price of aluminium over this period was largely due to growth in demand for aluminium products, which was primarily driven by growing markets, such as Russia, India and China; a decline in world aluminium production; and, with respect to 2006, an alumina deficit, which resulted in a global aluminium production cost increase. In the second half of 2008 and the first half of 2009, however, aluminium prices declined sharply, due to a steep decline in demand resulting from the global financial crisis and recession. The average price per tonne of aluminium as quoted on the LME decreased to US$2,304 in the second half of 2008 and US$1,422 in the first half of 2009.

The Group also sells alumina to and purchases alumina from third parties. Alumina is priced in one of two principal ways: on a spot basis at a fixed price for a specified period; or on a formula basis related to the price of aluminium as quoted on the LME.

The following table sets forth certain price information for aluminium and alumina for the periods indicated.

	High	Low	Average[1]
	(US$, except percentages)		
Aluminium price per tonne quoted on the LME			
Six months ended 30 June 2009	1,646	1,290	1,422
Six months ended 30 June 2008	3,175	2,359	2,836
Year ended 31 December 2008	3,341	1,464	2,620
Year ended 31 December 2007	2,953	2,316	2,662
Year ended 31 December 2006	3,273	2,267	2,568
Year ended 31 December 2005	2,289	1,675	1,900
Alumina price per tonne[2]			
Six months ended 30 June 2009	215	181	196
As % of LME price	13.1	14.0	13.8
Six months ended 30 June 2008	435	360	401
As % of LME price	13.7	15.3	14.1
Year ended 31 December 2008	394	316	341
As % of LME price	11.8	21.6	13.0
Year ended 31 December 2007	360	205	343
As % of LME price	12.2	8.9	12.9
Year ended 31 December 2006	617	202	436
As % of LME price	18.9	8.9	17.0
Year ended 31 December 2005	576	399	446
As % of LME price	25.2	23.8	23.5

Notes:

(1) Represents the average of the daily closing prices for each period.

(2) The high, low and average alumina price per tonne provided in this table is based on the daily closing spot prices of alumina as reported by Datastream; Metal Bulletin. Approximately 10% to 15% of alumina is sold on the spot market, the rest being sold primarily on a contractual basis at prices that may differ from the then-prevailing spot prices. The spot prices provided herein therefore may not be representative of the alumina market generally.

Revenue from aluminium sales to all markets (including the Russian Federation) is closely linked to movements in the LME price of aluminium. The Group's average realised price per tonne of aluminium generally has been higher than the average price quoted on the LME due to its production of value added products and the inclusion of certain alloys in the Group's products. Factors affecting the amount of premium charged for a particular product include the product type, the geographic market in which the product is sold, the quantity of the product ordered, the terms of delivery and payment and current market trends. In addition, in some cases the Group includes transportation services, reflecting the Group's transportation costs, in the final price charged to customers.

Following the acquisition of the Glencore Businesses the Group produced more alumina than it required for its aluminium production and sold this excess to third parties. Following the economic downturn at the end of 2008, the Group has reduced its alumina capacity to volumes that are sufficient for its internal use.

Currently the Group does not hedge its exposure to aluminium or alumina prices, though it may consider such hedging in the future. It does hedge sales to the United States and sales made from its Kubikenborg smelter. The objective of the Group's hedging of its sales to the United States and from its Kubikenborg aluminium smelter is to achieve the average LME official cash price for the month of production. After the Group has entered into an agreement for physical sale of aluminium, it hedges the physical sale forward on the LME. At a suitable time in the future it unwinds the forward long hedge by selling the cash average of production.

Prices of Materials

The main component of the Group's cost of sales is cost of materials, and therefore the Group's results of operations are affected by movements in such materials' prices. Cost of materials represented 58.5% and 55.8% of the Group's cost of sales in the year ended December 2008 and the six months ended 30 June 2009, respectively. The principal materials purchased include bauxite, caustic soda, fuel oil and natural gas, used in the production of alumina, and alumina, caustic soda, fluoride, pitch and coke, used in the production of aluminium. The cost of alumina and bauxite has been a significant component of cost of materials, representing 20.2% and 20.6% of the Group's cost of sales for the year ended 31 December 2008 and for the six months ended 30 June 2009, respectively. The Group will, due to ongoing contractual commitments, continue to source for a certain period of time considerable amounts of alumina from third parties notwithstanding in-house production that is now in excess of its needs. For example, UC RUSAL has entered into a long-term contract with Sirinidia Trading AG (which was subsequently assigned to ENR Alumina AG), which now operates the geographically isolated Pavlodar alumina refinery in Kazakhstan, to purchase alumina through 2016. Pavlodar's location enables the Group to secure favourable long-term contracts as it currently is the only geographically well-placed customer. See "Business — Strengths and Strategies — Strengths — High Degree of Vertical Integration". While the Group will thus continue to source a considerable quantity of materials from third parties, the Group's alumina production will serve as a hedge against price increases, while at the same time creating some exposure to price decreases. Following the downturn in the aluminium industry and the sharp decline in aluminium prices at the end of 2008 and beginning 2009, the Group reduced its alumina production capacity by temporarily suspending the operations of a number of higher cost alumina refineries. The Group now meets most of its bauxite requirements from its own mines and sources the rest through medium- to long-term contracts, but the price adjustment provisions leave some exposure to price variations. Moreover, the Group continues to rely on third-party sources to supply its aluminium smelters and alumina refineries with most of the other materials it requires, in particular, fuel oil, caustic soda, pitch and coke. The prices of these other materials have generally risen in recent years.

Electricity Prices

Electricity purchases by the Group's aluminium smelters represent a significant component of the Group's costs of sales. The Group has benefited and expects to continue to benefit from relatively low electricity prices in the parts of Siberia where its main smelting operations are located. Following the liberalisation of the electricity market in 2008, the Group has seen a significant increase in tariffs, which drove up its electricity expense; however, on average, electricity prices remain a structurally competitive advantage for the Group.

For each of the three years ended 31 December 2008 and for the six months ended 30 June 2009, the Group's aluminium smelters consumed, on an aggregate basis, approximately 47,765 mkWh, 71,700 mkWh, 74,862 mkWh and 33,047 mkWh of electricity, respectively. The energy costs of the Group at its aluminium smelters, were approximately US$474 million, US$1,100 million, US$1,849 million and US$757 million for each of the three years ended 31 December 2008 and for the six months ended 30 June 2009, respectively, or amounted to approximately US$196, US$301, US$400 and US$346 per tonne for each of the three years ended 31 December 2008 and for the six months ended 30 June 2009, respectively. Electricity costs account for the vast majority of energy costs, with the balance mainly oil and gas costs predominantly for use in the carbon and casthouse areas.

In 2006, 2007, 2008 and for the six months ended 30 June 2009, approximately 100%, 79%, 80% and 84%, respectively, of the Group's aluminium was produced by Siberian smelters which obtained their energy mainly from low-cost hydropower stations with few, if any, alternative sources of significant demand. In those parts of Siberia where these smelters are located, the Group is generally the principal consumer of electricity, and there are few, if any, alternative sources of significant demand. In addition to meeting its electricity needs through hydropower stations, the Group also obtains electricity from thermal generators. In 2006, 2007, 2008 and the six months ended 30 June 2009, aluminium smelters in Siberia paid a production-weighted average of US$0.0110/kWh, US$0.0129/kWh, US$0.0192/kWh and US$0.0182/kWh, respectively, for electricity. This compares with a production-weighted average in 2007, 2008 and the six months ended 30 June 2009, of US$0.0308/kWh, US$0.0355/kWh and US$0.0339/kWh, respectively, in the Urals region, and US$0.0321/kWh, US$0.0473/kWh and US$0.0285/kWh, respectively, in the European region of Russia (excluding the Urals region).

Electricity price increases may result from the need to secure alternative electricity supplies following industrial accidents or breakdowns at major electricity suppliers. In August 2009, a major accident occurred at the Sayano-Shushenskaya hydroelectric power plant in Siberia, which was the main supplier of electricity to the Group's Sayanogorsk and Khakas aluminium smelters. This disruption did not have a material effect on our business. Electricity price increases may also result from changes in the regulation of the Russian electricity industry. For further information, see "Risk Factors — Risks Relating to the Group and its Business — The Group's competitive position in the global aluminium industry is highly dependent on continued access to inexpensive and uninterrupted electricity supply, in particular, long-term contracts for such electricity; increased electricity prices (particularly as a result of deregulation of electricity tariffs), as well as interruptions in the supply of electricity, could have a material adverse effect on the Group's business, financial condition and results of operations".

The Group's strategy for maintaining access to low-cost electricity for its existing smelters varies by region. See "Business — Strengths and Strategies — Strengths — Secure and sustainable low cost position and power advantage" and "Business — Energy Supply — Security of Power Supply".

Transportation Tariffs

The Group's transportation costs are recorded in cost of sales (as part of cost of raw materials) and relate mainly to the transportation of alumina and other materials to the Group's aluminium smelters. Distribution costs are recorded in distribution expenses and relate to the transportation of finished aluminium products to customers. Distribution expenses represented 5.1% and 7.6% of its revenue, for 2008 and the six months ended 30 June 2009, respectively.

Railway transportation is the Group's principal means of transporting materials, mainly alumina, to its smelters and end products to its customers. The Group also relies on key Russian ports to receive shipments of foreign-sourced alumina and to export finished aluminium products. See "Business — Transportation".

Russian railway tariffs are currently regulated by the government and consist of two parts: infrastructure costs and carriage costs. In recent years, annual tariff increases have been in line with inflation (except for 2008, when tariffs rose faster than inflation) and in 2006 and 2007 the increases were less than inflation. There can be no assurance, however, that this policy will be maintained.

The Group benefits from favourable rail tariffs on certain routes, and protection from rate increases, pursuant to Russian regulations adopted in 2003 and 2004 (the "Railway Tariff Regulations") and an implementing agreement entered into in 2004 between RUSAL and the railway operator, JSC Russian Railways. Under these regulations and the implementing agreement, the infrastructure component of the railway tariff for transportation on specified routes of certain materials was fixed in Roubles until December 2010 at the level of 1 October 2003, provided that increasing annual volume levels are met. Subject to the possibility of early termination by either party before any year-end, the agreement is automatically renewed on an annual basis.

The tariffs set by the Railway Tariff Regulations and implemented by the agreement are applicable to the transportation of current and future production of the former RUSAL Russian aluminium smelters and alumina refineries.

In 2008, the Group entered into a memorandum of understanding with JSC Russian Railways to fix infrastructure component of transport tariffs generally applicable to specific types of raw materials and products at 2008 levels subject to a certain diminishing factor with subsequent annual increases indexed in accordance with general annual tariff indexation. Such fixed transport tariffs would apply to the principal types of raw materials and products usually transported by the Group, rather than particular entities or transportation routes, thus, would indirectly provide benefit to the entire Group. The Group intends to continue the negotiation process in relation to this memorandum of understanding in 2010. Once the negotiations are finalised, it is expected that new regulations will have to be issued by the state tariff agency in order to give effect to the new tariffs. Upon entry of the new tariffs into force, the Railway Tariff Regulations and the implementing agreement will terminate. Until then, the Group expects that the Railway Tariff Regulations and the implementing agreement with JSC Russian Railways continue to apply. As an alternative, the Group is also discussing with JSC Russian Railways the possibility of extending the current agreement to SUAL and new production facilities with the simultaneous extension of its term until 2020.

Furthermore, the Group is currently in the process of negotiating a 30% discount to the infrastructure component of the tariff to apply if the LME price falls below US$1,650 per tonne. While this has been approved by JSC Russian Railways, it remains subject to approval by the FST.

The infrastructure component of the tariff, which is fixed as described above, represents approximately 85% of the tariff, while the carriage component accounts for the remainder. The carriage component is not stipulated in the Railway Tariff Regulations or in the implementing agreement and is not subject to the ongoing negotiations with JSC Russian Railways. The carriage component is subject to indexation to the rate of inflation, typically undertaken annually. Currently, the Russian Government is contemplating plans to increase competition through the partial privatisation of the rolling stock owned by JSC Russian Railways, which could influence the carriage costs portion of the tariff. Although it is most likely that the government will limit any increase in the carriage component of the tariff until 2010 so as not to exceed the inflation rate, the pricing structure for the rail industry, should deregulation occur, is difficult to determine and the Group could be subject to tariff increases.

The Group's costs related to its shipments may be increased, when the cargo flow resumes, as a result of a shortage of railcars and logistical problems. To mitigate this risk, the Group may need to consider the acquisition of its own rolling stock for cargo transport.

Furthermore, certain portions of the railway tracks, such as rail sidings and branch lines laid from the main rail system directly to several of the Group's production facilities, are not owned by the Group or by JSC Russian Railways. Although not likely to affect production, the Group's reliance on such infrastructure may result in further increases in its transportation costs and cause additional expenses, such as expenses related to the maintenance of larger inventories of materials to secure against disruptions of rail delivery schedules.

The Group transports materials, mainly alumina, from its overseas facilities to its Russian smelters and distributes most of its upstream output to customers in markets outside Russia by sea via a number of ports, primarily St. Petersburg and Vanino. The St. Petersburg port has experienced bottlenecks in recent years due to increasing volumes as well as delays due to a work-to-rule slowdown. In 2009, deliveries of goods to and from the Vanino port have been subject to suspensions, delays and interruptions due to an increasing volume of goods being transported via the regional railway system, which has a limited capacity. It is also possible that these ports may be unable to accommodate new generations of larger, more efficient deep-draft vessels without dredging. To secure timely delivery of materials and finished products, the Group is seeking to develop its own port facilities. It has entered into a memorandum of cooperation for the construction of two terminals in Ust'-Luga, in the St. Petersburg region, and is also considering development opportunities in Novorossiyisk, St. Petersburg and Russia's Far East.

The following tariffs applied to railway transportation between the Krasnoyarsk, Bratsk, Khakas and Sayanogorsk aluminium smelters and the St. Petersburg, Novorossiyisk and Vanino ports in September 2009:

Aluminium (US$/t) September 2009	**St Petersburg**	**Novorossiyisk**	**Vanino**	**Alumina (US$/t) September 2009**	**St Petersburg**	**Novorossiyisk**	**Vanino**
Krasnoyarsk Aluminium Smelter	45.61	50.52	n.a.	Krasnoyarsk Aluminium Smelter	43.92	n.a.	n.a.
Bratsk Aluminium Smelter	55.90	57.39	51.44	Bratsk Aluminium Smelter	48.48	n.a.	42.12
Khakas Aluminium Smelter	44.51	n.a.	n.a.	Khakas Aluminium Smelter	n.a.	n.a.	49.07
Sayanogorsk Aluminium Smelter	45.10	55.25	n.a.	Sayanogorsk Aluminium Smelter	n.a.	n.a.	n.a.

The Group incurs all cost of transporting finished products by railway to ports for onward transportation overseas to end customers. Further transportation costs are incurred either by the Group or the customer, depending on the type of contract and its delivery terms. For costs borne by the Group, the Group negotiates annual freight service contracts for shipments by sea.

Effective Tax Rate

The Group's effective tax rate for the year ended 31 December 2006 was 10% and for the year ended 31 December 2007 was 13%. The concept of effective tax rate is not meaningful when there is negative profit before tax, as was the case for the Group for the year ended 31 December 2008 and the six months ended 30 June 2009. The difference between the statutory tax rate and the Group's effective tax rate results primarily from the location of Group operations in tax-efficient jurisdictions, including the Group's trading structure being located in Switzerland as well as the principal trading company being registered in Jersey; and the holding company of the Group, which is also registered in Jersey and holds Group assets through a number of intermediary holding companies registered in Cyprus, Jersey, BVI, the Bahamas and other tax-efficient jurisdictions.

The Group also uses tolling arrangements, mainly because a substantial portion of its alumina is sourced from outside Russia and processed by smelters in Russia, and the majority of third party sales of aluminium are outside Russia. Pursuant to the Group's international tolling arrangements, a tolling company, registered and subject to taxation in Switzerland and acting upon instructions of the principal trading company of the Group, purchases materials, such as alumina, and arranges for their delivery to manufacturers, such as aluminium smelters, in another country for processing into end products, such as primary aluminium, in consideration of a tolling (or processing) fee. The title to the materials or end products is not transferred to the manufacturers and, therefore, where tolling is employed, the shipment of raw materials and end products into and out of the country of the manufacturer is not characterised as an import/export operation and is not subject to local import/export duties. The tolling company and the manufacturer are taxed on their respective profits in their respective countries of tax residence. See "Business — Sales and Distribution" and Note 10 to UC RUSAL's Accountants' Report.

The Company intends to continue relying on tolling arrangements of the kind described above with respect to aluminium production in Russia when the alumina is sourced, and the finished aluminium is sold, outside Russia. Tolling arrangements are permitted under Russian law and the Group's tolling agreements are regularly registered by the Russian customs authorities. The Directors believe that the Group's tolling arrangements are conducted on appropriate commercial terms based on applicable Russian law and regulation. Processing fees are clearly indicated on the Group's tax declaration in Russia, and the Russian anti-monopoly authorities also receive periodic reports from each of the Group's smelters on the breakdown of the amounts of aluminium that are "produced" versus "processed".

Group transfer prices were generally linked to LME prices, less amounts reflecting of transportation, marketing, other logistical and overhead costs absorbed by the Group trading companies.

The Russian entities in the Group are regularly audited by the Russian tax authorities and, in particular, audits of the tax years 2005 and 2006 of the Group's major Russian operating subsidiaries have been completed. For a discussion of the period during which, and the reasons for which a tax year's audit may be repaid, see "Risk Factors — Risks Relating to the Group and its Business — Risks relating to the multijurisdictional regulatory, social, legal, tax and political environment in which the Group operates — Uncertainties relating to the tax systems of some of the countries in which the Group operates complicate the Group's tax planning and business decisions". As a result of these tax audits, the Directors believe that the Group's commercial structure and its terms are acceptable to the Russian tax authorities. The Directors also believe that the Group's non-Russian trading companies involved in these arrangements are not subject to taxes outside their countries of incorporation or where they have established and declared tax residency.

A risk remains, however, that Russian tax authorities may still challenge the treatment of these transactions and these companies. Moreover, the laws that currently permit tolling in Russia, or that regulate transfer pricing or the circumstances in which profits earned outside Russia are free of Russian profit tax, could be changed, requiring the Group to revise or discontinue its existing arrangements. Any of these developments could increase the Group's effective tax rate going forward, and any successful challenge to the Group's practices under applicable law at the time could result in material liability for additional tax, penalties and interest. The Directors do not believe that it is

possible to estimate the amount of any such liability for additional tax, penalties and interest in respect of its tolling arrangements and trading structure as it is unclear what approach (or combination thereof) would be adopted by the tax authorities in order to assess additional taxation, penalties and interest in respect of such arrangements or how existing Russian legislation, including transfer pricing legislation, would be interpreted.

Changes in Foreign Currency Exchange Rates

Many large multinational companies face to some extent a mismatch between the currencies in which their revenues and costs are denominated. As a result, they are vulnerable to some degree to margin erosion if the currencies in which their costs are denominated appreciate in real terms against the currencies in which their revenues are denominated. Substantially all of the Group's revenues are either denominated in U.S. dollars or linked to the U.S. dollar. While a large portion of the Group's costs is also denominated in or linked to the U.S. dollar, a significant part is denominated in Roubles, Euros and the Ukrainian Hryvnia, because the Group has substantial production facilities in Russia, the EU and Ukraine. Accordingly, depreciation of these currencies against the U.S. dollar has a positive effect, and appreciation of these currencies has a negative effect, on the Group's operating margins. Moreover, inflation of the Group's costs in Roubles, Euros and Hryvnia, if not counterbalanced by a corresponding depreciation of the relevant currency against the U.S. dollar or an increase in prices for aluminium and related products, could adversely affect the Group's margins.

Impairment of Non-Current Assets

The Group recognised US$6,774 million and US$37 million in impairment and other charges relating to non-current assets in 2008 and the first six months of 2009, respectively, as compared to no such impairment in 2007 and 2006. As a result of the sharp decline in aluminium prices in the fourth quarter of 2008, management determined that it was necessary to carry out impairment tests for all significant cash-generating units of the Group, for the Group's investment in Norilsk Nickel and for certain other projects. These impairment tests led to recognition of impairment charges of US$3,532 million relating to property, plant and equipment, US$2,408 million relating to the Group's investment in Norilsk Nickel (which was recognised in UC RUSAL's Accountants' Report in the line item "Share of losses and impairment of associates"), US$554 million relating to fair value adjustment on financial instruments (which was recognised in UC RUSAL Accountants' Report within line item "Finance Expense") and US$280 million relating to other assets as of 31 December 2008. In addition, during the first half of 2008, impairment charges of US$297 million were recognised in relation to the Komi project, which was suspended at that time due to uncertainty relating to its gas supply and infrastructure. For further information, see "— Results of Operations — Year Ended 31 December 2008 Compared to the Year Ended 31 December 2007 — Impairment of Non-Current Assets". During the six months ended 30 June 2009 there was a decrease in the carrying amount of the Group's investment in Norilsk Nickel after application of the equity method of accounting including recognition of the Group's share of the net profit of Norilsk Nickel and the effect of foreign currency translation of the investment to US dollars from its functional currency. Following the application of the equity method management analysed changes in the economic environment and nickel and related industries since 31 December 2008 and concluded that the value in use or the recoverable amount of the Group's investment in Norilsk Nickel increased in its functional currency and remained unchanged in US dollars. As a result, the Group recognised a partial reversal of the previously recorded impairment in the amount of US$308 million during the six months ended 30 June 2009.

Cost Reduction

To support the sustainability of the Group's operations during the global economic downturn, in February 2009, the Group implemented a comprehensive program designed to reduce costs and improve the production process. See "Business — Strengths and Strategies — Strengths — Secure and sustainable low cost position and power advantage". The program includes the following measures:

- reduction of aluminium output and alumina production by closing higher cost facilities and reducing production volumes;

- further reduction of aluminium production costs through more effective management of raw materials and energy supplies, optimised transport and logistics services;
- decrease in management expenses and headcount optimisation; and
- significant revision of investment plans.

The Group's Aluminium Cash Operating Costs per tonne of aluminium is a key operating metric. Partially as a result of its cost reduction program, the Group's Aluminium Cash Operating Costs have decreased by 27%, or US$513 per tonne (inclusive of exchange rate effects) from an average of US$1,915 per tonne for the year ended 31 December 2008 to an average of US$1,402 per tonne for the first six months of 2009. The principal contributors to this decrease were decreases of US$219 per tonne in alumina cost, US$113 per tonne in raw and auxiliary materials costs and US$83 per tonne in other costs including repair and maintenance and administrative expense. The Group's Aluminium Cash Operating Costs were an average of US$1,889 per tonne for the month of December 2008 and US$1,389 per tonne for the month of June 2009.

The Group's Alumina Cash Operating Costs have also decreased, by 28.7%, or US$100 per tonne from an average of US$349 per tonne for the year ended 31 December 2008 to an average of US$249 for the first six months of 2009. The principal contributors to this decrease were decreases of US$45 per tonne in power consumption cost, US$36 per tonne in raw materials costs and US$17 per tonne in other costs. The Group's Alumina Cash Operating Costs were an average of US$294.8 per tonne for the month of December 2008 and US$251.7 per tonne for the month of June 2009.

A substantial portion of the foregoing reductions in Aluminium and Alumina Cash Operating Costs was attributable to the Group's mothballing of higher cost smelters and refineries during the first half of 2009. The weakening of the Russian rouble against the US dollar and other currencies also contributed significantly to the reductions.

Impact of Restructuring Going Forward

The international override agreement and the debt restructuring agreements relating to the Group's Russian and Kazakh loans as well as the agreement with Onexim have only recently become effective, and the Company has had no track record of complying with them. Failure to comply could result in acceleration of the Group's indebtedness. In these circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company.

The terms of the restructuring agreements:

- significantly limit the Group's ability to incur additional indebtedness;
- permit the Group to make maintenance capital expenditure within specified limits but prohibit the Group from making development capital expenditure, except with respect to the Boguchanskaya HPP (within specified limits) or to comply with environmental law;
- oblige the Company, under certain circumstances, to dispose of all or a considerable part of its interest in Norilsk Nickel;
- do not permit the Company to pay dividends unless the Group's debt (other than its debt to VEB and Onexim) has been repaid by at least US$5 billion, its ratio of total net debt to Covenant EBITDA is 3 to 1 or less, there are no outstanding defaults under the international override agreement and the Group has sufficient cash to pay proposed dividends;
- oblige the Group to use excess cash flow and the net proceeds of asset disposals or equity or subordinated and other debt fund raisings (including proceeds from the Global Offering) to repay outstanding indebtedness; and
- oblige the Group to maintain specified financial ratios.

Compliance with these terms will considerably reduce the Group's ability to expand its operations and to pay dividends.

Results of Operations

For purposes of the following discussion, UC RUSAL's historical financial information for periods prior to 1 April 2007 represents the financial results of RUSAL. Effective 1 April 2007, UC RUSAL's historical financial information also includes the results of SUAL and the Glencore Businesses.

The following table sets forth UC RUSAL's consolidated income statement for the six months ended 30 June 2009 and 2008 and the three years ended 31 December 2008, 2007 and 2006.

	Six months ended 30 June				Year ended 31 December					
	2009		2008		2008		2007		2006	
	Mln US$	% of Revenue	Mln US$	% of Revenue	Mln US$	% of Revenue	Mln US$	% of Revenue	Mln US$	% of Revenue
Revenue	**3,757**	**100.0**	**8,354**	**100.0**	**15,685**	**100.0**	**13,588**	**100.0**	**8,429**	**100.0**
Cost of sales	(3,449)	(91.8)	(5,306)	(63.5)	(11,073)	(70.6)	(8,356)	(61.5)	(4,186)	(49.7)
Gross profit	**308**	**8.2**	**3,048**	**36.5**	**4,612**	**29.4**	**5,232**	**38.5**	**4,243**	**50.3**
Distribution expenses	(284)	(7.6)	(383)	(4.6)	(798)	(5.1)	(528)	(3.9)	(328)	(3.9)
Administrative expenses	(311)	(8.2)	(585)	(7)	(1,103)	(7)	(842)	(6.2)	(455)	(5.4)
Loss on disposal of property, plant and equipment	(7)	(0.2)	(8)	(0.1)	(56)	(0.4)	(97)	(0.7)	(5)	(0.1)
Impairment of non-current assets	(37)	(1.0)	(344)	(4.1)	(3,668)	(23.4)	—	—	—	—
Other operating expenses	(156)	(4.2)	(62)	(0.7)	(215)	(1.4)	(118)	(0.9)	(143)	(1.7)
Results from operating activities	**(487)**	**(13)**	**1,666**	**19.9**	**(1,228)**	**(7.8)**	**3,647**	**26.8**	**3,312**	**39.3**
Finance income	23	0.6	120	1.4	106	0.7	101	0.7	176	2.1
Finance expenses	(680)	(18.1)	(302)	(3.6)	(1,594)	(10.1)	(494)	(3.6)	(265)	(3.1)
Share of profits/(loss) of associates	348	9.3	79	0.9	(3,302)	(21.1)	(14)	(0.1)	(16)	(0.2)
Share of (loss)/profits of jointly controlled entities	(8)	(0.2)	40	0.5	(35)	(0.2)	(15)	(0.1)	(12)	(0.1)
Excess of the Group's share in net identifiable assets over the cost of acquisition	—	—	—	—	—	—	—	—	28	0.3
(Loss)/profit before income tax	**(804)**	**(21.4)**	**1,603**	**19.2**	**(6,053)**	**(38.6)**	**3,225**	**23.7**	**3,223**	**38.2**
Income tax	(64)	(1.7)	(194)	(2.3)	69	0.4	(419)	(3.1)	(336)	(4.0)
(Loss)/profit from continuing operations	**(868)**	**(23.1)**	**1,409**	**16.9**	**(5,984)**	**(38.2)**	**2,806**	**20.6**	**2,887**	**34.3**
Profit for the year/period from discontinued operations (net of income tax)	—		—	—	—	—	—	—	10	0.1
Net(loss)/profit for the year	**(868)**	**(23.1)**	**1,409**	**16.9**	**(5,984)**	**(38.2)**	**2,806**	**20.7**	**2,897**	**34.4**
Attributable to:										
Shareholders of the Company	(868)	(23.1)	1,411	16.9	(5,952)	(38.0)	2,809	20.7	2,897	34.4
Non-controlling interests	—	—	(2)	(0.02)	(32)	(0.2)	(3)	(0.02)	—	—

Six Months Ended 30 June 2009 Compared to the Six Months Ended 30 June 2008

Revenue

The table below sets forth a breakdown by product line of UC RUSAL's revenue, volumes sold and average realised prices for the first six months ended 30 June 2009 and 2008.

	Six months ended 30 June					
	2009			2008		
	Mln. US$	Thousand Tonnes	Average Realised Prices US$/Tonne	Mln. US$	Thousand Tonnes	Average Realised Prices US$/Tonne
Sales of primary aluminium and alloys	3,160	2,116	1,493	6,404	2,229	2,873
Sales of alumina	169	746	227	994	2,694	369
Sales of foil	104	—	—	146	—	—
Other revenue including chemicals and energy	324	—	—	810	—	—
Total	**3,757**			**8,354**		

The table below sets forth a breakdown of UC RUSAL's revenue by geographic area for the six months ended 30 June 2009 and 2008, showing the percentage of revenue attributable to each region.

	Six months ended 30 June			
	2009		2008	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Europe	1,822	48.5	3,671	43.9
CIS	595	15.8	2,157	25.8
Americas	513	13.7	873	10.5
Asia	812	21.6	1,621	19.4
Other	15	0.4	32	0.4
Total	**3,757**	**100.0**	**8,354**	**100.0**

Note: Data is based on location of purchaser, which may differ from location of end-user.

Revenue decreased by US$4,597 million, or 55.0%, to US$3,757 million in the first six months of 2009 compared to US$8,354 million in the same period in 2008. The decrease in revenue was primarily due to decreased sales of primary aluminium and alloys, which accounted for 84.1% and 76.7% of UC RUSAL's revenue for the first six months of 2009 and 2008, respectively.

Revenue from sales of primary aluminium and alloys decreased by US$3,244 million, or by 50.7%, to US$3,160 million in the first six months of 2009 as compared to US$6,404 million in the same period in 2008. The decrease in revenue over the period resulted primarily from the steep decline in worldwide aluminium prices starting in the fourth quarter of 2008, by approximately 48% on average in the first six months of 2009 as compared to the same period in 2008. The effect of decreased prices was coupled with the decrease in production volumes of primary aluminium and alloys at the higher cost facilities by approximately 9% as part of the Group's strategy to overcome the economic downturn and reduce costs.

Revenue from sales of alumina decreased by US$825 million, or 83.0%, to US$169 million in the first six months of 2009 from US$994 million in the same period in 2008. The decrease in revenue in the first six months of 2009 was primarily the result of a decrease in volume of sales of alumina by 72%, resulting in a reduction in revenue from sales of US$442 million, and a decrease in alumina sales prices, in line with the sharp decline in the aluminium prices, by 38% on average, resulting in a reduction in revenue from sales of US$383 million. The Group's alumina output in the first six months of 2009 was reduced by 33% as compared to the similar period of 2008 as a result of suspending a number of higher cost alumina refineries, including mothballing Alpart, Windalco and Eurallumina and reducing production at Aughinish and a number of other refineries, as a response to the downturn in the aluminium industry and the sharp decline in aluminium prices at the end of 2008 and beginning of 2009. This decrease in alumina output volumes was done primarily at the expense of sales of alumina outside of the Group and only to a smaller extent in conjunction with a reduction of aluminium production. In 2009, the Group continues to sell alumina to outside parties only under specific long-term contracts.

Revenue from sales of foil decreased to US$104 million in the first six months of 2009, or by 28.8%, from US$146 million in the same period in 2008. The decrease in revenues from sales of foil in 2009 was primarily due to a decrease in average realised price during the first six months of 2009 by approximately 23% compared to the corresponding period for 2008, following the decline in the aluminium price. Production volumes remained relatively stable with a slight decrease of approximately 3% in the first half of 2009.

Revenue from other sales, including chemicals and energy, decreased to US$324 million in the first six months of 2009, or by 60.0%, from US$810 million in the same period in 2008. The decrease in 2009 was primarily due to a decrease in sales of coal during the first half of 2009 to Nil compared to US$162 million during the corresponding period of 2008, as a result of the sale of a 50% equity interest in coal traders to Samruk-Kazyna as part of the sale and purchase agreement with respect to LLP Bogatyr Komir reached in April 2008. Other factors contributing to the decrease in other sales were reductions in prices and volumes of various by-products and secondary materials, including silicon, hydrate, soda, aluminium powders and electricity following the overall economic downturn and the resulting decrease in capacity of a number of the Group's production entities. In addition, the Group sold Pikalyovo alumina refinery to Basel-Cement in 2008 which reduced other sales by US$36 million in the first half of 2009 compared to the corresponding period of 2008 and cut down the sales of bauxite outside the Group by US$42 million compared to the first half of 2008.

Revenue decreased in each of UC RUSAL's main geographic segments for the period due to decreased sales prices in general. The Russia and CIS segment was particularly affected as a result of a dramatic slow-down in industries using the Group's products in this region in the beginning of 2009, including, among others, construction and car manufacturing. The share of sales in Asia increased as a percentage of the total revenue mainly due to the fact that demand decreased to a lesser extent in China than in other markets.

Cost of Sales

The following table sets forth a breakdown of UC RUSAL's cost of sales for the six months ended 30 June 2009 and 2008.

	Six months ended 30 June			
	2009		2008	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Cost of alumina	510	13.6	744	8.9
Cost of bauxite	201	5.4	376	4.5
Cost of other raw materials and other costs	1,212	32.2	2,008	24.0
Energy costs	901	24.0	992	11.9
Depreciation and amortisation	282	7.5	547	6.5
Personnel expenses[1]	399	10.6	518	6.2
Repair and maintenance	54	1.4	118	1.4
Change in provision for asset retirement obligations	23	0.6	3	—[2]
Net change in inventory recognition at realisable value	(133)	(3.5)	—	—
Total cost of sales	**3,449**	**91.8**	**5,306**	**63.5**

Notes:

(1) Total personnel expenses for the first six months of 2009 were equal to US$502 million, of which US$94 million were included in administrative costs and US$9 million in distribution expenses. Total personnel expenses for the first six months of 2008 were equal to US$763 million, of which US$229 million were included in administrative costs and US$16 million in distribution expenses.

(2) Less than 0.1%.

Cost of sales decreased by US$1,857 million, or 35%, to US$3,449 million in the first six months of 2009, compared to US$5,306 million in the same period of 2008. The decrease was in line with the overall decrease in production and sales volumes of both aluminium and alumina, as described above, with certain costs also affected by the depreciation of the Rouble against the US dollar in the first half of 2009 compared to the corresponding period for 2008 by approximately 38%. Cost of other raw materials and other costs of sales accounted for the largest decrease in cost of sales, in absolute terms, over the period. As a percentage of revenue, cost of sales increased from 63.5% in the first six months of 2008 to 91.8% in the same period in 2009.

Cost of alumina decreased by US$234 million, or 31.5%, to US$510 million in the first six months of 2009, compared to US$744 million in the same period in 2008. Cost of alumina includes the cost of purchased alumina. The decrease in the first six months of 2009 was primarily attributable to the decrease in volumes of alumina purchased from third parties following an overall decrease in production volumes, as well as the decrease in price of alumina. As a percentage of revenue, cost of alumina increased from 8.9% in the first six months of 2008 to 13.6% in the same period in 2009.

Cost of bauxite decreased by US$175 million, or 46.5%, to US$201 million in the first six months of 2009, as compared to US$376 million in the same period in 2008. Cost of bauxite represents the cost of purchased bauxite. The decrease in the cost of bauxite over the period resulted primarily from the reduction of purchased bauxite as part of the overall reduction in production volumes. As a percentage of revenue, cost of bauxite increased from 4.5% in the first six months of 2008 to 5.4% in the same period in 2009.

Cost of other raw materials and other costs decreased by US$796 million, or 39.6%, to US$1,212 million in the first six months of 2009 as compared to US$2,008 million in the same period in 2008. Other raw materials and other costs include tolling fees, costs of bauxite mining, industrial services provided by third parties and costs of purchasing materials, such as coke, pitch, fluoride, cathodes, anodes and other materials required for the production of aluminium and alumina. The decrease in cost of other raw materials and other costs over the period was primarily due to reductions in the cost of fuel and other materials, particularly related to the mothballed facilities. As a percentage of revenue, cost of other raw materials increased from 24.0% in the first six months of 2008 to 32.3% in the same period in 2009.

Energy costs decreased by US$91 million, or 9.2%, to US$901 million in the first six months of 2009 compared to US$992 million in the first six months of 2008. The decrease in electricity costs over the period resulted primarily from decreased consumption, the effect of which was partially offset by increased tariffs and Rouble depreciation. Consumption in the first six months of 2009 decreased due to decreased production volumes. The increase in energy costs in the first six months of 2009 was also due to a 10.4% increase in weighted-average electricity tariffs. The increase in weighted-average electricity tariffs was mainly due to continued market liberalisation and increased share of electricity sold through the whole-sale market. Electricity tariffs are generally quoted in Roubles and increased in line with the Russian consumer price index. The depreciation of the Rouble against the US dollar in the first half of 2009 compared to the corresponding period for 2008 by approximately 38% had a corresponding effect on the electricity tariffs. As a percentage of revenue, energy costs increased from 11.9% in the first six months of 2008 to 24.0% in the same period in 2009.

Depreciation and amortisation decreased by US$265 million, or 48.4%, to US$282 million in the first six months of 2009 compared to US$547 million in the same period in 2008. The depreciation and amortisation expenses decreased as a result of substantial impairments of property, plant and equipment and intangible assets recognised at 31 December 2008. As a percentage of revenue, depreciation and amortisation increased from 6.5% in the first six months of 2008 to 7.5% in the same period in 2009.

Personnel expenses recorded in cost of sales decreased by US$119 million, or 23.0%, to US$399 million in the first six months of 2009 compared to US$518 million in the same period in 2008. The decrease in personnel expenses in 2009 was mainly attributable to the mothballing of a number of production facilities, the depreciation of certain local currencies against the US dollar as well as significant staff reductions in the first half of 2009 resulting from the Group's cost optimisation arrangements. As a percentage of revenue, personnel expenses increased from 6.2% in the first six months of 2008 to 10.6% in the same period in 2009.

Repair and maintenance costs decreased by US$64 million, or 54.2%, to US$54 million in the first six months of 2009 compared to US$118 million in the same period in 2008. The decrease in repair and maintenance costs in the first six months of 2008 was due to a decrease in production capacity, including the mothballing of certain production facilities, as well as the depreciation of the Rouble against the US dollar. As a percentage of revenue, repair and maintenance costs remained constant at 1.4% for the first six months of 2008 and for the same period in 2009.

The provision for asset retirement obligations was US$3 million for the first six months of 2008 and US$23 million for the first six months of 2009. The increase in the provision resulted from changes in expected future cash flows related to asset restoration.

Net change in inventory recognition at realisable value

The net change in a reserve to write inventory down to its net realisable value represents a change in the provision made between 31 December 2008 and 30 June 2009. The provision decreased following a reduction in the production cost of inventories, and therefore a portion of the amount previously provided at 31 December 2008 was released through the profit and loss statement.

Gross Profit

As a result of the foregoing factors, UC RUSAL reported a gross profit of US$308 million and US$3,048 million for the six months ended 30 June 2009 and 2008, respectively, representing gross margins of 8.2% and 36.5%, respectively.

Distribution Expenses

Distribution expenses decreased by US$99 million, or 25.8%, to US$284 million in the first six months of 2009, compared to US$383 million in the same period in 2008. The decrease in distribution expenses in 2009 was mainly due to decreased sales volumes and a reduction in transportation tariffs. As a percentage of revenue, distribution expenses increased from 4.6% in the first six months of 2008 to 7.6% in the same period of 2009.

Administrative Expenses

Administrative expenses decreased by US$274 million, or 46.8%, to US$311 million in the first six months of 2009, as compared to US$585 million in the same period in 2008. Personnel costs recorded under administrative expenses decreased by US$135 million, primarily due to the implementation of actions to optimise the number of employees and a decision not to increase salaries and, for the most part, not to index them. In addition, the Group did not pay any year-end bonuses for 2008. As a percentage of revenue, administrative expenses increased from 7% in the first six months of 2008 to 8.3% in the same period of 2009.

Loss on Disposal of Property, Plant and Equipment

Loss on disposal of property, plant and equipment remained essentially constant at US$8 million in the first six months of 2008 and US$7 million in the first six months of 2009.

Other Operating Expenses

The following table sets forth a breakdown of UC RUSAL's other operating expenses for the six months ended 30 June 2009 and 2008.

	Six months ended 30 June	
	2009	2008
	(Mln. US$)	
Impairment loss on trade and other receivables	54	3
Provisions for legal claims	30	—
Charitable donations	3	18
Other operating expenses	69	41
Total other operating expenses	**156**	**62**

Other operating expenses increased by US$94 million, or 151.6%, to US$156 million in the first six months of 2009 compared to US$62 million in the same period of 2008. The increase in other operating expenses in 2009 resulted primarily from recording provisions for legal claims, mostly in connection with litigation with the Group's counterparties, in particular transportation companies as well as an increase in the provision on VAT receivable of US$45 million. As a percentage of revenue, other operating expenses increased from 0.7% in the first six months of 2008 to 4.2% in the same period in 2009.

Impairment loss on trade and other receivables were US$3 million for the first six months of 2008 and US$54 million in the first six months of 2009. The provisions in both periods represented provisions against receivables from municipal authorities, mainly for distribution of thermal power and water by the Group aluminium smelters to local communities.

Charitable donations were US$18 million in the first six months of 2008 and US$3 million in the first six months of 2009. Charitable donations throughout the period related to UC RUSAL's donations to various charities, including orphanages, cancer treatment hospitals and nursing homes.

Results from Operating Activities

As a result of the foregoing factors, UC RUSAL reported a loss from operating activities of US$487 million in the six months ended 30 June 2009, as compared to income from operating activities US$1,666 million for the six months ended 30 June 2008, respectively, representing operating margins of (13)% and 19.9%, respectively.

Finance Income

The following table sets forth a breakdown of UC RUSAL's finance income for the six months ended 30 June 2009 and 2008.

	Six months ended 30 June	
	2009	2008
	(Mln. US$)	
Interest income on third party loans and deposits	18	18
Interest income on loans to related parties	1	3
Net foreign exchange gain	—	44
Gain on disposal of financial investments	—	42
Change in fair value of financial instruments	4	13
Total finance income	**23**	**120**

Finance income decreased by US$97 million, or 80.8%, to US$23 million in first six months of 2009 as compared to US$120 million in the same period in 2008. Finance income in 2008 is primarily represented by net foreign exchange gain and a gain from disposal of financial investments. As a percentage of revenue, finance income decreased from 1.4% in the first six months of 2008 to 0.6% in the same period of 2009.

Interest income on third party loans and deposits remained constant at US$18 million in the first six months of both 2008 and 2009.

Interest income on loans to related parties decreased from US$3 million in the first half of 2008 to US$1 million in the first half of 2009. Interest income on loans to related parties represented interest on deposits with and promissory notes from related parties.

Net foreign exchange gain was US$44 million in the first six months of 2008 primarily as a result of the appreciation of the Rouble against the U.S. dollar. UC RUSAL recorded a foreign exchange loss of US$79 million in the first six months of 2009.

UC RUSAL recorded gain on disposal of financial investments in the first six months of 2008 in the amount of US$42 million, which resulted from the sale in April 2008 of 50% in LLP Bogatyr Komir, the right to which was acquired by the Group as part of the acquisition of SUAL in late March 2007, in accordance with an agreement with Samruk-Energo. See Note 20(a) to UC RUSAL's Accountants' Report.

Change in fair value of financial instruments was US$4 million in the first six months of 2009 and US$13 million in the same period in 2008 and resulted from gains on transactions to hedge foreign exchange and interest rate risk related to financing activities and to reduce risk of fluctuating prices in both periods.

Finance Expenses

The following table sets forth a breakdown of UC RUSAL's finance expenses for the six months ended 30 June 2009 and 2008.

	Six months ended 30 June	
	2009	**2008**
	(Mln. US$)	
Interest expense on bank loans wholly repayable within five years and other bank charges[1]	497	282
Less: interest expense capitalized into property, plant and equipment	—	(30)
Total interest expense	497	252
Interest expense on deferred consideration	85	25
Net foreign exchange loss	79	—
Interest expense on provisions	19	25
Total finance expenses	**680**	**302**

Note:

(1) During the six months ended 30 June 2009, the Group incurred charges of US$82 million under the Standstill and Waiver Agreement and Waiver Agreement referred to in Note 28 to UC RUSAL's Accountants' Report which is included in this prospectus.

Finance expenses increased by US$378 million, or 125.2%, to US$680 million in the first six months of 2009, as compared to US$302 million in the same period of 2008. The increase in finance expenses in 2009 was primarily due to increased interest expense on bank loans and other bank charges. As a percentage of revenue, finance expenses increased from 3.6% in the first six months of 2008 to 18.1% in the same period of 2009.

Interest expense on bank loans increased by US$215 million, or 76.2%, to US$497 million in the first six months of 2009, compared to US$282 million in the same period in 2008. The increase in interest expense in the first six months of 2009 was primarily due to additional interest expenses incurred in connection with the VEB Debt (as defined below) obtained in October 2008 at higher interest rates than the bridge facility that the VEB Debt refinanced as well as costs incurred in connection with the Group's debt restructuring. The bridge facility was obtained by the Group in April 2008 in connection with the Company's investment in Norilsk Nickel.

In the first six months of 2009, UC RUSAL recorded net foreign exchange loss of US$79 million primarily as a result of the depreciation of the Rouble against the U.S. dollar. UC RUSAL recorded a foreign exchange gain in the first six months of 2008.

In the first six months of 2009, UC RUSAL recorded US$85 million of interest expense on deferred consideration, as compared to US$25 million in the first six months of 2008. Interest expense on deferred consideration represents interest payable by the Company to Onexim on certain deferred consideration for the shares in Norilsk Nickel acquired in April 2008.

Share of (Losses)/Profits and Impairment of Associates and Jointly Controlled Entities

Share of profit and impairment of associates was US$348 million in the first six months of 2009 and US$79 million in the first six months of 2008. Share of profits of associates in both periods resulted primarily from the Company's investment in Norilsk Nickel. The Group's share in net profit of Norilsk Nickel for the first six months of 2009 amounted to US$350 million (including the reversal of a previously recognised impairment of US$308 million), as compared to a share in net profit of US$82 million for the period from 1 May 2008 through 30 June 2008.

Share of losses of jointly controlled entities was US$8 million in the first six months of 2009 and profit of US$40 million in the first six months of 2008. These represent shares of results and impairment in the Group's joint ventures — BEMO Project and LLP Bogatyr Komir.

(Loss)/Profit Before Income Tax

As a result of the foregoing factors, UC RUSAL sustained a loss before income tax of US$804 million for the six months ended 30 June 2009, as compared to profit before income tax of US$1,603 million for the six months ended 30 June 2008.

Income Tax Expense

UC RUSAL's income tax expense for the six months ended 30 June 2009 and 2008 comprised the following:

	Six months ended 30 June	
	2009	**2008**
	(Mln. US$)	
Current tax expense		
Current year	32	244
Deferred tax expense		
Origination and reversal of temporary differences	32	(50)
Income tax expense	**64**	**194**

Income tax expense decreased by US$130 million, or 67.0%, to US$64 million in the first six months of 2009, as compared to US$194 million in the same period in 2008. The decrease in 2009 was primarily due to a decrease in current tax expense.

Current tax expense decreased by US$212 million, or 86.9%, to US$32 million in the first six months of 2009, compared to US$244 million in the same period in 2008. The decrease in current tax expense was primarily due to the Group's pre-tax loss in the first six months of 2009.

Net (Loss)/Profit

As a result of the foregoing factors, UC RUSAL sustained a net loss of US$868 million for the six months ended 30 June 2009, as compared to net profit of US$1,409 million for the six months ended 30 June 2008, representing net margins of (23.1)% and 16.9%, respectively.

Year Ended 31 December 2008 Compared to the Year Ended 31 December 2007

Revenue

The table below sets forth a breakdown by product line of UC RUSAL's revenue, volumes sold and average realised prices for the years ended 31 December 2008 and 2007.

	Year ended 31 December					
	2008			2007		
	Mln. US$	Thousand Tonnes	Average Realised Prices US$/Tonne	Mln. US$	Thousand Tonnes	Average Realised Prices US$/Tonne
Sales of primary aluminium and alloys	12,057	4,435	2,719	10,747	3,562	3,017
Sales of alumina	1,948	5,464	357	1,503	3,087	487
Sales of foil	271	n/a	n/a	270	n/a	n/a
Other revenue including chemicals and energy	1,409			1,068		
Total	**15,685**			**13,588**		

The table below sets forth a breakdown of UC RUSAL's revenue by geographic segment for the years ended 31 December 2008 and 2007, showing the percentage of revenue attributable to each region.

	Year ended 31 December			
	2008		2007	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Europe	6,729	42.9	6,115	45.0
CIS	3,970	25.3	3,624	26.7
Americas	1,688	10.8	1,611	11.8
Asia	3,215	20.5	2,121	15.6
Other	83	0.5	117	0.9
Total	**15,685**	**100.0**	**13,588**	**100.0**

Note: Data is based on location of purchaser, which may differ from location of end-user.

Revenue increased by US$2,097 million, or 15.4%, to US$15,685 million in 2008 compared to US$13,588 million in 2007. The increase in revenue was primarily due to increased sales of primary aluminium and alloys, which accounted for 76.9% and 79.1% of UC RUSAL's revenue for 2008 and 2007, respectively. The decrease in primary aluminium and alloy sales as a percentage of revenue was primarily due to an increase in sales of alumina as a result of the full-year consolidation of SUAL and the Glencore Businesses.

Sales of aluminium and alloys increased by 12.2%, due to an increase in volume of sales that was partially offset by a decrease in average realised prices per tonne.

Sales volumes increased by 873 thousand metric tonnes, or 24.5%, to 4,435 thousand metric tonnes in 2008, from 3,562 thousand metric tonnes in 2007. The increase in sales volumes principally resulted from the launch of the Khakas aluminium smelter (300 thousand metric tonnes), the additional capacity at IrKAZ (47 thousand metric tonnes) and the full year consolidation of SUAL in 2008.

Revenue from sales of alumina increased by US$445 million, or 29.6%, to US$1,948 million in 2008 from US$1,503 million in 2007. The increase in revenue was primarily attributed to the additional volume of alumina produced by SUAL and Glencore, as both companies were consolidated into the Group for the entire year during 2008 as compared to only three quarters in 2007. Average prices decreased by 27% in 2008 as compared to 2007, which partially offset increases in revenue contributed by SUAL and the Glencore Businesses. The sales volume increased by 2,377 thousand metric tonnes, or 77%, to 5,464 thousand metric tonnes in 2008.

Revenues from sales of foil remained relatively constant from US$270 million in 2007 to US$271 million in 2008.

Revenue from other sales, including chemicals and energy, increased to US$1,409 million in 2008, or by 31.9%, from US$1,068 million in 2007. The increase in other revenue is mainly attributable to the revenue from transportation services rendered to associates (coal companies) of US$201 million. In 2007, these coal companies were consolidated as subsidiaries, as described below, and therefore revenue from services rendered to such companies was eliminated upon consolidation. Other changes in revenue from other sales were due to a US$118 million increase in sales of silicon, soda and other materials, which was offset by a US$168 million decrease in sales of coal. The increases of US$65 million and US$20 million in sales of silicon and soda, respectively, were mainly due to increases of 179% and 86% in selling prices of silicon and soda, respectively. The decrease in sales of coal was due to the disposal of a 50% share in certain coal traders at the end of the first quarter of 2008 as part of an agreement reached with Samruk-Kazyna with regard to LLP Bogatyr Komir.

Revenue increased in a majority of UC RUSAL's geographic segments from 2007 to 2008. Revenue growth was strongest in Asia, reflecting growing demand in that region. Revenue growth in the Americas was relatively slow, primarily because UC RUSAL continued to shift production from the American market in to other markets due to the reduced premiums for primary aluminium and alloys available in the Americas.

Cost of Sales

The following table sets forth a breakdown of UC RUSAL's cost of sales for the years ended 31 December 2008 and 2007.

	Year ended 31 December			
	2008		2007	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Cost of alumina	1,478	9.4	1,180	8.7
Cost of bauxite	763	4.9	520	3.8
Cost of other raw materials and other costs	4,242	27.0	3,413	25.1
Fair value mark-up on inventories[1]	—	—	135	1.0
Energy costs	2,044	13.0	1,271	9.4
Depreciation and amortisation	990	6.3	842	6.2
Personnel expenses[2]	995	6.3	748	5.5
Repairs and maintenance	222	1.4	203	1.5
Change in asset retirement obligations	—	—	42	0.3
Net change in provision for inventory	339	2.2	2	—
Total cost of sales	**11,073**	**70.6**	**8,356**	**61.5**

Notes:

(1) Inventories of SUAL and the Glencore Businesses were recorded at their fair value on the date of acquisition in late March 2007. See Note 5 to the UC RUSAL Accountants' Report.

(2) Total personnel expenses for 2008 were equal to US$1,386 million, of which US$364 million were included in administrative expenses and US$27 million in distribution expenses. Total personnel expenses for 2007 were equal to US$1,078 million, of which US$304 million were included in administrative expenses and US$26 million in distribution expenses.

Cost of sales increased by US$2,717 million, or 32.5%, to US$11,073 million in 2008, compared to US$8,356 million in 2007, primarily due to an increase in production volumes, increases in the prices of the main raw materials used in production and increases in energy tariffs.

Cost of alumina increased by US$298 million, or 25.3%, to US$1,478 million in 2008, compared to US$1,180 million in 2007. The increase was primarily attributable to the increased volume of alumina purchased, the increased price of alumina and increased transportation tariffs. The Group increased its aluminium production by 5.3% in 2008, as compared to 2007. Alumina prices are linked to LME quotations and the average LME quotation for the first six months of 2008 was 8% higher than the average LME quotation in 2007. This increase resulted in a 3% increase in average purchase price in 2008. As a percentage of revenue, cost of alumina increased from 8.7% in 2007 to 9.4% in 2008.

Cost of bauxite increased by US$243 million, or 46.7%, to US$763 million in 2008, compared to US$520 million in 2007. The increase in the cost of bauxite resulted primarily from an increase in the volume of bauxite purchased, the increase in bauxite prices and increased transportation tariffs. As a percentage of revenue, cost of bauxite increased from 3.8% in 2007 to 4.9% in 2008.

Cost of other raw materials and other costs increased by US$829 million, or 24.3%, to US$4,242 million in 2008 as compared to US$3,413 million in 2007. The increase was primarily due to the effect of the full-year consolidation of Glencore and SUAL in 2008, increases in prices, including increases of the average prices of fuel and coke. Prices of coal and pitch coke increased by 19% and prices of caustic soda by 12%. As a percentage of revenue, cost of other raw materials increased from 25.1% in 2007 to 27.0% in 2008.

Energy costs increased by US$773 million, or 60.8%, to US$2,044 million in 2008 as compared to US$1,271 million in 2007. The increase resulted primarily from an increase of more than 50% in weighted-average electricity tariffs, in US dollar terms, supplemented by an increase in production and the consequential growth in electricity consumption of 6%. The increase in weighted-average electricity tariffs in dollar terms was primarily an outcome of the liberalisation of the Russian energy industry and the increased portion of electricity purchases made by the Group on the open market (as compared to fixed-tariff long-term contracts that were more commonly used during the previous period). The strengthening of the Russian Rouble against the US dollar on average by 3% in 2008, as compared to 2007, also resulted in the weighted-average electricity tariffs increasing. As a percentage of revenue, energy costs increased from 9.4% in 2007 to 13.0% in 2008.

Depreciation and amortisation increased by US$148 million, or 17.6%, to US$990 million in 2008 as compared to US$842 million in 2007. Depreciation and amortisation was 9% and 10% of costs of sales in 2008 and 2007, respectively. Depreciation and amortisation expenses increased in 2008 as a result of the full-year consolidation of SUAL and Glencore. As a percentage of revenue, depreciation and amortisation remained relatively constant at 6.2% in 2007 and 6.3% in 2008.

Personnel expenses recorded in cost of sales increased by US$247 million, or 33.0%, to US$995 million in 2008 as compared to US$748 million in 2007. As production staff salaries are primarily denominated in Russian Roubles, which appreciated against the US Dollar in 2008, part of this increase related to foreign exchange rate fluctuations. Average salaries indexation during the period resulted in a 7% increase in personnel expenses. As a percentage of revenue, personnel expenses increased from 5.5% in 2007 to 6.3% in 2008.

Repairs and maintenance expenses increased by US$19 million, or 9.4%, to US$222 million in 2008 as compared to US$203 million in 2007. The increase in repairs and maintenance expenses was mainly due to consolidation of SUAL and Glencore operations for the whole year. As a percentage of revenue, repairs and maintenance expenses remained relatively constant at 1.5% in 2007 and 1.4% in 2008.

Change in asset retirement obligations was nil for 2008, as compared to US$42 million for 2007, and related to adjustment of basic parameters of retired assets in both periods.

Net change in inventory recognition at realisable value

The net change in a reserve to write inventory down to its net realisable value represents a change in the provision made between 31 December 2007 and 2008. The provision increased following a decrease in market price of aluminium and alumina.

Gross Profit

As a result of the foregoing factors, UC RUSAL reported a gross profit of US$4,612 million and US$5,232 million for the years ended 31 December 2008 and 2007, respectively, representing gross margins of 29.4% and 38.5%, respectively.

Distribution Expenses

Distribution expenses increased by US$270 million, or 51.1%, to US$798 million in 2008, compared to US$528 million in 2007. The increase was mainly attributable to the increase in transportation expenses of US$287 million, due to increased sales volumes and transportation tariffs, which was partially compensated by decreases in other lines. As a percentage of revenue, distribution expenses increased from 3.9% in 2007 to 5.1% in 2008.

Administrative Expenses

Administrative expenses increased by US$261 million, or 31%, to US$1,103 million in 2008 as compared to US$842 million in 2007. The administrative expenses increased in 2008 primarily as a result of an increase in consulting and other services by US$56 million, the increase in personnel costs by US$60 million and the increase in taxes and penalties of US$54 million. The increase in consulting and other services was due to the fees paid to advisors involved in the acquisition of shares of Norilsk Nickel and related financing. The increase in personnel costs was in line with the overall indexation of salaries introduced by the Group during 2008 and the impact of the Rouble depreciation against the US Dollar. As a percentage of revenue, administrative expenses increased from 6.2% in 2007 to 7% in 2008.

Loss on Disposal of Property, Plant and Equipment

Loss on disposal of property, plant and equipment decreased by US$41 million to US$56 million in 2008, as compared to US$97 million in 2007. There is no active trading market for aluminium production equipment. Even though the technology used by different producers or at different facilities is generally similar, each item of equipment is modified and is tailored to suit the needs of each production facility (even within the Group). Hence, a major part of property, plant and equipment is liquidated upon reaching the end of its useful life or when technical updates or modernisation works performed make it obsolete. Fixed assets sold relate to transport vehicles, various computers and similar equipment and buildings and other real estate no longer needed for production. The loss on disposal of property, plant and equipment in 2007 resulted from writing off equipment not intended to be used in production and/or obsolete in 2007, resulting in a greater loss during the prior period and a decrease in loss on disposal during 2008. As a percentage of revenue, loss on disposal of property, plant and equipment decreased from 0.7% in 2007 to 0.4% in 2008.

Impairment of Non-Current Assets

Charges for impairment of non-current assets amounted to US$3,668 million in 2008. These charges consisted principally of impairment of property, plant and equipment and intangible assets.

Following the sharp decline in aluminium prices in the fourth quarter of 2008, management determined that it was necessary to carry out impairment tests for all significant cash-generating units of the Group. As a result of these impairment tests, the Group recognised US$3,532 million (including US$161 million of impairment related to Komi project) in impairment charges relating to property, plant and equipment as of 31 December 2008. For information concerning the assumptions used by management in carrying out these impairment tests, see Note 17(a) to UC RUSAL Accountants' Report and "— Critical Accounting Policies — Property, Plant and Equipment — Recoverable Amount".

In 2008, the Group's management performed an additional feasibility analysis of the Komi Project, which led to an impairment of property, plant and equipment items in the amount of US$161 million (see above), an impairment of goodwill recognised on the acquisition of SUAL Komi BV in the amount of US$67 million and write offs of other intangible assets related to this project in the amount of US$69 million.

Other Operating Expenses

The following table sets forth a breakdown of UC RUSAL's other operating expenses for the years ended 31 December 2008 and 2007.

	Year ended 31 December			
	2008		2007	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Impairment loss and trade and other receivable	117	0.8	27	0.2
Provision for legal claims	50	0.3	—	—
Charitable donations	31	0.2	51	0.4
Other operating expenses	17	0.1	40	0.3
Total other operating expenses	**215**	**1.4**	**118**	**0.9**

Other operating expenses increased by US$97 million to US$215 million in 2008 as compared to US$118 million in 2007, principally due to provisions and bad debt expense in 2008. As a percentage of revenue, other operating expenses increased from 0.9% in 2007 to 1.4% in 2008.

The impairment loss on trade and other receivables of US$117 million mainly consisted of the write-off of receivables of US$95 million relating to the settlements of disputes in respect of the joint activity in Tadjikistan with a third party and US$17 million for 2008 and US$27 million for 2007 related to other impairments. The provisions against other receivables in both periods represented provisions against receivables from municipal authorities.

Provision for legal claims of US$50 million were accrued by the Group as a consequence of its alleged violation of contractual terms with transportation companies at the end of 2008; the transportation companies have filed a number of claims in this respect. See "Business — Litigation".

Charitable donations costs were US$31 million in 2008 and US$51 million in 2007. Charitable donations in both periods related to UC RUSAL's donations to various charities, including orphanages, cancer treatment hospitals and nursing homes.

Results from Operating Activities

As a result of the foregoing factors, UC RUSAL sustained a loss from operating activities of US$1,228 million in the year ended 31 December 2008 and a profit income from operating activities of US$3,647 million for the year ended 31 December 2007, representing operating margins of (7.8)% and 26.8%, respectively.

Finance Income

The following table sets forth a breakdown of UC RUSAL's finance income for the years ended 31 December 2008 and 2007.

	Year ended 31 December			
	2008		2007	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Interest income on third party loans and deposits	38	0.2	29	0.2
Interest income on loans to related parties	3	—	7	0.1
Foreign exchange gain	—	—	45	0.3
Gain on disposal of financial investment	42	0.3	—	—
Change in fair value of financial instruments	23	0.2	20	0.1
Total finance income	**106**	**0.7**	**101**	**0.7**

Finance income amounted to US$106 million in 2008 as compared to US$101 million in 2007. As a percentage of revenue, finance income remained constant at 0.7% in both 2007 and 2008.

Gain on disposal of financial investments of US$42 million in 2008 relates to the sale of the Group's 50% interest in LLP Bogatyr Komir (a coal producer in Kazakhstan) to a third party. This investment was acquired as part of the SUAL acquisition in March 2007 and was valued at US$606 million (for a 100% interest in LLP Bogatyr Komir). No such gain was recorded in 2007.

The foreign exchange gain of US$45 million in 2007 was the result of the appreciation of the Rouble against the US dollar and the annual revaluation of financial assets denominated in Roubles. In 2008, UC RUSAL incurred a foreign exchange loss, as discussed below under "— Finance Expenses".

Change in fair value of financial instruments was US$23 million in 2008 and US$20 million in 2007. The gain from derivatives in 2008 was the result of gains on forward sales and purchase contracts for primary aluminium of US$29 million and loss of US$6 million from the foreign exchange hedge. Gain from derivatives in 2007 of US$20 million relates to hedging of foreign exchange and interest rate risk related to financing activities.

Finance Expenses

The following table sets forth a breakdown of UC RUSAL's finance expenses for the years ended 31 December 2008 and 2007.

	Year ended 31 December	
	2008	2007
	(Mln. US$)	
Interest expense on bank loans wholly repayable within five years and other bank charges	766	358
Interest expense on bank loans wholly repayable after five years	—	148
Total interest expense on financial liabilities	766	506
Less: interest expense capitalised into property, plant and equipment	(58)	(52)
Total interest expense	708	454
Loss on fair-value adjustment on financial instruments	554	—
Interest expense on deferred consideration	99	—
Net foreign exchange loss	201	—
Interest expense on provisions	32	40
Total finance expenses	**1,594**	**494**

Finance expenses tripled to US$1,594 million in 2008, as compared to US$494 million in 2007. The increase in finance expenses in 2008 was primarily due to foreign exchange loss and a significant increase in interest expense on bank loans, other bank charges and loss on financial instruments. As a percentage of revenue, finance expenses increased from 3.6% in 2007 to 10.2% in 2008.

In the second half of 2008, the Group acquired a derivative financial instrument relating to the shares of Norilsk Nickel for total consideration of US$554 million. Under the terms of such financial instrument, the Group also has an option to acquire up to 5% of the shares of Norilsk Nickel from a third party on certain future dates at market prices prevailing on such dates. The Directors estimated that the fair value of this financial instrument at 31 December 2008 was nil. The investment was written off to its fair value through the income statement. After 30 June 2009, the Group partially unwound this arrangement in respect of an option to acquire up to 3% of the shares of Norilsk Nickel, with a resulting gain of US$23 million. There is no outstanding contractual obligation on the part of the Company under this financial instrument. See Note 21 of UC RUSAL's Accountants' Report.

The foreign exchange loss of US$201 million in 2008 resulted from the depreciation of the Rouble against the US dollar.

Interest expense increased by US$254 million, or 55.9%, to US$708 million in 2008, as compared to US$454 million in 2007. The increase in interest expense in 2008 was the result of financing obtained in April 2008. Further, the average outstanding balance of borrowings increased by 65% in 2008 compared to 2007 in part as a result of debt incurred in April 2008 in connection with the Group's investment in Norilsk Nickel. As a percentage of revenue, interest expense increased from 3.3% in 2007 to 4.5% in 2008.

The increase in interest expenses on bank loans repayable within 5 years and other bank charges is also explained by the payment of a facilitation fee in the amount of US$67 million in respect of a syndicated loan used for the acquisition of the Norilsk Nickel shares and the payment of a US$22 million fee for the refinancing of this loan.

Interest expense on deferred consideration amounted to US$99 million in 2008 and relates to US$2.7 billion in deferred cash consideration payable to Onexim in connection with UC RUSAL's purchase of its investment in Norilsk Nickel in April 2008. For further information, see Notes 19 and 27(c) to the UC RUSAL Accountants' Report.

Interest expense on provisions of US$32 million and US$40 million in 2008 and 2007, respectively, related to interest expenses on defined benefit plans and the unwinding of interest on asset retirement obligations of the Group.

Share of Loss and Impairment of Associates

Share of loss of associates was US$3,302 million in 2008 and US$14 million in 2007. Share of loss of associates in 2008 consisted primarily of UC RUSAL's US$881 million share in the loss of Norilsk Nickel for the period from 24 April through 31 December 2008, and share of loss of Queensland Alumina Limited in an amount of US$13 million.

In addition, following the substantial decline in demand for products of Norilsk Nickel in the fourth quarter of 2008, management determined that it was necessary to carry out an impairment test of UC RUSAL's investment in Norilsk Nickel. As a result of this impairment test, UC RUSAL recognised US$2,408 million in impairment charges related to its investment in Norilsk Nickel. For information concerning the assumptions used by management in carrying out this impairment test, see Note 19 to the UC RUSAL Accountants' Report.

Share of Loss and Impairment of Jointly Controlled Entities

Share of loss of jointly controlled entities was US$35 million in 2008 and US$15 million in 2007. Share of loss of jointly controlled entities in 2008 consists of a share in the loss of the BEMO Project in the amount of US$24 million and an impairment loss of US$144 million recognised in respect of the equity investment in LLP Bogatyr Komir, compensated by profit in the amount of US$133 million relating to LLP Bogatyr Komir and coal traders. Share of loss of jointly controlled entities of US$15 million in 2007 related to the results of operations of Rounio Limited in the first quarter 2007, prior to the acquisition of SUAL, and the subsequent reclassification of the investment in Rounio Limited as investments in subsidiaries.

(Loss)/Profit Before Income Tax

As a result of the foregoing factors, UC RUSAL sustained a loss before income tax of US$6,053 million for the year ended 31 December 2008 and a profit before income tax of US$3,225 million for the year ended 31 December 2007.

Income Tax (Benefit)/Expense

UC RUSAL's income tax (benefit)/expense for the years ended 31 December 2008 and 2007 comprised the following:

	Year ended 31 December	
	2008	**2007**
	(Mln. US$)	
Current tax expense		
Current year	396	489
Deferred tax expense		
Origination and reversal of temporary differences	(364)	(70)
Changes in enacted tax rate	(101)	—
Income tax (benefit)/expense	**(69)**	**419**

Income tax benefit amounted to US$69 million in 2008, as compared to income tax expense of US$419 million in 2007.

Current tax expense decreased by US$93 million, or 19.0%, to US$396 million in 2008, as compared to US$489 million in 2007. The decrease was primarily due to a decrease in taxable profits resulting from the significant decline in aluminium prices during the second half of the year 2008.

Deferred tax benefit increased by US$294 million to US$364 million in 2008, as compared to US$70 million in 2007. The increase in deferred tax benefit in 2008 was primarily due to impairment of property, plant and equipment resulting in a US$386 million decrease in deferred tax liabilities.

Net (Loss)/Profit for the Year

As a result of the foregoing factors, UC RUSAL sustained a net loss of US$5,984 million for the year ended 31 December 2008, as compared to a net profit of US$2,806 million for the year ended 31 December 2007.

Year Ended 31 December 2007 Compared to the Year Ended 31 December 2006

As a result of the acquisitions of SUAL and the Glencore Businesses, results for 2007 are not necessarily directly comparable to results for 2006.

Revenue

The table below sets forth a breakdown by product line of UC RUSAL's revenue, volumes sold and average realised prices for the years ended 31 December 2007 and 2006.

	Year ended 31 December					
	2007			2006		
	Mln. US$	Thousand Tonnes	Average Realised Prices US$/Tonne	Mln. US$	Thousand Tonnes	Average Realised Prices US$/Tonne
Sales of primary aluminium and alloys	10,747	3,562	3,017	7,484	2,880	2,599
Sales of alumina	1,503	3,087	487	396	936	423
Sales of foil	270	n/a	n/a	155	38	4,079
Other revenue including chemicals and energy	1,068			394		
Total	**13,588**			**8,429**		

The table below sets forth a breakdown of UC RUSAL's revenue by geographic segment for the years ended 31 December 2007 and 2006, showing the percentage of revenue attributable to each region.

	Year ended 31 December			
	2007		2006	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Europe	6,115	45.0	2,839	33.7
CIS	3,624	26.7	2,122	25.2
America	1,611	11.8	1,478	17.5
Asia	2,121	15.6	1,944	23.1
Other	117	0.9	46	0.5
Total	**13,588**	**100.0**	**8,429**	**100.0**

Note: Data is based on location of purchaser, which may differ from location of end-user.

Revenue increased by US$5,159 million, or 61.2%, to US$13,588 million in 2007 compared to US$8,429 million in 2006. The increase in revenue was primarily due to increased sales of primary aluminium and alloys, which accounted for 79.1% and 88.8% of UC RUSAL's revenue for 2007 and 2006, respectively. Share of primary aluminium sales decreased in 2007 primarily due to increase in sales of alumina as a result of the acquisition of SUAL and the Glencore Businesses.

Revenue from sales of primary aluminium and alloys increased to US$10,747 million in 2007, or by 43.6% as compared to US$7,484 million in 2006. The increase was primarily the result of increases in realised prices, as well as an increase in sales volumes of primary aluminium and alloys from 2006 to 2007. The increases in realised prices resulted primarily from improved market conditions, as the average price per tonne of aluminium as quoted on the LME increased by 3.7% from 2006 to 2007. See "— Certain Factors Affecting the Group's Results of Operations — Certain Factors Affecting Results of Operations — Demand for and Price of Aluminium and Alumina". Realised prices also increased as a result of management's strategy to shift production from commodity primary aluminium to alloys and value added products, both of which attain higher premiums.

Sales volumes increased by 682 thousand metric tonnes, or 23.7%, to 3,562 thousand metric tonnes in 2007, from 2,880 thousand metric tonnes in 2006, following the acquisition of SUAL and the Glencore Businesses in March 2007.

Revenue from sales of alumina more than tripled to US$1,503 million in 2007 from US$396 million in 2006. The increase was primarily the result of an increase in alumina prices and increased sales volumes. The sales volume increased by 2,151 thousand metric tonnes, or 230%, to 3,087 thousand metric tonnes in 2007 as compared to 936 thousand metric tonnes in 2006.

Revenue from sales of foil increased to US$270 million in 2007, or by 74%, from US$155 million in 2006. The increase was primarily due to increased production volumes facilities reaching their full capacity.

Revenue from other sales, including chemicals and energy, increased to US$1,068 million in 2007, or by 171%, from US$394 million in 2006. The increase was primarily due to sales of coal business contributed to UC RUSAL upon the acquisition of SUAL and the Glencore Businesses in late March 2007.

Revenue increased in each of UC RUSAL's geographic segments from 2006 to 2007. Sales to purchasers in the CIS increased primarily as a result of demand growth within these jurisdictions. Sales to purchasers in Europe increased notwithstanding a 6% import customs duty, which, with respect to primary aluminium, was reduced to 3% in May 2007. Revenue from sales to purchasers in Asia increased. Revenue from sales to purchasers in America increased but decreased as a percentage of revenues, primarily because UC RUSAL shifted sales from the American market to other markets due to the reduced premiums for primary aluminium and alloys available in America.

Cost of Sales

The following table sets forth a breakdown of UC RUSAL's cost of sales for the years ended 31 December 2007 and 2006.

	Year ended 31 December			
	2007		2006	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Cost of alumina	1,180	8.7	1,245	14.8
Cost of bauxite	520	3.8	263	3.1
Cost of other raw materials and other costs	3,413	25.1	1,382	16.4
Fair value mark-up on inventories(1)	135	1.0	—	—
Energy costs	1,271	9.4	525	6.2
Depreciation and amortisation	842	6.2	341	4.0
Personnel expenses(2)	748	5.5	328	3.9
Repairs and maintenance	203	1.5	72	0.9
Net change in asset retirement obligation	42	0.3	30	0.4
Net change in provision for inventories	2	—	—	—
Total cost of sales	**8,356**	**61.5**	**4,186**	**49.7**

Notes:

(1) Inventories of SUAL and the Glencore Businesses were recorded at their fair value on the date of acquisition in late March 2007. See Note 5(c) to UC RUSAL's Accountants' Report.

(2) Total personnel expenses for 2007 were equal to US$1,078 million, of which US$304 million were included in administrative expenses and US$26 million in distribution expenses; for 2006 - US$506 million (US$165 million was included in administrative expenses and US$13 million in distribution expenses).

Cost of sales increased by US$4,170 million, or 99.6%, to US$8,356 million in 2007, compared to US$4,186 million in 2006. The increase was primarily due to the acquisition of SUAL and the Glencore Businesses and relatively higher cost of sales of the acquired businesses as compared to that of RUSAL. Cost of other raw materials and other costs accounted for the largest increase in cost of sales, in absolute terms. As a percentage of revenue, cost of sales increased from 49.7% in 2006 to 61.5% in 2007.

Cost of alumina decreased by US$65 million, or 5.2%, to US$1,180 million in 2007, compared to US$1,245 million in 2006. The decrease was primarily attributable to a reduction in the volume of alumina purchased primarily as a result of the acquisition in 2007 of SUAL and the Glencore Businesses and the resulting long position in alumina. UC RUSAL also purchased less alumina as a result of a decrease in the volume of alumina it was no longer contractually committed to sell and an increase in the volume of alumina processed from bauxite pursuant to tolling arrangements. As a percentage of revenue, cost of alumina declined from 14.8% in 2006 to 8.7% in 2007.

Cost of bauxite increased by US$257 million, or 97.7%, to US$520 million in 2007, compared to US$263 million in 2006. The increase in the cost of bauxite resulted primarily from increases in the volume of bauxite purchased and an increase in the average price of bauxite. As a percentage of revenue, cost of bauxite increased from 3.1% in 2006 to 3.8% in 2007.

Cost of other raw materials and other costs increased by US$2,031 million, or 147%, to US$3,413 million in 2007 as compared to US$1,382 million in 2006. The significant increase in cost of other raw materials and other costs in 2007 was due to the acquisition of SUAL and the Glencore Businesses, the related increased share of alumina production and bauxite mining of the enlarged

Group and relatively higher production costs of the acquired businesses compared to those of RUSAL. In part the increase in cost of other raw materials was due to increases in prices, including a 32% increase in the average price of caustic soda and increases in the prices of fuel oil, natural gas, pitch and aluminium fluoride. The increase in cost of other raw materials also resulted from increases in the volumes of materials such as soda ash and aluminium fluoride. As a percentage of revenue, cost of other raw materials increased from 16.4% in 2006 to 25.1% in 2007.

Energy costs increased by US$746 million, or 142%, to US$1,271 million in 2007 as compared to US$525 million in 2006. The increase resulted primarily from increases in consumption and tariffs. Consumption in 2007 increased significantly due to increased production volumes as a result of the acquisition of SUAL and the Glencore Businesses. The increase in energy costs in 2007 was also due to an increase in weighted-average production electricity tariffs. Electricity tariffs are generally quoted in Roubles and increased in line with the Russian consumer price index. The real appreciation of the Rouble against the dollar over the period, therefore, resulted in higher electricity tariffs. As a percentage of revenue, energy costs increased from 6.2% in 2006 to 9.4% in 2007.

Depreciation and amortisation increased by US$501 million, or 147%, to US$842 million in 2007 as compared to US$341 million in 2006. Depreciation and amortisation expenses increased in 2007 as a result of the acquisition of SUAL and the Glencore Businesses. As a percentage of revenue, depreciation and amortisation increased from 4.0% in 2006 to 6.2% in 2007.

Personnel expenses recorded in cost of sales increased by US$420 million, or 128%, to US$748 million in 2007 as compared to US$328 million in 2006. The increase in personnel expenses in 2007 was attributable to an increased headcount as a result of the acquisition in 2007 of SUAL and the Glencore Businesses and the increase of average salaries in line with inflation. The increase in salaries was due to the Group's strategy to offer competitive remuneration packages to attract employees and to improve employee productivity. As a percentage of revenue, personnel expenses increased from 3.9% in 2006 to 5.5% in 2007.

Repairs and maintenance increased by US$131 million, or 182%, to US$203 million in 2007 as compared to US$72 million in 2006. The increase in repairs and maintenance costs in 2007 was due to the acquisition of SUAL and the Glencore Businesses. As a percentage of revenue, repairs and maintenance increased from 0.9% in 2006 to 1.5% in 2007.

The change in provision for asset retirement obligations of US$42 million for 2007 as compared to US$30 million for 2006 related to RUSAL's obligation to restore land and retire assets in the countries in which it has its primary operations.

Net Change in Inventory Recognition at Realisable Value

The net change in a reserve to write inventory down to its net realisable value represents a change in the provision made between 31 December 2006 and 2007. The provision increased following a decrease in the market price of aluminium and alumina.

Gross Profit

As a result of the foregoing factors, UC RUSAL reported a gross profit of US$5,232 million and US$4,243 million for the years ended 31 December 2007 and 2006, respectively, representing gross margins of 38.5% and 50.3%, respectively.

Distribution Expenses

Distribution expenses increased by US$200 million, or 61%, to US$528 million in 2007, compared to US$328 million in 2006. The increase in distribution expenses in 2007 was mainly due to an increase in sales volumes resulting from the acquisition of SUAL and the Glencore Businesses. As a percentage of revenue, distribution expenses remained at 3.9% in 2006 and 2007.

Administrative Expenses

Administrative expenses increased by US$387 million, or 85%, to US$842 million in 2007 as compared to US$455 million in 2006. The administrative expenses increased in 2007 primarily as a result of the acquisition of SUAL and the Glencore Businesses. As a percentage of revenue, administrative expenses increased from 5.4% in 2006 to 6.2% in 2007.

Loss on Disposal of Property, Plant and Equipment

Loss on disposal of property, plant and equipment increased by US$92 million to US$97 million in 2007 as compared to US$5 million in 2006. The loss on disposal of property, plant and equipment in 2007 resulted from losses relating to the consolidation of SUAL and Glencore operations for the last nine months of 2007. These operations and assets were not consolidated in the Group's consolidated financial statements in 2006. As a percentage of revenue, loss on disposal of property, plant and equipment increased from 0.1% in 2006 to 0.7% in 2007.

Other Operating Expenses

The following table sets forth a breakdown of UC RUSAL's other operating expenses for the years ended 31 December 2007 and 2006.

	Year ended 31 December			
	2007		2006	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Provision for legal claims	—	—	60	0.7
Impairment loss on trade and other receivables	27	0.2	21	0.2
Charitable donations	51	0.4	34	0.4
Other operating expenses	40	0.3	28	0.3
Total other operating expenses	**118**	**0.9**	**143**	**1.7**

Other operating expenses decreased by US$25 million, or 17.5%, to US$118 million in 2007 as compared to US$143 million in 2006. As a percentage of revenue, other operating expenses decreased from 1.7% in 2006 to 0.9% in 2007.

The provision for legal claims in 2006 relates to the settlement with Ansol pertaining to the termination of joint operations and the write-offs of amounts receivable from Ansol and the initial investment made by RUSAL in the joint operations. See "Business — Litigation" and Note 30(c) to UC RUSAL's Accountants' Report.

Impairment loss on trade and other receivables were US$27 million for 2007 and US$21 million for 2006. The provisions against other receivables in both years represented provisions against receivables from municipal authorities.

Charitable donations were US$51 million in 2007 and US$34 million in 2006. Charitable donations in both years related to RUSAL's donations to various charities, including orphanages, cancer treatment hospitals and nursing homes.

Results from Operating Activities

As a result of the foregoing factors, UC RUSAL had results from operating activities of US$3,647 million and US$3,312 million for the years ended 31 December 2007 and 2006, respectively, representing operating margins of 26.8% and 39.3%, respectively.

Finance Income

The following table sets forth a breakdown of UC RUSAL's finance income for the years ended 31 December 2007 and 2006.

	Year ended 31 December			
	2007		2006	
	Mln. US$	% of Revenue	Mln. US$	% of Revenue
Interest income on third party loans and deposits	29	0.2	21	0.2
Interest income on loans to related parties	7	0.1	33	0.4
Net foreign exchange gain	45	0.3	17	0.2
Change in fair value of financial instruments	20	0.1	37	0.4
Gain from disposal of available-for-sale investments reclassed from equity	—	—	68	0.8
Total finance income	**101**	**0.7**	**176**	**2.1**

Finance income decreased by US$75 million, or 42.6%, to US$101 million in 2007 as compared to US$176 million in 2006. The decrease was primarily the result of the recognition, in 2006, of a US$68 million gain on the disposal of shares of Sayano-Shushenskaya HPP to the shareholder prior to the merger. As a percentage of revenue, finance income decreased from 2.1% in 2006 to 0.7% in 2007.

Interest income on third party loans and deposits increased by US$8 million, or by 38%, to US$29 million in 2007 as compared to US$21 million in 2006. The increase in interest income in 2007 was primarily the result of an increase in deposits, including deposits held as collateral for credit facilities entered into in 2007 and 2006.

Interest income on loans to related parties decreased by US$26 million, or 78.8%, to US$7 million in 2007 as compared to US$33 million in 2006. These loans were repaid in instalments and were discharged in full in 2006. Interest income on loans to related parties in 2007 represented income on deposits and promissory notes from related parties.

In 2006, the Group also accounted for US$12 million as interest income on loans to companies classified as discontinued operations and disposed of to the shareholder of RUSAL before the acquisition of SUAL and the Glencore Businesses. No such income was accounted for in 2007.

Net foreign exchange gain was US$45 million in 2007 and US$17 million in 2006. The foreign exchange gain in each of 2007 and 2006 was the result of the appreciation of the Rouble against the US dollar and the annual revaluation of financial assets denominated in Roubles.

UC RUSAL did not record any gain from disposal of investments in 2007. In 2006, gain from disposal of available-for-sale investments released from equity constituted US$68 million. Gain from disposal of available-for-sale investments released from equity in 2006 related to the disposal of shares of Sayano-Shushenskaya HPP in connection with UC RUSAL's acquisition of SUAL and the Glencore Businesses.

Change in fair value of financial instruments was US$20 million in 2007 and US$37 million in 2006. Gain from derivatives in each year was the result of gains on transactions to hedge foreign exchange and interest rate risk related to financing activities.

Finance Expenses

The following table sets forth a breakdown of UC RUSAL's finance expenses for the years ended 31 December 2007 and 2006.

	Year ended 31 December	
	2007	**2006**
	(Mln. US$)	
Interest expense on bank loans wholly repayable within five years and other bank charges	358	230
Interest expense on bank loans wholly repayable within five years	148	66
Interest expense on loans to related parties wholly repayable within five years	—	16
Total interest expense on financial liabilities	506	312
Less: interest expense capitalised into property, plant and equipment	(52)	(53)
Total interest expense	454	259
Interest expense on provisions	40	6
Total finance expenses	**494**	**265**

Finance expenses increased by US$229 million, or 86.4%, to US$494 million in 2007, as compared to US$265 million in 2006. The increase in finance expenses in 2007 was due to a significant increase in interest expense on bank loans. As a percentage of revenue, finance expenses increased from 3.1% in 2006 to 3.6% in 2007.

Interest expense on bank loans increased by US$210 million, or 71%, to US$506 million in 2007, as compared to US$296 million in 2006. The increase in interest expense in 2007 was mainly the result of an increase in borrowings, and in base rates (due in part to the extension of the maturities of RUSAL's loan portfolio), partly offset by a reduction in margins over the base rate charged. As a percentage of revenue, total interest expense on financial liabilities was 3.7% in 2006 and 2007.

Interest expense on loans to related parties amounted to US$16 million in 2006. No such interest expense was recorded in 2007. The decrease resulted from periodic repayments and final discharge in 2006. These loans are described under "— Finance Income" above.

Share of Loss and Impairment of Associates and Jointly Controlled Entities

Share of loss of associates and jointly controlled entities was US$29 million in 2007 and US$28 million in 2006. Share of loss and impairment of associates and jointly controlled entities in both years resulted primarily from the Group's share of the losses experienced by Queensland Alumina Limited. In 2006 these losses were also attributable to RUSAL's share of the losses experienced by SUAL Komi B.V., in which RUSAL held a 50% equity stake prior to the formation of the Company. See Notes 19 and 20 to UC RUSAL's Accountants' Report.

Excess of the Group's Share in Net Identifiable Assets over the Cost of Acquisition

Excess of the Group's share in net identifiable assets over the cost of acquisition amounted to US$28 million in 2006. No such excess was recorded in 2007. The amount in 2006 was mainly the result of the excess of the fair value of RUSAL's share of the acquired net identifiable assets of the Friguia bauxite and the Eurallumina alumina complex over their respective costs of acquisition.

Profit Before Income Tax

As a result of the foregoing factors, UC RUSAL earned a profit before income tax of US$3,225 million and US$3,223 million for the years ended 31 December 2007 and 2006, respectively.

Income Tax Expense

UC RUSAL's income tax expense for the years ended 31 December 2007 and 2006 comprised the following:

	Year ended 31 December	
	2007	**2006**
	(Mln. US$)	
Current tax expense		
Current year	489	337
Deferred tax benefit		
Origination and reversal of temporary differences	(70)	(1)
Income tax expense	**419**	**336**

Income tax expense increased by US$83 million, or 24.7%, to US$419 million in 2007, as compared to US$336 million in 2006. The increase in 2007 was the result of an increase in current tax expense.

Current tax expense increased by US$152 million, or 45.1%, to US$489 million in 2007, as compared to US$337 million in 2006. The increase in current tax expense in 2007 was due to both an increase in taxable profits and an increase in the effective tax rate.

Deferred tax benefit increased by US$69 million to US$70 million in 2007 as compared to US$1 million in 2006. The increase in deferred tax benefit in 2007 was due to revision applied to the property, plant and equipment tax bases performed by management.

UC RUSAL's effective tax rate increased to 13% for the year ended 31 December 2007 from 10% for the year ended 31 December 2006. The increase in the effective tax rate over the period resulted from blending of former RUSAL and SUAL effective tax rates and increases in tolling fees received by RUSAL companies resident in Russia. See Note 10 to UC RUSAL's Accountants' Report.

Profit from Continuing Operations

As a result of the foregoing factors, UC RUSAL earned a profit from continuing operations of US$2,806 million and US$2,887 million for the years ended 31 December 2007 and 2006, respectively.

Profit for the Year from Discontinued Operation (Net of Income Tax)

Gains from discontinued operations of US$10 million were recorded in 2006. No such gain was recorded in 2007. The gain in 2006 represents the operating result of RUSAL's former packaging, aluminium construction and magnesium assets, which were transferred to its shareholder as a distribution.

Net Profit

As a result of the foregoing factors, UC RUSAL earned a net profit of US$2,806 million and US$2,897 million for the years ended 31 December 2007 and 2006, respectively, representing net margins of 20.7% and 34.4%, respectively.

Total Equity

The Group's total equity was US$3.1 billion as of 30 June 2009, compared to US$4.5 billion as of 31 December 2008, US$10.1 billion at 31 December 2007 and US$3.1 billion at 31 December 2006. The decrease in total equity from 31 December 2008 to 30 June 2009 mainly resulted from a net loss sustained by the Group for that period and negative change in the currency translation reserve due to the depreciation of Roubles and the Ukrainian Hryvania against the US dollar, partially offset by an increase in other reserves. The decrease in total equity from 31 December 2007 to 31 December 2008 mainly resulted from a net loss of the Group for that year and a negative change in the currency translation reserve due to the depreciation of Roubles and the Ukrainian Hryvania against the US dollar, partially offset by an increase in the share premium due to the issue of new shares in partial consideration for the acquisition of a 25% plus one share stake in Norilsk Nickel. The increase in total equity from 31 December 2006 to 31 December 2007 mainly resulted from an increase in the share premium due to the issue of new shares in partial consideration for the acquisitions of the SUAL and Glencore Businesses and overall positive financial results of the Group.

Property, Plant and Equipment

Property, plant and equipment constituted US$6.2 billion as of 30 June 2009, US$6.6 billion at 31 December 2008, US$10.4 billion at 31 December 2007 and US$4.5 billion at 31 December 2006. The decrease from 31 December 2008 to 30 June 2009 was mainly as a result of the absence of significant capital expenditures and routine depreciation charges. The decrease from 31 December 2007 to 31 December 2008 was mainly as a result of the impairment loss. Following the global economic downturn and significant decrease in the price of and the demand for aluminium in the fourth quarter of 2008, at 31 December 2008 the Directors considered it to be necessary to carry out impairment tests for all significant cash generating units of the Group at that date. In accordance with IAS 36, testing was carried out in respect of the cash-generating units, rather than particular items of property, plant and equipment. The recoverable amount of each cash-generating unit was determined by discounting expected future net cash flows of each cash-generating unit. For key assumptions and results of the impairment tests, see Note 17(a) to UC RUSAL's Accountants' Report. The increase from 31 December 2006 to 31 December 2007 was mainly as a result of additions due to the acquisitions of the SUAL and Glencore Businesses.

Intangible Assets

	Goodwill	Other intangible assets	Total
		(Mln. US$)	
Net book value			
At 31 December 2005	1,313	72	1,385
Acquisitions through business combinations & Other additions	11	9	20
Accumulated amortisation	—	(63)	(63)
At 31 December 2006	1,324	18	1,342
Acquisitions through business combinations[(1)]	3,073	362	3,435
Other additions	—	35	35
Foreign currency translation	165	—	165
Amortisation charge	—	(82)	(82)
At 31 December 2007	4,562	333	4,895
Additions/Transfers/(Disposals)	—	30	30
Foreign currency translation	(481)	(5)	(486)
Impairment loss[(2)]	(67)	(69)	(136)
Amortisation charge	—	(116)	(116)
At 31 December 2008	4,014	173	4,187
Additions/Transfers/(Disposals)/Amortisation charge	—	6	6
Foreign currency translation	(149)	—	(149)
At 30 June 2009	3,865	179	4,044

Notes:

(1) Acquisitions of goodwill and other intangible assets during the year ended 31 December 2007 related to the acquisition of SUAL and the Glencore Businesses and transportation business. These acquisitions included: 1) goodwill, 2) the fixed value of fixed price electricity purchase contract at Kubikenborg aluminium smelter, 3) the fair value of alumina off-take agreements between the acquired entities and Glencore, 4) the fair value of project documentation and feasibility study for SUAL Komi BV, and 5) other intangible assets of SUAL.

(2) Impairment losses of US$67 million and US$69 million were recognised in respect of the acquisition and other intangible assets, respectively, relating to SUAL Komi B.V.

Goodwill constitutes the majority of the Group's intangible assets. Goodwill as at 31 December 2006 principally arose on the formation of the Group by its controlling shareholder in 2000 and the acquisition of a 25% additional interest in the Group by its controlling shareholder in 2003.

The net book value of the Group's total intangible assets were US$4.0 billion as of 30 June 2009, US$4.2 billion at 31 December 2008, US$4.9 billion at 31 December 2007 and US$1.3 billion at 31 December 2006. The decrease from 31 December 2008 to 30 June 2009 was mainly as a result of the currency translation effect. The decrease from 31 December 2007 to 31 December 2008 was mainly as a result of the currency translation effect and the impairment loss recognised for that period. The increase from 31 December 2006 to 31 December 2007 was mainly as a result of the acquisitions of the SUAL and Glencore Businesses.

Interest in Associates

The Group has the following interests in associates as of the balance sheet dates indicated:

	30 June	31 December		
	2009	2008	2007	2006
	(Mln. US$)			
Interest in associates	9,666	9,944	443	442
Less: impairment losses	(2,100)	(2,408)	—	—
	7,566	7,536	443	442
Goodwill included in interests in associates	5,405	5,745	180	180

The Group's interest in associates was US$7.6 billion as at 30 June 2009, compared to US$7.5 billion as at 31 December 2008, US$443 million as at 31 December 2007 and US$442 million as at 31 December 2006. The change in interest in associates from 31 December 2008 to 30 June 2009 mainly resulted from a change in the gross carrying value share of net profit of associates and the effect of foreign currency translation. The significant increase of US$7.1 billion from 31 December 2006 and 31 December 2007 to 31 December 2008 was principally due to the acquisition of a 25% plus one share stake in Norilsk Nickel. Interest in associates increased insignificantly from 31 December 2006 to 31 December 2007, due to net results relating to equity-accounted investees.

Following the sharp decline in demand for products of Norilsk Nickel in the fourth quarter of 2008, the Group recognised US$2,408 million in impairment losses related to its investment in Norilsk Nickel at 31 December 2008, of which US$308 million was reversed as at 30 June 2009.

Interest in jointly controlled entities

The Group has the following investments in jointly controlled entities:

	30 June	31 December		
	2009	2008	2007	2006
	(Mln. US$)			
Interests in jointly controlled entities	659	650	219	127
Less: impairment loss	(157)	(144)	—	—
	502	506	219	127
Goodwill included in interests in jointly controlled entities	—	—	—	67

The Group's interest in jointly controlled entities was US$502 million as at 30 June 2009, compared to US$506 million as at 31 December 2008, US$219 million as at 31 December 2007 and US$127 million as at 31 December 2006. The decrease in interest in jointly controlled entities from 31 December 2008 to 30 June 2009 was insignificant as a result of the offset between an additional contribution to the BEMO project and the decrease due to the negative effect of the translation reserve and financial results. The increase in interest in jointly controlled entities from 31 December 2007 to 31 December 2008 was principally due to the purchase of a 50% share interest in LLP Bogatyr Komir and trading companies and an additional contribution to the BEMO project. The increase in interest in jointly controlled entities from 31 December 2006 to 31 December 2007 principally resulted from the additional contribution to the BEMO project, partially offset by a decrease due to the acquisitions of the SUAL and Glencore Businesses and the following reclassification of the interests in certain

jointly controlled entities projects to investments in subsidiaries. Two entities were jointly controlled by RUSAL and SUAL as at 31 December 2006, prior to the acquisition of SUAL and the Glencore Businesses. Following the acquisition of SUAL and the Glencore Businesses, these entities became subsidiaries of UC RUSAL and so resulted in a decrease in the Group's interests in jointly controlled entities as at 31 December 2007, which was more than offset by the increase resulting from the Group's interest in the BEMO project.

Inventories

The following table sets out a summary of our inventory balances as of the balance sheet dates indicated:

	30 June	31 December		
	2009	2008	2007	2006
	(Mln. US$)			
Raw materials and consumables	1,012	1,379	1,240	509
Work in progress	614	808	733	343
Finished goods and goods held for resale	752	1,103	923	537
	2,378	3,290	2,896	1,389
Provision for inventory obsolescence	(219)	(352)	(13)	(11)
	2,159	2,938	2,883	1,378

The Group's inventory balance was US$2.2 billion as of 30 June 2009, US$2.9 billion at 31 December 2008, US$2.9 billion at 31 December 2007 and US$1.4 billion at 31 December 2006. The decrease in inventory balance from 31 December 2008 to 30 June 2009 mainly resulted from reduced production levels during the six months ended 30 June 2009. The increase in inventory balance from 31 December 2007 to 31 December 2008 mainly resulted from the significant decrease in demand for aluminium and the general economic downturn around the world. The significant increase in inventory balance of US$1.5 billion, or 109%, from 31 December 2006 to 31 December 2007 mainly resulted from the acquisitions of the SUAL and Glencore Businesses.

In respect of our subsequent usage of inventory after 30 June 2009, approximately 67%, 100% and 100% of our raw materials and consumables, work-in-progress, and finished goods and good held for resale, respectively, had been utilised as of 30 September 2009.

The following table sets forth our average inventory turnover days for the years and six months indicated:

	For the six months ended 30 June	For the year ended 31 December		
	2009	2008	2007	2006
Average inventory turnover (in days)[1]	124	68	57	55

Note:

(1) Average inventory turnover is calculated as follows: (average inventories x 365 days (or the period of generating the sales)) / total revenue.

The significant increase in average inventory turnover from 31 December 2008 to 30 June 2009 mainly resulted from decreases in total sales in 2009. The decrease in average inventory turnover from 31 December 2007 to 31 December 2008 mainly resulted from a revenue increase in 2008. The increase in average inventory turnover from 31 December 2006 to 31 December 2007 mainly resulted from the acquisitions of the SUAL and Glencore Businesses.

Trade and Other Receivables

Total receivables of the Group were US$1.4 billion as of 30 June 2009, US$1.4 billion at 31 December 2008, US$2.2 billion at 31 December 2007 and US$1.0 billion at 31 December 2006. The slight increase from 31 December 2008 to 30 June 2009 was mainly as a result of gradual economy stabilisation during the six months ended 30 June 2009. The decrease from 31 December 2007 to 31 December 2008 was mainly as a result of the successful integration of business operations after the acquisition of SUAL and Glencore Businesses. The significant increase in Group receivables of US$1.2 billion, or 125%, from 31 December 2006 to 31 December 2007 mainly resulted from the acquisitions of the SUAL and Glencore Businesses.

The following table sets forth the Group's trade receivable turnover days for the years and six months indicated:

	For the six months ended 30 June	For the year ended 31 December		
	2009	**2008**	**2007**	**2006**
Trade receivables turnover (in days)[1]	16	8	23	16

Note:

(1) Trade receivables turnover is calculated as follows: (ending trade accounts receivable x 365 days (or the period of generating the sales)) / total revenue.

The increase in average trade receivables turnover from 31 December 2008 to 30 June 2009 mainly resulted from the global liquidity crisis affecting both international and Russian markets. The decrease in average trade receivables from 31 December 2007 to 31 December 2008 mainly resulted from the global economic downturn, partially offset by production increase during six months ended 30 June 2008. The increase in average trade receivables from 31 December 2006 to 31 December 2007 mainly resulted from the acquisitions of the SUAL and Glencore Businesses.

The following table sets forth changes in the Group's allowances for doubtful debts for trade and other receivables for the periods indicated:

	For the six months ended 30 June	For the year ended 31 December		
	2009	2008	2007	2006
	(Mln. US$)			
Balance at 1 January	(38)	(55)	(39)	(18)
Impairment loss recognised	(54)	(117)	(27)	(21)
Amount of provision for which the receivables were written off	18	134	11	—
Balance at 31 December/30 June (as applicable)	(74)	(38)	(55)	(39)

Ageing Analysis

Included in trade and other receivables are trade receivables (net of allowance for doubtful debts) with the following ageing analysis as of the balance sheet dates indicated in the table below:

	30 June	31 December		
	2009	2008	2007	2006
	(Mln. US$)			
Current	138	231	786	332
Past due 0-90 days	85	109	47	32
Past due 91-365 days	93	19	2	1
Past due over 365 days	3	2	31	—
Amounts past due	181	130	80	33
	319	361	866	365

Trade receivables on any balance sheet date mainly comprise receivables resulting from sales of primary aluminium and alloys.

As of 30 September 2009, approximately US$276 million, or 86%, of our trade receivables as of 30 June 2009 were settled. The table below sets forth subsequent settlement information on trade receivables for each of the following ageing categories as of 30 September 2009:

	(Mln. US$)
Current	125
Past due 0-90 days	72
Past due 91-365 days	76
Past due over 365 days	3
	276

Trade and Other Payables

Total payables of the Group were US$1.4 billion as of 30 June 2009, US$1.7 billion at 31 December 2008, US$1.6 billion at 31 December 2007 and US$0.6 billion at 31 December 2006. The decrease in total payables from 31 December 2008 to 30 June 2009 mainly resulted from the continuous interaction with the Group's suppliers and from the implementation of a working capital stabilization program. The increase in total payables from 31 December 2007 to 31 December 2008 mainly resulted from the global liquidity crisis affecting both international and Russian markets. The significant increase in total payables of US$1 billion, or 185%, from 31 December 2006 to 31 December 2007 mainly resulted from the acquisitions of the SUAL and Glencore Businesses.

The following table sets forth our trade payables turnover days for the years and six months indicated:

	For the six months ended 30 June	For the year ended 31 December		
	2009	2008	2007	2006
Trade payables turnover (in days)[1]	44	33	32	27

Note:

(1) Trade payables turnover is calculated as follows: (ending trade accounts payable / total cost of goods sold) x 365 days (or the period of generating cost of goods sold).

The increase in average trade payables turnover from 31 December 2008 to 30 June 2009 resulted from the Company's working capital optimisation, including extensions of contractual payment periods under certain of our existing contracts. The increase in average trade payables turnover from 31 December 2006 to 31 December 2007 mainly resulted from the acquisitions of the SUAL and Glencore Businesses.

Ensuring that the Group's obligations to its suppliers are met is one of the main responsibilities of the Company's deputy CEO. For these purposes, there is also a committee responsible for considering and regulating relations regarding obligations to suppliers and for ensuring that such obligations are met.

The entire balance of trade and other payables at each reporting date is due within 12 months or on demand.

Indebtedness

Borrowings

At the close of business on 31 October 2009, being the latest practicable date for the purpose of this indebtedness statement prior to the printing of this circular, the Group had total borrowings of approximately US$13,646 million, comprising secured short-term bank borrowings of approximately US$10,389 million and unsecured short-term bank borrowings of approximately US$3,257 million. Additionally, the Group recorded US$2,923 million of the deferred consideration (including accrued interest) payable to Onexim in respect of its acquisition of a 25% plus one share interest in Norilsk Nickel.

Subsequent to the breach of a number of restrictive covenants at 31 December 2008, which resulted in defaults and cross-defaults on a substantial portion of the Group's credit portfolio the entire amount of its long-term loans and borrowings has been reclassified to current liabilities to reflect the ability of the lenders to demand immediate repayment. Therefore all borrowings as at 31 October 2009 are considered short-term.

Following the Group's successful long-term restructuring of its debt to its international and Russian and Kazakh lenders in November and December 2009, its debt profile changed significantly. This indebtedness statement is provided as at 31 October 2009 and therefore is not reflective of this change. Details of the debt restructuring, its new maturity profile and key terms are set out in "— Debt Restructuring".

Security (including mortgages and pledges of assets) and guarantees

As at 31 October 2009, the Group's bank borrowings were secured as follows:

- US$4,500 million loan from VEB is secured by pledges of shares of the following Group companies:
  - — 25% plus one share in Norilsk Nickel;
  - — 100% shares of Gershvin Investments Corp Limited;
  - — 25% shares of OJSC RUSAL Bratsk;
  - — 25% shares of OJSC RUSAL Krasnoyarsk;
- US$137 million by the pledge of 100% shares of Alumina & Bauxite Company Limited and assignment of alumina sales proceeds;
- US$455 million by a UC RUSAL guarantee, the pledge of 100% of shares of Khakas aluminium smelter, pledge of 100% of shares of Tameko Development Inc. and of Noirieux — Consultadoria e Serviços Sociedade Unipessoal, Lda, as well as by a pledge over assets of Khakas aluminium smelter;
- By assignment of aluminium sales proceeds of approximately US$5,093 million;
- US$172 million by a pledge of assets of SUAL and a mortgage over real estate of SUAL;
- US$9 million by a pledge of assets of LLP Bogatyr Trans; and
- US$23 million by a pledge of assets of Bratsk aluminium smelter and a guarantee issued by UC RUSAL.

Off balance sheet commitments and arrangements

- As at 31 October 2009, UC RUSAL had a US$260 million guarantee issued in respect of the joint business between RUSAL and OJSC RusHydro related to the Boguchansky aluminium smelter.
- The Group is a guarantor of indebtedness of several non-Group controlling shareholder related entities. At 31 October 2009 the Group, either directly or indirectly, has guaranteed promissory notes payable of US$42 million.

Available facilities

As at 31 October 2009, the Group did not have any unutilised bank facilities available.

Cash and cash equivalents

Cash and cash equivalents as at 31 October 2009 amounted to US$297 million.

Disclaimers

Save as aforesaid and apart from intra-group liabilities and normal trade payables in the ordinary course of business, as at the close of business on 31 October 2009, the Group did not have any debt securities issued and outstanding or agreed to be issued, bank overdrafts or other similar indebtedness, liabilities under acceptances (other than normal trade bills) or acceptance credits, mortgages, charges, finance leases or hire purchase commitments, guarantees or other material contingent liabilities.

The Directors confirmed that apart from the long term debt restructuring covered above, there have been no material changes in the indebtedness and contingent liabilities of the Group since 31 October 2009 up to and including the Latest Practicable Date.

For information concerning the impact of the Group's debt restructuring on the Group's indebtedness, see "Financial Information — Selected Financial Data of the Group — Capitalisation".

Liquidity and Capital Resources

Liquidity

In 2006 and 2007, the Group's principal source of liquidity was cash flows from operations. In 2008, the principal sources of liquidity were operating cash flows of US$3,017 million and financing cash flows of US$3,250 million. The Group's principal uses of cash through 2012 are expected to be for operating expenses, debt repayment and limited capital expenditure pursuant to the terms of its debt restructuring agreements. It expects to fund its liquidity needs mainly through operating cash flow.

The Group expects that payments for purchases of materials, energy and other goods and services throughout the forecast period as well as payment of profit and other taxes and capital expenditures will be financed by operating cash inflow.

The Group intends to use all of the net proceeds received from the Global Offering to reduce outstanding debt and to satisfy other obligations to its creditors (which include the settlement of fee warrants exercised for cash and payment of US$115 million to Onexim) pursuant to the terms of its debt restructuring agreements. In 2010, the Group expects to repay bank loans and other debt in accordance with the terms of its debt restructuring agreements, including a proportionate repayment to international and Russian and Kazakh lenders (excluding the VEB Debt, as discussed below) and Onexim. The principal sources for the repayment of the debt will be operating cash flow.

According to its amended loan agreement with VEB, the Company is required to repay US$4,500 million on 29 October 2010. For a discussion of the Group's expectations concerning extension of this loan and repayment of this loan on its maturity date if it were not extended, see "— Debt Restructuring — Terms of the VEB Debt Restructuring".

The Group has obligations to Onexim in respect of the deferred consideration for the purchase of shares in Norilsk Nickel. In 2009, the Company restructured US$880 million of its obligations to Onexim in line with the restructuring of its international debt which will mature in 2013. The remaining obligations were converted into Shares representing 6% of the Company's share capital on the date of effectiveness of the international override agreement. See "— Debt Restructuring — Terms of the Onexim Debt Restructuring"

The Directors do not anticipate any other significant cash outflows in the 12 months following the date of the publication of this prospectus other than its payments for trade and other payables in the ordinary course of business, interest and other payments in connection with its restructuring agreements, payments of tax, foreign exchange exposure in the course of its business maintenance capex and certain limited development capex such as BEMO and as agreed in connection with its debt restructuring agreements.

Following completion of the Group's debt restructuring and having considered the net proceeds from the Global Offering, the Company believes that it has sufficient working capital for its present requirements until 31 January 2011. For the reasons described below under the heading "— Debt Restructuring — Terms of the VEB Debt Restructuring", this working capital statement is based upon the premise that either (i) on the extended maturity date of the VEB Debt (29 October 2010), VEB will extend the maturity of the VEB Debt for another year, (ii) pursuant to the Sberbank Letter Agreement, Sberbank will assume the rights, claims and obligations of VEB under the VEB Debt, following which the maturity date under the debt will be extended to 7 December 2013, or (iii) the Company will generate sufficient proceeds to repay the VEB Debt in full on 29 October 2010 (from refinancings permitted under the terms of the international override agreement, from equity or subordinated debt issuances and/or from the possible sale of its more than 25% stake in Norilsk Nickel). In addition, the working capital statement does not take into account the additional liquidity, if required, in the form of a US$200 million credit facility that is permitted under the terms of the international override agreement. Certain terms of such facility have been agreed between the Company and the international lenders, but no commitment to lend has been provided. Moreover, the identity of the lenders and the pricing of this facility remain to be agreed.

Cash Flows

The following table summarises UC RUSAL's cash flows for the six months ended 30 June 2009 and 2008:

	Six months ended 30 June	
	2009	**2008**
	(Mln. US$)	
Net cash (used in)/generated from operating activities	(232)	1,878
Net cash used in investing activities	(61)	(5,271)
Net cash (used in)/generated from financing activities	(143)	3,379
Net decrease in cash and cash equivalents	(436)	(14)
Cash and cash equivalents at beginning of period	685	247
Effect of exchange rate fluctuations on cash and cash equivalents	(10)	4
Cash and cash equivalents at end of period	239	237

Operating activities used cash flows of US$232 million in the first six months of 2009, compared to cash flows generated from operating activities of US$1,878 million in the same period in 2008. The decrease reflected the decrease in the Group's operating profit. Cash flows for each period were also affected by changes in working capital.

Cash flows utilised by investing activities decreased by US$5,210 million, or by 98.8%, to US$61 million in the first six months of 2009 compared to US$5,271 million in the same period in 2008. Cash flows utilised by investing activities in the first six months of 2008 principally reflected

acquisition of Norilsk Nickel shares, which was recorded as acquisition of associates and joint controlled entities and amounted to US$4,438 million. In the first six months of 2009, cash flows utilised by investing activities were limited to maintenance capital expenditures in respect of the Group's major production entities.

Financing activities used US$143 million of cash flows in the first six months of 2009, representing net repayment of borrowings, and provided cash flows of US$3,379 million in the first six months of 2008, representing proceeds of borrowings net of repayments of borrowings and dividends.

The following table summarises UC RUSAL's cash flows for the years ended 31 December 2008, 2007 and 2006:

	Year ended 31 December		
	2008	2007	2006
		(Mln. US$)	
Net cash generated from operating activities	3,017	3,346	2,790
Net cash used in investing activities	(5,802)	(2,853)	(584)
Net cash generated from/(used in) financing activities	3,250	(477)	(2,366)
Net (decrease)/increase in cash and cash equivalents	465	16	(160)
Cash and cash equivalents at beginning of period	247	229	385
Effect of exchange rate fluctuations on cash and cash equivalents	(27)	2	4
Cash and cash equivalents at end of period	685	247	229

Cash flows from operating activities decreased by US$329 million, or 9.8%, to US$3,017 million in 2008 as compared to US$3,346 million in 2007, which in turn represented an increase by US$556 million, or 19.9%, compared to US$2,790 million in 2006. The decrease in 2008 reflected lower earnings before non-cash expenses such as impairment losses, depreciation and amortisation and provisions. The increase in 2007 reflected primarily higher earnings before such non-cash expenses. Cash flows for each year were also affected by changes in working capital.

Cash flows utilised by investing activities nearly doubled to US$5,802 million in 2008, as compared to US$2,853 million in 2007, which in turn represented a more than fourfold increase from US$584 million in 2006. The increase in 2008 resulted from the use of US$4,438 million for the acquisition of interest in Norilsk Nickel in April 2008. The effect of the Norilsk Nickel transaction was partially offset by dividends from equity investees of US$231 million (including US$205 million, net of tax, in dividends from Norilsk Nickel) and decrease of US$336 million in cash used for acquisition of property, plant and equipment, among other factors. The increase in 2007 resulted primarily from the use of US$1,081 million in cash for the acquisition of SUAL and the Glencore Businesses, net of cash acquired, and from an increase of US$817 million in cash used for the acquisition of property, plant and equipment.

Financing activities provided cash flows of US$3,250 million in 2008 and utilised cash flows of US$477 million in 2007 and US$2,366 million in 2006. The change from 2007 to 2008 resulted from a US$3,116 million increase in proceeds from borrowings, net of repayments of borrowings and repayments of bonds, and a US$611 million decrease in dividends paid and distributions to shareholders. The decrease in cash flows utilised by financing activities from 2006 to 2007 resulted from a US$1,060 million decrease in dividends paid and distributions to shareholders and a US$829 million increase in proceeds from borrowings, net of repayments of borrowings and repayments of bonds.

Debt restructuring

Background of the Debt Restructuring

In October, November and December 2009, the Company and certain of its subsidiaries restructured their debt and certain other obligations to the Group's international, Russian and Kazakh lenders and certain other creditors.

The principal objective of the Company's Directors and management in negotiating the debt restructuring was to give the Company greater time and flexibility to meet its debt obligations in anticipation of the expected aluminium price recovery. This has been achieved through the following arrangements:

- linking debt repayment obligations to the Company's ability to generate excess operating cash flow (subject to meeting certain cumulative debt repayment targets);
- allowing a portion of interest charges to be capitalised under a pay in kind arrangement; and
- converting into equity a substantial obligation to Onexim.

Compliance with the Debt Restructuring and Sensitivity Analysis

In considering the terms of the debt restructuring, the Directors have taken into account their best estimates of the projected operational and financial performance of the Group during the term of the override period until December 2013, as well as the limitations on that estimate as disclosed under "Risk Factors — Risks Relating to the Group and its Business — The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders". The Directors also considered the Group's ability to realise cash from proceeds from possible disposals of shares in Norilsk Nickel in excess of the amount required for repayment of the VEB Debt and potential future equity and subordinated debt fundraisings. On that basis, and subject to such limitations, the Directors have reasonable grounds to believe that the Company will be able to comply with the relevant performance targets, covenants and restrictions under the terms of the debt restructuring agreements for the duration of the override period.

However, there can be no assurance that the Company will be able to dispose of its Norilsk Nickel shares at a price that will generate excess amounts after repaying the VEB Debt or to raise future equity or subordinated debt if and when required. Furthermore, disposing of its Norilsk Nickel shares at a price that will generate excess amounts after repaying the VEB Debt, or raising equity or subordinated debt, is likely to be more challenging in an environment of low commodity prices, which is when the Company might be required to take such action.

The Company used the 23 October 2009 aluminium price and RUR/US$ exchange rate forward curves as the basis for the assumptions used when preparing the profit forecast for the year ending 31 December 2009 and working capital memorandum for the 15 months period ending 31 December 2010 ("restructuring base case"). The profit forecast and working capital memorandum assume that the VEB loan will be rolled over to 2013 or refinanced on equivalent terms. See also "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the VEB Debt Restructuring". In the following discussion, in order to provide the most up to date available information, the Company

has utilised the 27 November 2009 aluminium price and RUR/US$ exchange rate forward curves as sourced from Bloomberg to update the restructuring base case ("updated base case"), which are presented in the table below for reference.

	2009	2010	2011	2012	2013
Aluminium price (US$/t)					
Updated base case	1,649	2,051	2,147	2,224	2,297
RUR/US$ exchange rate					
Updated base case	31.78	30.56	32.60	34.70	36.65

The Directors believe that the forward curves for aluminium prices and exchange rates used in the Company's updated base case are the best available objective publicly sourced forecasts of these two variables.

Based on historical information, the Company believes that the long-term behaviour of the aluminium spot price and the spot RUR / US$ exchange rate is inversely correlated, and that, measured over an extended period of time, the RUR will tend to depreciate (i.e. the RUR / US$ exchange rate will tend to increase) when the aluminium price decreases. This does not happen every single time the aluminium price changes and is not always reflected by the short-term movements of these variables or by their forward curves as other factors also drive the shapes of these curves including, in the case of aluminium prices, such factors as the market's view on current and future supply of aluminium, the cost of keeping physical aluminium in storage, interest rates and availability of financing and, in the case of the RUR/US$ exchange rate, interest rates, global flow of funds and inflation rate differentials between Russia and the US.

The Directors' compliance expectations were tested against an estimate of operational performance in the updated base case, which was then adjusted by changing certain assumptions to test compliance in an environment of greater stress (including a reduction in the aluminium price). A summary of the assumptions underlying the updated base case is presented below. These assumptions relate to future events, circumstances and developments. By their nature, these assumptions involve risk and uncertainty and there can be no guarantee that such assumptions will prove to be accurate or correct. Moreover, a number of these assumptions relate to matters outside the Group's control, including prices for aluminium, alumina, electricity, transportation, raw materials and other inputs as well as general economic and market conditions and uninterrupted production. There are a number of risks, uncertainties and other factors that could cause the actual events, circumstances and developments to differ materially from these assumptions. See also "Forward-Looking Statements".

- Aluminium production and sales volumes: assumes that production and sales volumes increase to levels in line with those of 2008 when the aluminium market recovers;

- Aluminium prices: forecast is based on the LME aluminium forward curve as at 27 November 2009 as sourced from Bloomberg;

- RUR/US$ exchange rates: forecast is based on the RUR/US$ forward curve as at 27 November 2009 as sourced from Bloomberg;

- Production cash costs: based on management's best internal estimates of the evolution of key cost components such as alumina price, electricity costs, transportation costs and other raw material and input costs consistent with an economic environment supporting the assumed aluminium prices and exchange rates referred to above;

- Capital expenditure: capital expenditure for this period will be limited to maintenance capital expenditure within specified limits except with respect to the Boguchanskaya hydropower plant, as permitted by the international override agreement; and
- Net proceeds from the Global Offering following the cash settlement of fee warrants: assumed to be approximately US$2 billion (assuming an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range).

Stress test scenarios. Based on the Company's historical performance, the Directors believe that the impact of changes to any particular assumptions underlying the updated base case cannot be presented in isolation, as they believe that a reduction in aluminium prices will be offset to a degree by a reduction in input costs (including the cost of alumina, anode blocks, coke, pitch, and transportation costs), reducing the Company's overall production cash costs. The analysis presented below reflects the Directors' estimate of the Company's ability to comply with the financial covenants and debt reduction targets that form part of the debt restructuring under the assumption that aluminium prices are approximately 20% below the updated base case. In this stress test scenario, production volume and cash costs are assumed to decline in relation to the reduction in the assumed aluminium price based on the Company's historical operational performance between 2008 and 2009.

The Directors believe that this stress test scenario provides investors with an appropriate downside case representing the impact of a severe downturn in the global economy and in the aluminium industry, comparable to that experienced by the aluminium industry in general, and the Company specifically, in the last six months of 2008 and in 2009. Due to the downturn in the global economy at the end of 2008 and in 2009, aluminium producers curtailed approximately 17% of annual aluminium production on an annualised basis due to the low aluminium price. The impact of the assumptions described above would reduce the Company's operating margin to a level comparable to that expected for 2009.

In any year between 2010 and 2013, should the average aluminium price assumption for that year be reduced by up to 20% (assuming that the production volume and cash cost assumptions are consistent with the assumed aluminium price as described above and all other assumptions remain as per the updated base case), the Directors believe that the Company should be able to comply with the financial covenants and debt reduction targets that form part of the debt restructuring. In isolation, changes in the RUR/US$ exchange rate forecast have less of an impact in comparison to changes in the aluminium price assumption.

There can be no assurance, however, that any of the variations will be as assumed. In particular, if: i) the assumed aluminium price is lower; ii) input costs and production cash costs are higher; iii) the RUR/US$ exchange rate is lower (i.e. the RUR appreciates); and/or iv) input costs and production cash costs do not decrease when the aluminium price falls, the Company's ability to comply with the financial covenants and debt reduction targets that form part of the debt restructuring will be adversely affected.

The updated base case average assumed aluminium price is forecasted to rise by a compound annual growth rate of approximately 8.6% between 2009 to 2013 and the average RUR/US$ exchange rate is forecast to increase (i.e. the RUR depreciates) by a compound annual rate of approximately 3.6% between 2009 to 2013. **The Group's cash flows are highly sensitive to changes in the assumptions regarding the key variables and their correlation. Small changes in one or more of these assumptions could have a material adverse effect on the Company's ability to comply with the terms of its debt restructuring agreements**.

Should the aluminium price fail to increase and/or if the RUR/US$ exchange rate fails to increase (i.e. the RUR fails to depreciate) as forecast in the updated base case, the Company may not be able to comply with financial covenants and debt reduction targets that form part of the debt restructuring. The following scenarios illustrate relevant sensitivities:

Scenario No. 1: constant nominal aluminium price and nominal RUR/US$ exchange rate. If the assumed aluminium price and the RUR/US$ exchange rate were to remain constant in nominal terms at the spot levels as sourced from Bloomberg on 2 December 2009 (US$2,126/t of aluminium and RUR29.4/US$1.0), and all other assumptions under the updated base case remained unchanged, the Company would not comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring in 2011; or

Scenario No. 2: Aluminium price falls by more than 20% for more than one year. If the assumed average aluminium price falls by more than 20% below the updated base case for more than one year, while other assumptions remain unchanged as per the stressed tested scenario described above, in 2011 the Company would not be able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring; or

Scenario No. 3: RUR/US$ exchange rate decreases (i.e. the RUR appreciates) more than 18% for more than one year. If the assumed average RUR/US$ exchange rate decreases (i.e. the RUR appreciates) by more than 18% below the updated base case for more than one year, while other assumptions remain unchanged as per the updated base case, in 2011 the Company would not be able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring; or

Scenario No. 4: Input costs remain flat or increase or the RUR/US$ exchange rate remains flat or decreases (i.e. the RUR appreciates) when aluminium prices decrease. If input costs were to remain flat or increase, or the RUR/US$ exchange rate was to remain flat or decrease (i.e. the RUR appreciates) when the assumed aluminium price decreases, the impact of such decrease on the Company's operating performance will be more severe, and could result in the Company not being able to comply with one or more of the financial covenants and debt reduction targets that form part of the debt restructuring when the assumed aluminium price reduction is less than 20%.

While the future level of aluminium prices and RUR/US$ exchange rate remain uncertain, the Directors take considerable comfort from the Company's position on the aluminium cost curve, which positions it amongst the lowest cost aluminium producers in the world, and the fact that aluminium price levels are unlikely to fall below the aluminium industry's average cost of production for any extended period. As set out in "Industry and Market Overview — Demand and Supply", historically the demand for aluminium has grown in excess of global GDP. The Directors expect this trend to continue, especially as the GDP per capita growth of China, India and Brazil exceeds that of developed nations. Given the evolution of global demand for aluminium through the economic cycles, the Directors believe that only a prolonged downturn in the global economy, including the economies of China, India and Brazil, could cause the aluminium price to remain at unsustainably low levels such that the aluminium industry is not profitable. There can be no assurance that aluminium prices will not fall below the industry's average cost of production for an extended period of time. If that were the case, the Company's ability to comply with the financial covenants and debt reduction targets that form part of the debt restructuring will be adversely affected.

If the Company's cash generation is not sufficient to satisfy its debt restructuring obligations, there are a number of actions which the Company's management can undertake in an attempt to meet these debt restructuring obligations, including delaying capital expenditures (e.g. rescheduling pot rebuilds), reducing production or mothballing higher cost facilities and managing working capital. There can be no assurance that these or other additional actions that the Company's management undertakes in an attempt to satisfy these debt restructuring obligations will be sufficient to allow the Company to comply with the financial covenants and debt reduction targets that form part of the debt restructuring.

Failure to comply with the terms of the debt restructuring agreements (including the financial covenants and debt reduction targets) could, if the required majority of lenders so elects, result in acceleration of the Group's indebtedness. In these circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. See also "Risk Factors — Risks Relating to the Group and its Business — The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders".

Refinancing of the debt following the Override Period

The Directors believe that (based on the Company's operating assumptions and their outlook for the aluminium sector) by the end of the four year override period ending in December 2013 the Group's debt (including capitalised interest) level will be reduced significantly, which the Directors believe will improve the Company's ability to access the credit markets (subject to market conditions at that time) to refinance the outstanding debt at the end of the four year override period ending December 2013. In addition, the existing international lenders have agreed to provide new debt facilities to refinance outstanding debt (including capitalised interest) at the end of the override period (6 December 2013), subject to a number of conditions being met as at the end of the override period, including: i) meeting certain debt reduction targets that are part of the international override agreement; and ii) the total net debt to Covenant EBITDA being 3 to 1 or less. The Russian and Kazakh banks (other than VEB) have also provided a soft commitment to provide new debt to refinance outstanding debt. The new debt facilities would have a maturity of three years.

Based on the Directors' best estimates of the projected operational and financial performance of the Group, the Company should:

- be in a financial position to raise new debt from other sources of finance in order to refinance the outstanding debt as at the end of the override period (including capitalised interest);
- comply with the international lenders' conditions in order to refinance outstanding debt (including capitalised interest) from new debt facilities to be provided by the international lenders; and
- be able to refinance from new debt to be provided by the Russian and/or Kazakh banks.

There can be no assurance, however, that the Company will meet the total net debt to Covenant EBITDA condition, the debt reduction targets included in the international override agreement, and certain other conditions required by the international lenders, or be able to raise new debt to refinance the debt as at the end of the override period. If the Group is unable to meet such conditions or targets or unable to raise such new debt, it would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. See "Risk Factors — Risks Relating to the Group and its Business — The terms of the debt restructuring agreements impose strict limits on the Group's capital expenditure and other uses of available cash which will limit its ability to expand its business and to pay dividends, and failure by the Group to comply with the terms and conditions of these agreements may materially adversely affect the Group and its shareholders".

Terms of International Debt Restructuring

The long-term restructuring of the Group's financial indebtedness to its international lenders will be completed in two phases: phase one (with a duration of 48 months) being governed by the international override agreement, which harmonises certain provisions of the Group's international loan facilities; and phase two (with a duration of 36 months) involving a refinancing of outstanding debt out of new debt facilities, if necessary.

Override

The Company has entered into an arrangement with 65 creditors under international facilities accounting for US$7.4 billion of debt and contingent liabilities pursuant to which such creditors have agreed to extend maturities until 6 December 2013. This arrangement is documented in an international override agreement, which became effective on 7 December 2009, and other related agreements.

The international override agreement imposes certain obligations on the Group during the override period and harmonises the pricing and amortisation schedule of existing international loan facilities. The international override agreement contains standard financial covenants, including with respect to the maintenance of specified ratios, such as free cashflow to net finance charges, total net debt to Covenant EBITDA and total net debt to equity, tested quarterly. The Company paid an upfront fee to the restructuring lenders, including 0.5% of the lenders' exposure in cash and nominal strike warrants ("fee warrants") entitling the restructuring lenders to 1% of the Company's fully diluted share capital as at the date of effectiveness of the international override agreement. On the effective date of the international override agreement, the principal amount of debt outstanding subject to the international override agreement was US$7.4 billion (including US$0.2 billion of contingent liabilities).

For the purposes of the Group's debt restructuring agreements, "Covenant EBITDA" means, in respect of any relevant period, the Company's consolidated profit before tax for that relevant period:

(a) before deducting any Finance Charges and not including any Finance Income;

(b) not including any earnings before interest, tax, depreciation and amortisation (calculated on the same basis as this definition) of any project company of the Group where (1) the project company is set up solely for the purpose of carrying out the relevant project, where the lenders have no recourse to any member of the Group (including by way of completion guarantee or similar instrument or offtake agreement on preferential terms) other than to the project company, and (2) no other member of the Group provides any funding to such project company and where the financing of such project company is otherwise ring-fenced from the rest of the Group on terms acceptable to the majority international lenders (being international lenders representing 66 ⅔% or more of the aggregate exposures of the international lenders at that time), recalculated on the basis that any sales to other members of the Group and purchases from other members of the Group by any such project company are recorded at the average market price used for sales of the relevant product to persons not being members of the Group and purchases of the relevant product from persons not being members of the Group during the relevant period;

(c) not including any exceptional, one off, non-recurring or extraordinary items;

(d) after deducting the amount of any profit (or adding back the amount of any loss) of any member of the Group which is attributable to minority interests;

(e) adding the amount of the net income of Norilsk Nickel or deducting the amount of net loss attributable to the shares owned by members of the Group in Norilsk Nickel, if not already included in consolidated profit before tax of the Group;

(f) before taking into account any upward or downward adjustment of any non-cash provision;

(g) after adding back any amount attributable to the amortisation, depreciation or impairment of assets of members of the Group to the extent not added before;

(h) before taking into account any foreign exchange gains or losses recognised as such in the Company's consolidated financial statements prepared in accordance with IFRS; and

(i) before deducting any amount paid to the holders of warrants that is required to be paid as a result of a distribution being made by the Company to its Shareholders,

in each case, to the extent the above adjustments are not already made, as the case may be, for the purposes of determining the consolidated profit before tax.

For the purposes of the definition of "Covenant EBITDA", (A) "Finance Charges" means, for any relevant period, the aggregate amount of the accrued interest (other than payment-in-kind interest), commission, fees, discounts, prepayment fees, premiums or charges and other finance payments in respect of certain borrowings whether paid or payable by any member of the Group (calculated on a consolidated basis) in respect of that relevant period: (i) including any upfront fees or costs; (ii) including the interest (but not the capital) element of payments in respect of finance leases; (iii) including any commission, fees, discounts and other finance payments payable by (and deducting any such amounts payable to) any member of the Group under any interest rate hedging arrangement; and (iv) excluding any payments to the holders of warrants according to the warrant documents, provided that no amount shall be added (or deducted) more than once and (B) "Finance Income" means consolidated interest income on financial investments (including available-for-sale financial assets), dividend income, gains on the disposal of available-for-sale financial assets, changes in the fair value of financial assets at fair value through profit and loss, gains on hedging instruments that are recognised in consolidated profit or loss of the relevant company and other items recognised as such in the Company's consolidated financial statements prepared in accordance with IFRS.

The following is a reconciliation of Covenant EBITDA to consolidated profit before tax for the 12 months ended 30 June 2009:

Reconciliation of Covenant EBITDA	**Year ended 30 June 2009**
	(Mln. US$)
Consolidated profit/(loss) before tax	(8,460)
Add:	
Net Finance charge	1,059
Amortisation and depreciation	762
Impairment of non-current assets	3,361
Impairment of other assets	2,812
FOREX	324
Other	437
Covenant EBITDA	294

For the purposes of the Group's debt restructuring agreements, "total net debt" means, at any time, the aggregate amount of all obligations of members of the Group for or in respect of Borrowings at that time but:

(a) excluding any such obligations to any other member of the Group;

(b) excluding to the extent they constitute Borrowings:

(i) any Quasi-Equity; and

(ii) any project financings of the Group whereby, in each case, (1) the borrower of such financing is a project company set up solely for the purpose of carrying out the relevant project, where the lenders have no recourse to any member of the Group (including by way of completion guarantee or similar instrument or offtake agreement on preferential terms) other than to the project company, and (2) where no other member of the Group provides any funding to such project company and where such financing is otherwise ring-fenced from the rest of the Group on terms acceptable to the majority international lenders;

(c) including, in the case of finance or capital leases only, their capitalised value; and

(d) deducting the aggregate amount of cash and cash equivalent investments held by any member of the Group,

and so that no amount shall be included or excluded more than once.

For the purposes of the definition of total net debt, (A) "Borrowings" means, at any time, the aggregate outstanding principal, capital or nominal amount (and any fixed or minimum premium payable on prepayment or redemption) of any Financial Indebtedness of members of the Group other than Financial Indebtedness falling under paragraph (h) of the definition of Financial Indebtedness to the extent they constitute payment instruments and only in respect of amounts which are not then due and payable thereunder; (B) "Financial Indebtedness" means, without double counting, in relation to a person, its obligation (whether present or future, actual or contingent, as principal or surety) for the payment or repayment of money (whether in respect of interest, principal or otherwise) incurred in respect of (a) moneys borrowed or raised (including in each case, for the avoidance of doubt, any interest that has capitalised thereon) and debit balances at banks or other financial institutions; (b) any bond, note, loan stock, debenture or similar instrument issued with an objective of borrowing or raising money; (c) any amount raised pursuant to any acceptance credit (but excluding acceptance credits issued in the ordinary course of business payable in less than 90 days), bill discounting or factoring facility (but excluding any amount raised without recourse); (d) the purchase of any goods or services from any person which is more than 60 days past the due date; (e) any amount raised by the issue of shares which are redeemable (other than at the option of the issuer) before the date falling four years after the override repayment date; (f) any hire purchase agreement, conditional sale agreement or lease, where that agreement has been entered into primarily as a method of raising finance or financing the acquisition of an asset; (g) any finance or capital lease; (h) any guarantee, bond, stand-by letter of credit or other similar instrument issued in connection with the performance of contracts, including such instruments granted in respect of project finance undertakings in the ordinary course of business and any documentary credit (except to the extent such instrument is a payment instrument and only in respect of amounts which are not then due and payable thereunder); (i) any interest rate or currency swap agreement or any other hedging (including commodities hedging) or derivatives instrument or agreement (with the amount of such Financial Indebtedness being calculated on a mark to market valuation); (j) any arrangement pursuant to which any asset sold or otherwise disposed of by that person is or may be leased to or re-acquired by the relevant person (whether following the exercise of an option or otherwise); (k) any amount raised under any other transaction having the commercial effect of a borrowing or otherwise classified as borrowings under IFRS; and (l) any guarantee, indemnity or similar insurance against financial loss given in respect of the obligation of any person; and (C) "Quasi-Equity" means an unsecured loan (not constituting a discounted instrument) to the Company by a person that is not a member of the Group where (a) no cash interest is payable and (b) the tenor ends no earlier than four years after the end of the override period; and (c) the loan is duly subordinated (as to principal and interest) on terms acceptable to the requisite majority of international lenders.

Margin

During the override period, the restructured debt bears interest at the currently applicable base rate (either LIBOR or Euribor depending on the denomination of the debt), plus a margin that varies depending on the ratio of total net debt to Covenant EBITDA and includes cash and payment-in-kind ("PIK", meaning capitalised) components, as follows:

Ratio of Total Net Debt to Covenant EBITDA	Total Margin	Cash Pay Margin	PIK Margin
more than 15	7.00% p.a.	1.75% p.a.	5.25% p.a.
7.5 to 15	5.50% p.a.	1.75% p.a.	3.75% p.a.
4.0 to 7.5	4.50% p.a.	2.25% p.a.	2.25% p.a.
3.0 to 4.0	4.00% p.a.	3.00% p.a.	1.00% p.a.
less than 3.0	3.50% p.a.	3.50% p.a.	N/A

Until the first interest period commencing after receipt of audited consolidated financial statements of the Group for 2009 the applicable total margin is set at 7.00% per annum, including a 1.75% per annum cash pay margin and a 5.25% per annum PIK margin. The ratio of total net debt to Covenant EBITDA was 47.2 to 1 as at 30 June 2009. If a material event of default (breach of conditions subsequent, payment default or failure to meet Event of Default Cumulative Amount targets) has occurred, the applicable PIK margin will increase by 2% per annum, but so that the total margin does not exceed 7%.

Repayment

No fixed amortisation schedule applies during the override period, with all debt outstanding under the international facilities becoming due at the end of the override period (i.e., December 2013). However, the net proceeds raised from asset disposals and equity and subordinated and other debt fund raisings (including the proceeds of the Global Offering) and excess cashflow (subject to the Group being allowed to retain a US$400 million cash buffer) must be applied to repay the Group's outstanding indebtedness on a pro rata basis.

Disposal and Equity Injection Undertakings, Debt Repayment Targets

The Company is obliged to dispose of assets and/or raise equity or subordinated debt by the end of the override period (i.e., by December 2013) sufficient to generate net proceeds of at least US$2.4 billion. Compliance with this obligation is tested only once, at the end of the override period.

The Company is also obliged to ensure that debt of the Group (other than debt owed to VEB and Onexim) is repaid during the override period in the following amounts:

Test Dates	Target Cumulative Amount	Event of Default Cumulative Amount	Percentage of share capital[1]
	(Mln. US$)		(%)
31 December 2010	1,400	750	0.75
30 September 2011	3,000	2,000	0.75
30 September 2012	4,000	3,000	1.25
End of override period	5,000	4,000	1.50

Note:

(1) Percentage of share capital of the Company for which equity compensation warrants shall be issued is calculated on the relevant issue date without taking into account any warrants then in issue.

If the Target Cumulative Amounts are not met and/or on the third and fourth test dates certain leverage ratios are not met, the Company will be obliged to issue zero strike warrants ("equity compensation warrants") to the international lenders representing equity in specified percentages. For example, if we are unable to meet our Target Cumulative Amount on 31 December 2010 (but are successful in meeting the Event of Default Cumulative Amount) after giving effect to the Global Offering we would be required to issue equity compensation warrants representing 0.75% of the fully diluted share capital of the Company as at the relevant issue date. The issuance of such warrants would have an immediate dilutive effect to our shareholders. Failure to meet the Event of Default Cumulative Amount targets will result in an event of default.

In certain circumstances, the Group may be obliged to dispose of a number of shares in Norilsk Nickel (see "Business — The Group's Operations — Norilsk Nickel and Material Joint Ventures") sufficient to enable it to repay amounts outstanding under a US$4.5 billion loan dated 30 October 2008 between the Company and State Corporation "Bank for Development and Foreign Economic Affairs" (the "VEB Debt"), as described below:

- The Company's obligation to sell will be triggered if, (i) during the period starting on the first date of the override period and ending three months prior to the end of the override period, (a) the market value of the Company's 25% plus one share stake in Norilsk Nickel (the "NN Stake") exceeds the Trigger Value (as defined below) for 15 consecutive business days; or (b) the Company receives an offer from a third party in respect of a number of shares in Norilsk Nickel sufficient to enable the Company to repay the VEB Debt with an implied value of at least the Trigger Value for the entire NN Stake; or (ii) the Company fails to meet an Event of Default Cumulative Amount target.

- The sale obligation is suspended until 30 November 2010. If, prior to that date, the Group repays indebtedness outstanding to its international lenders in an amount at least equal to US$1.4 billion using cashflow, proceeds from any new equity raising (including proceeds of the Global Offering), proceeds from any disposal of any shares in Norilsk Nickel (at the Company's sole discretion) and proceeds from any disposal of any non core assets (meaning assets not involved in the Group's primary business of aluminium or alumina production and any assets of the former SUAL group other than Irkutsk aluminium smelter assets), the sale obligation will be further suspended until 31 March 2012.

- The sale obligation will no longer be suspended if a material event of default occurs under the international override agreement, i.e., a payment default, a default under the debt reduction covenant or failure to meet any conditions subsequent under the international override agreement.

- Whether or not the obligation to sell is still suspended, if, prior to 31 March 2012, the Group repays indebtedness outstanding to its international lenders in an amount at least equal to US$3 billion using cashflow, proceeds from any new equity raising (including proceeds of the Global Offering), proceeds from any disposal of any shares in Norilsk Nickel (at the Company's sole discretion) and proceeds from any disposal of any non core assets (meaning assets not involved in the Group's primary business of aluminium or alumina production and any assets of the former SUAL group other than Irkutsk aluminium smelter assets), the sale obligation will cease to apply.

- "Trigger Value" means US$7.5 billion plus the aggregate amount of principal (including capitalised interest) which has been repaid to the Group's international lenders prior to commencement of the sale process as a result of any new equity raisings (including

proceeds of the Global Offering), operation of the cashflow sweep mechanism and disposal of any non core assets (including any shares in Norilsk Nickel). The question whether or not the sale obligation has been triggered at any time during any suspension period will be determined by reference to the Trigger Value as at the end of the suspension period. For example, if the market value of the NN Stake rises to US$8 billion in March 2010 and remains at that level but, on or before 30 November 2010, the Company has issued additional equity in the amount of US$600 million, then the sale obligation will not arise since the Trigger Value at the end of the suspension period will be at least US$8.1 billion.

- If the obligation to sell is triggered as described in sub-paragraph (i) of the first bullet above, the Company will have up to 12 months following the date when the obligation was triggered, but no less than six months following the end of the suspension period to sell the NN Stake ("first mandatory sale period"). If the suspension period has terminated following an occurrence of a material event of default, the first mandatory sale period will be reduced to three months after the later of (a) the date when the obligation to sell is triggered in accordance with sub-paragraph (i) of the first bullet above and (b) the end of the suspension period.

- During the first mandatory sale period, a prescribed auction process will be arranged by the mandate banks. There will be no obligation to sell the shares in Norilsk Nickel during the first mandatory sale period if the Company is unable to realise net proceeds at least equal to the Trigger Value (or its pro rata share if less than the entire NN Stake is to be sold).

- If the obligation to sell is triggered as described in sub-paragraph (ii) of the first bullet above or if the sale does not occur during the first mandatory sale period and the sale obligation continues to apply, a second mandatory sale period of three months will commence, during which the price may be any amount resulting in net proceeds sufficient to repay the VEB Debt. During the second mandatory sale period a prescribed action process will be arranged by the mandate banks. A sale during the second mandatory sale period could result in a material loss for the Group.

- The Company has the option, at any time after the obligation to sell is triggered, of avoiding a sale of the NN Stake by (i) raising equity or subordinated debt sufficient to repay the VEB Debt in full or (ii) repaying the international debt in an amount (the "Required Amount") necessary to ensure that the outstanding amount under the international facilities is reduced (x) to no more than 50% of the amount outstanding as at the start of the override period or (y) if less than the Required Amount, by US$4 billion. In addition, the Company may avoid the obligation to sell the NN Stake to the winner of the auction by selling it instead to a third party on arm's length terms.

Additional Security

In addition to the security provided under its existing loan facilities, the Group provided or agreed to provide additional security to the international lenders over the following:

- 25% of the shares in the Bratsk and Krasnoyarsk aluminium smelters plus, on a secondary ranking basis, one share in each of them (following the release of the security held by VEB, security over one share in each of the Bratsk and Krasnoyarsk aluminium smelters shall be provided on a primary ranking basis);

- 39% less one share in each of the Novokuznetsk aluminium smelters, SUAL and Achinsk alumina refinery and 27.15% in Sayanogorsk aluminium smelter, provided that percentage of shares subject to pledge in each of those entities will be reduced to 25% plus one share

once the Group repays indebtedness outstanding to its international lenders in an amount at least equal to US$1.4 billion using cashflow, proceeds from any new equity raising (including proceeds of the Global Offering) and proceeds from disposal of non-core assets (including shares in Norilsk Nickel);

- receivables under certain offtake, export and tolling contracts and certain intra-group loans subject to certain exceptions;

- 100% of the shares or interest in certain non-Russian operating companies or their holding companies;

- security over fixed assets of the Russian aluminium smelters and Achinsk alumina refinery split between international lenders and Russian lenders according to pre-agreed percentages, where international lenders' share in security over fixed assets does not exceed 10% of the assets of each of the aluminium smelters and 30% of the fixed assets of Achinsk alumina refinery; the fixed assets of the Bratsk and Krasnoyarsk aluminium smelters are subject to security in favour of the international lenders only; and

- security over aluminium owned by certain Group companies.

Following the repayment of the VEB Debt, the Company will be obliged to provide security over any shares in Norilsk Nickel that the Group then continues to hold and which are not subject to security in favour of the international lenders (the Company is also obliged to provide security over certain assets it controls following the unwinding of the derivative financial instrument relating to the shares in Norilsk Nickel). In addition, as a condition to the restructuring of the guarantee of the Boguchanskoye project loan, the Company has provided security over shares in its intermediary holding companies controlling the Group's interest in the Boguchansk project and has agreed to provide, subject to RusHydro's consent, security over its interest in the BEMO project (including at the operating companies' level).

Dividends

The restructuring agreements restrict the Group's ability to pay dividends. In particular, dividends may not be paid until the Group's ratio of total net debt to Covenant EBITDA is 3 to 1 or less and its debt (excluding debt owed to VEB and Onexim) has been repaid by at least US$5 billion. Further, there should be no continuing default under the international override agreement and the Group should be able to demonstrate that it has sufficient cash to pay the proposed dividends. If and when dividends become payable, they are limited to no more than 50% of the Group's annual net profit (excluding earnings, but including dividends, of Norilsk Nickel) in any one year.

Warrants

Fee warrants will be automatically converted into the Company's Shares at the nominal value of the Shares on the date of the Global Offering. International lenders may require the Company to settle the fee warrants (issued on the first day of the override period) in cash in lieu of shares at a price per share equal to the US dollar price per Share under the International Placing less certain portion of commissions, fees and expenses relating to the Global Offering. Otherwise, Shares into which warrants are converted following the Global Offering will be subject to a lock-up of 180 days following the date of completion of the Global Offering (or such shorter lock-up period as may apply to the Company's shareholders). International lenders holding fee warrants representing 0.73% of the Company's share capital (immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised and no bonus Shares are issued to management) have exercised their cash settlement option.

Equity compensation warrants that may be issued by the Company during the override period will be convertible, in whole but not in part, into the Company's Shares at any time following the Global Offering at the election of the warrantholders. Shares for which any warrants are exercised may be sold by the relevant warrantholders subject to the Company's right of first refusal.

Financial Covenants

The Group is obliged to comply with certain financial covenants during the override period, including total net debt to Covenant EBITDA, total net debt to equity and free cashflow to net finance charges as follows:

Testing Period Ending	Total Net Debt to Covenant EBITDA	Total Net Debt to Equity	Free Cashflow to Net Finance Charges
31 December 2009[(1)]	18.5x	4.0x	0.7x
31 March 2010 [(1)]	18.5x	4.0x	0.7x
30 June 2010 [(1)]	15.0x	2.5x	1.0x
30 September 2010	15.0x	2.5x	1.0x
31 December 2010	13.5x	2.5x	1.0x
31 March 2011	13.5x	2.5x	1.0x
30 June 2011	13.5x	2.5x	1.0x
30 September 2011	13.5x	2.5x	1.0x
31 December 2011	11.0x	1.7x	1.0x
31 March 2012	11.0x	1.7x	1.0x
30 June 2012	11.0x	1.7x	1.0x
30 September 2012	11.0x	1.7x	1.0x
31 December 2012	6.5x	1.6x	1.2x
31 March 2013	6.5x	1.6x	1.2x
30 June 2013	6.5x	1.6x	1.2x
30 September 2013	6.5x	1.6x	1.2x
31 December 2013	4.0x	1.0x	2.0x

Note:

(1) Prior to 30 September 2010, the Group will be required to provide the relevant calculations in respect of the financial covenants, but will not be tested for compliance.

Testing of compliance with the financial covenants occurs on a quarterly basis starting from 30 September 2010 with reference to historical financial information for the preceding 12 months.

Capital Expenditure Restrictions

During the override period, the Group will be allowed to incur maintenance capital expenditure within the limits specified below and will be prohibited from incurring any development capital expenditure except for capital expenditure with respect to the Boguchanskaya HPP within the limits specified below and capital expenditure required to comply with environmental laws.

Financial Year Ending	Limit on Maintenance Capital Expenditure	Limit on Boguchanskaya HPP Capital Expenditure
	(Mln. US$)	
31 December 2009	183	188
31 December 2010	225	256
31 December 2011	255	60
31 December 2012	241	23
Each financial year thereafter	236	nil

Under the debt restructuring agreements, expansion capital expenditure is allowed only from proceeds of non-recourse project finance and project equity. If the Company is not able to raise non-recourse project financing and project equity to fund any expansion capital expenditure, the Company's existing operational facilities should not be negatively impacted. However, the Company may be delayed or prevented from exploiting certain growth opportunities.

The maintenance capital expenditure incorporated in the debt restructuring is based on the Company's current best estimates of the maintenance capital expenditure requirements for each of its smelters, refineries, mines and facilities for the duration of the override period, with such estimates taking into account the age of the assets. These maintenance capital expenditure estimates also take into account the Company's historic operational performance as well as its projected operational and financial performance during the override period. As a result, these maintenance capital expenditure levels should be sufficient to maintain the Company's assets for the duration of the override period. However, there can be no assurance that these current best estimates will be correct. See "Risk Factors — Risks Relating to the Group and its Business — Equipment failures or other difficulties may result in production curtailments or shutdowns".

Guarantees

Material subsidiaries of the Company and their holding companies agreed to provide guarantees of the obligations of the Company and other Group members that are borrowers under the Group's international debt agreements. The guarantees are subject, where relevant, to statutory limitations, but otherwise guarantee the full amount of debt outstanding and subject to the international override agreement together with any interest payments and/or fees and expenses.

Conditions Subsequent

In accordance with the international override agreement, the conditions subsequent summarised below will need to be met after the override date:

- RTI Limited ("RTI"), a direct subsidiary of the Company, will need to be recapitalised by 12 February 2010. The recapitalisation involves the Company giving an undertaking to pay, on a date after 6 December 2013, an amount greater or equal to the present retained losses of RTI in return for the allotment of redeemable shares in RTI. Upon allotment (provided RTI is willing to allot the Shares on the basis of the undertaking which it should do if

satisfied as to its current and future solvency), the additional paid in capital from the allotment will be coedited to the share capital account of RTI and will therefore offset against the retained losses of RTI. As at 30 November 2009, RTI had retained negative equity of approximately US$1 billion. Under the recapitalisation procedure, the Company will not have to make any payment to RTI in respect of its undertaking to pay (as referred to above) until December 2013 at the earliest. In the event that RTI trades solvently through December 2013, then the receipt of monies from the Company to RTI and the payment of redemption monies by RTI to the Company are likely to cancel each other out. In light of this, no sums have been set aside in this respect. Under Jersey law, there is no requirement for recapitalisation and negative net assets do not prevent a company from continuing to trade or from paying dividends.

- Certain members of the Group will need to accede to the finance documents as guarantors by no later than 31 January 2010.

- The Company shall ensure that a BEMO technical report by an independent advisor (confirming the BEMO project schedule, levels of capital expenditure required to commission the Boguchanskaya HPP and for the Boguchanskaya HPP to reach first and final stage full capacity and including an updated technical and commercial review of BEMO) is delivered no later than the date falling 60 days after the override date.

- Additional security shall be provided within a period from 1 month up to 180 days after the override date over certain receivables, certain shares in Group companies and certain fixed assets, valuation obtained for fixed assets that need to become subject to security and certain other steps taken to ensure the perfection of security granted. There is no requirement that such fixed assets attain a certain value.

- No later than 15 January 2010, a final BEMO valuation report shall be delivered confirming that, as of the override date, on the assumption that commissioning and final completion of the Boguchanskaya HPP project is achieved, the net present value of the Group's interest in the Boguchanskaya HPP project is at least US$260 million (after taking into account such capital expenditures as are expected to be required to commission the Boguchanskaya HPP and to reach its final completion).

- The Company shall provide certain information, including:

  - no later than 3 months after the override date, any further information required by any finance party in order to enable it to comply with any "know your client" or other money laundering checks;

  - no later than 14 January 2010, a copy of each related party contract (including promissory note and aluminium purchase contract with Krasnoyarsk Metallurgical Plant);

- Within 5 business days of the shareholders' resolution dated 24 December 2009 amending the Company's articles to reduce the nominal value of the Company's Shares to US$0.01 from US$1 per Share the Company shall issue replacement warrant certificates to each warrantholder.

- By 31 January 2010, the Company shall deliver certain corporate documents in relation to SUAL, one of guarantors, and ensure that SUAL accedes to a security document granting security over certain intra-group receivables.

- By 12 January 2010, a member of the Group holding Norilsk Nickel shares shall grant a power of attorney to the mandated bank in accordance with the Norilsk Nickel disposal undertaking. See "— Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Disposal and Equity Injection Undertakings, Debt Repayment Targets".

In addition to the above, in accordance with the terms of the Russian restructuring agreements, the Group will need to provide security over certain shares and fixed assets and provide additional guarantees within a period from 30 to 180 days following the execution of the relevant Russian restructuring agreements.

Corporate authorisations and market standard legal opinions will be required in relation to the status, execution and due authorisation or validity and enforceability of the relevant agreements entered into by the Group members.

The Directors view the conditions subsequent as largely administrative and procedural in nature and expect them to be implemented within the time allowed, and external counsel has confirmed that it is not aware of any legal impediment to the satisfaction of the conditions subsequent under the debt restructuring agreements within the time allowed. In the event that the Company fails to fulfil any of the conditions subsequent by the applicable deadline, the Company would seek a waiver or extension from the lenders in respect of such conditions subsequent. If such a waiver or extension were not granted, failure to meet such conditions subsequent by the applicable deadline would result in an event of default. If, under such circumstances, the requisite majority of lenders under the loan facilities elected to accelerate their debt, the Company would become insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company. The Directors believe, however, that if the Company were unable to fulfil one or more of the conditions subsequent by the applicable deadline, the lenders would likely grant a waiver or extension.

Events of Default

An event of default may occur under the international override agreement upon the occurrence of certain events and circumstances, including (i) in the event that there is a failure to pay indebtedness when due (including failure to meet Event of Default Cumulative Amount Targets); (ii) when certain covenants are breached, including restrictions on incurring further indebtedness, acquisitions, capital expenditure, disposal of shares in Group members, requirements to enter into transactions on arm's length terms and various information undertakings; (iii) if a court or arbitral tribunal awards material damages or fines against any member of the Group (subject to certain exceptions described below), or a Group member fails to comply with a final court decision; (iv) upon creditors' actions against members of the Group or their assets, including attachment, sequestration, distress or execution, subject to a materiality threshold; and (v) upon certain governmental intervention actions, including seizure, nationalisation, expropriation or compulsory acquisition. The occurrence of an event of default would, if the required majority of lenders so elected, lead to acceleration. In these circumstances, the Company would be insolvent and could be declared bankrupt, in which case investors' rights to receive any distribution would rank behind the creditors of the Company (including the creditors with respect to the Company's restructured debt), and investors could lose their entire investment in the Company.

For purposes of clause (iii) above, damages or fines awarded against any member of the Group are material if (A) such damages or fines are in excess of US$50 million in aggregate for that member of the Group or (B) such damages or fines have or could reasonably be expected to have a material adverse effect on the business, operations, property, financial or other condition or prospects of any guarantor or the Company or the Group, taken as a whole; or (C) such damages or fines have or could

reasonably be expected to have a material adverse effect on the Company's or guarantors' ability to perform their obligations under the debt restructuring documents or enforceability or validity of any debt restructuring documents. Damages or fines awarded in connection with the litigation disclosed under the heading "Business — Litigation — Republic of Guinea", however, will not give rise to an event of default insofar they are awarded against (or not complied with by) any member of the Group incorporated in the Republic of Guinea or a judgment of a Guinean court is held against other members of the Group, unless such judgment is held to be enforceable or is enforced by a court of a member country of the Organisation for Economic Cooperation and Development or a country where the Company or its subsidiaries carry on operations. In addition, damages or fines awarded in connection with the following litigation disclosed in this Prospectus under the heading "Business — Litigation" do not give rise to an event of default unless they exceed the relevant threshold amount set forth below:

Litigation	Threshold Amount
CDH	US$120 million
Norden	US$90 million
ZAlK	US$95 million
Washington Group	US$72 million

It should be noted that (i) for each of the cases appearing in the table, the amount claimed against the Group member is in excess of the threshold amount listed above. Therefore, in a scenario where a Court awarded damages over the threshold amount, the claims listed above would give rise to an event of default; and (ii) apart from those listed in the table above, none of the other claims disclosed in "Business — Litigation" are exempted. Therefore, an award against a Group member in respect of any of these or other claims resulting in fines or damages in aggregate for that member of the Group in excess of US$50 million would constitute an event of default.

Refinancing

Following the override period, subject to certain conditions being met, the existing international lenders have agreed to provide new debt facilities on the terms specified below. The Company has the option to refinance any indebtedness outstanding as at the end of the override period out of any other sources.

The key terms of the refinancing are set out in a termsheet and a commitment letter. Subject to a flex within 90 days prior to the start of the refinancing period, the margin during the refinancing period will be 4.5% per annum in the first year, 5.0% per annum in the second year and 6.0% per annum in the final year and will be payable in cash. The principal amount of debt outstanding will be fully amortised during the refinancing period and the Group will be obliged to prepay any debt outstanding out of asset disposal proceeds and, subject to certain exceptions, equity and debt fund raising proceeds. In addition, if total net debt to Covenant EBITDA exceeds 3 to 1, the Group will be obliged to use all of its excess cashflow above the applicable cash buffer and if total net debt to Covenant EBITDA exceeds 2 to 1, 50% of its excess cashflow above the applicable cash buffer to prepay debt.

During the refinancing period, after the Group's ratio of total net debt to Covenant EBITDA is 3 to 1 or less, the Group will be allowed to incur development capital expenditure up to 50% of excess cashflow above the applicable cash buffer that is not required to be used to repay outstanding indebtedness.

Terms of the VEB Debt Restructuring

On 30 October 2009, the Company signed an agreement with VEB pursuant to which the maturity date of US$4.5 billion owed to VEB was extended for 12 months until 29 October 2010. The VEB Debt relates to a refinancing of the Company's debt raised for the acquisition of its shareholding in Norilsk

Nickel. Interest on the VEB Debt accrues at the rate of 12-month LIBOR plus 5% margin, of which margin LIBOR plus 3% is paid quarterly in cash and 2% is capitalised and paid at maturity. The VEB Debt is secured by a pledge by the Company of its stake of 25% plus one share in Norilsk Nickel and a pledge over 25% of the Company's shares in the Bratsk and Krasnoyask aluminium smelters. The Company expects (i) to request VEB to extend the maturity of the VEB Debt for successive one-year periods through the end of the override period in December 2013, (ii) to request Sberbank to assume the rights, claims and obligations of VEB under the VEB Debt pursuant to the Sberbank Letter Agreement or (iii) to generate sufficient proceeds to repay the VEB Debt in full upon maturity (by way of refinancing permitted under the terms of the international override agreement, from equity and/or subordinated debt issuances and/or from the possible sale of its more than 25% stake in Norilsk Nickel).

The Company's restructuring base case (described above under "— Debt Restructuring") assumes that, and it is the expectation of the Directors that, if requested, VEB will extend the maturity of the VEB Debt for successive one-year periods through the end of the override period in 2013, however, VEB has no current obligation to extend the loan, and, if it does extend, there can be no assurance as to the terms of any such extension. In making this assumption, the Directors have considered the following factors:

- VEB is not a commercial bank but a state corporation authorised to engage in banking activities that serves in effect as an arm of the Russian Government. It has a Supervisory Board chaired by the Prime Minister. The VEB Debt was provided to the Company as part of the Russian Federation's state assistance programme in October 2008 introduced by Federal Law No. 173. This legislation was established by the Russian Federation in response to the global downturn and specifically to refinance loans provided to strategic Russian companies by foreign banks. The Accounts Chamber of Russia performed a review on the accounts of the Group at the end of 2008 to the beginning of 2009 following the provision of the loan in October 2008. There was no intention expressed by the Accounts Chamber of Russia to perform such a review on any regular basis;

- Under Federal Law No. 173, the maximum duration of each loan made by VEB is a period of 12 months. However VEB is able to extend the maturity of the loan for further 12 month period(s), as evidenced by VEB agreeing on 30 October 2009 to extend the maturity of its loan to the Company for a further 12 months;

- This is consistent with the approach VEB has taken with all other companies to which it has extended loans, including Evraz (US$1.8 billion), Altimo (US$2 billion), and others such as PIK Group and Gazpromneft, each of whose loans were rolled over for a further twelve months;

- In order to facilitate the Group's debt restructuring, VEB agreed to reduce its level of recourse against the Company by switching from a pledge over 25% of the Company's shares in the Bratsk and Krasnoyask aluminium smelters, which produce approximately half of the Group's aluminium, to a pledge, provided by existing shareholders, over 5% of the outstanding shares in the Company. In addition, VEB has agreed that a portion of interest may be capitalised;

- VEB will become a shareholder in the Company following the Global Offering, as it has entered into the cornerstone placing agreement with the Company and the Joint Bookrunners to acquire a 3% interest in the fully diluted share capital of the Company immediately following completion of the Global Offering (but prior to any exercise of the Over-allotment Option) as a cornerstone investor (see "The Cornerstone Placing — The Cornerstone Investors"); on 25 November 2009 the Russian Minister of Finance announced that he expects VEB to remain a shareholder for at least three years; and

- The size of the VEB equity investment is expected to amount to about US$664 million based on its holding 3.15% of the shares of the Company in issue upon completion of the Global Offering (assuming the Over-allotment Option is not exercised and no bonus Shares are issued to management of the Company), based on an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range. Should the Company run into financial difficulties, the equity holders of the Company will rank behind all creditors. As such, the interest of VEB (as an equity investor of the Company) is closely aligned with all other shareholders of the Company.

In addition, Mr. Vladimir Dmitriev, the Chairman of VEB, has issued a letter to The Stock Exchange of Hong Kong Limited stating that "VEB confirms that it continues to support the financial stability and solvency of UC Rusal both as a lender and a future shareholder" and that "[i]n this regard, in future and on an on-going basis, if UC Rusal were to make requests to have its loan extended, VEB would cooperate in providing such an extension on a yearly basis, subject to the approval of VEB's Supervisory Council and in accordance with applicable law". In reaching this conclusion, Mr. Dmitriev noted that:

- UC Rusal is the largest aluminium producer in the world, operating numerous mining, refining and smelting facilities in Russia and other countries which secures supply of necessary aluminium for Russian and international customers;

- UC Rusal is one of the key employers and major project developers in Russia and overseas, and significant deterioration in its financial position could result in excessive and unnecessary instability, as well as in social pressures, in particular in Russia;

- For these reasons, VEB supported and continues to support UC Rusal's operations;

- In particular, the Supervisory Board of VEB has recently approved the extension of the US$4.5 billion facility to 29 October 2010 and VEB's participation in the Global Offering as a cornerstone investor in accordance with VEB's long-term investment strategy; and

- Russian law would permit annual extension of the VEB Debt to support such strategy, pursuant to a decision of the Supervisory Board of VEB, as occurred in October 2009.

Taking these factors into account, the Directors believe that:

- VEB would not take any actions that would endanger the Company's solvency, as this would be inconsistent with the original remit of its lending programme (given that serves in effect as an arm of the Russian Government), inconsistent with the position it has taken on agreeing the first one-year roll-over and contrary to its interests as a shareholder (following completion of the Global Offering); and

- accordingly, at the end of 12 months there is a high probability that VEB will agree to further extend the maturity of the loan.

In addition to the Company's analysis of the VEB arrangements, certain third parties evaluated the Company's arrangements with VEB:

- the impact of the VEB arrangements on the liquidity of the Company was the subject of considerable analysis by the Group's creditors in the context of assessing the viability of the Company's restructuring, which has now become effective; and

- VEB has a representative on the Company's Board and, like all the other Directors on the Board, he will be responsible for the contents of the prospectus including the working capital sufficiency statement. Such working capital sufficiency statement will cover a period to 31 January 2011, i.e. after the current maturity date of the VEB Debt.

On 23 December 2009, Sberbank entered into the Sberbank Letter Agreement with the Company, stating an unconditional and irrevocable commitment to assume all rights, claims and obligations under the VEB Debt following receipt of written request from the Company between 1 August and 1

September of each year from 2010 to 2013 inclusive. The Sberbank Letter Agreement states that following such an assignment of the rights and obligations of VEB under the VEB Debt to Sberbank, the maturity date under the debt will be extended to 7 December 2013. The assumption by Sberbank of the rights, claims and obligations under the VEB Debt is subject to VEB assigning its rights and obligations under the VEB Debt to Sberbank. On 17 December 2009, the Supervisory Board of VEB provided its authorisation to the assignment of all rights and obligations of VEB under the VEB Debt to Sberbank. As consideration for such assumption by Sberbank, a commission of 2.00% of the outstanding principal amount, together with any other amounts accrued and payable under the VEB Debt and assumed by Sberbank as of the date of the assignment, is payable in cash to Sberbank by the Company (the Company being subject to a best efforts obligation to pay such commission without breaching any of the Group's obligations under the international override agreement) or, failing which, by the Major Shareholders, who have (severally and not jointly) guaranteed to Sberbank to pay on demand such commission in the event the Company is unable to pay all or any part of the commission due to such payment being inconsistent with the Group's obligations under the international override agreement. The guarantee of the Major Shareholders to Sberbank to pay such commission is not subject to any rights of termination by the Major Shareholders. Pursuant to the Sberbank Letter Agreement the commission is payable by the Company in the following instalments: a) US$22.5 million by 31 December 2009, b) ¼ (one quarter) of the commission annually by 31 December of the years 2010, 2011 and 2012, provided that no assignment has occurred in such year or any previous year and c) the outstanding amount of the commission (as reduced by amounts paid under a) and b)) not later than three business days prior to the date of the assignment. If such instalments are paid by the Major Shareholders, the Major Shareholders are required to make such payments within one business day from the date when the payment of the commission falls due under the Sberbank Letter Agreement. The first instalment of US$22.5 million is expected to be paid by the Major Shareholders on or before 4 January 2010. Sberbank may assign all of its rights, claims and obligations under the VEB Debt, or under any transactions entered into to secure repayment of the VEB Debt, to any third party without the Company's consent. The Sberbank Letter Agreement states that the Company has a unilateral right to terminate the Sberbank Letter Agreement. The Company does not intend to exercise such termination right until the VEB Debt has either been repaid or extended to 7 December 2013.

The following information and related data concerning Sberbank in this prospectus have been extracted or reproduced based on publicly available information published by Sberbank. The Directors believe that the sources of this information are appropriate sources for such information and the Company has taken reasonable care in extracting and reproducing such information. The Directors have no reason to believe that such information is false, inaccurate or misleading or that any fact has been omitted that would render such information false, inaccurate or misleading. The information has not been independently verified by the Group, the Joint Sponsors, the Joint Bookrunners, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy. In addition, neither Sberbank nor its auditors have been involved in the preparation of this prospectus.

Sberbank is the largest credit institution in Russia and the CIS, accounting for approximately a quarter of aggregate Russian banking assets and a third of Russian banking capital. As of 8 May 2009, the Central Bank of Russia owned 57.6% of Sberbank's total share capital, making it Sberbank's controlling shareholder. Sberbank's international ratings are: "BBB" long term issuer default rating from Fitch Ratings and "Baa1" long term foreign currency deposit rating from Moody's Investors Service — both of which are at the Russian sovereign ceiling.

The following table shows selected financial information prepared in accordance with IFRS by Sberbank as at 30 September 2009 and 31 December 2008. The selected financial information has been extracted without material adjustment from, and should be read in conjunction with, Sberbank's published IFRS financial statements as at 30 September 2009 and 31 December 2008 and for the year then ended.

Balance sheets items	30 September 2009	31 December 2008
	(USD bn)	(USD bn)
Assets	224	229
Loans to customers (net)	168	173
Due to customers	166	163
Equity	26	26
Tier I capital adequacy ratio (Basel I)	11.8%	12.1%
Total capital adequacy ratio (Basel I)	18.8%	18.9%

Income statement items	Year ended 31 December 2008
	(USD bn)
Total operating revenues	18
Operating profit before provisions	9
Margin	*50.7%*
Net profit	4
Margin	*21.7%*
EPS	0.18

Sberbank's website can be accessed at: http://www.sbrf.ru/en/ (information contained on this website does not form part of this prospectus).

Should the Company need to repay the VEB Debt, it has a number of options available including possible refinancing (which is permitted provided certain criteria are met as set out in the international override agreement) and equity and subordinated debt fund raising. However, the Company also has the option to repay it through the sale of its Norilsk Nickel stake. In this regard Norilsk Nickel is the world's largest nickel miner and, as noted above, the stake in Norilsk Nickel has a market value of US$6.8 billion as of 17 December 2009, representing a 51% premium to the outstanding principal amount of the VEB Debt.

Terms of Russian and Kazakh Debt Restructuring (other than VEB)

The long term restructuring of the Russian and Kazakh debt is implemented by agreements entered into in November and December 2009 amending the loan agreements or refinancing the existing loans between each Russian and Kazakh bank (other than VEB) and the Group. On the effective date of the restructuring, the principal amount of debt outstanding under the loan agreements with the Russian and Kazakh banks (other than VEB) was: RUR20 billion under loan agreements with VTB; US$455 million and EUR140 million under loan agreements with Gazprombank; US$722 million under loan agreements with Sberbank; US$23 million under loan agreement with Surgutneftegasbank and US$8.9 million under loan agreements with Kazkommertzbank. All of the loans outstanding under such loan agreements are subject to restructuring agreements.

The maturities of the Group's obligations to Russian and Kazakh banks (other than the VEB Debt) have been extended until November or December 2013, subject to annual debt repayment targets. Upfront restructuring fees were paid to the Russian banks (other than VEB and Surgutneftegasbank) in the amount of 1% of their exposure. An upfront restructuring fee was paid to Surgutneftegasbank in the amount of 0.5% of its exposure. No restructuring fee was paid to Kazkommertzbank.

Annual debt repayment targets under the restructuring agreements with the Russian and Kazakh banks (other than VEB) are, shown on a cumulative basis, as follows (and represent part of the debt reduction targets under the international override agreement).

Date	Gazprombank		VTB	Sberbank	Surgutneftegasbank	Kazkommertzbank
	Alternative	Basic				
	(in millions)		(in billions)	(in millions)		
31 December 2010	US$35.4 and EUR10.9	US$66.0 and EUR20.3	RUR1.6	US$60.2	US$1.82	US$0.7
30 September 2011	US$93.4 and EUR28.7	US$140.3 and EUR43.2	RUR4.2	US$160.5	US$4.85	US$1.3
30 September 2012	US$139.0 and EUR42.8	US$185.9 and EUR57.2	RUR6.2	US$240.7	US$7.28	US$2.3
End of the 4 year period	US$184.1 and EUR55.7	US$231.0 and EUR71.1	RUR8.2	US$320.9	US$ 9.7	US$3.3
Debt Balance (excluding capitalized interest) to be refinanced at the end of the 4 year period	US$270.9 and EUR83.3	US$224.0 and EUR68.9	RUR11.8	US$401.1	US$13.3	US$5.5

Failure to make repayments under the basic repayment schedule relating to Gazprombank facility may result in penalties being payable by the Group on the difference between such amounts and the amounts actually repaid. Failure to make repayments under the alternative (in the event of Gazprombank) or the stipulated repayment schedule will result in an event of default.

Interest on the Russian and Kazakh bank debt (other than the VEB Debt and the loan from Surgutneftegasbank) includes a payment-in-kind component or is calculated in a way as to give an economic equivalent of part of the interest being capitalised and either is based on the CBR rate or accrues at a fixed rate varying annually or on the basis of the total net debt to the Covenant EBITDA ratio. Interest on the loan by Surgutneftegasbank accrues at a fixed rate of 8.35% and is payable in cash. The table below sets out the interest rates under various other Russian loans.

VTB		Gazprombank		Sberbank		Kazkommertzbank	
Ratio of total net debt to Covenant EBITDA	Cash/PIK	Ratio of total net debt to Covenant EBITDA	Cash/PIK	Period	Cash	Period	Cash
More than 15	CBR/3.0%	More than 15	8%/1.5%	year 1 (until March 2010)	12.5%	—	—
7.5 to 15	CBR plus 0.5%/2.5%	7.5 to 15	8.0%/1.0%	year 1 (from March 2010 until November 2010)	8%	year 1	8%
4.0 to 7.5	CBR plus 1.5%/1.5%	4.0 to 7.5	8.5%/0%	year 2	8%	year 2	8%
3.0 to 4.0	CBR plus 2.5%/0.5%	3.0 to 4.0	8.5%/0%	year 3	10.7%	year 3	10.7%
Less than 3.0	CBR plus 3%	Less than 3.0	8.5%/0%	year 4	10.7%	year 4	10.7%

Covenants and restrictions under the restructuring agreements with Russian and Kazakh banks largely mirror those under the international override agreement.

The Group provided or agreed to provide additional security to the Russian banks (other than VEB), in addition to existing security, over:

- certain fixed assets of the Russian aluminium smelters (other than the Bratsk and Krasnoyarsk aluminium smelters) and Achinsk alumina refinery split between international lenders and Russian banks according to pre-agreed percentages and security over certain fixed assets of SAYANAL;
- shares in Sayanogorsk aluminium smelter representing 7.85% of its share capital; and
- shares in each of SUAL, Novokuznetsk aluminium smelter and Achinsk alumina refinery representing 11% of the entity's share capital.

Terms of Onexim Debt Restructuring

On 1 December 2009, the Company entered into an amendment agreement in relation to a stock purchase agreement between the Company, Onexim and certain other parties relating to the acquisition of shares in Norilsk Nickel to restructure deferred consideration in the amount of US$2.7 billion plus interest accrued thereon. In accordance with the amendment agreement, the Company's obligations in respect of US$880 million plus interest accrued on the total amount of deferred consideration from 6 November 2009 until the date of effectiveness of the international override agreement (in the amount of approximately US$15 million) plus any interest capitalised thereon during the override period will be settled out of excess cashflow and other proceeds used to prepay debt (being proceeds of asset disposals and equity and subordinated and other debt fund raisings) during the term of the international override agreement on the same terms as those applicable to the international lenders with limited exceptions. The remaining obligations were converted into Shares representing approximately 6% of the Company's share capital on the date of effectiveness of the international override agreement. The deferred consideration in the amount of US$880 million (together with additional interest accrued from 6 November 2009 until the date of effectiveness of the international override agreement) will accrue interest on the same terms as international debt as set out in the international override agreement. See "— Terms of International Debt Restructuring — Margin". The interest accrued until and including 5 November 2009 on the total amount of the deferred consideration and a restructuring fee in an aggregate amount of US$275 million were or are to be paid in cash: US$160 million was paid by the Company within one day of the date of the effectiveness of the international override agreement and US$115 million will be paid out of the net proceeds of the Global Offering.

Capital Expenditure

In addition to meeting its working capital requirements, UC RUSAL expects that repayments of outstanding debt and limited capital expenditure pursuant to the terms of the restructuring agreement will represent the Company's most significant use of funds for a period of several years. See "— Contractual Commitments" for a description of the amount and term of the Company's obligations in respect of outstanding long-term debt and certain other commitments.

The table below sets forth a breakdown of the Company's capital expenditure by business segments (excluding acquisitions) in the first six months of 2009 and the years ended 31 December 2006, 2007 and 2008.

	Six months ended 30 June	Year ended 31 December		
	2009	2008	2007	2006
	(Mln. US$)			
Aluminium	49	1,104	1,198	710
Alumina	18	238	470	128
Mining and metals	—	—	—	—
Energy	4	6	7	—
Other operations	3	26	44	29
Total capital expenditure	**74**	**1,374**	**1,719**	**867**

In addition, the Company paid US$55 million, US$4,633 million, US$1,461 million and US$110 million for acquisitions in the first six months of 2009 and in 2008, 2007 and 2006, respectively.

Contractual Commitments

The Group had significant contractual commitments at 30 June 2009, as described below.

Debt Maturities

Following completion of the Group's debt restructuring, all of the Group's debt except its indebtedness to VEB has a single maturity date of 6 December 2013, four years after the effective date of the restructuring. Payments will be made earlier out of equity or debt fund raisings (including Global Offering), asset disposals or excess cash flow. In addition, there are debt reduction targets, for both the international banks and the Russian and Kazakh banks (other than VEB), as described above under "— Debt Restructuring".

The indebtedness to VEB matures on 29 October 2010. Management currently intends to seek a further extension of the VEB Debt before it falls due.

Capital Commitments

The following table represents the Group's capital commitments to make future payments under contracts and commitments as of 30 June 2009:

	Six months ended 30 June 2009
	(Mln. US$)
Capital Commitments	615

The Group has entered into contracts that result in contractual obligations primarily relating to various construction and capital repair works approximating US$615 million as at 30 June 2009. These commitments are due over a number of years. See Note 33(a) to UC RUSAL's Accountants' Report. Approximately 70% of these capital commitments relate to the Taishet aluminium smelter project (see

"Business — The Group's Operations — Aluminium Division — Approved Projects within the Aluminium Division — Medium-term — Taishet Aluminium Smelter"). During the override period, these commitments have to be funded from project financing or equity investments permitted under the international override agreement.

In March 2000, the Group acquired a 30% interest in Nikolaev alumina refinery in an auction. In accordance with the original agreement with the State Property Fund of Ukraine, the Group was obligated to construct a primary aluminium plant with a production capacity at a minimum level of 100,000 metric tonnes. In August 2004, the Group re-negotiated the terms of the agreement with the State Property Fund of Ukraine. In accordance with the revised agreement, the Group is obliged to increase the production capacity of Nikolaev alumina refinery by up to 1,600 thousand metric tonnes per year. The revised agreement nullifies the requirement stipulated in the original agreement to construct a primary aluminium plant. The amount of the capital commitment cannot be estimated reliably.

Moreover, in May 2006, the Group entered into a co-operation agreement with RusHydro. Under this co-operation agreement RusHydro and the Group jointly committed to finance the construction and future operation of the Boguchanskaya hydropower plant and an aluminium plant, which is planned to be the main customer of the hydropower plant. The parties established two joint companies with a 50:50 ownership, into which the Group committed to invest US$2,303 million by the end of 2012. As at 30 June 2009, the outstanding commitment of the Group for the construction of the aluminium plant was approximately US$1,277 million, to be committed by the end of 2011 and outstanding commitment for the hydropower station was US$448 million, to be committed by the end of 2012. See Note 20(c) to UC RUSAL's Accountants' Report. At the end of 2008, due to the economic downturn, the parties have postponed the contemplated completion date of the aluminium plant from the end of 2011 to the end of 2014.

Purchase Commitments

Commitments with third parties to purchase supplies of alumina, bauxite, other raw materials and industrial services from 2009 to 2016 under long-term supply agreements are estimated to range from US$4,137 million to US$4,483 million at 30 June 2009, depending on the actual purchase volumes and applicable prices. Commitments with related parties for purchases of alumina, bauxite and other raw materials in 2009 to 2010 under supply contracts are estimated to range from US$86 million to US$95 million at 30 June 2009. These commitments will be settled at market prices on the date of delivery.

Commitments with third parties for purchases of transportation services between 2009 to 2011 under long-term agreements were estimated to range from US$185 million to US$205 million at 30 June 2009. Commitments with related parties for purchases of transportation services in the 2009 to 2010 period under long-term agreements were estimated at US$22 million as at 30 June 2009.

Sale Commitments

Commitments with third parties for sales of alumina, bauxite and other raw materials from 2009 to 2013 are estimated to range from US$1,225 million and US$1,297 million as at 30 June 2009 and will be settled at market prices on the date of delivery. Commitments with related parties for sales of alumina, bauxite and other raw materials from 2009 to 2010 were estimated from US$373 million to US$387 million at 30 June 2009. Commitments with related parties for sales of primary aluminium from 2009 to 2016 are estimated to range from US$4,386 million to US$5,361 million at 30 June 2009. Commitments with third parties for sales of primary aluminium in the 2009 to 2016 period are estimated to range from US$1,708 million to US$4,152 million as at 30 June 2009. These commitments will be settled at market prices on the date of delivery.

Operating lease commitments

Non-cancellable operating lease rentals are payable as follows:

	31 December			30 June
	2006	2007	2008	2009
	(Mln. US$)			
Less than one year	12	12	8	12
Between one and five years	37	29	24	23
	49	41	32	35

Social Commitments

The Group contributes to the maintenance and upkeep of the local infrastructure and the welfare of its employees, including contributions toward the development and maintenance of housing, hospitals, transport services, recreation and other social needs of the regions of the Russian Federation where the Group's production facilities are located. The funding of such assistance is periodically determined by management and is appropriately capitalised or expensed as incurred.

Guarantees

The Group is a guarantor of indebtedness of several non-Group controlling shareholder related entities. At 30 June 2009, the Group, either directly or indirectly, has guaranteed promissory notes payable of US$39 million.

In addition, at 30 June 2009, the Group guaranteed the indebtedness of the joint business between the Group and OJSC RusHydro related to the Boguchansk project in an amount of US$260 million. In accordance with the international override agreement and related finance documents, it is contemplated that the underlying loan will be repaid on its final maturity date in March 2010 partially out of the proceeds of a new US$260 million loan to be provided to the Group by the existing lenders to the project and that, upon repayment, the guarantee of the promissory notes will be released. No amount has been accrued in the consolidated financial statements for the Group's obligation under these guarantees as the projected economic outflows from such guarantees is immaterial.

Contingencies and Off-Balance Sheet Items

Taxation

Russian tax, currency and customs legislation is subject to varying interpretations and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant local, regional and federal authorities. Notably, recent developments in the Russian environment suggest that the authorities are becoming more active in seeking to enforce, through the Russian court system, interpretations of the tax legislation, in particular in relation to the use of certain commercial trading structures, which may be selective for particular tax payers and different to the authorities' previous interpretations or practices. Different and selective interpretations of tax regulations by various government authorities and inconsistent enforcement create further uncertainties in the taxation environment in the Russian Federation.

Tax declarations, together with related documentation, are subject to review and investigation by a number of authorities, each of which may impose fines, penalties and interest charges. Fiscal periods remain open to review by the authorities for three calendar years preceding the year of review (one

year in the case of customs). Under certain circumstances, reviews may cover longer periods. In addition, in some instances, new tax regulations effectively have been given retroactive effect. Additional taxes, penalties and interest that may be material to the financial position of the taxpayers may be assessed in the Russian Federation as a result of such reviews.

The Group had a provision for US$63 million for income tax as at 30 June 2009. A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. At each balance sheet date the Directors have assessed the provisions for taxation and concluded that the provisions and disclosures are adequate.

In addition to the amount of income tax the Group has provided, there are certain tax positions taken by the Group where it is reasonably possible, though less than 50% likely, that additional tax may be payable upon examination by the tax authorities or in connection with ongoing disputes with tax authorities. The Group's best estimate of the aggregate maximum of additional amounts that it is reasonably possible may become payable if these tax positions were not sustained is US$516 million as at 30 June 2009. This amount includes approximately US$160 million in respect of claims (including fines and penalties) issued by the Russian tax authorities as a result of tax audits for 2005-2006, and another US$24 million issued by the other tax authorities, as a result of tax audits for those and other years, which in each case are still outstanding and subject to dispute in court. See Note 34(a) to UC RUSAL's Accountants' Report. These claims issued by the Russian tax authorities are in connection with allegations of understatement of taxable income and, as a result, underpayment of income tax, overstatement of expenses recognized for tax purposes (including non-deductible education expenses, travelling expenses and consulting expenses), VAT disputes, recoverability of export VAT, determination of the applicable tax base and other fines and penalties. The remainder of the US$516 million relates to reasonably possible additional tax that may be payable upon examination by the tax authorities.

The Group's major trading companies are incorporated in low tax jurisdictions outside Russia and a significant portion of the Group's profit is realised by these companies. The Directors believe that these companies are not subject to taxes outside their countries of incorporation and that the commercial terms of transactions between them and other Group companies are acceptable to the relevant tax authorities. The Group's consolidated financial statements are prepared on this basis. However, as these companies are involved in a significant level of cross border activities, there is a risk that Russian tax authorities may challenge the treatment of cross-border transactions and assess additional tax charges. It is not possible to quantify the financial exposure resulting from this risk.

Estimating additional tax which may become payable is inherently imprecise. It is therefore possible that the amount ultimately payable may exceed the Group's best estimate of the maximum reasonably possible liability; however, the Group considers that the likelihood that this will be the case is remote.

Environmental Contingencies

The Group and its predecessor entities have operated in the Russian Federation, Ukraine, Jamaica, Guyana, Republic of Guinea and the European Union for many years, and certain environmental problems have developed. Governmental authorities are continually considering environmental regulations and their enforcement and the Group periodically evaluates its obligations related thereto. As obligations are determined, they are recognised immediately. The outcome of environmental liabilities under proposed or any future legislation, or as a result of stricter enforcement of existing legislation, cannot reasonably be estimated. Under current levels of enforcement of existing legislation, the Directors believe there are no possible liabilities that will have a material adverse effect on the financial position or the operating results of the Group. However, the Group

anticipates undertaking significant capital projects to improve its future environmental performance and to bring it into full compliance with current legislation. For a discussion of the Group's expected environmental capital expenditures, see "— Capital Expenditure" and "Business — Environmental, Health and Safety Matters".

In addition, the Group had recorded provisions of US$273 million at 30 June 2009 relating to site reclamation obligations. For information concerning risk-adjusted expected expenditures in relation to such obligations, see Note 30(b) to UC RUSAL's Accountants' Report.

Legal Contingencies

The Group is the named defendant in a number of lawsuits as well as a named party in other proceedings arising in the ordinary course of business. See "Business — Litigation". In addition to the amounts that the Group has provided for legal claims (US$94 million at 30 June 2009), there are an additional US$124 million in legal claims with respect to which management assesses a cash outflow as possible. See Note 30(c) to UC RUSAL's Accountants' Report.

The Directors have assessed the likely outcome of such contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have a materially adverse effect on the financial position or the operating results of the Group.

Profit Forecast

The Directors believe that, in the absence of unforeseen circumstances and on the bases and assumptions set out in Appendix IV — Profit Forecast, the forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 (which includes the estimated net gain of US$1,067 in relation to the debt restructuring in December 2009) is unlikely to be less than US$434 million (approximately HK$3,366 million) and the pro forma forecast earnings per share for the year ending 31 December 2009 is unlikely to be less than US$0.03 (approximately HK$0.23).

The forecast of the consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 is based on the audited consolidated financial results of the Group for the six months ended 30 June 2009, the consolidated results from the unaudited financial information of the Group for the nine months ended 30 September 2009 (which include the audited consolidated financial results for the six months ended 30 June 2009), and a forecast of the consolidated results of the Group for the remaining three months ending 31 December 2009. The profit forecast has been presented on the basis of the accounting policies consistent in all material respects with those currently adopted by our Group as summarised in the Accountants' Report, the text of which is set out in Appendix I to this prospectus.

The unaudited pro forma forecast earnings per Share is calculated by dividing the forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 by the adjusted weighted average number of Shares outstanding of 14,353,757,032 Shares during the entire year. The adjusted weighted average number of Shares outstanding reflects the actual weighted average number of Shares outstanding prior to the debt restructuring of 11,628 Shares or 12,690,128,270 Shares on an adjusted basis to reflect the effect of (a) the share subdivision on 24 December 2009; (b) the capitalisation issue of the Company's ordinary shares in conjunction with the Global Offering; (c) 809,781,730 Shares issued on 7 December 2009 pursuant to the conversion of a portion of the obligations to Onexim, weighted for the portion of the period that such Shares were outstanding and adjusted for the share subdivision on 24 December 2009 and capitalization issue in conjunction with the Global Offering; and (d) 1,610,292,840 Shares to be issued

pursuant to the Global Offering as if the Global Offering had been completed on 1 January 2009, without taking into account the Over-allotment Option or any Shares that may be allotted and issued or repurchased by our Company pursuant to the mandate set out in the paragraph headed "Statutory and General Information" in Appendix VIII to this prospectus.

Financial Ratios

Gearing

The Group's gearing ratio, which is the ratio of total debts (including both long-term and short-term borrowings and bonds outstanding) to the total assets, as at 31 December 2006, 2007 and 2008 and 30 June 2009 was 49.3%, 39.2%, 57.8%, and 61.6%, respectively. Save for the decrease in the gearing ratio in 2007, the gearing ratio increased during the track record period as a result of the increase in total debt (including long-term and short-term borrowings and bonds outstanding). The decrease in the gearing ratio in 2007 was related primarily to the increase in total assets following the acquisition of SUAL and the Glencore Businesses, which was part funded through the issue of new equity.

Return on Equity

The Group's return on equity, which is the amount of net profit as a percentage of total equity, as at 31 December 2006, 2007 and 2008 and 30 June 2009 was 92.3%, 27.7%, (133.3%) and (28.2%), respectively. Return on equity decreased significantly during the three years ended 31 December 2008 and six months ended 30 June 2009 as a result of the decrease in net profit during the same period. The substantial decline in return on equity for 2007, despite the relatively small decrease in net profit, was primarily due to the increase in equity following the acquisition of SUAL and the Glencore Businesses, which was part funded through the issue of new equity.

Interest Coverage Ratio

The Group's interest coverage ratio, which is the ratio of our earnings before interest and taxes and net interest, for the year ended 31 December 2006 and 2007 was 37.33 and 9.21, respectively. Interest expense was well covered in 2006 and 2007. Interest coverage was negative for 2008 and the first six months of 2009 as the Company recorded a loss before interest and tax; as a result, no interest coverage ratio was presented for these two periods.

Quick Ratio

The Group's quick ratio, which is the ratio of current assets minus inventories to current liabilities, as at 31 December 2006, 2007 and 2008 and 30 June 2009 was 0.7, 0.6, 0.1 and 0.1, respectively. Quick ratios decreased during the three years ended 31 December 2008 and six months ended 30 June 2009, primarily as a result of the significant increase in short-term loans and borrowings, and the deterioration in financial performance and cash flow in 2008 and the first six months of 2009.

Net Debt/Adjusted EBITDA

The Group's Net Debt to Adjusted EBITDA ratio, as at 31 December 2006, 2007 and 2008 and 30 June 2009 was 1.2:1, 1.8:1, 3.7:1 and 46.6:1, respectively. The Group's Net Debt to Adjusted EBITDA ratio differs from its total net debt to Covenant EBITDA ratio. The increase in Net Debt to Adjusted EBITDA ratio over the three years ended 31 December 2008 and six months ended 30 June 2009 was a result of the increase in total debt (including long-term and short-term borrowings and bonds outstanding).

Quantitative and Qualitative Disclosures About Market Risk

The Group is exposed in the ordinary course of its business to risks related to changes in interest rates and foreign exchange rates. The Group does not currently use mechanisms to hedge these risks.

Interest Rate and Foreign Currency Risk

The Group has in place primarily floating rate financing arrangements and as such the Group is exposed to changes in interest rates. The Group bears interest rate risk relating to interest payable associated with its loans.

The foreign exchange risks of the Group arise from the fact that the Group's operations are carried out primarily in the Russian Federation and, as such, a significant portion of the Group's business is transacted in Roubles, while a major portion of the Group's revenues are denominated and received primarily in U.S. dollars. The Group does not engage in any significant hedging activity to mitigate this risk, as hedging and derivative instruments are generally not available in the Russian Federation in the required volumes. The following table shows the Company's key cost lines according to currency denomination.

Cost category	% of total (US$)	Currency denomination
Cost of alumina and bauxite	21%	US$ denomination
Cost of other raw materials and other costs	31%	US$ denominated/local currency
Energy costs	26%	Local currency, local currency use formula tied to LME US$ price
Personnel expense	12%	Local currency
Repairs and maintenance	2%	Local currency
Depreciation and amortisation	8%	Majority local currency

The Group's international debt is denominated in US dollars and Euros and bears interest at a floating rate based on LIBOR (or another existing base rate, depending mainly on the currency of the original loan). The Group's Russian and Kazakh bank debt (other than VEB) is denominated in Euros, US dollars and Roubles and bears interest at a floating rate based on the CBR rate or at a fixed rate varying annually or on the basis of the Group's total net debt to Covenant EBITDA ratio. The VEB debt is denominated in US dollars and bears interest at a fixed rate of 8.49% per annum.

The following table indicates the instantaneous change in the Group's profit/(loss) before taxation (and retained profits/(accumulated losses)) that would have arisen if foreign exchange rates to which the Group has significant exposure at the balance sheet date had changed at that date, assuming all other risk variables remained constant.

	Foreign currency sensitivity analysis — increase/(decrease) in profit/(loss) before tax									
	Six months ended 30 June				Financial year ended 31 December					
(US$ in millions)	Increase/ (decrease) in FX rate	2009	Increase/ (decrease) in FX rate	2008	Increase in FX rate	2008	Increase in FX rate	2007	Increase/ (decrease) in FX rate	2006
US$ vs. RUR	(7%)	(23)	(8%)	(31)	(8%)	(29)	5%	7	5%	(13)
US$ vs. EUR	5%	(14)	5%	(5)	5%	(7)	5%	(6)	5%	(3)
US$ vs. other currencies	(5%)	1	(5%)	3	(5%)	(2)	5%	(2)	5%	(1)
Effect on profit/(loss) before taxation		**(36)**		**(33)**		**(38)**		**(1)**		**(17)**

Critical Accounting Policies

The preparation of the Group's consolidated financial statements requires management to make judgments and estimates and form assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the financial statements, and the reported revenue and costs during the periods presented. On an ongoing basis, management evaluates its judgments and estimates in relation to assets, liabilities, contingent liabilities, revenue and costs.

Management bases its judgments and estimates on historical experience and on other factors it believes to be appropriate and reasonable under the circumstances, the results of which form the basis of the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions.

The Group has identified the following critical accounting policies under which significant judgments, estimates and assumptions are made and where actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods.

Property, Plant and Equipment — Recoverable Amount

In accordance with the Group's accounting policy, each asset or cash-generating unit is evaluated every reporting period to determine whether there are any indications of impairment. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss recognised to the extent that carrying amount exceeds recoverable amount. The recoverable amount of an asset or cash-generating group of assets is measured at the higher of fair value less costs to sell and value in use.

Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties, and is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal.

Value in use is also generally determined as the present value of the estimated future cash flows, but only those expected to arise from the continued use of the asset in its present form and its eventual disposal. Present values are determined using a risk-adjusted pre-tax discount rate appropriate to the risks inherent in the asset. Future cash flow estimates are based on expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors), reserves (see "— Bauxite Reserve Estimates"), operating costs, restoration and rehabilitation costs and future capital expenditure. This policy requires management to make these estimates and assumptions that are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all of the carrying value of the assets may be impaired and the impairment would be charged against the income statement.

Inventories — Net Realisable Value

The Group recognises write-down of inventories based on an assessment of the net realisable value of the inventories. A write-down is applied to the inventories where events or changes in circumstances indicate that the net realisable value is less than cost. The determination of net realisable value requires the use of judgement and estimates. Where the expectation is different from the original estimates, such difference will impact carrying value of the inventories and write-down of inventories charged to income statement in the periods in which such estimate has been changed.

Goodwill — Recoverable Amount

In accordance with the Group's accounting policy, goodwill is allocated to the Group's Aluminium segment as it represents the lowest level within the Group at which the goodwill is monitored for internal management purposes and is tested for impairment annually by preparing a formal estimate of recoverable amount. The recoverable amount is estimated as the value in use of the Aluminium segment.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to goodwill.

Investments in Associates and Jointly Controlled Entities — Recoverable Amount

In accordance with the Group's accounting policy, each investment in associate or jointly controlled entities is evaluated every reporting period to determine whether there are any indications of impairment after application of equity method of accounting. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an investment in associate or jointly controlled entities is measured at the higher of fair value less costs to sell and value in use.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to investments in associates or jointly controlled entities. In addition to the considerations described above, the Group may also assess the estimated future cash flows expected to arise from dividends to be received from the investment, if such information is available and considered reliable.

Legal Proceedings

In the normal course of business the Group may be involved in legal proceedings. Where management considers that it is more likely than not those proceedings will result in the Group compensating third parties, a provision is recognised for the best estimate of the amount expected to be paid. Where management considers that it is more likely than not that proceedings will not result in the Group compensating third parties or where in rare circumstances it is not considered possible to provide a sufficiently reliable estimate of the amount expected to be paid, no provision is made for any potential liability under the litigation but the circumstances and uncertainties involved are disclosed as contingent liabilities.

The assessment of the likely outcome of legal proceedings and the amount of any potential liability involves significant judgement. As law and regulations in many of the countries in which the Group operates are continuing to evolve, particularly in the areas of taxation, sub-soil rights and protection of the environment, uncertainties regarding litigation and regulation are greater than those typically found in countries with more developed legal and regulatory frameworks.

Provision for Restoration and Rehabilitation

The Group's accounting policy requires the recognition of provisions for the restoration and rehabilitation of each site when a legal or constructive obligation exists to dismantle the assets and restore the site. The provision recognised represents management's best estimate of the present value of the future costs required. Significant estimates and assumptions are made in determining the amount of restoration and rehabilitation provisions. Those estimates and assumptions deal with uncertainties such as: changes to the relevant legal and regulatory framework; the magnitude of possible contamination; and the timing, extent and costs of required restoration and rehabilitation activity. These uncertainties may result in future actual expenditures differing from the amounts currently provided.

The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs for operating sites are recognised in the balance sheet by adjusting both the restoration and rehabilitation asset and provision. Such changes give rise to a change in future depreciation and interest charges. For closed sites, changes to estimated costs are recognised immediately in the income statement.

Taxation

The Group's accounting policy for taxation requires management's judgment in assessing whether deferred tax assets and certain deferred tax liabilities are recognised on the balance sheet. Deferred tax assets, including those arising from carried forward tax losses, capital losses and temporary differences, are recognised only where it is considered more likely than not that they will be recovered, which is dependent on the generation of sufficient future taxable profits. Deferred tax liabilities arising from temporary differences in investments, caused principally by retained earnings held in foreign tax jurisdictions, are recognised unless repatriation of retained earnings can be controlled and are not expected to occur in the foreseeable future.

Assumptions about the generation of future taxable profits and repatriation of retained earnings depend on management's estimates of future cash flows. These depend on estimates of future production and sales volumes, commodity prices, reserves, operating costs, restoration and rehabilitation costs, capital expenditure, dividends and other capital management transactions. Assumptions are also required about the application of income tax legislation. These estimates and assumptions are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of deferred tax assets and deferred tax liabilities recognised on the balance sheet and the amount of other tax losses and temporary differences not yet recognised. In such circumstances, some or all of the carrying amount of recognised deferred tax assets and liabilities may require adjustment, resulting in a corresponding credit or charge to the income statement.

The Group generally provides for current tax based on positions taken (or expected to be taken) in its tax returns. Where it is more likely than not that upon examination by the tax authorities of the positions taken by the Group additional tax will be payable, the Group provides for its best estimate of the amount expected to be paid (including any interest and/or penalties) as part of the tax charge.

Bauxite Reserve Estimates

Reserves are estimates of the amount of product that can be economically and legally extracted from the Group's properties. In order to calculate reserves, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates.

The Group determines and reports ore reserves under the Australasian Code for Reporting of Mineral Resources and Ore Reserves (December 2004), known as the JORC Code. The JORC Code requires the use of reasonable investment assumptions to calculate reserves.

Estimating the quantity and/or grade of reserves requires the size, shape and depth of ore bodies or fields to be determined by analysing geological data such as drilling samples. This process may require complex and difficult geological judgments and calculations to interpret the data.

Since economic assumptions used to estimate reserves change from period to period, and since additional geological data is generated during the course of operations, estimates of reserves may change from period to period.

Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- Asset carrying values may be affected due to changes in estimated future cash flows.
- Depletion charged in the income statement may change where such charges are determined by the units of production basis or where the useful economic lives of assets change.
- Decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities.

Exploration and Evaluation Expenditure

The Group's accounting policy for exploration and evaluation expenditure results in certain items of expenditure being capitalised for an area of interest where it is considered likely to be recoverable by future exploitation or sale or where the activities have not reached a stage which permits a reasonable assessment of the existence of reserves. This policy requires management to make certain estimates and assumptions as to future events and circumstances, in particular whether an economically viable extraction operation can be established. Any such estimates and assumptions may change as new information becomes available. If, after having capitalised the expenditure under the policy, a judgment is made that recovery of the expenditure is unlikely, the relevant capitalised amount will be written off to the income statement.

Development Expenditure

Development activities commence after project sanctioning by the appropriate level of management. Judgement is applied by management in determining when a project has reached a stage at which economically recoverable reserves exist such that development may be sanctioned. In exercising this judgement, management is required to make certain estimates and assumptions similar to those described above for capitalised exploration and evaluation expenditure. Any such estimates and assumptions may change as new information becomes available. If, after having commenced the development activity, a judgment is made that a development asset is impaired, the appropriate amount will be written off to the income statement.

Defined Benefit Pension and Other Post-Retirement Schemes

For defined benefit schemes, the cost of benefits charged to the income statement includes current and past service costs, interest costs on defined benefit obligations and the effect of any curtailments or settlements, net of expected returns on plan assets. An asset or liability is consequently recognised in the balance sheet based on the present value of defined obligations, less any unrecognised past service costs and the fair value of plan assets.

The accounting policy requires management to make judgments as to the nature of benefits provided by each scheme and thereby determine the classification of each scheme. For defined benefit schemes, management is required to make annual estimates and assumptions about future returns on classes of scheme assets, future remuneration changes, employee attrition rates, administration costs, changes in benefits, inflation rates, exchange rates, life expectancy and expected remaining periods of service of employees. In making these estimates and assumptions, management considers advice provided by external advisers, such as actuaries. Where actual experience differs to these estimates, actuarial gains and losses are recognised directly in the statement of comprehensive income.

Fair Values of Identifiable Net Assets of Acquired Companies

The Group's policy is to engage an independent appraiser to assist in determining fair values of identifiable net assets of acquired companies for all significant business combinations.

A variety of valuation techniques is applied to appraise the acquired net assets depending on the nature of the assets acquired and available market information. The details of methods used and assumptions made to determine fair values of property, plant and equipment are disclosed in Note 17, intangible assets are disclosed in Note 18, provisions are disclosed in Note 30 and financial investments are disclosed in Note 21 of UC RUSAL's Accountants' Report. Other assets and liabilities acquired including provisions are evaluated in accordance with the Group's applicable accounting policies disclosed in Note 3 of UC RUSAL's Accountants' Report.

Going concern

The Group was in breach of a number of covenants relating to its debt agreements at 31 December 2008 and subsequently suspended servicing certain loans and borrowings. See Note 2(d) to UC RUSAL's Accountants' Report. On 7 December 2009, the Group completed restructuring negotiations with its lenders. The Directors believe that the restructuring terms will allow the Group successfully to continue its operations and repay its debts as and when they fall due. Accordingly, UC RUSAL's Accountants' Report has been prepared on a going concern basis.

However, the validity of the going concern assumption is premised on future events, the outcome of which is inherently uncertain, being dependent on the Group's ability to generate cash inflows from future operations. If the repayment of the whole of the Group's debt should be accelerated, for example because a relevant member of the Group is unable to comply with or satisfy any of the terms or conditions of or triggers any event of default under, the debt restructuring or other debt obligations, or if the Company should be unable to extend or refinance or repay the VEB Debt as and when it falls due, it may cease to continue as a going concern. UC RUSAL's Accountants' Report does not include any adjustments relating to the recoverability and classification of recorded asset amounts or to amounts and classification of liabilities that may be necessary if the Group were unable to continue as a going concern.

DISCLOSURE PURSUANT TO RULES 13.13 TO 13.19 OF THE LISTING RULES

In the second half of 2008, as a result of the global liquidity crisis which resulted in, among other things, contractions in many sectors of the real economy and a sharp drop in aluminium prices, the Group was in breach of a number of covenants relating to its debt agreements and subsequently suspended servicing certain loans and borrowings. At 30 June 2009, the Group's current liabilities exceeded its current assets by US$14,397 million. On 7 December 2009, the Group completed restructuring negotiations with its lenders in order to establish financial stability and to put the necessary arrangements in place to allow the Group to meet its obligations when they fall due as part of ongoing operations. Details of the debt restructuring arrangements are set out in "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring" of this prospectus. Save as disclosed in this paragraph, we confirm that as of the Latest Practicable Date, we are not aware of any circumstances that would give rise to a disclosure requirement under Rules 13.13 to 13.19 of the Listing Rules.

DISTRIBUTABLE RESERVES

As of 30 June 2009, the Company had reserves available for distribution to its shareholders in the amount of US$2,958 million. Please refer to Note 27 (e) of UC RUSAL's Accountants' Report.

PROPERTY INTERESTS AND PROPERTY VALUATION REPORT

The value of the Group's selected real estate property interests as of 30 September 2009 valued by American Appraisal, an independent property valuer of our Company, was US$1,744 million. There was a net revaluation surplus, representing the excess market value of the properties over their book value as of 30 September 2009. Further details of the Group's property interests and the text of the letter and valuation certificates of these selected property interests prepared by American Appraisal are set out in Appendix V to this prospectus.

Disclosure of the reconciliation of the valuation of the interests in properties subject to valuation as of 30 September 2009 and such property interests in our consolidated statements of financial position as of 30 June 2009 as required under Rule 5.07 of Listing Rules is set forth below:

	US$ (in millions)
Net book value of property interests as of 30 June 2009	
Smelters	1,532
Refineries	498
Other Production Facilities in Current use	105
Non-Core Downstream Operations	94
Production Facilities in PRC	5
Total as of 30 June 2009	2,234
Net movement for the period from 1 July 2009 to 30 September 2009	14
Net book value as of 30 September 2009	2,248
Properties and buildings that have not been valued	(839)
Properties and buildings that have been valued	1,409
Valuation surplus as of 30 September 2009	335
Valuation as of 30 September 2009	1,744

NO MATERIAL ADVERSE CHANGE

The Directors confirm that there has been no material adverse change in the financial or trading position or prospects since 30 June 2009, being the date of the latest consolidated financial statements as set out in UC RUSAL's Accountants' Report included in Appendix I to this prospectus.

ADDITIONAL INTERIM REPORTING AFTER LISTING

In addition to compliance with the financial reporting requirements under the Listing Rules, the Company's proposed quarterly disclosure for the first and third quarters of each financial year is intended to include:

(i) Qualitative interim management statements, which will include (a) an explanation of material events and transactions that have taken place since the start of the relevant period and their impact on the issuer's financial condition; and (b) a general description of the financial position and performance of the group during that time, and quarterly revenues of each business segment of the Company in compliance with European Transparency Directive and French laws and regulations which would apply to the Company as a result of its listing on Euronext Paris.

(ii) Unaudited consolidated summary IFRS financial information for the quarter and on a cumulative basis for the fiscal year including:

(a) Narrative describing the results for the cumulative results for the fiscal year and the quarter;

(b) Narrative describing the liquidity and capital resources of the Company;

(c) Information on aluminium and alumina production volumes;

(d) Information on aluminium and alumina sales volumes;

(e) Condensed profit and loss statement under IFRS in US$;

(f) Condensed balance sheet under IFRS in US$;

(g) Condensed cashflow statement under IFRS in US$,

(iii) A statement in connection with the Company's compliance with the financial covenants under the international override agreement.

GENERAL

The Board consists (subject to the appointment of Mr. Barry Cheung and Mr. Igor Ermilin with effect from the Listing Date) of 18 Directors, comprising three executive Directors, 11 non-executive Directors and four independent non-executive Directors.

The Directors of the Company are as follows:

Name	Age	Position
Oleg Deripaska	41	*Chief Executive Officer, Executive Director*
Petr Sinshinov	55	*Deputy Chief Executive Officer, Executive Director*
Tatiana Soina	47	*Chief Financial Officer, Executive Director*
Victor Vekselberg	52	*Chairman and Non-executive Director*
Dmitry Afanasiev	40	*Non-executive Director*
Len Blavatnik	52	*Non-executive Director*
Ivan Glasenberg	52	*Non-executive Director*
Vladimir Kiryukhin	52	*Non-executive Director*
Alexander Popov	37	*Non-executive Director*
Dmitry Razumov	34	*Non-executive Director*
Jivko Savov	42	*Non-executive Director*
Vladislav Soloviev	36	*Non-executive Director*
Anatoly Tikhonov	40	*Non-executive Director*
Igor Ermilin	49	*Non-executive Director*
Peter Nigel Kenny	61	*Independent Non-executive Director*
Philip Lader	63	*Independent Non-executive Director*
Elsie Leung Oi-sie	70	*Independent Non-executive Director*
Barry Cheung Chun-yuen	51	*Independent Non-executive Director*

The Directors of the Company who have held in the three years prior to the listing, or are currently holding, directorships in public companies that have securities listed on any securities market in Hong Kong or overseas are as follows:

Name	Listed Company	Period of Appointment	Stock Exchange	Current Role with Listed Company
Oleg Deripaska	Norilsk Nickel	30 June 2008 - 26 December 2008	MICEX RTS	None
Dmitry Afanasiev	Norilsk Nickel	26 December 2008 - 30 June 2009	MICEX RTS	None
Len Blavatnik	Warner Music Group Corp.	2004 - 2008	New York Stock Exchange ("NYSE")	None
Ivan Glasenberg	Xstrata plc	February 2002 - present	LSE SIX	Member of Board of Directors
	Minara Resources Limited	December 2000 - present	Australian Stock Exchange	Member of Board of Directors

Name	Listed Company	Period of Appointment	Stock Exchange	Current Role with Listed Company
Peter Nigel Kenny . . .	PartyGaming Plc.	May 2005 - December 2006	LSE	None
	First City Monument Bank plc	July 2007 - present	Lagos Stock Exchange	Member of Board of Directors
	JP Morgan Emerging Markets Investment Trust plc	September 2008 - present	LSE	Member of Board of Directors
Dmitry Razumov	Norilsk Nickel	June 2009 - present	MICEX RTS	Member of Board of Directors
	OPIN	2008 - present	MICEX RTS	Member of Board of Directors
Vladislav Soloviev. . .	Norilsk Nickel	26 December 2008 - present	MICEX RTS	Member of Board of Directors, Member of the Board's Strategy Committee, Chairman of the Board's Budget Committee
	OJSC OGK-3	6 February 2009 - present	MICEX RTS	Member of Board of Directors, Member of the Board's Strategy Committee, Chairman of the Board's Budget Committee
Barry Cheung Chun-yuen	Titan Petrochemicals Group Limited	9 July 2004 - 23 July 2008	Hong Kong Stock Exchange	None
Philip Lader	WPP plc	1 February 2001 - present	LSE NASDAQ	Non-executive Chairman
	AES Corporation	1 February 2001 - present	NYSE	Member of Board of Directors
	Marathon Oil Corporation	1 February 2002 - present	NYSE	Member of Board of Directors
	Songbird Estates Plc.	1 June 2006 - present	AIM	Member of Board of Directors

Save as disclosed in this prospectus, none of our Directors has had any other directorships in the last three years in public companies the securities of which are listed on any securities market in Hong Kong or overseas.

Each of the Directors can be contacted at the Company's registered address at Whiteley Chambers, Don Street, St Helier JE4 9WG, Jersey.

As at the date of this prospectus the Board has nine Directors nominated by En+, two Directors nominated by SUAL Partners, one Director nominated by Glencore and one Director nominated by Onexim. VEB also has the right under the loan agreement with the Company to nominate for appointment one Director.

There are four independent non-executive Directors on the Board. Two independent non-executive Directors, Peter Nigel Kenny and Philip Lader, have acted in such capacity since the acquisition of SUAL and the Glencore Businesses in March 2007. A majority of the members of each of the Audit Committee, Remuneration Committee and Corporate Governance and Nominations Committee are independent non-executive Directors. See "— Committees — Board Committees".

Notwithstanding that a Director may have been nominated to the Board by a particular shareholder and irrespective of whether that Director is an executive, non-executive and/or independent Director, every Director of a Jersey company owes the same fiduciary duties under Jersey law to the company as a whole including a statutory obligation in exercising their powers and discharging their duties to act honestly and in good faith with a view to the best interests of the company. Under common law, the Directors have a general duty to act in good faith, exercise their powers for a proper purpose and manage conflicts of interest appropriately.

Pursuant to the Company's Articles of Association, if any Director has an interest that conflicts with the interests of the Company, that Director is required to disclose such conflict at the earliest Board meeting at which it is practicable to do so. Save in limited circumstances, a Director shall not vote on any resolution concerning any contract, transaction, arrangement, or any other proposal in which he has a material interest. If any question arises at any meeting as to the materiality of a Director's interest (other than an independent non-executive Director's interest) or as to the entitlement of any Director (other than an independent non-executive Director) to vote, and such question is not resolved by his voluntarily agreeing to abstain from voting, such question shall be referred to the independent non-executive Directors present at the meeting. The independent non-executive Directors' ruling, by simple majority of those independent non-executive Directors present at the meeting, in relation to the Director concerned shall be final and conclusive. See Appendix VII for a summary of the Company's Articles of Association.

The roles of the Chairman and the CEO are not exercised by the same individual. Appropriate training and an induction programme is undertaken in respect of all Directors on appointment and, subsequently, such briefing and professional development as is necessary, taking into account existing qualifications and experience.

The Directors understand that the Board is collectively responsible for the management and operations of the Company. The Directors believe, based on due and careful enquiry and in the context of the requirements of the Listing Rules, that each member of the Board has the character, experience and integrity and is able to demonstrate a standard of competence commensurate with his or her position as a director of a listed issuer of the Hong Kong Stock Exchange.

Biographies of each of the Directors are set out below:

Executive Directors

Oleg Deripaska, aged 41 (*Chief Executive Officer, Executive Director*)

Oleg Deripaska was appointed as Executive Director and Chief Executive Officer of the Company, Chief Executive Officer and head of the Moscow Branch of RUSAL Global Management B.V. in January 2009 and he has been a member of the Company's Board of Directors since 26 March 2007. He is responsible for the development and implementation of the Company's strategy as both an energy and metals corporation that meets best international standards for production, product quality, environment, industrial safety and corporate governance. Mr. Deripaska is also focused on ensuring the sustainable development of the Company in the context of the global financial crisis and on implementing a series of crisis management measures.

Having raised his initial capital by trading in metals, Mr. Deripaska acquired shares in the Sayanogorsk aluminium smelter and became its Director General in 1994. In 1997, Mr. Deripaska initiated the creation of the Sibirsky Aluminium Group LLC, which was Russia's first vertically integrated industrial group. Between 2000 and 2003, Mr. Deripaska was Director General of Russian Aluminium OJSC, which was set up as a result of the combination of aluminium smelters and alumina refineries of Sibirsky Aluminium and the Sibneft oil company. From October 2003 to February 2007 he held the position of Chairman of the Board in Russian Aluminium OJSC. Since January 2003, he has been a director of Basic Element Limited. Since September 2003, he has held the position of Chairman of the Supervisory Board of Company Bazovy Element LLC and from March 2009 onwards he has held the position of General Director of that same company. He has been the Chairman of the Board of OJSC "Russian Machines" (formerly "RusPromAvto LLC") since November 2006. He was a director of Transstroy Engineering & Construction Company LLC from April 2008 to April 2009.

Mr. Deripaska was born in the city of Dzerzhinsk in 1968. In 1993, he graduated with distinction from the Physics Department of Moscow State University, Lomonosov, and in 1996 he received a degree from Plekhanov Academy of Economics. Mr. Deripaska is Vice President of the Russian Union of Industrialists and Entrepreneurs and Chairman of the Executive Board of the Russian National Committee of the International Chamber of Commerce and a member of the Competitiveness and Entrepreneurship Council, an agency of the Russian Government. In 2004, Russian President Vladimir Putin appointed Mr. Deripaska to represent the Russian Federation on the Asia-Pacific Economic Cooperation Business Advisory Council. In 2007, he was appointed Chairman of the Russian section of the Council. He sits on the Board of Trustees of many institutions including the Bolshoi Theatre and the School of Economics at Moscow State University, Lomonosov and is co-founder of the National Science Support Foundation and the National Medicine Fund. His charity foundation, Volnoe Delo supports a wide range of projects including initiatives to help children, improve medical care and increase educational opportunities throughout Russia.

Mr. Deripaska received the Order of Friendship in 1999, a state award from the Russian Federation. He was named businessman of the year in 1999, 2006, 2007 by Vedomosti, a leading Russian business daily published in partnership with The Wall Street Journal and The Financial Times.

Mr. Deripaska is beneficially interested in 660,000 Shares through En+ as at the date of this prospectus. Save as aforesaid, Mr. Deripaska has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Deripaska is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, Mr. Deripaska has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the

past three years. Mr. Deripaska was nominated as an executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Petr Sinshinov, aged 55 (*Deputy Chief Executive Officer and Executive Director*)

Petr Sinshinov was appointed a member of UC RUSAL's Board on 23 November 2009. As Deputy Chief Executive Officer of the Moscow Branch of RUSAL Global Management B.V., he oversees the general expenditure cutting and production cost reduction activities. His responsibilities also include seeking effective alternative solutions to the Group's procurement and purchasing schemes and optimising transportation and logistics costs.

From October 2006 until 2008, Mr. Sinshinov was the Chief Executive Officer of Transmash Holding. In 2005-2006 he held several executive positions at Kuzbassrazrezugol where he served on the board of directors starting from the beginning of 2006. From 2002 to 2003 Mr. Sinshinov was the Chief Executive Officer of Ruspromavto. In 2000-2001, he was the Chief Executive Officer of Soyuzmetalresurs, a holding company for several industrial operations. From 1995 to 2000 Mr. Sinshinov was the commercial director and deputy managing director of the Sayanogorsk aluminium smelter. In 1977 he began his professional career at the Norilsk mining plant. Mr. Sinshinov was born in 1954. Mr. Sinshinov graduated from the Institute of Non-Ferrous Metals in Krasnoyarsk in 1977.

Mr. Sinshinov has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed herein, Mr. Sinshinov is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Mr. Sinshinov has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Sinshinov was nominated as an executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Tatiana Soina, aged 47 (*Chief Financial Officer and Executive Director*)

Tatiana Soina was appointed a member of the UC RUSAL Board with effect from 9 November 2009. Tatiana Soina was appointed head of the Finance Directorate of the Moscow Branch of RUSAL Global Management B.V. in January 2009. In addition to financial planning and auditing responsibilities, she is in charge of business transaction analysis and oversees information technology (SAP/R3) and efficiency management systems. Previously, Ms. Soina was Director of the Budget and Planning Department, first of RUSAL, from 2003 onwards, then of UC RUSAL upon its establishment in March 2007. Between 2000 and 2002, she was Deputy Director of the Budget and Planning Department. From 1986 to 1991 she worked as an economist in various Russian and foreign companies and between 1999 and 2000 she headed the economic and planning department at 'Siberian Aluminium'. Ms. Soina was born in 1962. In 1983 she graduated from the Kiev State University Institute of National Economy, majoring in Economics. In 2004 she was awarded an MBA diploma from the Higher School of Economics in Moscow with a focus on 'General and Strategic Management'.

Ms. Soina has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Ms. Soina is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Ms. Soina has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Ms. Soina was nominated as an Executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Non-executive Directors

Victor Vekselberg, aged 52 (*Chairman and Non-executive Director*)

Victor Vekselberg was appointed non-executive Director and Chairman of the UC RUSAL Board on 26 March 2007. From January 2003 to March 2007, Victor Vekselberg was Chairman of the Board at SUAL, where he was previously President from 2000 to 2003. In October 2003, after the establishment of TNK-BP Limited, Mr. Vekselberg became the Managing Director for Production and Technologies and joined the TNK-BP Limited board of directors. As at the date of this prospectus, while remaining a member of the TNK-BP Limited board of directors, he also holds the position of Chairman of the Supervisory Committee of the RENOVA Group, Executive Director for Gas Business Development of OAO TNK-BP Management and Chairman of the board of directors of "RUSIA Petroleum". From April 2002 through October 2003 he was the Chairman of the Management Board of TNK. In 1996, Mr. Vekselberg created SUAL, which incorporated the Irkutsk and Urals aluminium smelters, and he held the position of Chief Executive Officer of SUAL from 1996 to 2000. In 1990, he became one of the founders of RENOVA.

Victor Vekselberg was born in 1957 in Drogobych, a provincial town in the Lviv region, Ukraine. In 1979, he completed his studies in Automatic Control Systems and graduated from the Moscow Institute of Transport Engineers with Honours. That same year, he continued his education with a post-graduate course at the Computer Centre of the Academy of Science. He is a Member of the Bureau of the Management Board of the Russian Union of Industrialists and Entrepreneurs (RSPP) and Chairman of the RSPP Committee on International Cooperation.

Mr. Vekselberg is beneficially interested in 78,800 Shares through SUAL Partners as at the date of this prospectus. Save as aforesaid, Mr. Vekselberg has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Vekselberg is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Mr. Vekselberg has not held any directorship in any public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Vekselberg was nominated as a non-executive Director of the Company by SUAL Partners as shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Dmitry Afanasiev, aged 40 (*Non-executive Director*)

Dmitry Afanasiev was appointed a member of the UC RUSAL Board on 26 March 2007. He is the Chairman of Egorov, Puginsky, Afanasiev and Partners, a Russian law firm that provides legal services the Company. Prior to co-founding the firm in 1994, he worked at Schnader Harrison Segal & Lewis LLP and Wolf Block Schorr and Solis-Cohen LLP. He specializes in corporate transactions, dispute resolution and public policy. He has represented the interests of the Russian Federation on numerous occasions in various legal matters and participated in the drafting of some of Russia's federal laws, including antitrust legislation.

Dmitry Afanasiev was born in 1969. He studied law at Leningrad State University, the University of Pennsylvania and the St. Petersburg Institute of Law. He was awarded a medal by the Federal Chamber of Advocates of the Russian Federation for professional excellence and received a commendation from the President of Russia for achievements in defending human rights. He is a member of the General Council of Business Russia, a national non-profit association, and a founding member of the Russian-American Business Council.

Mr. Afanasiev has no interests in the Shares within the meaning of Part XV of the SFO. Mr. Afanasiev is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed in this Prospectus, Mr. Afanasiev has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Afanasiev was nominated as a non-executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Len Blavatnik, aged 52 (*Non-executive Director*)

Len Blavatnik was appointed a member of the UC RUSAL Board at its creation on 26 March 2007. Mr. Blavatnik has been a Director and the Vice President of SUAL Partners Limited since October 2006 and was a Director of SUAL International Limited from October 2001 to September 2006. Mr. Blavatnik is the founder and Chairman of Access Industries, a privately-held U.S. industrial group with holdings in natural resources and chemicals, media and telecommunications, and real estate. Incorporated in 1986, Access Industries is today an international industrial concern with strategic investments in the U.S., Europe and South America. Mr. Blavatnik was raised in Russia and became a U.S. citizen in 1981. He received his Master's degree in Computer Science from Columbia University in 1981 and his MBA from Harvard Business School in 1989.

Mr. Blavatnik serves on the board of numerous companies in the Access Industries portfolio including LyondellBasell Industries (the world's third largest independent chemical company) and TNK-BP (a vertically integrated oil major). Mr. Blavatnik remains engaged in educational pursuits and, in addition to corporate directorships, sits on academic boards at Cambridge University, Harvard Business School and Tel Aviv University. An active philanthropist, Mr. Blavatnik also sits on boards of directors of, *inter alia*, The White Nights Foundation of America, the 92nd Street Y in New York and The Center for Jewish History in New York.

Mr. Blavatnik is beneficially interested in 67,300 Shares through the indirect ownership of approximately 30.56% of the issued share capital of SUAL Partners as at the date of this prospectus. Mr. Blavatnik has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Blavatnik is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, Mr. Blavatnik has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Blavatnik was nominated as a non-executive Director of the Company by SUAL Partners as shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Igor Ermilin, aged 49 (*Non-executive Director*)

Mr. Ermilin has been appointed as a member of the Board with effect from the Listing Date. Since April 2009, he has been the General Counsel of the En+ where his responsibilities include managing the legal aspects of the En+'s mergers and acquisitions projects, creating joint ventures, accessing the international financing and capital markets, court activities, claims and contracting. From 2003 to 2009, Mr. Ermilin held various executive positions in the legal department of Basic Element, most recently as the company's General Counsel. Prior to joining Basic Element in 2003, Mr. Ermilin worked for the Russian Government, the European Bank for Reconstruction and Development and practiced law at major law firms in Moscow, London, Washington D.C. and New York. Mr. Ermilin was born in 1960. Mr. Ermilin graduated from Moscow State University in 1982 and Georgetown University Law Center in 1997.

Mr. Ermilin has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Ermilin is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Mr. Ermilin has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Ermilin was nominated as a non-executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Ivan Glasenberg, aged 52 (*Non-executive Director*)

Ivan Glasenberg was appointed a member of the UC RUSAL Board and a member of the Standing Committee of the Company on 26 March 2007. He has been Glencore's Chief Executive Officer since 2002. Mr. Glasenberg is a member of the board of directors of Xstrata plc and Minara Resources Limited. He joined Glencore in 1984 and worked in the coal department in South Africa for three years and in Australia for two years. From 1988 to 1989, he managed Glencore's Hong Kong and Beijing offices. In 1990, he became head of coal and in 2002 he was appointed Chief Executive Officer of Glencore. Prior to joining Glencore, Mr. Glasenberg worked at Levitt Kirson Chartered Accountants for five years. He is a Chartered Accountant of South Africa. He holds a Bachelor's degree in Accountancy from Witwatersrand University, South Africa, as well as a master's degree in Business Administration from the University of Southern California, Los Angeles.

Mr. Glasenberg has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, he is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, he has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Glasenberg was nominated as a non-executive Director of the Company by Glencore as shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Vladimir Kiryukhin, aged 52 (*Non-executive Director*)

Vladimir Kiryukhin was appointed a member of the UC RUSAL Board on 10 June 2009. He has acted as Government Relations Director of En+ since June 2009. He is responsible for providing interaction between En+ and the federal and regional authorities within the framework of the implementation of the company's business strategy. He has held the position of Chief Executive Officer of En+ Development since 2008.

Prior to joining En+, Mr. Kiryukhin held different positions, including First Deputy Chief Executive Officer and Chief Executive Officer, at EuroSibEnergo (a public company that manages power assets of En+) in the period 2003-2008.

Vladimir Kiryukhin is a member of the Supervisory Board of Non-Commercial Partnership Market Council; Adviser to the Russian Federation Federal Tariff Service; Adviser to the Council of the Federation Commission on Natural Monopolies; Assistant to Member of the Council of the Federation. Mr. Kiryukhin graduated from A Popov Higher Naval Radio-Electronics Academy in 1979, Mr. Kiryukhin also holds a PhD in Automated Information Systems from the All-Soviet Union Science and Research Institute of Interindustries Information which he received in 1988.

Mr. Kiryukhin has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, he is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. He has not held any directorship in any public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Kiryukhin was nominated as a non-executive Director of the Company by En+, as shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Alexander Popov, aged 37 (*Non-executive Director*)

Alexander Popov was appointed a member of the Board on 24 April 2008. Mr. Popov joined En+ in March 2007 as Group Financial Controller and has responsibility for building the finance function in the newly created Energy Sector within Basic Element Group. Prior to joining En+, Alexander Popov worked as head of corporate financial reporting department in oil company OAO "LUKOIL" for six years. From 1994 to 1999 Alexander Popov held various positions in the audit company PricewaterhouseCoopers, rendering consulting and audit services to major oil and gas companies in Russia. Mr. Popov was born in 1971 in Togliatti. He is a Certified Public Accountant (member of the American Institute of Certified Public Accountants), holds a Master's degree in Engineering (automobile industry) from State Polytechnic University in Togliatti (Russia) and a Bachelor's degree in accounting and audit from Saratov State Academy of Economics in Saratov, Russia.

Mr. Popov has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Popov is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Mr. Popov has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Popov was nominated as a non-executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Dmitry Razumov, aged 34 (*Non-executive Director*)

Mr. Razumov was appointed a member of the Board on 24 April 2008. In June 2007, he was appointed to his current position as CEO of LLC "Onexim Group". He is also a member of the Board of Directors of Norilsk Nickel, Investment and Development Group OPIN, MMC Intergeo, MFK Bank and Soglasie Insurance Company.

Earlier in his career, Mr. Razumov practiced business and corporate law at Clifford Chance LLP, following which he gained investment banking experience at Renaissance Capital, a leading Russian investment bank. In 1998, Mr. Razumov left Renaissance Capital to co-found the independent venture capital firm LV Finance that stands behind the success of MegaFon, the third largest mobile phone operator in Russia, before selling his interest in the firm in 2003. Between 2001 and 2005, Mr. Razumov served as Deputy Chief Executive Officer for Strategy and M&A at Norilsk Nickel, Russia's largest mining company, leading its transformation into a world class company through groundbreaking deals with Stillwater Mining Company, Gold Fields and Polyus Gold, and pioneering industry best corporate governance standards among Russian blue-chip companies.

In 1997, Mr. Razumov graduated from the International Law Department of Moscow State Institute of International Relations, receiving a Master's degree in International Trade Law.

Mr. Razumov has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, he is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, he has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Razumov was nominated as a non-executive Director of the Company by Onexim as shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Jivko Savov, aged 42 (*Non-executive Director*)

Mr. Jivko Savov was appointed a member of the UC RUSAL Board on 24 March 2009. He also served as a member of the UC RUSAL Board from 1 March 2008 through 30 October 2008. Mr. Jivko Savov joined En+ in 2006 and is responsible for the management and optimisation of the electricity generation portfolio of En+. Mr. Jivko Savov worked for over 12 years in the energy sector in private equity, business development and structured finance roles.

From 2002 till 2006 Mr. Savov was Head of Energy Investments at MMC Energy Europe and Equest Partners in London managing private equity investments in power and renewable energy projects, oil and gas, and metals in Eastern Europe and Russia. Prior to that, he worked as a Manager, structured marketing and origination with EDF Trading in London, where he was responsible for the East European and Benelux markets.

Mr. Savov serves on the board of directors of En+ Power Ltd, EuroSibEnergo LLC, EuroSibEnergo OJSC and Irkutsenergo OJSC. Before joining EDF Trading, Jivko Savov worked for Enron Europe, London in the project finance and trading teams covering South East Europe and Turkey. He began his career in 1996 at the World Bank as Project Officer for the Energy and State Enterprise sectors. Born in 1966, Mr. Savov received an MBA from INSEAD, France in 1998 and an MSc in International Relations (with Honours) from the Moscow State Institute of International Relations, Russia in 1992.

Mr. Savov has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Savov is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Mr. Savov has not held any directorship in any public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Savov was nominated as a non-executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Vladislav Soloviev, aged 36 (*Non-executive Director*)

Vladislav Soloviev was appointed a member of the UC RUSAL Board on 18 October 2007. In January 2008, Mr. Soloviev was appointed Chief Executive Officer of En+ Management LLC. From 2007 to 2008, Mr. Soloviev was head of the Company's Finance Directorate upon the Company's formation. Previously he was head of the Finance Directorate and before that the director of the Company's accounting department. Prior to joining the Company, Mr. Soloviev was Deputy Director of the department of tax policy and worked as adviser to the minister for taxes of the Russian Federation, where he was responsible for implementing amendments to tax laws. From 1994 to 1998, he held various top positions in UNICON/MC Consulting and was in charge of auditing oil and gas companies. Mr. Soloviev serves on the board of directors of United Oil Group LLC, EuroSibPower Company Ltd, EuroSibPower Company OJSC, En+, En+ Power Limited, Norilsk Nickel, OGK-3 OJSC

and OJSC NK RussNeft. Mr. Soloviev was born in 1973. In 1995, he graduated from the Higher School of the State Academy of Management with Honours, and in 1996, he graduated from the Stankin Moscow Technical University. In 2004, he graduated from the Finance Academy of the Government of the Russian Federation and was awarded an MBA degree by Antwerp University in Belgium.

Mr. Soloviev has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Soloviev is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, Mr. Soloviev has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Mr. Soloviev was nominated as a non-executive Director of the Company by En+ as major shareholder of the Company. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules.

Anatoly Tikhonov, aged 40 (*Non-Executive Director*)

Anatoly Tikhonov became a member of the UC RUSAL Board on 24 March 2009. Mr. Tikhonov has been a member of the Management Board and First Deputy Chairman of State Corporation "Bank for Development and Foreign Economic Affairs (Vnesheconombank)" since October 2008. He worked as Deputy Governor of the Krasnoyarsk Region Administration from 2003 to 2007 and as Deputy Head of the Krasnoyarsk Region Government from 2007 to 2008.

In 2007-2008, Mr. Tikhonov headed the External Relations and Investment Policy Department at the Krasnoyarsk Region Administration as Deputy Governor of the Krasnoyarsk Region. From 2003 to 2007, he acted as Deputy Governor of the Krasnoyarsk Region and Head of the Permanent Representation of the Krasnoyarsk Region Administration in the Russian Government. From 1999 to 2003, Mr. Tikhonov worked as Deputy Chairman of the Finance Committee at the St. Petersburg City Administration.

In 1996-1999, Mr. Tikhonov held the position of Director for Commerce and Vice-President for Economics and Finance of the Russian Public Fund of Disabled War Veterans. In 1995-1996, he was General Director of ZAO Bagram.

Mr. Tikhonov's professional career began in 1987, when he started his work as a recording clerk at the Moscow Garrison's military court. In 1989, he completed his two-year military service. Anatoly Tikhonov was born on 13 June 1969 in Moscow. In 1995, he graduated from the Moscow State University, Lomonosov majoring in jurisprudence.

Mr. Tikhonov has no interests in the Shares within the meaning of Part XV of the SFO. Mr. Tikhonov is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Mr. Tikhonov has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules nor are there any matters which need to be brought to the attention of the Shareholders in connection with Mr. Tikhonov's appointment as a non-executive Director of the Company.

In order to promote good corporate governance, the Company's Articles have provided that in the event of conflict of interest, the interested Director is required to abstain from voting for the relevant resolution. Mr. Tikhonov, as a Director nominated by VEB, will abstain from voting for any resolutions on transactions that the Company may have with VEB.

Barry Cheung Chun-yuen, aged 51 (*Independent Non-executive Director*)

Mr. Cheung has been appointed a member of the Board with effect from the Listing Date. Mr. Cheung is the Chairman of the Hong Kong Mercantile Exchange Ltd. He is also Chairman of both the Urban Renewal Authority and the Standing Committee on Disciplined Services' Salaries and Conditions of Service in Hong Kong. From July 2004 to January 2008, Mr. Cheung was first the Chief Executive Officer of Titan Petrochemicals Group Limited and later its Deputy Chairman. Mr. Cheung previously served as Chairman of the Corruption Prevention Advisory Committee of the Independent Commission Against Corruption. From 1987 to 1994, he was a consultant with McKinsey & Company in the United States and Asia. From 1993 to 1994 he also served as a full-time member of the Hong Kong Government's Central Policy Unit on secondment from McKinsey & Company. Mr. Cheung was born in 1958. Mr. Cheung holds a Bachelor of Science degree with First Class Honours in Mathematics and Computer Science from the University of Sussex and an MBA from Harvard Business School.

Mr. Cheung has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Cheung is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, Mr. Cheung has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules nor are there any matters which need to be brought to the attention of the Shareholders in connection with Mr. Cheung's appointment as a non-executive Director of the Company.

Peter Nigel Kenny, aged 61 (*Independent Non-executive Director*)

Dr. Peter Nigel Kenny was appointed independent non-executive Director and Chairman of the Audit Committee of the Company on 26 March 2007. He is currently a partner at Sabre Capital Worldwide Inc., a private equity company specialising in emerging markets.

From 1992 to 2002, Dr. Kenny held a number of senior positions at Standard Chartered Bank Plc, including Group Head of Audit, Regional General Manager for UK & Europe, Group Head of Operations, Corporate and Institutional Banking and Group Finance Director. In 1978 he joined Chase Manhattan Bank where he assumed regional responsibilities for the bank's audit activities throughout Europe, the Middle East and Africa.

Dr. Kenny started his career at PriceWaterhouse and is a Chartered Accountant. He holds a PhD in Theoretical Physics (1973) and a Bachelor's of Science in Physics (1970), both degrees were awarded by the University of Surrey.

Dr. Kenny is currently a non-executive director of First City Monument Bank plc, a bank listed on the Nigerian stock exchange, and an independent director of JPMorgan Emerging Markets Investment Trust plc.

Dr. Kenny has no interests in the Shares within the meaning of Part XV of the SFO. Dr. Kenny is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, Dr. Kenny has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules nor are there any matters which need to be brought to the attention of the Shareholders in connection with Dr. Kenny's appointment as a non-executive Director of the Company.

Philip Lader, aged 63 (*Independent Non-executive Director*)

Philip Lader is an independent non-executive Director of the Company appointed on 26 March 2007. Since 2001, he has held the position of Non-executive Chairman of WPP plc, the worldwide advertising and communications services company, and Senior Adviser to Morgan Stanley. He also serves on the boards of Lloyd's of London, Marathon Oil Corporation, AES Corporation and Songbird Estates Plc. Formerly, in addition to senior executive positions in several U.S. companies, he was U.S. Ambassador to the United Kingdom and served in senior positions in the U.S. government, including White House Deputy Chief of Staff.

Mr. Lader holds a Bachelor's degree in Political Science from Duke University (1966) and a Master's degree in History from the University of Michigan (1967). He completed graduate studies in law at Oxford University in 1968 and obtained a Juris Doctor degree from Harvard Law School in 1972.

Mr. Lader has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Mr. Lader is independent from and not related to any other Directors, senior management, substantial shareholders or controlling shareholders of the Company. Save as disclosed above, Mr. Lader has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules nor are there any matters which need to be brought to the attention of the Shareholders in connection with Mr. Lader's appointment as a non-executive Director of the Company.

Elsie Leung Oi-sie, aged 70 (*Independent Non-executive Director*)

Ms. Leung was appointed a member of the Board on 30 November 2009. From 1997 to 2005 Ms. Leung was the Secretary for Justice of the Hong Kong Special Administrative Region, as well as a member of the Executive Council of Hong Kong. Ms. Leung was admitted as a solicitor of the Supreme Court of Hong Kong in 1968. She was a partner of P. H Sin & Co., a Hong Kong law firm, which amalgamated with the law firm Iu, Lai & Li Solicitors & Notaries in 1993; she was a senior partner with Iu, Lai & Li Solicitors & Notaries from 1993 to 1997. In 2006, she resumed practice at Iu, Lai & Li Solicitors & Notaries. Ms. Leung has served on several government boards and committees, including the Independent Police Complaints Council, Equal Opportunities Commission, Social Welfare Advisory Committee and Inland Revenue Board of Review. Ms. Leung was appointed as a Delegate of the People's Congress of Guangdong Province in 1989. In 1993, she was appointed as a Delegate of the 8th National People's Congress as well as a Hong Kong Affairs Adviser. Since 2006 she has been the Deputy Director of the Hong Kong Basic Law Committee of the Standing Committee of the National People's Congress of the People's Republic of China. Ms. Leung was born in 1939. Ms. Leung is a qualified Solicitor in England and Wales and obtained a Master of Law degree from the University of Hong Kong in 1988.

Ms. Leung has no interests in the Shares within the meaning of Part XV of the SFO. Save as disclosed above, Ms. Leung is independent from and not related to any other Directors, members of senior management, substantial shareholders or controlling shareholders of the Company. Ms. Leung has not held any directorship in any other public companies the securities of which are listed on any securities market in Hong Kong or overseas in the past three years. Save as disclosed above, there is no other information which is required to be disclosed pursuant to any of the requirements under Rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules nor are there any matters which need to be brought to the attention of the Shareholders in connection with Ms. Leung's appointment as a non-executive Director of the Company.

As of the Latest Practicable Date, save as disclosed under the section headed "C. Further Information about Directors and Substantial Shareholders" in Appendix VIII to this prospectus, our Directors do not have any interest or short positions in the shares or underlying shares in the Company within the meaning of Part XV of the SFO.

Please refer to the section headed "C. Further Information about Directors and Substantial Shareholders" in Appendix VIII to this prospectus for the amount of the Directors' emoluments and the basis of determining such emoluments.

Senior Management

The Group's senior management team, in addition to the executive Directors listed above, is as follows:

Name	Age	Position
Kirill Aleksandrov	49	*Chief Legal Officer*
Alexey Arnautov	35	*Director of Aluminium Division (acting)*
Sergey Belsky	42	*Director of Marketing and Sales*
Valery Freis	55	*Director of Resources Protection*
Eugueny Fyodorov	31	*Director of Engineering and Construction Division*
Vadim Geraskin	41	*Director of Government Relations*
Oleg Mukhamedshin	36	*Director of Capital Markets*
Pavel Ovchinnikov	34	*Director of Alumina Division*
Artem Volynets	42	*Director of Corporate Strategy*
Aby Wong Po Ying	44	*Hong Kong Company Secretary*

Each of the members of the senior management team listed above can be contacted at the Company's registered address at Whiteley Chambers, Don Street, St Helier JE4 9WG, Jersey.

The senior management team listed above, together with the executive Directors, are all members of the Executive Committee, which is responsible for the day-to-day management of the Group.

Biographies of each of the members of the senior management team are set out below:

Kirill Aleksandrov, aged 49 (*Chief Legal Officer*)

Kirill Aleksandrov has led Legal Directorate of the Moscow Branch of RUSAL Global Management B.V. since January 2008 and has been a director of RUSAL Global Management B.V. since March 2008. Before joining UC RUSAL, Mr. Aleksandrov served as Chief Legal Officer and Member of the Executive Committee of the Siberian Coal Energy Company (SUEK). From 2003 to 2005, he headed the legal activities of British Petroleum's trade representative office in Russia. From 2000 to 2003, Mr. Aleksandrov provided legal support to SIDANCO as Senior Vice-President and Member of the Executive Committee. From 1994 to 2000, he worked as Chief Legal Officer in Glencore International AG supporting the CIS activities. Kirill Aleksandrov was born in 1960. He holds a degree in law from Moscow State University, Lomonosov (1982).

Alexey Arnautov, aged 35 (*Director of Aluminium Division (acting)*)[1]

Alexey Arnautov assumed the role of Acting Director of the Aluminium Division of the Moscow Branch of RUSAL Global Management B.V. in March 2009. He is responsible for raising efficiency as well as achieving steadily high-performance results from the division's assets. He is also in charge of developing a new production management system, which will aim to match the world's best practices. Prior to this appointment, Mr. Arnautov was Financial Director of the Aluminium Division from April 2006. From November 2004 until April 2006, he was the Director of the Financial Department of the Engineering and Construction Division. Between 1998-2000, he held several positions in the financial services in Sibneft. He began his professional career in Noyabrskneftegaz in the Far North in 1996. Born in 1974, he graduated from Donbass State Academy of Construction and Architecture with a degree in engineering and construction (1996). He received a degree with honours from the International Academy of Entrepreneurship (1998) and an MBA in Economics from the Institute of Business and Economics at California State University (2004).

Sergey Belsky, aged 42 (*Director of Marketing and Sales*)

Sergey Belsky was appointed the Director of the Marketing and Sales Directorate of the Company in November 2008. He is responsible for the marketing and sales of the company's wide product mix, including aluminium, silicon, and aluminium powders to the international markets in Asia, America, Europe, and the CIS. He is also responsible for developing long-term relationships with existing clients, whilst searching for new sales opportunities and strengthening the Company's ties with domestic and international end-users of its products.

Since the foundation of Russian Aluminium in 2000, Sergey Belsky has worked as the Head of Sales Department, Russia and the CIS, including as the Sales Director of the Company's Moscow office from 2007 to 2008. Between 1999 and 2000 he was the head of the export sales department in Sibirsky Aluminium. Mr. Belsky started his career as a trader in Raznoimport before working his way up to head a division at Trans World Group in 1996. Sergey Belsky was born in Moscow in 1967. In 1991, Mr. Belsky graduated from the Moscow Institute of Steel and Alloys where he majored in metal engineering. A year later, he graduated from the Moscow Institute of International Business of the Ministry of Economic Relations and Trade. In 2003, he received training at the London Business School.

Valery Freis, aged 55 (*Director of Resources Protection*)

Valery Freis has been the Director of the Resources Protection Directorate of the Moscow branch of RUSAL Global Management B.V. since February 2008. He is responsible for the creation and effective management of the security system and the development of a policy and strategy in the field of resource protection from causing harm to the Company's economic interests, business standing, business processes, and personnel.

[1] It is the Group's informal policy to designate members of senior management as Acting Directors of their respective divisions for a discretionary period, typically lasting approximately one year from their appointment. Mr. Arnautov's predecessor as Director of the Aluminium Division, Mr. Mikhail Erenburg, was Acting Director of the Aluminium Division from March 2008 to January 2009 and Director of the Aluminium Division from January 2009 through Mr. Arnautov's appointment in March 2009. Mr. Erenburg left the position of Director of the Aluminium Division upon a promotion outside the Aluminum Division, but left the Group shortly thereafter. Prior to the appointment of Mr. Erenburg, Mr. Viktor Zhirnakov was Director of the Aluminium Division from July 2005 until his departure in March 2008.

Before joining the Company, Valery Freis was Deputy General Director for Economic Security at OAO Irkutskenergo and Chairman of the Board of Directors of several companies. In the period between 1996 and 2002 he was Deputy General Director for Security at OAO Ust-Ulimsk Timber Processing Complex. From 1989 to 1996 Valery Freis held the post of General Director of Lestorgurs. Earlier he served in the Combating the Theft of Socialist Property Agency of the Ministry of the Interior of the Russian Federation. Valery Freis was born in 1954. In 1979, Valery Freis graduated from the Kuybyshev Planning Institute; he underwent training at the Academy of National Economy of the Russian Federation Government.

Eugueny Fyodorov, aged 31 (*Director of Engineering and Construction Division*)

Eugueny Fyodorov has been in charge of the Company's Engineering and Construction Division since January 2009. He is responsible for the development of the structure that includes LLC "Russian Engineering Company", of which he acts as chief executive officer, the Engineering and Technology Centre, and VAMI. Some of the priority projects of the Division are construction of aluminium smelters in the Krasnoyarsk and Irkutsk regions, the Boguchanskaya HPP, construction of the bauxite and alumina complex in the Komi Republic, creation of the Company's proprietary aluminium production technology (RA-400, RA-500), upgrading the existing production sites, along with other projects running both in Russia and abroad. Prior to this appointment Mr. Fyodorov was the Head of Energy Division of Moscow Branch of RUSAL Global Management B.V. (since March 2008) and was responsible for creating the Company's own energy base for aluminium production, searching for prospective energy sources and other opportunities for developing this area of business.

Between 2006 and 2008 Mr. Fyodorov was the Head of the Boguchanskoye Energy and Metals complex, the joint project of the Company and RusHydro. Earlier he was the Head of the Power Engineering unit within the Company's Engineering and Construction Division, and Head of the projected development unit of the Energy Department of the Company. Mr. Fyodorov was born in the city of Obninsk in 1978. In 2001, he graduated from the Bauman's Moscow State Technical University, and later took a post-graduate course in science and economics at the Moscow Energy Institute, earning a PhD in 2003.

Vadim Geraskin, aged 41 (*Director of Government Relations)*

Vadim Geraskin was appointed as the Director of Government Relations of Moscow Branch of Rusal Global Management B.V. in January 2009 and has been a member of the Executive Committee since March 2008. He manages the company's relationships with federal and regional authorities, the Russian Parliament, the government, and public organizations. Mr. Geraskin is also responsible for public-private partnership projects, for the support of social and economic development in the regions where the Company is based, and for improving the Company's security system. Between January 2008 and January 2009, Mr. Geraskin was Acting Director of Government Relations. From March 2004 until March 2007, Mr. Geraskin was in charge of the Directorate of Natural Monopolies at Moscow Branch of RUSAL Global Management B.V. and previously, LLC "RUSAL Management Company". Earlier, Mr. Geraskin was head of the Transport & Logistics Directorate, and Director of RUSAL's Transport Department. From 1997-2000, he held the office of General Director of 'Zarubezhkontrakt', and from 1993 he was a specialist of Alyumin Product. Vadim Geraskin was born in 1968. In 1993, he graduated from the Faculty of Physics at Moscow State University, Lomonosov, majoring in Physics.

Vera Kurochkina, aged 39 *(Director of Public Relations)*

Vera Kurochkina was appointed the Director of the Public Relations Directorate of the Moscow Branch of RUSAL Global Management B.V. in late March 2007. She is responsible for the development and the implementation of the external and internal communications strategy of the Company and for establishing co-operational ties with industrial and non-commercial associations. She is also responsible for media relations projects, event management, advertisements, charity and social programmes.

From 2006 to 2007 Ms. Kurochkina was the Public Relations Director of RUSAL. Prior to 2006, she headed RUSAL's mass media relations department. From 2001-2003, she was the Public Relations and Marketing Director at LUXOFT, a large Russian software developer. From 2000 to 2001, Vera managed a group of projects in Mikhailov & Partners, a strategic communications agency, and from 1998 to 2000 she was a Marketing and Communications Manager at PricewaterhouseCoopers.

Vera Kurochkina holds a Master's degree from the Peoples' Friendship University of Russia in Moscow, from which she graduated with Honours in 1995. She also holds a Master's degree from the Finance Academy of the Russian Government.

Oleg Mukhamedshin, aged 36 (*Director of Capital Markets*)

Oleg Mukhamedshin was appointed Director of Capital Markets of the Moscow Branch of RUSAL Global Management B.V. at the creation of the Company in late March 2007. He is responsible for raising finance on capital markets, including both debt and equity products, the use of financial derivatives, as well as relations with credit rating agencies and capital market regulators. In addition, he currently supervises other areas of corporate finance, including trade, pre-export and project financing. He is a member of the board of directors of Russian Aluminium, a subsidiary of UC RUSAL. From August 2004 to March 2007, Mr. Mukhamedshin was Deputy Chief Financial Officer of RUSAL in charge of Corporate Finance and led the preparation, execution and financing of a number of major mergers and acquisitions transactions. From 2000 to August 2004, he was Director of RUSAL's Department for Corporate Finance. Before joining RUSAL, Mr. Mukhamedshin occupied leading corporate finance positions in the Tumen Oil Company (TNK), the Rosprom-YUKOS Group and Menatep Bank. Between 1999 and 2000, he was an advisor to the principal shareholder of the Industrial Investors Group. From 1994 to 1995, he worked with the investment bank PaineWebber to help establish the Russia Partners Fund, one of the first international direct investment funds in Russia. Mr. Mukhamedshin was born in 1973. Mr. Mukhamedshin holds a Bachelor's degree in Economics from Moscow State University, Lomonosov, from which he graduated with Honours in 1995.

Pavel Ovchinnikov, aged 34 (*Director of Alumina Division*)

Pavel Ovchinnikov was appointed Director of the Alumina Division of the Moscow Branch of RUSAL Global Management B.V. in late March 2007. He is responsible for the Company's Russian and international bauxite and alumina production facilities, overseeing the introduction of production systems, improvement of labour efficiency and optimisation of process flows. Mr. Ovchinnikov was appointed head of RUSAL's Alumina Division in April 2006. From 2007 to 2008 he served as a director of Aughinish Alumina Limited, Limerick Alumina Refining Limited, UC RUSAL Alumina Jamaica Limited, UC RUSAL Alumina and Jamaica II Limited. He also served as an Executive Committee Member of the West Indies Alumina Company (Windalco) and Eurallumina S.p.A. From 2006 to 2008 he was a director of Friguia S.A., and served as an Executive Committee Member of OAO "BGZ" and the Achinsk alumina refinery from June 2005 to June 2006 and June 2006 to February 2007 respectively. From October 2005 to March 2006 he held the position of Managing Director of the Achinsk alumina refinery. Currently, he is a director of Alpart Farms (Jamaica) Limited, Bauxite Company of Guyana Inc., and an Executive Committee Member of Alumina Partners of Jamaica (Alpart) and OJSC Boksit Timana. From early 2004 to 2005, he was Financial Director of

RUSAL's Alumina Division, and from 2003 to 2004, he was Financial Director for the alumina complex project in Guinea. He joined RUSAL in March 2001, and served as Deputy Director of the Corporate Finance Department through 2003. Prior to joining RUSAL, Mr. Ovchinnikov held a number of executive positions in foreign investment funds focused on Russian enterprises. He began his career as an oil, gas and metals analyst at the Alliance-Menatep investment company, where he was responsible for structural financing of various gold-mining and engineering companies. Mr. Ovchinnikov was born in 1975. In 1997, he graduated from the Applied Mathematics and Cybernetics Department at Moscow State University, Lomonosov. Mr. Ovchinnikov holds a PhD in Economics from Moscow State University, Lomonosov, which he obtained in 2002.

Maxim Sokov, aged 30 *(Director of Investment Management)*

Maxim Sokov was appointed Director of Investment Management of the Moscow Branch of RUSAL Global Management B.V. in May 2008. Among other things, he is responsible for managing all issues relating to the Group's shareholding in Norilsk Nickel. Mr. Sokov was elected as a member of the Board of Directors of Norilsk Nickel on December 26, 2008. In 2009, Mr. Sokov also joined the Board of Directors of OJSC OGK-3.

Prior to assuming his current role at the Company, Mr. Sokov was the Director of the Department for Strategic Projects at the Moscow Branch of RUSAL Global Management B.V. from 2007 to 2008. From 2004 to 2006 Mr. Sokov was the Head of the Legal Department for Mergers and Acquisitions of LLC RUSAL — Management Company. Prior to joining the Group, Mr. Sokov worked at the Moscow office of Herbert Smith CIS Legal Services.

Mr. Sokov was born in 1979 and graduated with honors from the Russian State Tax Academy under the Russian Ministry of Taxes, majoring in law, in 2000. Mr. Sokov also graduated from New York University School of Law with a Master's degree in 2002.

Artem Volynets, aged 42 (*Director of Corporate Strategy*)

Artem Volynets was appointed Director for Corporate Strategy and Business Development of the Moscow Branch of RUSAL Global Management B.V. in March 2007. He is responsible for the development of the Company, identification, preparation and execution of M&A and organic growth projects. Mr. Volynets is working on transactions that strengthen the company's competitive position within its core industry and expand its reach to new geographies and sectors. From 2004 to 2007, Mr. Volynets was Chief Development Officer at SUAL, and Vice President Business Development from 2003 to 2004. From 1997 to 2003 he worked as strategy consultant and corporate finance advisor at Monitor Group in London, UK. Mr. Volynets lived in the U.S.A. from 1991 to 1997 studying at Georgetown and American Universities and working on the consulting projects for the United States Agency for International Development and The World Bank. In 2009, Mr. Volynets was elected the Chairman of the International Aluminium Institute — a international organisation for the aluminium industry, representing over 80% of global production. Mr. Volynets was born in 1967. Mr. Volynets received an MBA from Georgetown University in 1997. While at Georgetown, he also studied as an exchange student at INSEAD Business School in France. In addition he received a BA in Economics from the American University in Washington, D.C. in 1994, and studied Geology and Philosophy at the Lomonosov Moscow State University from 1984 to 1986 and 1989 to 1991. Mr. Volynets completed two years of military service from 1986 to 1988.

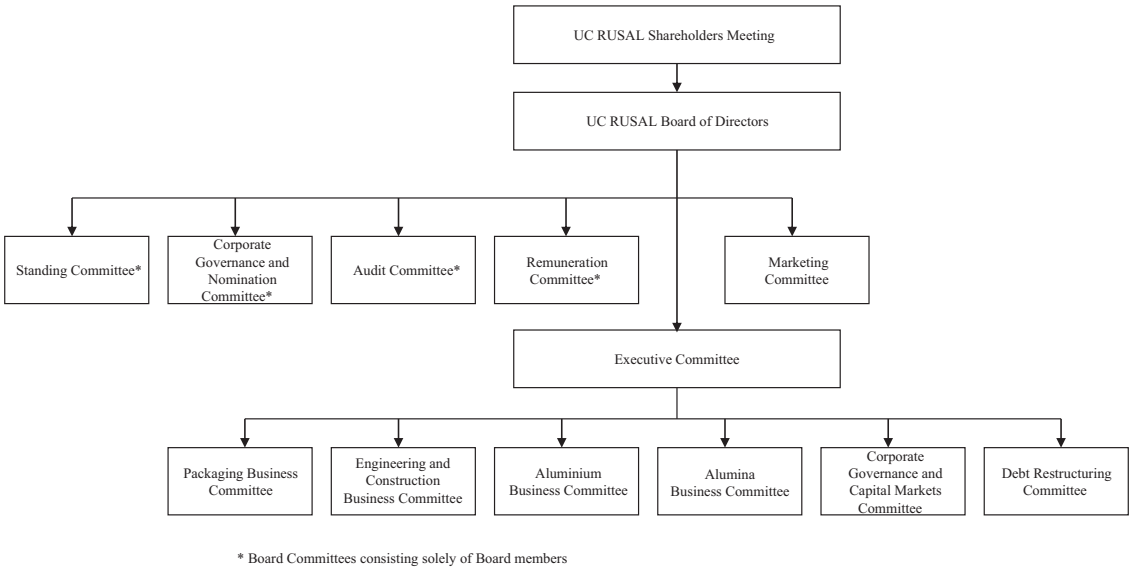
Wong Po Ying, Aby, aged 44, (*Hong Kong Company Secretary*)

Wong Po Ying, Aby was appointed Hong Kong Company Secretary on 29 November 2009. Ms. Wong has over 6 years experience in corporate secretarial practice working with various law firms and corporate services companies as company secretary and company secretarial manager. Ms. Wong is an

Associate Member of the Hong Kong Institute of Company Secretaries and an Associate of The Institute of Chartered Secretaries and Administrators. Ms. Wong was born in 1965. Ms. Wong holds a diploma in Management for Secretary from Asia International Open University in Macau which she received in 1994.

COMMITTEES

The Company's corporate governance system consists of (i) a number of board committees that meet regularly and report directly to the Board of Directors; and (ii) six management committees that report to the Executive Committee and Chief Executive Officer who, in turn, report directly to the Board of Directors. A chart illustrating the corporate governance system is as follows:



Board Committees

Standing Committee

The standing committee was established with written terms of reference in 2006. The standing committee consists of four members, one nominated by each party to the Shareholders' Agreement between Major Shareholders only and, if deemed suitable to be a member of the standing committee, appointed by the Board of Directors. The current members of the committee are Victor Vekselberg, Ivan Glasenberg, Vladislav Soloviev and Dmitry Razumov. The primary function of the standing committee is to make decisions and resolve matters in relation to the Group in those instances where the attention of the full Board of Directors is not required. The standing committee shall only make decisions with unanimous consent.

Specifically, the standing committee is authorised: to approve matters with a value of under US$500 million; to approve unlimited indemnities contained in hold harmless letters, engagement letters and other forms of indemnity given by the Company and/or any member of the Group to advisers in connection with the provision of advisory services; to approve mandate letters between banks and the Company and/or any member of the Group in relation to credit facilities (but not the final terms of such credit facilities); and to seek information from Group employees and legal or other professional advice in relation to the foregoing.

Audit Committee

We have established an audit committee with written terms of reference in compliance with Rule 3.21 of the Listing Rules and paragraph C3 of the Code on Corporate Governance Practices, as set out in Appendix 14 to the Listing Rules. The audit committee consists of five Directors: three independent non-executive Directors, being Dr. Nigel Kenny, an independent non-executive Director with the appropriate professional qualifications who shall serve as chairman of the committee, Mr. Philip Lader and Ms. Elsie Leung and two non-executive Directors, Mr. Dmitry Razumov and Mr. Alexander Popov. The primary duties of the audit committee are to assist our Board in providing an independent view of the effectiveness of our financial reporting process, internal control and risk management system, to oversee the audit process and to perform other duties and responsibilities as assigned by our Board.

Remuneration Committee

We have established a remuneration committee with written terms of reference in compliance with paragraph B1 of the Code on Corporate Governance Practices, as set out in Appendix 14 to the Listing Rules. The remuneration committee consists of three independent non-executive Directors, being Mr. Philip Lader, who is the chairman of the remuneration committee, Dr. Nigel Kenny and Mr. Barry Cheung (with effect from the Listing Date) and two non-executive Directors, being Mr. Len Blavatnik, and Mr. Vladislar Soloviev. The primary function of the remuneration committee is to make recommendations to the Board of Directors on the remuneration package of the Company's Directors and senior management and to evaluate and make recommendations on employee benefit arrangements.

Corporate Governance and Nomination Committee

We have established a corporate governance and nomination committee with written terms of reference as recommended under the Code on Corporate Governance Practices, set out in Appendix 14 to the Listing Rules. The corporate governance and nomination committee consists of three independent non-executive Directors, being Mr. Philip Lader, who is the Chairman of the corporate governance and nomination committee, Dr. Nigel Kenny and Mr. Barry Cheung (with effect from the Listing Date) and two non-executive Directors, being Mr. Ivan Glasenberg and Mr. Vladislav Soloviev. The primary function of the corporate governance and nomination committee is to develop, recommend and annually review corporate governance guidelines for the Company and its consolidated subsidiaries and to oversee corporate governance matters, as well as to make recommendations to our Board on the appointment and removal of Directors of the Company.

Marketing Committee

We have established a marketing committee consisting of Mr. Vladislav Soloviev, who shall serve as chairman of the committee and two non-directors, being Mr. V. Kremer and Mr. G. Fegel. The main functions of the committee are (a) to review and approve UC RUSAL's marketing strategy; (b) to recommend the appointment of marketing directors for aluminium and alumina; and (c) to recommend to the CEO of UC RUSAL the removal of marketing directors. The marketing committee includes in its terms of reference an explanation of its role and the authority delegated to it by the Board.

Management Committees

The Group's business is managed on a day to day basis by the Chief Executive Officer and the senior management team. As discussed in greater detail below, the Chief Executive Officer and the senior management team meet as the Executive Committee at least twice monthly, and sub-committees of the executive committee assist the Executive Committee in the management of the Group's business divisions and other functions.

The Executive Committee

We have established an Executive Committee consisting of the Chief Executive Officer, each of the other executive Directors and the senior management team. The primary role of the Executive Committee is to assist the Chief Executive Officer and senior management with the day-to-day management of the Group and to assist the Board of Directors in formulating and implementing the Group's strategy and monitoring its performance.

Additional duties and responsibilities of the Executive Committee include, but are not limited to, developing Group strategy for Board approval and implementing such strategy once approved, reviewing and opining on any matter involving an outlay of more than US$75 million before referring such matter to the Board and overseeing and monitoring the financial performance of the Group. In addition, the Executive Committee is empowered to establish committees of its members from time to time.

The Executive Committee meets as frequently as necessary, but not less than twice per month. The Executive Committee operates as the management board of the Company's subsidiary, Rusal Global Management B.V. The Chief Executive Officer formally reports the decisions and actions of the Executive Committee to the Board at meetings of the Board.

Sub-committees of the Executive Committee

Corporate Governance and Capital Markets Committee

We have established a corporate governance and capital markets committee consisting of five members being Mr. Artem Volynets, who shall serve as chairman of the committee, Mr. Kirill Alexandrov, Ms. Tatiana Soina (CFO), Mr. Oleg Mukhamedshin and Mr. Dmitry Yudin. The powers of the committee include coordination and optimisation of the Group's corporate governance structure, M&A, corporate development, implementation of matters related to the IPO, capital markets, disclosure of information, and formulation of position on substantial litigations.

Debt Restructuring Committee

We have established a debt restructuring committee consisting of five members being Mr. Oleg Mukhamedshin, who shall serve as chairman of the committee, Mr. Kirill Alexandrov, Ms. Tatiana Soina (CFO), Mr. Artem Volynets, Mrs. Vera Kurochkina and Mr. Maxim Sokov. Each of the members of the debt restructuring committee is also a member of the Group's senior management team. The role of the committee is to coordinate the restructuring of the Company's debts to its major creditors, including Onexim by developing and improving the Company debt restructuring policy as well as monitoring the efficiency of its application.

The debt restructuring committee is empowered to pass resolutions on issues with budgets of up to US$10 million. Among other things, the debt restructuring committee is authorised to develop and introduce a company debt restructuring policy, approve positions during negotiations with Company creditors in relation to debts and monitor compliance with the company debt restructuring policy.

The debt restructuring committee is composed of senior management and reports to the Executive Committee of the Company. As set out above, the Executive Committee reports to the Board of Directors on debt restructuring matters.

Division Committees

We have established four division committees: the aluminium business committee, the alumina business committee, the engineering and construction business committee and the packaging business committee. The role of these committees is to assist the Executive Committee in the management of the relevant business divisions of the Company, being aluminium, alumina, engineering and

construction and packaging. Ms. Tatiana Soina, CFO of the Company, chairs the division committees for the aluminium, alumina and engineering and construction businesses. The directors of the divisions are members of the relevant committees. The representatives of the internal audit department and internal control department are also members of the division committees.

COMPLIANCE ADVISER

We have appointed Somerley Limited as our compliance adviser pursuant to Rule 3A.19 of the Listing Rules. Pursuant to Rule 3A.23 of the Listing Rules, our compliance adviser will advise us in the following circumstances:

- before the publication of any regulatory announcement, circular or financial report;
- where a transaction, which might be a notifiable or connected transaction, is contemplated, including share issues and share repurchases;
- where we propose to use the proceeds of the Global Offering in a manner different from that detailed in this prospectus or where our business activities, developments or results deviated from any estimate or other information in this prospectus; and
- where the Hong Kong Stock Exchange makes an inquiry of us regarding unusual movements in the price or grading volume of our Shares.

The terms of the appointment shall commence on the Listing Date and end on the date which we distribute our annual report in respect of our financial results for the first full financial year commencing after the Listing Date and such appointment may be subject to extension by mutual agreement.

HISTORICAL COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT[(2)]

The aggregate remuneration the Group's Directors have received (including fees, salaries, discretionary bonus, contributions to defined contribution benefit plans (including pension), housing and other allowances, and other benefits in kind) for the years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009 was approximately US$18.9 million, US$22.0 million, US$14.1 million and US$0.8 million, respectively.

The aggregate amount of fees, salaries, discretionary bonus, defined contribution benefit plans (including pension), housing and other allowances, and other benefits in kind paid to our five highest paid individuals of the Company, including Directors, during the years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009 were approximately US$25.5 million, US$30.0 million, US$26.4 million and US$3.0 million, respectively.

(2) The total basic remuneration for the Group's Directors per annum is GBP120,000 (or approximately US$240,000, US$227,000 and US$179,000 for the years ending 31 December 2007, 2008 and the first half of 2009 on an annualised basis, respectively). In addition, each of the Group's Directors receives GBP10,000 (or approximately US$20,000, US$19,000 and US$15,000 for the years ending 31 December 2007, 2008 and the first half of 2009 on an annualised basis, respectively) for membership in each of the Board committees; and GBP15,000 (or approximately US$30,000, US$28,000 and US$22,000 for the years ending 31 December 2007, 2008 and the first half of 2009 on an annualised basis, respectively) for chairing any of the Board committees. The conversion rates between GBP and USD used in the foregoing were GBP1 : US$2.00181 for 2007, GBP1 : US$1.85518 for 2008 and GBP1 : USD1.49345 for the first half of 2009, being the average spot conversion rate shown on the relevant page of OANDA for the relevant period. The CEO of the Company is also the CEO of RUSAL Global Management B.V., a member of the Group, and receives his compensation from RUSAL Global Management B.V.

Save as disclosed above, no other payments have been paid or are payable, in respect of the three years ended 31 December 2006, 2007 and 2008 and six months ended 30 June 2009, by us or any of our subsidiaries to our Directors. We have paid an aggregate amount of approximately US$37.8 million, including benefits and contributions, to our Directors as remuneration by us, excluding any discretionary bonus payable to our Directors, in respect of the years ended 31 December 2006, 2007 and 2008 and six months ended 30 June 2009, according to the present arrangements.

Under the arrangements currently in force, we estimate the aggregate amount of fees, salaries, discretionary bonus, defined contribution benefit plans (including pension), housing and other allowances, and other benefits in kind of our Directors payable for the year ending 31 December 2009 to be approximately US$10.4 million.

FUTURE COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT

A proposal has been put to the Board of Directors, on the recommendation of the Remuneration Committee, to consider and approve the following in relation to the compensation of the Company's non-executive directors, chief executive officer and certain members of senior management and other employees:

A. **Non-Executive Directors**

1. ***Non-executive Chairman***

   (a) To be paid, lump-sum and pre-Global Offering, a 2009 Chairman's fee of US$400,000 per annum for services from 1 January 2009 through 31 December 2009 or pro-rated through the completion of the Global Offering, if earlier;

   (b) Thereafter, to be paid monthly a pro-rated US$400,000 per annum Chairman's fee.

2. ***Non-executive Directors***

   (a) Commencing with the Global Offering, all non-executive Directors are to be paid a pro-rated GBP120,000 per annum, paid monthly; those non-executive Directors who are employed or retained by the Company's Major Shareholders will consult with such shareholders as to whether the Directors, as individuals, may retain such fees or whether such fees should be paid to their respective employing entities;

   (b) Additional fees for committee assignments - GBP15,000 per annum for chairman, GBP10,000 for member - commencing after pertinent appointments, to be made at the recommendation of the Corporate Governance and Nomination Committee, early in 2010;

   (c) The two independent non-executive directors who have contributed to the establishment of the Company's governance structure and preparation for the Global Offering shall each receive an IPO bonus in the amount of GBP60,000 upon completion of the Global Offering.

B. **Chief Executive Officer**

1. For services rendered since assuming the role of Chief Executive, the incumbent CEO is to receive a lump-sum payment before the Global Offering in the amount of the aggregate of the following:

   (a) US$10 million per annum base salary;

   (b) An annual bonus in the amount of 2.5% of the Company's net profit (excluding the one-off 2009 IFRS adjustment for gain from the debt restructuring);

   (c) Such annual bonus shall be adjusted downward annually in any year in which the previous year's minimum bonus exceeded 2.5% of net profits, such downward adjustment to be in the amount of that short-fall, but in no event shall such downward adjustment reduce the annual bonus below the minimum bonus level of US$10 million;

   (d) This compensation package shall continue until completion of the Global Offering or until otherwise modified by the Company's Board of Directors, at the Remuneration Committee's recommendation.

2. For his services in preparation of the Global Offering, the CEO will be paid an IPO bonus of up to US$75 million, subject to certain conditions, in the form of restricted Shares of the Company, with a two-year lock-up (being 53,888,889 Shares, assuming an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range).

3. Post-Global Offering, the CEO's annual compensation will comprise the following:

   (a) US$10 million per annum base salary, paid monthly;

   (b) Short-term Incentive Program ("STIP"): a performance-linked cash payment within 30 days after the Company's Audit Committee's approval of entire-year audited financial statement for the previous year, in the potential amount of 200% of base salary, to be decided on the basis of the Remuneration Committee's specific criteria;

   (c) Long-Term Incentive Program ("LTIP"): all such awards, based strictly on 12-month share price appreciation, comprising:

      (i) 50% restricted shares of the Company, vesting annually in equal amounts over three years with no performance conditions other than continued employment; and

      (ii) 50% performance shares of the Company, vesting in three equal tranches over three years, subject to the CEO's continued employment and each of such subsequent year's substantial achievement of that prior year's business plan and such shares being in the form of restricted shares, with each tranche to be released after a further two-year holding period from the date of vesting and subject to continued employment through such period;

   (d) The quantum of the LTIP award will be based strictly on share price appreciation compared with a comparator group of 6-15 global, public, complex and (though not exclusively) extractive-industry companies' share price movements.

C. **Other Management/Employee Bonus Shares:**

Certain members of senior management and other employees will be awarded restricted shares (with the same terms as the CEO's restricted share potential awards) and performance shares (also with same terms as the CEO's potential performance shares).

For services provided in preparation of the Global Offering, certain members of senior management and other employees will be paid an IPO bonus of approximately US$15 million, subject to certain conditions and to increase in certain circumstances, 60% of which will be in the form of Shares of the Company (half of such Shares being performance Shares and the remaining half being restricted Shares), with a two-year lock-up, and 40% of which will be in cash. Assuming that the amount of the bonus is US$15 million and an Offer Price of HK$10.80 per Offer Share, being the mid-point of the estimated Offer Price range, the number of Shares that would be issued to senior management and other employees in respect of the IPO bonus would be 6,466,667 Shares.

In addition, on the recommendation of the Remuneration Committee, the Company's Board of Directors also adopted in principle a management incentive compensation plan, the details of which remain to be specified. It is expected that the management incentive compensation plan will involve short-term and long-term elements, and a mixture of cash and stock incentive compensation, and that the stock portion will include restricted shares, some of which will vest only if performance criteria are met going forward.

This implementation of certain aspects of the future compensation arrangements set forth above will require the consent of the Company's lenders under its debt restructuring agreements.

So far as the Directors are aware, the following persons will, immediately following the completion of the Global Offering and taking no account of any Shares which may be issued pursuant to the exercise of the Over-allotment Option or any bonus shares that may be issued to management, have interests or short positions in the Shares or underlying Shares which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO:

Name of shareholder	Capacity/Nature of interest	Number of Shares held	Approximate percentage of interest in the Company immediately after the Global Offering
Oleg Deripaska	Interest of a controlled corporation	7,202,910,267 Shares held by En+[1]	47.59%
En+[1]	Beneficial owner	7,202,910,267 Shares	47.59%
Onexim	Beneficial owner	2,586,499,596 Shares	17.09%
TCO Holdings Inc.	Interest of controlled corporation	860,507,680 Shares[2] 117,341,956 Shares[2]	5.68% 0.77%
TZ Columbus Services Limited	Interest of controlled corporation	860,507,680 Shares[3] 117,341,956 Shares[3]	5.68% 0.77%
Renova Holdings Limited	Interest of controlled corporation	860,507,680 Shares[4] 117,341,956 Shares[4]	5.68% 0.77%
Renova Metals & Mining Limited	Interest of controlled corporation	860,507,680 Shares[5] 117,341,956 Shares[5]	5.68% 0.77%
SUAL Partners	Beneficial owner	2,400,970,089 Shares[6] 327,405,012 Shares[7]	15.86% 2.16%
Amokenga Holdings	Beneficial owner	1,309,620,048 Shares	8.65%

Notes:

(1) Mr. Oleg Deripaska beneficially owns the entire issued share capital of En+. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.

(2) TCO Holdings Inc. is the beneficial owner of 100% of the shares in TZ Columbus Services Limited, which in turn acts as trustee of a trust (details of which are referred to in Note 3 below) holding an indirect interest in 35.84% of the issued share capital of SUAL Partners. TCO Holdings Inc. is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.

(3) TZ Columbus Services Limited is the trustee of a trust of which Victor Vekselberg is the sole beneficiary and the beneficial owner of 100% of the shares in Renova Holdings Limited and is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.

(4) Renova Holdings Limited is the beneficial owner of 100 % of the shares in Renova Metals and Mining Limited and is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.

(5) Renova Metals and Mining Limited is the beneficial owner of 35.84% of the shares in SUAL Partners and is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.

(6) Shares held by SUAL Partners. These represent the Shares in which SUAL Partners has a direct beneficial interest.

(7) Shares held by SUAL Partners. These represent the Shares in which SUAL Partners has an interest as a result of certain rights of first refusal granted by Glencore — see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only - Rights of first refusal-Glencore".

En+

En+ is a limited liability company incorporated under the laws of Jersey with its registered office at Whiteley Chambers, Don Street, St. Helier, Jersey, Channel Islands, JE4 9WG. En+ is ultimately controlled by its sole beneficial owner Mr. Oleg Deripaska. For a description of the business activities of En+, see "Relationship with the Controlling Shareholder and Non-Competition — En+'s Business".

Onexim

Onexim is a company incorporated under the laws of Cyprus, whose registered address is at Vyronos, 36 Nicosia Tower Centre, 801 P.C., 1506 Nicosia, Cyprus. Onexim is ultimately controlled by Mr. Mikhail Prokhorov who founded the Company in 2007. It is one of Russia's largest private equity funds and its portfolio includes investments in base and precious metals producers, the Russian energy, financial services and real estate sectors and the media and high technology sectors.

SUAL Partners

SUAL Partners is a limited liability company incorporated under the laws of the Bahamas whose registered office is at 2nd Terrace West, Centreville, Nassau, Commonwealth of the Bahamas. SUAL Partners is beneficially owned by a number of individuals, with Mr. Victor Vekselberg and Mr. Len Blavatnik, together being the controlling shareholders of SUAL Partners. SUAL Partners is a holding company that holds interests in UC RUSAL and a separate kitchenware and houseware business.

Amokenga Holdings

Amokenga Holdings is a company incorporated in Bermuda whose registered office is at 22 Victoria Street, Canon's Court, Hamilton, HM12, Bermuda. Amokenga Holdings is ultimately controlled by Glencore International AG, which is 100% owned by management and key employees (including one of the Company's Directors, Ivan Glasenberg), none of which controls more than 20% of the share capital of Glencore International AG. For a description of the business activities of Glencore, see "Relationship with the Controlling Shareholder and Non-Competition — Glencore — Glencore's Business".

The following table shows the indirect holdings of ordinary shares in the Company of the beneficial owners as at the date hereof, where such holding exceeds 3% of the issued share capital of the Company:

Beneficial Owner	Number of Ordinary shares at the date of this Prospectus	Percentage of issued share capital
Oleg Deripaska[(1)]	660,000	53.35%
Victor Vekselberg[(2)]	78,800	6.37%
Len Blavatnik[(1)(3)]	67,300	5.44%
Mikhail Prokhorov	237,000	19.16%
Total	1,043,100	84.32%

Notes:

(1) Company's Director. See "Directors and Senior Management".

(2) Chairman of the Company's Board of Directors. See "Directors and Senior Management".

(3) Mr. Len Blavatnik and his family members are the beneficiaries of trusts which are indirectly interested in 30.56% of SUAL Partners, which owns shares in the Company as disclosed herein.

Shareholder Options

En+ and SUAL Options

Pursuant to a deed dated 25 July 2008 between En+, SUAL Partners and Glencore, Glencore granted En+ and SUAL Partners the option (the "Glencore Call Option") to acquire all ordinary shares in the Company held by Glencore on the date of exercise of the Glencore Call Option that were also (i) held by Glencore on 26 March 2007 or (ii) issued to Glencore by the Company after 26 March 2007

but before exercise of the Glencore Call Option (both of which, for the avoidance of doubt, exclude any shares in the Company acquired by Glencore on an arms length basis from anyone other than the Company following an initial public offering or any shares in the Company sold by Glencore to any third party in compliance with the shareholders' agreement then in force in relation to the Company) (the "Glencore Option Securities"). The Glencore Call Option may only be exercised by En+, but following exercise, SUAL Partners have the right to participate in proportion to their holding of Shares at that time vis-à-vis En+. The Glencore Call Option is exercisable until 26 March 2017.

The exercise price of the option will be determined by an investment bank as 120% of the higher of (i) market value of Glencore option securities, which is determined by reference to the enterprise value of the Group on the relevant option exercise date or after an initial public offering, the volume weighted average price of an ordinary share over the preceding five trading days; and (ii) a valuation calculated by reference to the cumulative aggregate EBITDA of the Group for the preceding 12 quarters and the discounted enterprise value/EBITDA multiple at which certain of the Group's competitors trade.

Pursuant to a deed dated 25 July 2008 as amended and restated on 18 December 2009 between SUAL Partners and En+, En+ granted put options to SUAL Partners. If the Company is not listed on the Official List in London by 31 December 2010, such listing complying with certain other best practice criteria, SUAL Partners will have the right to put the Shares it holds onto En+ at 115% of their market value (100% if the Shares had been acquired from Glencore). The right to exercise this put option will terminate upon the earlier of (i) completion of an initial public offering on a major internationally recognised stock exchange other than Moscow; (ii) if En+'s interest in the Company falls below 52% plus one Share as a result of an issue of Shares approved by SUAL Partners (the "En+ Dilution Condition") and (iii) 8 June 2013. In addition, if the Company proposes a non-London initial public offering, SUAL Partners will have the right to put the Shares it holds onto En+ at 115% of their market value until the earlier of (i) completion of the London initial public offering; (ii) seven days after Board approval of a non-London initial public offering; (iii) satisfaction of the En+ Dilution Condition and (iv) 25 April 2012. Both put options will terminate upon the Listing Date.

Onexim Options

Pursuant to the terms of a deed dated 20 November 2007, as amended and restated on 11 April 2008 and 1 December 2009 between Onexim, the Company and En+, Onexim has granted En+ the right to acquire any Shares held by Onexim in excess of 7% of the then issued share capital of the Company. This call option is exercisable from the date of admission to trading of the Company's shares to a major international stock exchange, for a period of two years. The exercise price is the greater of the then market price and such valuation which corresponds to a valuation for the Group of US$22 billion prior to the issue of any Shares or other share capital reorganisation subsequent to 1 December 2009.

On 1 December 2009, the Company entered into an amendment and restatement of the put and call option deed between the Company, Onexim and EN+ dated 11 April 2008. Pursuant to this deed as amended and restated, the Company has granted Onexim a put option (the "Onexim Put Option") in respect of the Shares Onexim received in April 2008 as part consideration for the sale by Onexim to the Company of a 25% plus one share stake in Norilsk Nickel.

The Onexim Put Option would terminate with respect to the Company if it could show that it had used best endeavours to achieve admission of the Shares to trading on a major international stock exchange prior to 31 December 2013 ("Admission"). If Onexim exercised the Onexim Put Option and the Company could not show that it had used best endeavours to achieve Admission, to the extent the Company was legally prevented from acquiring those Shares, En+ would be obliged to acquire them. In addition, if Onexim exercised the Onexim Put Option and the Company could show that it had used best endeavours to achieve Admission, En+ would also be obliged to acquire them unless it could show that it had also used best endeavours to achieve Admission.

The aggregate exercise price of the Onexim Put Option is US$6,226,981,156 or, depending on certain payment conditions, US$7,325,859,992.

The Onexim Put Option will terminate on the Listing Date.

Shareholders' Agreement between Major Shareholders only

En+, SUAL Partners, Glencore and Onexim (the "Major Shareholders") have agreed the terms of a shareholders' agreement that is expected to be entered into before the Listing Date, to which the Company is not a party, which sets out certain agreed matters between the Major Shareholders in relation to board appointments, board committees, voting, transfers of Shares and certain other matters (the "Shareholders' Agreement between Major Shareholders only"). The principal terms of the Shareholders' Agreement between Major Shareholders only are described below. Unless otherwise stated, references to En+, SUAL Partners, Glencore and Onexim are deemed to include reference to other entities controlled by those Major Shareholders (other than any member of the Group).

Board of the Company

- For as long as En+ holds at least 30% of the Shares held by the Major Shareholders and their respective wholly owned subsidiaries (the "Major Shareholders' Shares"), the Major Shareholders have agreed to use their respective voting and other rights to procure, so far as they are able, that the Board shall consist of a minimum of 16 and a maximum of 18 Directors and that Directors proposed for nomination or removal under the Articles or otherwise by the Shareholders will be appointed to or removed from the Board to achieve the following:

  - For as long as En+ holds at least 40% of the Major Shareholders' Shares, Directors representing at least 50% of the Board shall be directors proposed by En+ (excluding independent Directors), one of whom shall be the vice chairman of the Board. For as long as En+ holds at least 30% of the Major Shareholders' Shares, En+ shall have the right to nominate for appointment and removal, the chief executive officer of the Company (the "CEO"). The appointment of the CEO will be subject to approval by a majority of the Board and the Board will retain the ability to remove the CEO. The number of directors (other than independent Directors) which En+ is entitled to propose for nomination and removal to the Board shall reduce by one for as long as its shareholding, as a percentage of the Major Shareholders' Shares, is between 35% and 40%, and by two for as long as such percentage is between 30% and 35%. In addition, En+ shall be entitled to propose for nomination and removal two independent Directors for as long as it holds at least 40% of the Major Shareholders' Shares and one independent Director for as long as that percentage remains between 10% and 40%. En+ shall have the right to veto the appointment of any independent Director nominated by SUAL Partners or Onexim on the grounds set out in the Shareholders' Agreement between Major Shareholders only.

  - For as long as Glencore holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue), Glencore shall have the right to propose for nomination and removal as a Director, the CEO of Glencore and to veto the appointment of any independent Director nominated by En+, SUAL Partners or Onexim on the grounds set out in the Shareholders' Agreement between Major Shareholders only.

  - For as long as SUAL Partners holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue), SUAL Partners shall have the right to propose for nomination and removal three Directors, one of whom shall be independent, and to veto the appointment of any independent Director nominated by En+ or Onexim on the grounds set out in the Shareholders' Agreement between Major Shareholders only.

  - For as long as Onexim holds at least 5% of the total Shares in issue, Onexim shall have the right to propose for nomination and removal one Director and to veto the appointment of any independent Director nominated by En+ or SUAL Partners on the grounds set out in the Shareholders' Agreement between Major Shareholders only. In addition, if Mr. Barry Cheung Chun-yuen resigns as a Director, Onexim shall be entitled to propose for nomination and removal one independent Director.

  - For as long as it is required pursuant to the facilities agreement between VEB and the Group, one director shall be proposed by VEB.

  - Victor Vekselberg will remain as chairman for so long as both En+ holds at least 40% of the Major Shareholders' Shares and SUAL Partners holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue).

- For as long as En+ holds less than 30% of the Major Shareholders' Shares, the Major Shareholders have agreed to use their respective voting and other rights to procure, so far as they are able, that the Board shall consist of between 15 and 19 directors comprising:

  - four independent Directors, to be nominated in accordance with the rights of proposal of En+, SUAL Partners and Onexim described above (if relevant) and, to the extent required, by the corporate governance and nomination committee;

  - one director proposed by VEB, if required; and

  - Directors (other than independent Directors) who shall be proposed for nomination and removal by the Major Shareholders in proportion to their respective holdings of Shares from time to time.

- The Major Shareholders have agreed to exercise their respective voting and other rights to procure that, for as long as the Company is able to appoint between two and five Directors to the board of Norilsk Nickel, Onexim is entitled to propose one Director for appointment to that board, and for as long as the Company is able to appoint six or more directors, Onexim is entitled to propose two directors for appointment to that board.

Boards of Subsidiaries

- The Major Shareholders have agreed to use their respective voting and other rights to procure, so far as they are able, that the Directors proposed for nomination or dismissal by the Shareholders will be appointed to or removed from the boards of an agreed list of subsidiaries of the Company (the "**Agreed Subsidiaries**") to achieve the following:

  - The board of each of RUSAL Global Management B.V. and RUSAL America Corp. shall comprise:

    - four directors proposed by En+, for as long as the shareholding of En+ as a percentage of the Major Shareholders' Shares is at least 40%, provided that the number of directors to be proposed by En+ shall be three where such percentage is between 30% and 40%, shall be two where it is between 20% and 30% and shall be one where it is less than 20%; and

    - one director proposed by each of Glencore, SUAL Partners and Onexim, for as long as in each case the relevant Major Shareholder holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue), in the case of each of Glencore and SUAL Partners, and 5% of the total Shares in issue, in the case of Onexim.

- The board of each other Agreed Subsidiary shall comprise:
  - three directors proposed by En+ for as long as the shareholding of En+ as a percentage of the Major Shareholders' Shares is at least 40%, provided that the number of directors to be proposed by En+ shall be two where such percentage is between 20% and 40% and shall be one where it is less than 20%; and
  - one director proposed by each of Glencore and SUAL Partners, for as long as in each case the relevant Major Shareholder holds at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue).

Committees of the Board

- The Major Shareholders have agreed to procure, so far as they are able, that certain committees of the Board are to be established, with the composition, functions and responsibilities set out below.
  - An audit committee, remuneration committee and corporate governance and nomination committee, each to be established in accordance with the requirements of the Code on Corporate Governance Practices. The audit committee shall consist of five members, of whom three shall be independent Directors (as approved by the Board), one shall be appointed by En+ and one by Onexim. The remuneration committee shall consist of five members, of whom three shall be independent Directors (as approved by the Board), one shall be appointed by En+ and one by SUAL Partners. The corporate governance and nomination committee shall consist of five members, of whom three shall be independent Directors (as approved by the Board), one shall be appointed by En+ and one by Glencore. Summaries of the functions of these committees are set out in "Directors and Senior Management — Committees".
  - A marketing committee consisting of one member proposed for appointment by each of En+, SUAL Partners and Glencore, whose responsibilities include the review and approval of the Company's marketing strategy, recommending the appointment of marketing directors for aluminium and alumina and recommending to the CEO of the Company the removal of marketing directors.
  - A health, safety and environmental committee, whose composition, functions and terms of reference are to be determined from time to time by the Board.
  - A standing committee consisting of four members who may or may not be Directors, one proposed for appointment by each of En+, SUAL Partners, Glencore and Onexim. The standing committee shall have authority to take certain decisions in relation to the Group without further approval of the Board or the Shareholders.

Exercise of voting rights by Onexim

- At general meetings of the Company, with respect to certain agreed matters customarily reserved to Shareholders, Onexim will undertake to exercise its voting rights in the same manner as En+ exercises its voting rights, provided that in no event shall Onexim be required to vote its holding of Shares: (A) in a manner that would contravene applicable law; (B) in a manner that would be directly and materially adverse to the interests of Onexim in its capacity as a direct or indirect holder of Shares; (C) if Onexim shall have exercised a right of "veto" (as described below) in respect of the relevant matter; or (D) if and for so long as En+ is in material breach of the Shareholders' Agreement between Major Shareholders only or the Shareholders' Agreement with the Company.

Veto rights

- The Major Shareholders have agreed to exercise their voting rights with a view to giving the Major Shareholders effective veto rights as set out below, by procuring that Directors proposed by them for appointment vote against any resolution in respect of which a Major Shareholder has exercised its "veto":

- Each of En+, Glencore, SUAL Partners and Onexim is to be given an effective right of veto in relation to any Related Party Transaction (or amendment to or renewal of an existing Related Party Transaction). For this purpose, "Related Party Transaction" means any agreement, transaction or arrangement between any member of the Group on the one hand, and En+, Glencore, SUAL Partners or Onexim (or, in the case of En+, SUAL Partners and Onexim, their beneficial owners) involving the aggregate payment or transfer of value in any calendar year by one or more members of the Group of an amount which, when aggregated with any payment or transfer of value under any related agreement, transaction or arrangement would exceed US$1 million.

- Each of En+, Glencore and SUAL Partners and Onexim is to be given an effective right of veto in respect of any matter proposed to be undertaken by the Company or any of its subsidiaries which would require a special resolution were the Company or the relevant subsidiary incorporated in England and Wales (e.g., alteration of articles of association; change of name; re-registration of a private company as a public company; re-registration of an unlimited company as limited; re-registration of a public company as a private company; offer to issue shares or rights to subscribe for shares other than pro rata to existing shareholders by disapplying statutory pre-emption rights; reduction of share capital; to give, revoke, renew or vary the authority for the company to purchase (off market) shares in itself; and to redeem or purchase own shares out of capital).

- The Company does not believe that these veto rights will have any material impact on the operation of the Company.

Matters inconsistent with the Shareholders' Agreement between Major Shareholders only

- The Major Shareholders have agreed that they shall use their voting and other rights available to them to procure that no resolutions are passed or actions taken or refrained from being taken by the Company or any other member of the Group to the extent that they would be inconsistent with the terms of the Shareholders' Agreement between Major Shareholders only.

KraMZ/KUMZ supply agreements and agreements with Glencore

- The Major Shareholders have agreed to use their voting and other rights available to them to procure that all board and shareholder approvals and resolutions which are required under the Listing Rules in respect of the supply agreement entered into between the Group and Kamensk-Uralsky Metallurgical Works Joint-Stock Company, a company owned by certain shareholders of SUAL Partners and the supply agreement entered into between the Group and KraMZ group companies, a group of companies owned by Mr. Deripaska are passed in accordance with those laws and rules.

- If the entry into, amendment of or exercise of any rights under any agreements between the Group and Glencore require shareholder approval under the Listing Rules, the Major Shareholders have agreed to use their voting and other rights available to them to procure that such approvals and resolutions are passed in accordance with those laws and rules.

Dividend policy

- The Major Shareholders have agreed to procure compliance by the Group with a dividend policy, to the extent permissible under the terms of the restructuring agreements, under which not less than 50% of the annual consolidated net profits of the Group in each financial year are distributed to Shareholders within four months after the end of the relevant financial year, subject to any applicable legislation. Currently, the Company does not expect to declare dividends in respect of any year through at least 2013.

Encumbrances over Shares

- Until 26 March 2012, and subject to the exception stated below, En+ has agreed not to encumber Shares comprising 40% of the Major Shareholders Shares. Notwithstanding the foregoing, En+ will be entitled to encumber Shares equal to a maximum of 17% of the total Shares in issue from time to time in favour of a finance provider as bona fide security for indebtedness of En+ or its subsidiaries.

- Glencore and SUAL Partners have agreed not to encumber any Shares except for (i) pursuant to certain Glencore security agreements; (ii) a pledge as set out below; and (iii) the same proportion of their holding of Shares as the proportion which En+ is entitled to encumber as stated above.

- There will be no restrictions on Onexim encumbering its Shares.

- The Major Shareholders acknowledge that they may be required to pledge in aggregate 5% of the total issued Shares, on a pro rata basis, as security for indebtedness owed by the Group to VEB. The rights of the Major Shareholders to encumber a certain proportion of their Shares as described above is in addition to any such pledge granted by them to VEB.

Rights of first refusal — SUAL Partners Shares

- Subject to certain exceptions, if SUAL Partners wishes to sell any of its holding of Shares in an on-market transaction, it must serve notice on En+, offering it a right of first refusal. The price at which En+ will be entitled to acquire the Shares offered by SUAL Partners is the volume weighted average price per Share for the three trading days prior to the date on which the relevant notice is sent by SUAL Partners.

- SUAL Partners will not be obliged to offer En+ a right of first refusal in respect of Shares sold by it to the extent that:

  - the aggregate number of Shares sold in any one trading day by SUAL Partners does not exceed 20% of the daily average trading volume for the 30 trading days immediately preceding that trading day; and

  - the aggregate number of Shares sold within the above limits does not in any period of four months exceed 0.5% of the total Shares in issue at the time of the relevant sale.

Rights of first refusal — Glencore's Shares

- Glencore must offer En+ and SUAL Partners a right of first refusal in respect of any proposed sale of Shares by Glencore in an on-market transaction, on substantially the same terms as the right of first refusal to be offered in respect of Shares held by SUAL Partners (as described above), subject to the same carve outs as described above in relation to SUAL Partners.

Onexim tag along rights

- Upon any sale of Shares by En+, SUAL Partners or Onexim, such that the aggregate number of Shares sold by those three Major Shareholders in any rolling four month period exceeds 25% of the Shares then in issue, the sale shall not proceed unless the purchaser has also offered, on the same terms, to acquire the Shares then held by Onexim which were received by Onexim as part consideration for the acquisition by the Company of a stake of 25% plus one share in Norilsk Nickel.

Share placing

- To the extent that the Company proposes to undertake a bookbuilt placing or underwritten offering of Shares of in excess of 1% of the issued share capital of the Company, the Major Shareholders have agreed to use their voting and other rights to procure that the Major Shareholders are also entitled to sell a pro rata proportion of their Shares as part of such placing or offering.

No mandatory offer

- The Major Shareholders have agreed not to acquire or dispose of any voting rights which would be exercisable at a general meeting of the Company, if such acquisition or disposal would trigger a mandatory obligation under the Hong Kong Codes on Takeovers and Mergers and Share Repurchases to make an offer for Shares and have undertaken to indemnify each other in the event of a breach of such undertaking.

Licences

- For as long as Onexim is a Shareholder, En+, SUAL Partners and Glencore have agreed not to, and to use their respective voting and other rights to procure that neither the Company nor any of its subsidiaries will, bid for or acquire, and that the Company will take reasonable steps to procure that Norilsk Nickel will not bid for or acquire, certain specified geological licences relating to nickel, copper, platinum and cobalt without the prior written consent of Onexim.

Termination for particular shareholders

- The Shareholders' Agreement between Major Shareholders only shall terminate in respect of the relevant Major Shareholder in the following circumstances:

    - Upon completion of the Glencore Call Option under the deed described in "— Shareholder Options".

    - Upon completion of the SUAL Put Option under the deed described in "— Shareholder Options", such that all of SUAL's Shares have been transferred.

    - Upon either Glencore or SUAL Partners ceasing to hold at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue) Glencore or SUAL Partners (as the case may be) shall lose their rights to propose Directors for nomination to the Board, and upon such shareholdings falling below 50% of the relevant minimum shareholding stated above they shall lose their respective veto rights as described above.

    - Upon En+ ceasing to hold at least 8.6% of the total Shares in issue (or such lesser percentage as results from dilution on a further share issue), it shall lose any rights to propose Directors for nomination to the Board, and upon such shareholding falling below 50% of the relevant minimum shareholding stated above, it shall lose its veto rights as described above.

    - Upon Onexim ceasing to hold at least 5% of the total Shares in issue, other than as a result of dilution on a further share issue, it shall lose all of its rights and obligations under the Shareholders' Agreement between Major Shareholders only.

- If Onexim holds less than 5% of the total Shares in issue, but still has any rights under the Shareholders Agreement between Major Shareholders only, it shall lose all of its rights and obligations under the Shareholders' Agreement between Major Shareholders only upon any subsequent disposal by it of Shares or entry into derivative contracts or arrangements in relation to Shares.

- Upon any Major Shareholder ceasing to hold at least 3% of the total Shares in issue, for whatever reason, it shall lose all of its rights and obligations under the Shareholders' Agreement between Major Shareholders only.

- Subject to certain exceptions, if there is a change of control of Glencore or a third party acquires all or substantially all of Glencore's assets, it shall lose its rights to propose Directors for nomination to the Board and the veto rights described above. See "— Shareholders' Agreement between Major Shareholders only — Board of the Company" and "— Shareholders' Agreement between Major Shareholders only — Veto Rights".

- If there is a change of control of Onexim or a third party acquires all or substantially all of Onexim's assets, it shall lose all rights and its obligations under the Shareholders' Agreement between Major Shareholders only.

Shareholders Agreement between Major Shareholders and the Company

The Major Shareholders have agreed the terms of a shareholders' agreement that is expected to be entered into before the Listing Date to which the Company is also a party (the "Shareholders' Agreement with the Company"). The principal terms of the Shareholders' Agreement with the Company are described below. Unless otherwise stated, references to En+, SUAL Partners, Glencore and Onexim are deemed to include reference to other entities controlled by those Major Shareholders (other than any member of the Group).

Right of first refusal — bauxite, alumina, aluminium

- The Major Shareholders must offer the Company a right of first refusal in respect of any assets or development opportunities related to the production of bauxite, alumina or aluminium ("**Industrial Assets**") that they wish to acquire where such Industrial Asset or a group of related Industrial Assets has a value in excess of US$50 million.

- The minimum threshold of US$50 million stated above is subject to adjustment with effect from 26 March 2012 up to a maximum of US$1 billion, depending on the LME price of aluminium on the last business day before that date.

- Each Major Shareholder must disclose to the Company any opportunity which has come to their (or their associates') respective attentions to acquire Industrial Assets of whatever value.

Right of first refusal — nickel, copper, platinum, cobalt, palladium

- Until 25 April 2010, En+ and Onexim must offer the Company a right of first refusal in respect of any industrial assets or development opportunities related to the production of nickel, copper, platinum, cobalt or palladium, save for RTB Bor Copper moveable and fixed assets licences in Serbia ("Mining Assets") or any licences for the mining of any such Mining Asset (save for certain agreed existing or prospective licences) ("Geological Licences") that they wish to acquire where such Mining Asset has a value in excess of US$150 million, or such Geological Licence has a value in excess of US$100 million.

- Each of En+ and Onexim must disclose to the Company any opportunity which has come to their (or their associates') respective attentions to acquire Mining Assets or Geological Licences where the value is reasonably likely to give rise to a right of first refusal.

- This right of first refusal will only apply to En+ if the aggregate direct and indirect interest of En+ and its ultimate beneficial owner in Shares exceeds 40% of the total Shares in issue (or such lesser percentage as a result of any dilution on a further Share issue) and will only apply to Onexim if the aggregate direct and indirect interest of Onexim and its ultimate beneficial owner in Shares exceeds 5% of the total Shares in issue.

Acquisitions of Norilsk Nickel shares

- Onexim will undertake not to acquire shares in Norilsk Nickel before 25 April 2010 without the prior consent of the Company.

- Each of En+, SUAL and Glencore will undertake not to acquire shares in Norilsk Nickel before 25 April 2010 without the prior consent of the Company and Onexim.

Relationship between the Company and the Major Shareholders

- Each Major Shareholder must ensure that any contract between it or any of its associates and any member of the Group is entered into on an arms' length commercial basis and on terms that are not unfairly prejudicial to the interests of any Major Shareholder or the Group.

- If there is a dispute between a Major Shareholder or any of its associates and the Company, that Shareholder will not, and will procure that any Directors appointed by it will not, do anything to prevent or hinder the Company's handling of the dispute.

- The Major Shareholders agree to act in good faith in relation to the Group and in a manner that is not unfairly prejudicial to the interests of the Shareholders generally, and that the Group will be operated in accordance with the corporate governance standards set out in the Code on Corporate Governance Practices.

Termination for particular Shareholders

- The Shareholders' Agreement with the Company shall terminate in respect of the relevant Major Shareholder in the following circumstances:

    - Upon completion of the Glencore Call Option or the put option granted by Glencore under the deed described in "— Shareholder Options".

    - Upon completion of the SUAL Put Option under the deed described in "— Shareholder Options", such that all of SUAL's Shares have been transferred.

    - Upon Onexim ceasing to hold a minimum shareholding of 5% of the total Shares in issue, other than as a result of dilution on a further share issue, it shall lose all of its rights and obligations under the Shareholders' Agreement with the Company.

    - If Onexim holds less than 5% of the total Shares in issue, but still has any rights under the Shareholders' Agreement with the Company, it shall lose all of its rights and obligations under the Shareholders' Agreement with the Company upon any subsequent disposal by it of Shares or entry into derivative contracts or arrangements in relation to Shares.

    - Upon any Major Shareholder ceasing to hold at least 3% of the total Shares in issue, for whatever reason, it shall lose all of its rights and obligations under the Shareholders' Agreement with the Company.

    - Subject to certain exceptions, if there is a change of control of Glencore or a third party acquires all or substantially all of Glencore's assets, it shall lose its right of first refusal outlined above.

- If there is a change of control of Onexim or a third party acquires all or substantially all of Onexim's assets, it shall lose all rights and its obligations under the Shareholders' Agreement with the Company.

Litigation Involving Certain Beneficial Owners

Litigation Involving Mr. Deripaska

On 24 November 2006 a claim was issued on behalf of Mr. Cherney against Mr. Deripaska from the High Court. Neither UC RUSAL nor any of its subsidiaries is a party to this dispute — it is entirely between two individuals, Mr. Cherney and Mr. Deripaska. UC RUSAL has not had access to non-public information about the case and is not privy to the litigation strategy of either party or the prospects of settlement.

In his claim, Mr. Cherney alleges that:

- (i) Mr. Cherney and Mr. Deripaska each held a beneficial interest in OJSC United Company Siberian Aluminium ("Sibal"). (ii) In March 2001, Mr. Deripaska and Mr. Cherney entered into an agreement (the "Agreement") in anticipation of the proposed transfer of the assets of Sibal to an entity called Russian Aluminium ("RA", an entity that the claim does not formally identify but which may be Rusal Limited, now a wholly owned direct subsidiary of UC RUSAL (see "History and Corporate Structure — History and Development")). (iii) As a result of the transfer, Mr. Cherney would become entitled to a 20% beneficial interest in RA.

In his claim, Mr. Cherney also alleges that:

- (i) Under the Agreement, Mr. Deripaska agreed to pay Mr. Cherney US$250 million for a 17.5% shareholding in Sibal. (ii) Under a supplement to the Agreement, Mr. Deripaska was also to hold 20% of the shares in RA on behalf of Mr. Cherney (directly or indirectly through entities owned or controlled by Mr. Deripaska) and to realise such shares starting no later than 10 March 2005 and complete this exercise by 10 March 2007. (iii) Mr. Deripaska was to pay the proceeds of such realisation (or an amount based on a formula if such realisation did not take place), less US$250 million, to the account of Mr. Cherney within six months of the shares being sold, and in any event within six months of 10 March 2007 (i.e., by no later than 10 September 2007). (iv) Although Mr. Deripaska met his obligations with respect to the payment of US$250 million, he did not perform his remaining obligations.

The claim states that, at least pending receipt by Mr. Cherney of the amounts due to him pursuant to the arrangements referred to above, Mr. Cherney is entitled to and seeks:

- A declaration that Mr. Deripaska (directly or indirectly) holds (i) 20% of the shares in RA and (ii) 20% of the 66% shareholding in UC RUSAL (held by former shareholders of RA) on trust for Mr. Cherney and to his order.

- A declaration that any benefits or proceeds derived directly or indirectly by Mr. Deripaska from such shares and shareholding as well as any assets acquired using directly or indirectly any dividends or other monies or benefits received by Mr. Deripaska and referable to the shares and shareholding are held on trust for Mr. Cherney, alternatively subject to a lien in Mr. Cherney's favour.

- A declaration that, insofar as the shares are held indirectly by a person acting subject to Mr. Deripaska's directions or companies or entities owned and controlled by Mr. Deripaska, Mr. Deripaska's right to control those persons, companies or entities and to sell the said shares is held on trust for and to be exercised on behalf of and at the direction of Mr. Cherney.

- A declaration that, if and to the extent that Mr. Deripaska directly or indirectly acquired assets from RA (further or alternatively Sibal) or UC RUSAL for "inadequate consideration", such assets and/or proceeds thereof are subject to the aforementioned trust and/or lien.

- An order that Mr. Deripaska sell or procure the sale of 20% of the shares in RA and 20% of the 66% of the shares in UC RUSAL at the market price and account to Mr. Cherney for the proceeds of that sale.

- The claim alleges further, or alternatively, that by reason of Mr. Deripaska's breaches of contract, Mr. Cherney suffered loss and damage at least equal to the market value of 20% of RA and 20% of 66% of UC RUSAL, which the claim alleges to be in excess of US$4 billion, less US$250 million, increased by the value of any assets diverted for "inadequate consideration".

- Mr. Cherney also claims interest on the amounts alleged to be owed him.

The procedural history of Mr. Cherney's claim is as follows:

- On 24 November 2006, the claim against Mr. Deripaska was issued on behalf of Mr. Cherney in the High Court.

- On 3 May 2007, the High Court set aside the claim on jurisdictional and procedural grounds, and Mr. Cherney's application for permission to appeal such decision to the Court of Appeal was refused on two occasions.

- On 3 December 2007, Mr. Cherney filed an amended claim form and particulars of claim which claimed that he and Mr. Deripaska had agreed the English Courts as a forum for resolution of disputes arising from the Agreement and English law as the governing law of the Agreement, and also issued an application for permission to serve Mr. Deripaska out of the jurisdiction.

- On 3 July 2008, the High Court held that although Mr. Cherney had a good arguable case that the alleged agreement was made (and that insofar as any judgment could be reached on present material Mr. Cherney had much the better side of the argument), there was not a good and arguable case that there was any oral agreement between Mr. Cherney and Mr. Deripaska as to English law and jurisdiction in connection with the alleged agreement. The High Court's reasoning on these matters is set out in the extracts from the 3 July 2008 decision included in Appendix X to this Prospectus. The High Court also concluded, however, that the risks inherent in a trial in Russia (including risks of assassination, arrest on trumped up charges and lack of a fair trial) were sufficient to make England the forum in which the case could most suitably be tried. The High Court, therefore, gave permission for the claim form to be served outside the jurisdiction. In this connection, however, the High Court also stated that it "cannot tell whether any threat to Mr. Cherney is likely to come from a figure from his supposed criminal past or a former business rival (or someone who falls into both categories) or neither". The full decision of the High Court is on public display and can be found at <www.bailii.org/ew/cases/EWHC/Comm/2008/1530.html>.

- The High Court subsequently granted Mr. Deripaska's application to appeal and Mr. Deripaska timely appealed the 3 July 2008 decision.

- On 31 July 2009 the Court of Appeal dismissed Mr. Deripaska's appeal and subsequently refused permission to appeal to the House of Lords (now known as the Supreme Court).

- On 17 September 2009, Mr. Deripaska filed an application to the Supreme Court for permission to appeal the decision of the Court of Appeal.

- On 9 December 2009 the Supreme Court refused Mr. Deripaska's application for permission to appeal the decision of the Court of Appeal. On 14 December 2009 Mr. Deripaska was served with Mr. Cherney's claim. Mr. Deripaska will be required to serve a defence to Mr. Cherney's claims in early 2010.

At present, there is considerable uncertainty as to the possible scope and the potential outcomes in the case and how and to what extent, if at all, UC RUSAL and/or its subsidiaries and/or its or their respective assets might be affected by any decision against Mr. Deripaska. Nonetheless, the following can be noted:

- Neither UC RUSAL nor any of its subsidiaries or investees, nor En+ (the majority shareholder owned indirectly by Mr. Deripaska), nor any other direct shareholder in UC RUSAL, is currently a party in this case.

- When the merits of the case are heard, issues to be resolved will include whether there was in fact a contract with respect to 20% of RA as alleged by Mr. Cherney and, if so, whether it is governed by English or Russian law.

- In the event that Mr. Cherney were to prevail on the merits, the essence of his claim would be for money from Mr. Deripaska. The quantum of the claim referred to above (in excess of US$4 billion in respect of 20% of RA, and 20% of 66% of UC RUSAL, plus possible additional amounts) has not yet been subject to judicial examination, and it is uncertain at this time how the quantum of the claim ultimately would be determined.

- If the claim were to be paid by Mr. Deripaska without any adverse impact on his beneficial interest in UC RUSAL, his directorship or office in the Group, there would be no direct consequences for UC RUSAL or any of its subsidiaries.

- As noted above, given that (i) UC RUSAL is not a party to the litigation and (ii) the litigation is still at a very early stage, UC RUSAL is unable to express a view on the merits of Mr. Cherney's claim. However, in the event that Mr. Cherney were to succeed in his claim and obtain the relief he is seeking, then, unless Mr. Deripaska funds the judgment bill entirely from assets unconnected with the Group, Mr. Deripaska's beneficial interest in UC RUSAL or (depending on the remedy granted) certain assets of the Group, such as a portion of UC RUSAL's interest in RA, would be affected adversely by the claim. For example, if Mr. Cherney succeeds in his claim on the basis that the contract is found to be governed by English law:

  — Mr. Deripaska's beneficial interest in, and thus his influence over, UC RUSAL would be significantly reduced, through the declaration of a trust or lien in favour of Mr. Cherney over UC RUSAL shares owned indirectly by Mr. Deripaska and/or through the sale of such shares to satisfy an award for damages and interest. (A similar consequence would arise from a settlement that Mr. Deripaska financed through a sale of shares he beneficially owns in UC RUSAL.)

— If Mr. Cherney were to elect to pursue his claim in respect of shares in RA, rather than shares in UC RUSAL beneficially owned by Mr. Deripaska, a court could ultimately declare a trust or lien over, and order the sale of, shares in RA instead of shares in UC RUSAL. If, as may be the case, RA is Rusal Limited, this would lead to the creation of a new minority interest in the Group. Rusal Limited and its subsidiaries accounted for 73%, 44% and 37% of the Company's production of aluminium, alumina and bauxite, respectively, in 2008, and 76%, 52% and 50%, respectively, in the first half of 2009. The creation of a minority interest in Rusal Limited, or any other subsidiary of the Company, would itself give rise to a loss for the Group and might potentially have adverse consequences under the Group's debt restructuring agreements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Events of Default". In addition, on an ongoing basis, the creation of a minority interest would reduce the Company's net profit/(loss) attributable to Shareholders for the affected periods, the Company's comprehensive income/(loss) attributable to Shareholders for such periods and the Company's Covenant EBITDA for such periods. The Company's total equity attributable to Shareholders would also be reduced. Neither total net profit/(loss), nor total comprehensive income/(loss), nor total equity, nor Adjusted EBITDA would be affected, however.

— The Company has received legal advice from external counsel under English law that:

- If Mr. Cherney were to prevail on the merits, Mr. Cherney would have to choose between seeking a declaration of trust or a lien over shares in UC RUSAL and seeking the same over shares in RA. While it is difficult to assess the relative inherent values of the two interests, and in any event this judgement would be made by Mr. Cherney at the end of the process, the Company believes that shares in UC RUSAL after the listing would be considerably easier to sell than shares in Rusal Limited and that this might favor a decision by Mr. Cherney to pursue a remedy in relation to UC RUSAL shares beneficially owned by Mr. Deripaska rather than Rusal Limited shares.

- If Mr. Cherney were to succeed in establishing his claim to a trust over UC RUSAL shares or over shares in RA, Mr. Cherney could claim for dividends or other monies or benefits referable to those shares and trace into any assets purchased using any such dividends, monies or benefits, which might include shares of UC RUSAL, or of RA, or other Group assets. In the event that Mr. Cherney were to succeed in establishing that assets of RA or UC RUSAL had been transferred for "inadequate consideration", it is possible that Mr. Cherney would be able to trace his claim into these assets as well (or other assets derived from them), which also might include shares of UC RUSAL, or of RA, or other Group assets.

- The Company has also received legal advice from external counsel under Russian law, based on the assumptions that (a) the alleged contract is found to be governed by Russian law and (b) it is held to be valid and binding based on the fulfillment of all Russian legal requirements, including that the subject matter thereof be identified definitively. In such assumed circumstances, Mr. Cherney's remedy would be limited to recovering money damages from Mr. Deripaska, as the only other party to the alleged contract. Mr. Cherney would not be able to recover shares or assets from RA, UC RUSAL or En+ directly, would not be able to seek specific performance from any of these companies, and would not otherwise have any legal remedies against them or any of their assets. If, however, Mr. Deripaska did not otherwise satisfy any monetary judgment against him, his non-monetary assets, as well as his monetary assets, would be subject to attachment. Such non-monetary assets might include his interest in entities that indirectly hold shares of UCR and RA.

- Even before a final decision on the merits is made, further proceedings in respect of this claim, and publicity surrounding them, could adversely affect the trading price of the shares.

Mr. Deripaska has informed the Company that he strongly denies and will vigorously resist Mr. Cherney's claim. The Company would vigorously contest any claim if made against it, any of its subsidiaries or any of its or their respective assets.

Litigation Involving Mr. Vekselberg

The Swiss Financial Market Supervisory Authority (formerly the *Eidgenössische Bankenkommission*) ("FINMA") commenced two administrative proceedings (*eingreifendes Verwaltungsverfahren*) against Mr. Vekselberg in the context of acquisitions of shares in OC Oerlikon Corporation AG ("Oerlikon") and Sulzer AG ("Sulzer"), in relation to Oerlikon, on 20 June 2007 and, in relation to Sulzer, on 28 February 2007.

The proceedings relate to an alleged failure by Mr. Vekselberg and other investors to comply with disclosure obligations under the relevant Swiss statutory provisions arising out of the above acquisitions. Both proceedings are currently with the Swiss Federal Department of Finance (*Eidgenössisches Finanzdepartement*) (the "EFD"). The proceedings have been and continue to be vigorously contested by Mr. Vekselberg.

On 2 April 2009, the EFD issued a final protocol in the Oerlikon proceedings, stating that Mr. Vekselberg and other investors had violated their disclosure duties. The EFD may now render its administrative order for penalty (*Strafbescheid*) in the Oerlikon proceedings. It is not known when the EFD will issue the final protocol in the Sulzer proceedings. Accordingly, it is currently uncertain whether, and if so when, an administrative order for penalty will be issued by the EFD. If an administrative order for penalty is appealed, the order becomes an indictment before the Swiss Federal Criminal Tribunal *(Bundesstrafgericht)* for judicial decision.

The maximum penalty that it is expected could be imposed by EFD on Mr. Vekselberg in this respect is double the stock exchange price of the non-disclosed holdings at the date of the alleged non-compliance.

Immediately following completion of the Global Offering, En+ will be interested in approximately 47.59% of the Company's then issued share capital (if the Over-allotment Option is not exercised and no bonus Shares are issued to management) or approximately 46.89% of the Company's then issued share capital (if the Over-allotment Option is exercised in full but no bonus Shares are issued to management) and will be the Company's Controlling Shareholder. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.

En+'s Business

En+'s strategy is to focus on businesses which extract raw materials for energy production, generate electricity and produce non-ferrous metals. En+ specialises in metals that require high energy consumption and then look for synergies between its energy producing and energy consuming businesses.

En+'s origins lie in its core business of aluminium production. Apart from being our Controlling Shareholder, En+ also owns Central European Aluminum Company (CEAC) which operates an aluminium smelter and bauxite mine in Montenegro.

INDEPENDENCE FROM EN+

Having considered all relevant factors, the Directors are satisfied that the Group can conduct its business independently of En+ after the Global Offering:

Independence of our Board and our Senior Management and Senior Management of En+

The Board consists (subject to the appointment of Mr. Barry Cheung and Mr. Igor Ermilin with effect from the Listing Date) of 18 Directors, comprising three executive Directors, 11 non-executive Directors and four independent non-executive Directors. The Board currently comprises a majority of non-executive Directors due to a historical arrangement between En+, SUAL Partners, Glencore and Onexim, pursuant to which they are each entitled to nominate a certain number of candidates for appointment as Directors. As at the Latest Practicable Date, nine of the Directors were nominated by En+ and one of such Director was also a director of En+. The overlapping Director, namely Mr. Vladislav Soloviev, is a non-executive Director in both the Company and En+ and has been elected on the basis of his qualifications and breadth of experience, as set out in more detail in "Directors and Senior Management". Mr. Deripaska, CEO and executive Director of the Company, is not a director of and holds no other position at En+. The Company's non-executive Directors attend Board meetings and provide guidance to and decide on the Company's important matters. Certain of the non-executive Directors also sit on the committees of the Board and are responsible for the matters related to such committees.

For the following reasons, the Directors are of the view that the Group is able to operate independently from En+ notwithstanding that nine Directors, including the CEO, are nominated by En+ and one Director is also a director of En+:

(a) the decision-making mechanism of our Board set out in the Articles of Association provides that in the event of a conflict of interest or duty, all Directors with a conflicting interest shall abstain from voting when a conflicted resolution is to be discussed and voted on;

(b) the Group's day-to-day operations are managed by three executive Directors, each of whom is nominated by En+, and our senior management team. All non-Board members of our senior management are independent of and not connected with En+. Mr. Deripaska devotes approximately 80% of his time to the Group; and

(c) the Board has four independent non-executive Directors (subject to the appointment of Mr. Barry Cheung with effect from the Listing Date) with extensive corporate governance and financial experience and is able to review, enhance and implement measures to manage any conflict of interests between En+ and our Group in order to protect minority shareholders' interests and to manage the affairs of the Group independently of En+. A committee of the independent non-executive Directors will make recommendations to the independent shareholders on how to vote for any resolution relating to connected transactions with effect from the Listing Date.

Based on the above, the Board is satisfied that the Board as a whole, together with our senior management team are able to perform the managerial role in the Group independently.

Operational Independence

The Group has full control of its assets and its businesses, and the Group has operated throughout the Track Record Period and continue to operate as at this time, as a business group which is separate from and fully independent of the Controlling Shareholder.

The Group has, as disclosed under the section entitled "Connected Transactions" of this prospectus, entered into contracts with companies controlled by the Controlling Shareholder for the purchase of electricity, and may continue to do so after Listing.

As aluminium production is energy intensive, access to relatively inexpensive Siberian hydropower is central to the competitive strategy of the Group. However, notwithstanding the volume of such purchases from companies owned and controlled by the Controlling Shareholder, and the importance of electricity cost to the production activities of the Group, the Company for the following reasons does not consider that it is as a consequence overly reliant on the Controlling Shareholder:

(1) the Group has access to alternative sources of electricity as the Group's Russian smelters are connected to the Russian power grid, meaning that electricity supplies can be obtained from various power plants, all of which are also connected to the grid. These supplies are available to the Group at market prices;

(2) a fixed tariff set by the Russian Government currently applies to approximately 50% of the electricity supplies purchased from companies controlled by the Controlling Shareholder. The remainder is purchased primarily at prices determined independently of these power producers by an independent market council that sets applicable daily prices on the basis of a pricing model applied across Russia and is entitled to apply market smoothing mechanisms. As a result, there would be relatively limited price impact in switching to suppliers unrelated to our Controlling Shareholder except to the extent we were to obtain supplies from higher-cost coal producers;

(3) none of the contracts is in take-or-pay format;

(4) even with the staged reduction of the proportion of each supply contract which is subject to regulated tariffs in accordance with existing regulations in Russia, which are expected to reduce such regulated proportion to zero by 1 January 2011, the Group is currently already a very large volume user with significant negotiating power in the Russian power market. For the year ended 2008, the Group consumed approximately 30% of the power generated in Siberia; and

(5) the power plants owned or controlled by the Controlling Shareholder are located in remote regions where there are a limited number of large volume users located in proximity to such plants. Sales to distant users would involve significant transmission losses and, because Siberia is a surplus energy producer, the result is that these plants are more reliant on the customer than vice versa.

Financial Independence

The Group's financial auditing system is independent from En+ and employs a sufficient number of dedicated financial accounting personnel responsible for financial auditing of our accounts. We have independent bank accounts and independent tax registration.

The Group's treasury operations are handled by our Treasury Department, whose functions include financing, treasury and cash management and operates independently from En+ and shares no functions or resources with En+.

The Group's choice of financial institutions is mainly based on the credit standing of the institutions and the terms offered by them.

As at the Latest Practicable Date, En+ has not provided any security and/or guarantee on the Group's borrowings.

Based on the above, the Directors believe that the Group is able to maintain financial independence from En+.

Non-competition

None of the Directors nor the Controlling Shareholder of the Company has any business which competes with or is likely to compete with the Group's business, either directly or indirectly, except for the excluded business described below. However, by reason of the nature of such excluded business and the clear delineation between the Group's business and such excluded business, the Group is fully capable of carrying on its business independently of and at arm's length from such excluded business. There is no real competitive threat to the Group's business from the excluded business and there is no intention for the Company to acquire such excluded business.

Mr. Deripaska owns Central European Aluminium Company ("CEAC") (which operates in Montenegro an aluminium smelter called Kombinat Aluminijuma Podgorica and a bauxite mine called Rudnic Boxita Niksic which supplies raw material for the smelter). CEAC's revenue was 44.7 million Roubles for the six months ended 30 June 2009. CEAC's net loss was 94.6 million Roubles for the six months ended 30 June 2009. One of CEAC's assets is the Kombinat Aluminijuma Podgorica (Aluminum Plant Podgorica) ("KAP"), based in Montenegro, which manufactures a wide range of aluminium alloys. CEAC employs more 2,500 people and produces 120,000 tonnes of aluminum annually. KAP's main suppliers are the electricity company of Montenegro, the Port of Bar, Montenegro Railways and bauxite mines. KAP's largest customers are aluminium traders (KAP sells most of its aluminium into the market at LME based prices).

Mr. Deripaska also owns the KraMZ group of companies (which operate the Krasnoyarsk Metallurgical Plant ("KraMZ"). The KraMZ plant was opened in the 1960s and currently employs in excess of 2,000 individuals. In 2008 the KraMZ plant produced approximately 112,000 tonnes of semi-finished aluminium alloys. KraMZ's revenue was 2,803.5 million Roubles for the six months ended 30 June 2009. KraMZ's net loss was 59.1 million Roubles for the six months ended 30 June 2009. Most of the KraMZ plant's raw materials (principally aluminium) are purchased from companies within the Group (primarily KrAZ). KraMZ's main customers are industrial customers located within Russia that purchase aluminium rods, tools, dies and cast aluminium alloys.

In addition, Mr. Deripaska is a beneficial owner of Dmitrov Pilot Plant for Aluminium Canning Tape ("DOZAKL") (the sole manufacturer in Russia and the CIS of aluminium tape for soft food cans and aluminium strips for lamplight reflectors and lath ceilings). The DOZAKL plant was opened in 1972 and currently employs more than 360 individuals. It manufactures aluminium tape for food cans and lamplight reflectors in Russia or the CIS. DOZAKL's revenue was 381.6 million Roubles for the six months ended 30 June 2009. DOZAKL's net loss was 0.6 million Roubles for the six months ended 30 June 2009. DOZAKL purchases most of its raw materials (principally aluminium) from the Group's Russian aluminium smelters. DOZAKL's main customers are industrial customers located within Russia and the CIS.

KraMZ and DOZAKL are focused on the downstream market for aluminium products, and not the upstream market on which the Group has taken a strategic decision to focus. As a result, a decision was taken not to include them in the Group at the time of the 2007 merger because they do not fit the Group's strategic profile, which is to focus on more profitable upstream businesses. CEAC is a geographically isolated producer of aluminium and would not be of interest to the Group due to its relatively high cost structure and certain privatization obligations.

The Company does not consider the above operations to pose any real competitive threat due to their small size, limited geographical reach and focus on the downstream segment, which is not part of the Company's business strategy.

GLENCORE

Immediately following completion of the Global Offering, Glencore will be indirectly interested in approximately 8.65% of the Company's then issued share capital (if the Over-allotment Option is not exercised and no bonus Shares are issued to management) or approximately 8.53% of the Company's then issued share capital (if the Over-allotment Option is exercised in full but no bonus Shares are issued to management) and will not be a controlling shareholder of the Company.

Mr. Glasenberg is a shareholder, director and CEO of Glencore, whose principal business is the production and trading of commodities including aluminium. Mr. Glasenberg is a Non-executive Director of the Company and is also a member of the Remuneration Committee and the standing committee. As he is not an executive Director, he does not participate in the day-to-day management of the Company, and accordingly is not involved in the daily operations of the aluminium trading division and so does not have access to confidential contracts entered into by that division. As his role on the Board of UC RUSAL as a Non-executive Director does not require his involvement in day-to-day management of the Company, this does not preclude Mr. Glasenberg from fulfilling his fiduciary duties. In case Mr. Glasenberg has a conflicting interest, he shall abstain from voting at Board meetings when a conflicted resolution is to be discussed and voted on, subject to certain exceptions. See "Summary of the Constitution of the Company and Jersey Company Law — Articles of Association — Disclosure of interests in contracts with the Company or any of its subsidiaries" in Appendix VII.

Glencore's Business

Glencore is one of the world's largest suppliers of a wide range of commodities and raw materials to industrial consumers. Headquartered in Baar, Switzerland, Glencore is a privately held company owned by its management and employees.

Glencore's customers are located around the world, in a variety of industries such as automotive, power generation, steel production and food processing. Glencore supplies its customers with metals and minerals (including bauxite, alumina and aluminium), crude oil and oil products, coal and agricultural products. These commodities originate either from Glencore's directly or indirectly owned production assets, or are secured by Glencore from third parties, or they benefit from the refining, processing or marketing expertise of Glencore.

When the Group acquired certain of the alumina businesses of Glencore in late March 2007, it became subject to a contract for the supply of alumina to Glencore that continued through 2008, in declining amounts. The Group sold to Glencore approximately 36% of its excess alumina in 2008. The Company also has long term supply contracts with Glencore for alumina and primary aluminium, and Glencore was the Group's largest customer of alumina and primary aluminium in the six months ended 30 June 2009, accounting for approximately 21% of the Group's sales of primary aluminum. See "Business — Sales and Distribution".

INDEPENDENCE FROM GLENCORE

Having considered all relevant factors, the Group is satisfied that it can conduct its business independently of Glencore after the Global Offering:

Independence of our Board and our Senior Management and Senior Management of Glencore

The Board consists (subject to the appointment of Mr. Barry Cheung and Mr. Igor Ermilin with effect from the Listing Date) of 18 Directors, comprising three executive Directors, 11 non-executive Directors and four independent non-executive Directors .

For the following reasons, the Directors are of the view that the Group is able to operate independently from Glencore notwithstanding that one Director is also a director of Glencore:

(a) the decision-making mechanism of our Board set out in the Articles of Association provides that in the event of a conflict of interest or duty, all Directors with a conflicting interest shall abstain from voting when a conflicted resolution is to be discussed and voted on;

(b) the Group's day-to-day operations are managed by three executive Directors who are independent of and not connected with Glencore and our senior management team, who are all independent of and not connected with Glencore; and

(c) the Board has (subject to the appointment of Mr. Barry Cheung with effect from the Listing Date) four independent non-executive Directors with extensive corporate governance and financial experience and is capable to review, enhance and implement measures to manage any conflict of interests between Glencore and the Group in order to protect minority shareholders' interests and to manage the affairs of our Group independently of Glencore. A committee of the independent non-executive Directors will make recommendations to the independent shareholders on how to vote for any resolution relating to connected transactions with effect from the Listing Date.

Based on the above, the Board is satisfied that the Board as a whole, together with the senior management team are able to perform the managerial role in the Group independently.

Competition

Glencore and its subsidiaries are involved in the production of primary aluminium. Glencore and its subsidiaries also participate in the marketing of both aluminium and alumina from world markets as well as from its owned industrial assets. Glencore's subsidiaries own 100% of the Columbia Falls aluminium smelter, 100% of the Sherwin alumina refinery and have an interest of 44% of Century Aluminum Company, a NASDAQ-quoted company whose assets include: the Ravenswood aluminium smelter, a 49.7% equity interest in the Mt. Holly aluminium smelter, a 100% equity interest in the Hawesville aluminium smelter and a 100% equity interest in the Nordural aluminium smelter. Consequently, Glencore competes with the Group as an aluminium producer. Glencore, in its business of production and trading, is also a customer of the Group and the Company and an aluminium producer.

Set out below is a summary of the transactions which the Group will enter into before the Listing Date, and are expected to continue after the Listing, or which will be entered into after the Listing Date, and which, in either case, fall within the definition of continuing connected transactions under the Listing Rules.

Electricity and Capacity Supply Contracts

The aluminium smeltering process is energy intensive and it is critical to secure access to a continuous supply of energy. See "Business — Energy Supply — Security of Power Supply".

In the Russian Federation, energy prices are prescribed by regulations of the federal and local authorities on an annual basis. The Russian Government controls hydro and nuclear power generation, and regulates tariffs through the FST. Reforms of the state electricity system began in the mid-1990s, when the electricity market was divided into the national wholesale market, organised by price zones, and the local retail market. The national wholesale market was further divided into two segments, one regulated by the FST with the remaining being a free market segment characterised by online trading and significant price fluctuations. The local retail markets have been fully controlled by the regional energy commissions, who have tariff-setting authority based on the FST benchmark tariffs.

In April 2007, the Russian Government established guidelines for the share of electricity production volumes to be supplied on the wholesale market under regulated tariffs during the period from 1 January 2007 to 31 December 2010. That share is from 45% to 50% during the period of 1 July to 31 December 2009 and is expected to gradually decrease to 15% to 20% by 1 July 2010. Beginning on 1 January 2011, all electricity production volumes are expected to be supplied to industrial users under free market prices. Once deregulation has occurred, electricity tariffs for industrial users are expected to rise as a result of electricity price liberalisation and demand growth.

Subsidiaries of the Group, namely Bratsk aluminium smelter, Krasnoyarsk aluminium smelter, Sayanogorsk aluminium smelter, Novokuznetsk aluminium smelter and SUAL enter into, from time to time as part of their ordinary course of business, short-term electricity and capacity supply contracts with Irkutskenergo and Krasnoyarskaya HPP, companies controlled by En+. En+ is the controlling shareholder of the Company. Accordingly, the short-term electricity and capacity supply contracts between Irkutskenergo and members of the Group or Krasnoyarskaya HPP and members of the Group will constitute continuing connected transactions for the Company under the Listing Rules after the Listing Date.

The electricity and capacity supplied under these short-term electricity and capacity supply contracts are derived from hydro-electric power plants operated by Irkutskenergo and Krasnoyarskaya HPP in Siberia. Approximately 50% of the electricity supplied by Irkutskenergo is provided at a fixed price prescribed by the Russian Government with the remaining 50% supplied at market prices. With respect to the portion pegged to market prices, it is supplied in accordance with the Regulations on Transitional Wholesale Electric Power (Capacity) Market approved by the Russian Government, the Wholesale Power Trade System Accession Agreement (the "Accession Agreement") and related rules and regulations. Such contracts are entered on an arm's length basis on pricing terms approved by the Non-Commercial Partnership Market Council (the "Market Council"), an independent industry body which is responsible for making any amendments to the Accession Agreement or the market rules and regulations. With respect to the portion prescribed by the Russian Government, it is supplied at a fixed price based on tariffs set by the Russian Government through the FST. In accordance with the guidelines established by the Russian Government for the share of electricity production to be supplied under regulated tariffs, this portion is expected to decrease gradually until 31 December 2010, and from 1 January 2011, all electricity supplied to the Company will be supplied at free market prices. Accordingly, at present, the parties have limited scope for negotiation of the pricing of short term electricity supply contracts.

The Company expects that these short-term contracts will be replaced upon their expiry by the long-term electricity capacity contracts below. See also "Business — Energy Supply — Security of Power Supply".

(a) On 1 December 2009, Bratsk aluminum smelter, a subsidiary of the Company, and Irkutskenergo, a power generating company owned by En+, entered into a long-term electricity and capacity supply contract pursuant to which Bratsk aluminium smelter has agreed to purchase electricity and capacity from Irkutskenergo for a period of nine years from 2010 to 2018.

(b) On 15 November 2009, SUAL, a subsidiary of the Company, and Irkutskenergo entered into a long-term electricity and capacity supply contract pursuant to which SUAL has agreed to purchase electricity and capacity for Irkutsk aluminium smelter, a branch of SUAL, from Irkutskenergo for a period of nine years from 2010 to 2018.

(c) On 4 December 2009, Krasnoyarsk aluminum smelter, a subsidiary of the Company, and Krasnoyarskaya HPP, a hydroelectric power station controlled by En+ entered into a long-term electricity and capacity supply contract pursuant to which Krasnoyarsk aluminium smelter has agreed to purchase electricity from Krasnoyarskaya HPP for a period of 11 years from 2010 to 2020.

En+ is the controlling shareholder of the Company. Accordingly, the electricity and capacity supply contracts between members of the Group and Irkutskenergo and Krasnoyarskaya HPP will constitute continuing connected transactions for the Company under the Listing Rules after the Listing Date.

The electricity and capacity supplied under these electricity and capacity supply contracts are derived from hydro-electric power plants operated by En+ in Siberia and is related only to the portion of the electricity supply that is not subject to government regulated pricing. It is estimated that each of Bratsk, Krasnoyarsk and Irkutsk aluminium smelters will purchase approximately 60% of its electricity requirements from the power companies operated by En+ in the first half of 2010, which will increase to approximately 80% in the second half of 2010, and further increase to 100% of its requirements from 2011 onwards. During 2010, each of the Bratsk, Krasnoyarsk and Irkutsk aluminium smelters will satisfy the balance of its electricity demand with power to be supplied from the open market.

The prices for the long-term electricity and capacity contracts are not regulated strictly by the Market Council and the electricity supplied by Irkutskenergo and Krasnoyarskaya HPP are based on a fixed formula which is tied to the market prices of electricity and the prices of aluminium quoted on the LME to link electricity costs to the Group's revenue. See "Business — Energy Supply — Security of Power Supply — Electricity tariffs of the Group's aluminium smelters". In addition, the tariff for Bratsk aluminium smelter and Irkutsk aluminium smelter is also affected by changes in power generating costs at the supplier company. Electricity under these long-term electricity and capacity supply contracts is therefore supplied at the contract price rather than the market price. Depending on the prices of aluminium on the LME and the market prices of electricity, the prices of the electricity supplied by Irkutskenergo and Krasnoyarskaya HPP may be adjusted.

In each of the four years from 2005 through and including 2008, Krasnoyarskaya HPP has had an availability ratio of 100%, and Irkutskenergo has had an availability ratio of 93-94%, where availability ratio is defined as the percentage of time during which the plant is actually operational and able to produce electricity to supply the smelters of the Group. The Group's long-term electricity supply contracts with Irkutskenergo and Krasnoyarskaya HPP provide for the suppliers to deliver specified maximum quantities of electricity, and to make available specified maximum capacities, for each year during the term of the contracts. The parties to the contracts have mutual obligations to deliver and purchase, respectively, electricity and capacity in amounts as close as possible to the

specified maximum amounts. The specified amounts are those that the Company believes it will need for the operations of the relevant smelters during the term of the contracts. Based on past experience with Irkutskenergo and Krasnoyarskaya HPP, the Company believes that these suppliers will be able to deliver and make available the required quantities of electricity and capacity during the term of the contracts.

The Company considers that the long-term electricity and capacity supply contracts will help secure a stable source of supply of electricity and capacity for the aluminium smelters of the Company and reduce unpredictability in price movements amidst the deregulating electricity supply market in Russia. Linking the electricity cost to the price of its products also tends to reduce the effect of volatility in the market price of aluminium on the Group's margins. The Directors are of the view that the terms of the long-term electricity and capacity supply contracts are fair and reasonable, conducted under normal commercial terms and are generally in the interest of the Company and its shareholders as a whole and are of the view that it is common practice for companies in the metals and mining industry to enter into energy supply contracts of similar duration to ensure uninterrupted production.

In addition to the long-term contracts, the Company also enters into short-term electricity and capacity supply contracts with power generating plants which are controlled either through equity ownership or management arrangements, by CJSC Integrated Energy Systems (IES), which in turn is controlled by one of the ultimate beneficial owners of SUAL Partners, a substantial shareholder of the Company. All such contracts are entered into at government prescribed prices, on terms determined by the Market Council and JSC "TSA", an entity controlled by the Market Council, a non-profit partnership that regulates the electricity market in Russia, with no negotiation possible of the price paid by the Company.

Owing to the nature of the Group's business these contracts are typically signed for short periods of time, each with terms of either six months or one year, on a rolling basis. If the Company had to comply strictly with Chapter 14A with respect to each of these contracts, the Company would be required to make regular disclosure of each electricity and capacity supply contract entered into, engage independent financial advisers to consider their terms and obtain the prior approval of independent shareholders for such contracts prior to entering into them. Further, it would have to spend each year convening multiple meetings and incurring unjustifiable costs.

Because short-term electricity and capacity supply contracts will account for more than 40% of the Group's electricity demand and all such contracts would be transacted at market prices or at the government-prescribed price and the terms of supply are based on standard terms for the supply of electricity and capacity in Russia, strict compliance with the reporting, announcement and independent Shareholders' approval requirements for each of the contracts would result in unnecessary expense and inconvenience placed on the Company and would not provide any substantial additional protection for the public Shareholders.

Historical transaction record

For the three years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009, the sum paid by the Company to power generating companies under En+ was approximately US$199 million, US$281 million, US$389 million and US$225 million, respectively. Changes in the sums paid by the Company to power generating companies during the three years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009 were primarily due to changes in electricity prices and volumes of electricity supplied. The changes in volume of electricity applied were mainly driven by changes in the volumes of production of the Group's aluminium smelters, which were reduced in the second half of 2008 and the first six months of 2009 in response to the volatile global macroeconomic environment during that period.

Annual cap

Based on the current assumption of the Company in respect of electricity use, it is expected that the amounts payable under the long-term and short-term electricity supply contracts listed above for the three years ending 31 December 2009, 2010 and 2011 will not exceed the following annual caps, which represent approximately 3.44%, 3.35% and 5.18% of the Group's revenue of approximately US$15,685 million for the year ended 31 December 2008:

Period	Million Kwh consumption	Annual Cap
Year ending 31 December 2009	68,906	US$540 million
Year ending 31 December 2010	76,650	US$598 million
Year ending 31 December 2011	76,649	US$812 million

The increase in the annual cap from US$389 million in 2008 to US$540 million in 2009 is based on the actual and projected usage of electricity in 2009, which is attributable to the increases in the electricity rates. The significant increases in the annual cap for electricity supply contracts in 2011 are due to the liberalisation of the electricity supply market in Russia in 2011. Since the annual amount payable under these electricity supply contracts is expected to exceed 2.5% of the applicable ratios under Rule 14.07 of the Listing Rules, the transactions would be subject to the reporting, announcement and independent shareholders' approval requirements under Rule 14A.53 of the Listing Rules.

Aluminium Sale Contracts

As part of the Group's ordinary course of business and pursuant to antimonopoly requirements to supply aluminium to Russian purchasers, members of the Group have entered into long-term aluminium sales contracts in Russia with:

(i) Kamensk-Uralsky Metallurgical Works Joint-Stock Company ("OJSC KUMZ"), a company owned by certain shareholders of SUAL Partners Limited who in aggregate have a controlling interest in SUAL Partners Limited. SUAL Partners Limited is a substantial shareholder of the Company, transactions between companies of the Group and OJSC KUMZ will constitute continuing connected transactions for the Company under the Listing Rules after the Listing Date; and

(ii) LLC Tradecom and LLC Torgovo-Zakupochnaya Kompaniya GAZ ("LLC GAZ"), companies controlled by Mr. Deripaska, an executive Director and the ultimate beneficial owner of the Controlling Shareholder of the Group.

The following contract has been entered into with OJSC KUMZ:

(a) On 4 October 2007, Open joint stock company "United Company RUSAL Trading House" ("UCR Trade"), a wholly-owned subsidiary of the Company entered into a supply contract for the supply of aluminium to OJSC KUMZ, for a period until December 2021 in amounts that vary between 115,000 tonnes per year (in 2008) and 330,000 tonnes per year (in 2016). The price is set on arm's length terms, tied to the price of aluminium on the LME. The parties may, at the purchaser's request, no later than two calendar months in advance of the beginning of a new year of supplies, agree in writing on a new annual volume of goods to be supplied provided that the variance should not be more than 10% of the original agreed volume. From the execution of the contract until 1 January 2010, the purchaser is entitled to request a reduction in the annual volume of goods to be supplied up to 160,000 tonnes of aluminium per annum. Such reduction will come into effect two years after the date of

receipt of such notification by the supplier. From 2 January 2010 until 1 January 2014, the purchaser is entitled to request an increase in the annual volume of goods to be supplied up to the original agreed volume. Such increase will take effect two years after the date of receipt by the supplier of such notification. The volume of goods to be supplied from 2017 to 2021 will be further agreed by the parties;

The following contracts have been entered into with companies controlled by Mr. Deripaska, an executive Director and the ultimate beneficial owner of the Controlling Shareholder of the Group:

(b) On 14 December 2006, UCR Trade entered into a long-term supply contract with LLC TradeCom for the supply of aluminium to LLC Tradecom for a period of fifteen years until December 2021. Pursuant to such contract, the Group will supply between 147,000 tonnes per year (in 2008) and 164,132 tonnes of aluminium per year (in 2016) to the purchaser at arm's length prices tied to the price of aluminium on the LME. The parties may, at the purchaser's request, no later than two calendar months in advance of the beginning of a new year of supplies, agree in writing a new annual volume of goods to be supplied subject to the variation not exceeding 10% of the original agreed volume. From the execution of the contract until 1 January 2010, the purchaser is entitled to request a reduction in the annual volume of goods to be supplied up to 80,000 tonnes of aluminium per annum. Such reduction will come into effect in a year from the date of receipt of such notification by the supplier. From 2 January 2010, the purchaser is entitled to request an increase in the annual volume of goods to be supplied up to the original agreed volume. Such increase will take effect in a year from the date of receipt by the supplier of such notification. The volume of goods to be supplied from 2017 to 2021 shall be further agreed between the parties; and

(c) On 28 February 2009, UCR Trade entered into a framework agreement with LLC GAZ pursuant to which the Group will supply aluminium at prices and in amounts to be agreed on arm's length terms on a monthly basis until December 2010. The agreement will be automatically extended for the next calendar year unless the parties declare their intention to terminate it.

The aluminium sale contracts above are for periods of over three years (subject to prolongation in the case of an agreement between LLC GAZ and UCR Trade). It is common for industrial concerns to enter into long-term supply contracts for raw materials to ensure that production would not be interrupted. Given that the price of the aluminium supplied under the contracts above are based on the market price of aluminium, the Directors are of the view that the long-term contracts have been entered into in the usual and ordinary course of business of the Group and are in the interest of the Company and its shareholders as a whole.

The Directors consider that the duration of these contracts is justified and necessary and that it is normal business practice for contracts of this type to be of such duration for the following reasons:

— the duration of the Group's aluminium sale contracts with other independent suppliers are generally also for a term of more than 10 years;

— based on public information, the Directors note that long-term sale contracts of some of the Company's publicly listed competitors carry terms ranging from 8 years to 30 years; and

— the aluminum sale contracts with duration of more than three years were entered into on 4 October 2007 and 14 December 2006, and it will be difficult for the Company to renegotiate and amend the terms of such contracts.

Based on the above, the Joint Sponsors consider that the above view of the Directors was made after due and careful consideration.

Historical transaction record

For the three years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009, the aggregate amount of aluminium supplied by the Group to subsidiaries of OJSC KUMZ and companies controlled by Mr. Deripaska was approximately Nil, US$210 million, US$292 million and US$4 million, respectively.

For the three years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009, the aggregate amount of aluminium supplied by the Group to LLC Tradecom was approximately Nil, US$433 million, US$321 million and US$62 million, respectively.

For the three years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009, the aggregate amount of aluminium supplied by the Group to LLC GAZ was approximately US$11 million, US$13 million, US$21 million and US$4 million, respectively.

Changes in the quantity of aluminium supplied by the Group during the Track Record Period were primarily due to changes in global demand for aluminium relating to a volatile global macroeconomic environment during the period, in particular with the contraction in economic activity that resulted from the economic crisis in 2008.

Annual cap

Based on the current assumption of the Company, it is expected that the supply of aluminium to subsidiaries of OJSC KUMZ and companies controlled by Mr. Deripaska under the aluminium supply contracts for the three years ending 31 December 2009, 2010 and 2011 will not exceed, respectively, the following annual caps, which represent approximately 0.28%, 1.91% and 2.55% of the revenue of the Group of approximately US$15,685 million for the year ended 31 December 2008:

Supply of aluminium to subsidiaries of OJSC KUMZ

Period	Annual Cap
Year ending 31 December 2009	US$45 million
Year ending 31 December 2010	US$300 million
Year ending 31 December 2011	US$400 million

The increase in 2009 over 2008 is due to the recovery of the aluminium market and the significant increase in the annual cap in 2010 from the annual cap of US$45 million in 2009 is attributable to the anticipated increase in demand from OJSC KUMZ on the basis of supply of 150,000 tonnes of aluminium per year at US$2,000 per tonne due to the anticipated commissioning of a new production plant in 2010 and the expected continuous improvement in the aluminium product market in 2010 and 2011.

Based on the current assumption of the Company it is expected that the supply of aluminium to LLC Tradecom and LLC GAZ under the aluminium supply contracts for the three years ending 31 December 2009, 2010 and 2011 will not exceed, respectively, the following annual caps, which represent approximately 0.80%, 2.17% and 2.55% of the Group's revenue of approximately US$15,685 million for the year ended 31 December 2008. The level of the annual cap in 2009 is due to the actual and anticipated sales of aluminium to LLC Tradecom and LLC GAZ expected to increase to 170,000 tonnes of aluminium at US$2,000 per tonne due to the anticipated recovery of the aluminium market.

Period	Annual Cap
Year ending 31 December 2009	US$125 million
Year ending 31 December 2010	US$340 million
Year ending 31 December 2011	US$400 million

As the annual amount of aluminium to be supplied by the Group to OJSC KUMZ, LLC Tradecom and LLC GAZ under the aluminium supply contracts is expected to exceed 2.5% of the applicable ratios under Rule 14.07 of the Listing Rules, the transactions would be subject to the reporting, announcement and independent shareholders' approval requirements under Rule 14A.35 of the Listing Rules.

APPLICATION FOR WAIVER

The Directors, including the independent non-executive Directors, consider that the electricity supply contracts and the aluminium supply contracts are conducted in the ordinary and usual course of business of the Group, on normal commercial terms and are fair and reasonable and in the interests of the Shareholders as a whole. The Directors, including the independent non-executive Directors, are also of the view that the annual caps of the transactions set out above are fair and reasonable.

Pursuant to Rule 14A.42(3) of the Listing Rules, the Company has applied to and received from the Hong Kong Stock Exchange a waiver from strict compliance with the announcement and independent shareholders' approval requirements under Chapter 14A of the Listing Rules in respect of (a) all electricity and capacity supply contracts, as set out in paragraph (1) above, between members of the Group and En+ which will straddle the Listing Date or will be signed or renewed or extended after the Listing Date up to 31 December 2011 and (b) the aluminium supply contracts listed in paragraph (2) above that will straddle the Listing Date. The Company will comply with the requirements of the Listing Rules for continuing connected transactions upon expiry of the current term for the annual caps on 31 December 2011.

CONFIRMATION FROM THE JOINT SPONSORS

The Joint Sponsors are of the view that (i) the continuing connected transactions set out above for which waivers were sought have been entered into in the ordinary and usual course of the Group's business, on normal commercial terms and are fair and reasonable and in the interest of the Shareholders as a whole; and (ii) the proposed annual caps for these continuing connected transactions referred to above are fair and reasonable and in the interest of the Shareholders as a whole.

The following is a description of the authorised and issued share capital of the Company as at the date of this prospectus and immediately after completion of the Global Offering (but prior to the exercise of the Over-allotment Option):

As at the date of this prospectus		**US$**
Authorised share capital:		
1,350,000	Shares of US$0.01 each	13,500
Issued share capital:		
1,237,000	Shares of US$0.01 each	12,370
Immediately after completion of the Global Offering[(1)]		**US$**
Authorised share capital:		
20,000,000,000	Shares of US$0.01 each	200,000,000
Issued share capital (after Capitalisation Issue):		
13,500,000,000	Shares of US$0.01 each	135,000,000
Issued share capital (after Capitalisation Issue and conversion of fee warrants):		
13,526,070,806		135,260,708.06
Issue of Shares as part of the Global Offering:		
1,610,292,840	Shares of US$0.01 each	16,102,928.40[(1)]
Total issued Shares on completion of the Global Offering:		
15,136,363,646	Shares of US$0.01 each	151,363,636.46[(1)]

Note

(1) Excludes such number of bonus Shares as may be issued to the management of the Company. See "Directors and Senior Management — Future Compensation of Directors and Senior Management".

(2) Includes shares to be sold in the form of GDSs in the International Placing. The GDSs are to be issued by The Bank of New York, Mellon, as depositary, pursuant to a deposit agreement to be entered into between the Company and the Depositary. Each GDS will represent 20 Shares. Pursuant to the Deposit Agreement, the Shares represented by the GDSs will be held with the custodian, for the benefit of the Depositary. The custodian will be the registered holder of such Shares in the share register of the Company. The number of GDSs to be sold in the International Placing will be determined by the Joint Global Coordinators following pricing of the Global Offering.

ASSUMPTIONS

The tables above assume the Global Offering becomes unconditional and is completed in accordance with the relevant terms and conditions. It takes no account of (a) any of the new Shares which may be issued upon the exercise of the Over-allotment Option; (b) any Shares which may be issued under the general mandate given to our Directors for the issue and allotment of Shares; or (c) any Shares which may be repurchased by us pursuant to the general mandate given to our Directors for the repurchase of Shares.

Fee warrants entitling the Group's restructuring lenders to 1% of the Company's fully diluted share capital were issued in connection with its debt restructuring arrangements. Lenders may require the Company to settle the fee warrants fully in cash in lieu of Shares. Otherwise, warrants will be automatically converted into Shares on the date of the Global Offering, subject to lock-up arrangements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Warrants". Immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised and no bonus Shares are issued to management, En+ would hold 47.59%, SUAL Partners would hold 15.86%, Amokenga Holdings would hold 8.65%, Onexim would hold 17.09% and the public would hold 10.81% (of which, VEB would hold 3.15% and the international lenders would hold 0.17% of the issued share capital of the Company. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.

RANKING

The Offer Shares are ordinary shares in the share capital of the Company and rank equally with all Shares currently in issue or to be issued and, in particular, will rank in full for all dividends or other distributions declared, made or paid on the Shares in respect of a record date which falls after the date of this prospectus.

GENERAL MANDATE TO ISSUE SHARES

Subject to the conditions stated in the section headed "Structure of the Global Offering — Conditions of the Global Offering", our Directors have been granted a general unconditional mandate to allot, issue and deal with Shares (otherwise than pursuant to, or in consequence of, the Global Offering, a rights issue or the exercise of any subscription rights under any scrip dividend scheme or similar arrangements, or any adjustment of rights to subscribe for Shares under options and warrants or a special authority granted by our shareholders) with an aggregate nominal value of not more than the sum of:

(a) 20% of the aggregate nominal value of the share capital of the Company in issue immediately following completion of the Global Offering; and

(b) the aggregate nominal value of the share capital of the Company repurchased by the Company (if any) under the general mandate to repurchase Shares referred to below.

This general mandate to issue Shares will remain in effect until:

(a) the conclusion of the Company's next annual general meeting of shareholders;

(b) the expiration of the period within which the Company's next annual general meeting of shareholders is required by any applicable law or our Articles of Association to be held; or

(c) it is varied or revoked by an ordinary resolution of our shareholders in general meeting of shareholders, whichever is the earliest.

GENERAL MANDATE TO REPURCHASE SHARES

Subject to the conditions stated in the section headed "Structure of the Global Offering — Conditions of the Global Offering" and subject to the requirements of the Jersey Companies Law, our Directors have been granted a general unconditional mandate to exercise all our powers to repurchase Shares (Shares which may be listed on the Hong Kong Stock Exchange or on any other stock exchange and Shares which are recognised by the Securities and Futures Commission and the Hong Kong Stock Exchange for this purpose) with a total nominal value of not more than 10% of the aggregate nominal value of the Company's share capital in issue immediately following completion of the Global Offering.

This mandate only relates to repurchases made on the Hong Kong Stock Exchange, or on any other stock exchange on which our Shares are listed (and which is recognised by the Securities and Futures Commission and the Hong Kong Stock Exchange for this purpose), and made in accordance with all applicable laws and the requirements of the Listing Rules. A summary of the relevant Listing Rules is set out in the section headed "Repurchase of the Company's own Shares" in Appendix VIII.

The general mandate to repurchase Shares will remain in effect until the earliest of:

(a) the conclusion of the Company's next annual general meeting of shareholders;

(b) the expiration of the period within which the Company's next annual general meeting of shareholders is required by any applicable law or our Articles of Association to be held; or

(c) it is varied or revoked by a special resolution of the Company's shareholders in general meeting of shareholders.

PUBLIC FLOAT REQUIREMENTS

Rule 8.08(1)(a) of the Listing Rules requires that at least 25.0% of the issuer's total issued share capital must at all times be held by the public. The Company has applied to the Hong Kong Stock Exchange to request the Hong Kong Stock Exchange to exercise, and the Hong Kong Stock Exchange has confirmed that it will exercise, its discretion under the Listing Rules to grant the Company a waiver from strict compliance with Rule 8.08(1)(a) of the Listing Rules and to accept a lower public float percentage of our Company of the higher of: (1) 10% of the Company's Shares, and (ii) the percentage of public shareholding that equals HK$6 billion at the Listing Date, as the minimum percentage of public float of the Company. The above discretion is subject to the condition that the Company will make appropriate disclosure of the lower prescribed percentage of public float in this prospectus and confirm sufficiency of above-mentioned public float in its successive annual reports after the listing.

The Company shall maintain a list of the directors, chief executive and substantial shareholders of the Company and their respective associates and their respective shareholdings in the Company, which shall be updated on a regular basis. The Company shall review the list regularly to ensure that the percentage of total issued Shares held in public hands will be no less than the minimum percentage of public float prescribed by the Hong Kong Stock Exchange. In the event that the public float percentage falls below the minimum percentage prescribed by the Hong Kong Stock Exchange, the Directors and the controlling shareholder will take appropriate steps which include a further issue of equity and/or the substantial shareholders of the Company placing some of their Shares to independent third parties, to ensure the minimum percentage of public float prescribed by the Hong Kong Stock Exchange is complied with. If the lowest prescribed percentage of the public float is not maintained then the Hong Kong Stock Exchange may, pursuant to Rule 8.08 of the Listing Rules, suspend trading of the Shares until appropriate steps have been taken.

FUTURE PLANS

See the section headed "Business — Strengths and Strategies" for a detailed description of our future plans.

USE OF PROCEEDS

We estimate that we will receive net proceeds from the Global Offering of approximately HK$16,790 million (assuming an Offer Price of HK$10.80 per Share, being the mid-point of the estimated Offer Price range), after deducting the underwriting fees and commissions and estimated expenses payable by us in relation to the Global Offering.

We intend to use all of the net proceeds we will receive from the Global Offering to reduce outstanding debt and to satisfy other obligations to its creditors (which include the settlement of fee warrants exercised for cash and a specified payment to Onexim) pursuant to the terms of our debt restructuring agreements.

To the extent that the net proceeds of the Global Offering are not immediately used for the purposes described above they will be placed in short term demand deposits and/or money market instruments.

THE CORNERSTONE PLACING

The Cornerstone Placing

In December 2009, as part of the International Placing, the Company entered into placing agreements with certain cornerstone investors (the "**Cornerstone Investors**") who have agreed to subscribe Offer Shares (both in the form of Shares and in the form of Global Depositary Shares) at the Offer Price. Assuming a mid-point Offer Price of HK$10.80, the total number of Offer Shares (both in the form of Shares and in the form of Global Depositary Shares) subscribed by the Cornerstone Investors would be approximately 635,071,480 Offer Shares, which represent approximately (i) 4.20% of the Shares issued and outstanding upon completion of the Global Offering, and (ii) 39.44% of the Offer Shares (both in the form of Shares and in the form of Global Depositary Shares), in each case, assuming that the Over-allotment Option is not exercised and no bonus Shares are issued to the management of the Company.

None of the Cornerstone Investors are related to each other and are independent third parties *vis-à-vis* the Company, the Directors and/or their associates and not a connected person as defined under the Listing Rules. None of the Cornerstone Investors will subscribe for any Offer Shares (both in the form of Shares and in the form of Global Depositary Shares) under the Global Offering other than pursuant to the relevant cornerstone placing agreement. Immediately following the completion of the Global Offering, save for the existing Board membership of Mr. Anatoly Tikhonov, a representative of VEB appointed as a Director prior to the Company's submission of the listing application, no Cornerstone Investor will have any board representation in our Company, nor will any Cornerstone Investor become our substantial shareholder. The Offer Shares (both in the form of Shares and in the form of Global Depositary Shares) to be subscribed by the Cornerstone Investors will rank pari passu in all respects respectively with the fully paid Shares in issue and the Global Depositary Shares to be issued in the Global Offering, and the Offer Shares to be subscribed by the Cornerstone Investors will be counted towards the public float of the Company.

The Cornerstone Investors

A brief description of the Cornerstone Investors is as follows:

Vnesheconombank (A State Corporation "The Bank for Development and Foreign Economic Affairs (Vnesheconombank)", "**VEB**") was established in the Russian Federation. On 17 May 2007, then Russian President Vladimir Putin signed the Federal Law N82-FZ "On Bank for Development." On 8 June 2007, VEB was registered in the Unified State Register of Legal Entities. VEB is one of the key instruments of the government investment policy. The major areas of VEB's investment activity are the implementation of investment projects aimed at removing infrastructure restrictions impeding economic growth, fostering innovations, enhancing the efficiency of natural resources utilization, improving ecological situation, developing small- and medium-sized enterprises, and also providing support for exports of industrial products and services.

VEB has agreed to subscribe for 477,090,000 Offer Shares (in the form of Shares) at the Offer Price.

NR Investments Limited ("**NR Investments**") is the principal investment vehicle of the Honourable Nathaniel Rothschild. It is independent of and not connected with N M Rothschild & Sons Limited, the financial adviser to the Company. NR Investments holds both private and public investments in a wide range of assets and jurisdictions.

NR Investments has agreed to subscribe for (i) such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$50 million at the Offer Price and such number of Global Depositary Receipts (rounded down to the nearest whole number of Global Depositary Receipts) as may be purchased with

US$50 million at the Offer Price; or (ii) if the Global Depositary Receipts are not listed on the Professional Segment of Euronext Paris on the Listing Date, such number of International Placing Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$100 million at the Offer Price. The Hong Kong dollar equivalent shall be determined based on the closing middle point spot rate quoted by The Hong Kong and Shanghai Banking Corporation Limited for US dollars at the close of business in Hong Kong on the day on which the Offer Price is determined (or next following business day if such day is not a business day). NR Investments is committed to acquire the Offer Shares (in the form of Shares and the Global Depositary Receipts) between the estimated Offer Price range of HK$9.10 and HK$12.50 as stated in this prospectus. Assuming a mid-point Offer Price of HK$10.80 per Offer Share, NR Investments will purchase 71,851,851 Offer Shares (both in the form of Shares and in the form of Global Depositary Shares), representing approximately 4.46% of the total Shares and Global Depositary Shares initially available under the International Placing and approximately 0.47% of the issued share capital (both in the form of Shares and in the form of Global Depositary Shares) of the Company upon completion of the Global Offering (if the Over-allotment Option is not exercised and no bonus Shares are issued to the management of the Company).

Paulson & Co. Inc. ("**Paulson**") is a privately owned fund manager that is based in New York and has been registered with the U.S. Securities and Exchange Commission as an investment advisor since 2004. Funds and separate accounts managed by Paulson & Co. Inc. have assets under management in excess of US$30 billion as of 1 December 2009. The firm manages funds with event-driven strategies, focusing on securities of companies involved in corporate events such as mergers, restructurings and bankruptcies. The sole shareholder of the firm is John Paulson.

Other than in connection with the investment that is the subject of the cornerstone placing agreement, Paulson & Co. Inc. and funds and accounts managed by it have no relationship to, or business dealings with, the Company.

Paulson has agreed, on behalf of the funds and accounts managed by it, to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with HK$775 million (which is equivalent to US$100 million at the exchange rate of US$1.00 = HK$7.75) at the Offer Price. Paulson is committed to acquire the Offer Shares (in the form of Shares) between the estimated Offer Price range of HK$9.10 and HK$12.50 as stated in this prospectus. Assuming a mid-point Offer Price of HK$10.80 per Offer Share, Paulson will purchase 71,759,259 Offer Shares (in the form of Shares), representing approximately 4.45% of the total Offer Shares under the International Placing and approximately 0.47% of the issued share capital (both in the form of Shares and in the form of Global Depositary Shares) of the Company upon completion of the Global Offering (if the Over-allotment Option is not exercised and no bonus Shares are issued to the management of the Company).

Mr. Kuok Hock Nien, Kerry Trading Co. Limited, Cloud Nine Limited and Twin Turbo Limited

Mr. Kuok Hock Nien, Kerry Trading Co. Limited, Cloud Nine Limited and Twin Turbo Limited have agreed to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent in the aggregate amount of US$20,000,000 at the Offer Price. Assuming a mid-point Offer Price of HK$10.80 per Offer Share, Mr. Kuok Hock Nien, Kerry Trading Co. Limited, Cloud Nine Limited and Twin Turbo Limited will in aggregate purchase 14,370,370 Offer Shares (in the form of Shares), representing 0.89% of the total Offer Shares under the International Placing and approximately 0.09% of the issued share capital (both in the form of Shares and in the form of Global Depositary Shares) of the Company upon completion of the Global Offering (if the Over-allotment Option is not exercised and no bonus Shares are issued to the management of the Company).

The Hong Kong dollar equivalent of US$20,000,000 shall be determined based on the closing middle point spot rate quoted by The Hong Kong and Shanghai Banking Corporation Limited for U.S. dollars at the close of business in Hong Kong on the day on which the Offer Price is determined (or next following business day if such day is not a business day).

Each of Kerry Trading Co. Limited, Cloud Nine Limited and Twin Turbo Limited is a private company incorporated in Hong Kong engaged in the business of investment holding, and a member of the Kuok group, being companies owned and/or controlled by Mr. Kuok Hock Nien and/or interests associated with him.

Conditions Precedent

The subscription obligation of each Cornerstone Investor is conditional upon, among others, the International Placing Agreement being entered into and having become effective and unconditional and not having been terminated.

Restrictions on Disposals by the Cornerstone Investors

Each of the Cornerstone Investors has agreed that, without the prior written consent of the Company and the relevant Joint Bookrunners which are parties to the relevant cornerstone placing agreement, it will not, at any time during the period starting on the date of execution of its cornerstone placing agreement and ending 6 months following the Listing Date, directly or indirectly, dispose of any Offer Shares (both in the form of Shares and in the form of Global Depositary Shares) subscribed by it pursuant to the cornerstone placing agreement to which it is party, other than transfer to the transferees as permitted in the relevant cornerstone placing agreement and on the basis that the transferee will be subject to the same restrictions on disposal.

Global Offering

In connection with the International Placing and Hong Kong Placing, it is expected that the Company will enter into the International Placing Agreement with the Joint Global Coordinators and the other Underwriters on or about the Price Determination Date. Under the International Placing Agreement, the Underwriters would, subject to certain conditions set out therein, severally, and not jointly, agree to procure purchasers for the International Placing Shares or Global Depositary Shares being offered pursuant to the International Placing Agreement or failing which to purchase for such International Placing Shares or Global Depositary Shares.

The Company will grant to the Underwriters the Over-allotment Option, exercisable by the Joint Global Coordinators on behalf of the Underwriters on or before 26 February 2010, being the 30th day from the Listing Date, to require the Company to issue and allot up to an aggregate of 225,000,000 additional Shares, together representing approximately 14.0% of the Offer Shares, at the Offer Price, among other things, to cover over-allocations in the Global Offering, if any.

Purchasers of Offer Shares under International Placing will have the option of taking delivery of such shares either in the form of Shares or Global Depositary Shares. For further information concerning the Global Depositary Shares, see "Structure of the Global Offering — Global Offering — The International Placing".

Grounds for termination

The Joint Global Coordinators (for themselves and on behalf of the Underwriters) shall be entitled to give notice in writing to the Company on or prior to 8:00 am on the Listing Date to terminate the International Placing Agreement if there has occurred:

(i) any change, or any development or occurrence of any event, matter or circumstance or series of events, matters or circumstances or prospective change, in the condition (financial or otherwise), in the earnings, results of operations, business, properties or business or trading prospects of the Group;

(ii) any change in international financial, political or economic conditions or currency exchange rates or exchange controls or taxation in France, Jersey, Hong Kong, Russia, the United Kingdom or the United States;

(iii) any suspension or material limitation of trading in securities generally on the Hong Kong Stock Exchange, Euronext, the New York Stock Exchange, the National Association of Securities Dealers Automated Quotations or the London Stock Exchange, or any setting of minimum or maximum prices for trading on such exchange;

(iv) any suspension of trading of any securities of the Company on any exchange or in the over-the-counter market;

(v) any banking moratorium declared by any authority in any of France, Jersey, Hong Kong, Russia, the United Kingdom or the United States;

(vi) any major disruption of settlements of securities, payment, or clearance services in any of France, Jersey, Hong Kong, Russia, the United Kingdom or the United States, or

(vii) any act of God, war, riot, public disorder, civil commotion, economic sanctions, fire, flood, explosion, epidemic, outbreak of an infectious disease, strike or lock-out any attack on, outbreak or escalation of hostilities or act of terrorism, any declaration of war by the United States, the People's Republic of China or France or any other national or international calamity or emergency the effect of which,

in the case of any paragraphs (i) to (vii), is at the sole and absolute discretion of the Joint Global Coordinators so material and adverse to make it impracticable or inadvisable to market the Offer Shares or to enforce contracts for the sale of the Offer Shares.

In addition, the International Placing Agreement may be terminated in case customary conditions precedent are not fulfilled as contemplated in the International Placing Agreement.

Lock-up

Pursuant to the International Placing Agreement, the Company will not, except pursuant to the Global Offering (including pursuant to the exercise of the Over-allotment Option), without the prior written consent of the Joint Global Coordinators (on behalf of the Underwriters) and unless in compliance with the Hong Kong Listing Rules during the period from the date hereof until the expiry of six months from the Listing Date: (i) offer, accept subscription for, pledge, charge, allot, issue, repurchase, sell, lend, mortgage, assign, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or subscribe for any of the Shares, Global Depositary Shares and other securities of the Company or any interest therein (including, but not limited to, any securities that are convertible into or exercisable or exchangeable for, or that represent the right to receive, any such Shares, Global Depositary Shares or securities or any interest therein), except for the issuance and conversion of the fee warrants or pursuant to any existing employee, officer or director stock or benefit plan; (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any such Shares, Global Depositary Shares or securities or any interest therein; (iii) enter into any transaction with the same economic effect as any transaction described in paragraphs (i) or (ii) above; or (iv) agree or contract to, or publicly announce any intention to, enter into any such transaction described in paragraphs (i), (ii) or (iii) above, whether any such transaction described in paragraphs (i), (ii) or (iii) above is to be settled by delivery of Shares or other securities, in cash or otherwise.

Pursuant to Rule 10.07 of the Listing Rules, each of Mr. Deripaska and En+ has undertaken to the Company and to the Hong Kong Stock Exchange that he or it will not, and shall procure that the registered holders controlled by him or it will not:

(a) in the period commencing on the date (the "Reference Date") by reference to which disclosure of their shareholding is made in the prospectus ("Prospectus") of the Company in relation to the Global Offering and ending on the date (the "End Date") which is six months from the Listing Date, dispose of, or enter into any agreement to dispose of, or otherwise create any options, rights, interests or encumbrances (save pursuant to a pledge or charge as security in favour of an authorised institution (as defined in the Banking Ordinance, Chapter 155 of the Laws of Hong Kong) in respect of, any of those securities of the Company in respect of which he or it is shown by the Prospectus to be the beneficial owners (the "Relevant Securities") for a bona fide commercial loan (the "Permitted Pledges"); and

(b) in the period of six months commencing from the End Date, dispose of, or enter into any agreement to dispose of, or otherwise create any options, rights, interests or encumbrances (save pursuant to any Permitted Pledges) in respect of the Relevant Securities if, immediately following such disposal or upon the exercise or enforcement of such options, rights, interests or encumbrances, he or it would cease to be a controlling shareholder (as defined in the Listing Rules) of the Company.

In accordance with Note 3 to Rule 10.07(2) of the Listing Rules, Mr. Deripaska and En+ also irrevocably and unconditionally undertake to the Company and the Stock Exchange that within the period commencing on the Reference Date and ending on the date which is 12 months from the Listing Date, he or it will:

(a) when he or it pledges or charges any securities of the Company beneficially owned by him or it in favour of an authorised institution (as defined in the Banking Ordinance, Chapter 155 of the Laws of Hong Kong), immediately inform the Company in writing of such pledge or charge together with the number of securities so pledged or charged; and

(b) when either he or it receives indications, either verbal or written, from the pledgee or chargee that any of the pledged or charged securities of the Company shall be disposed of, immediately inform the Company in writing of such indications.

Each of En+, Onexim, SUAL Partners and Amokenga Holdings has undertaken to the Company and each of the Joint Global Coordinators that, subject to certain exceptions, it will not, for a period of 180 days after the Listing Date, offer, sell, contract to sell, pledge, charge, allot, contract to allot, sell any option or contract to purchase, purchase any option or contract to sell, grant or agree to grant any option, right or warrant to purchase or subscribe for, lend or otherwise transfer, or otherwise dispose of, directly or indirectly, any of the share capital of the Company or any securities of the Company or any interest therein, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of any such share capital or securities, without, in each case, the prior written consent of each of the Joint Global Coordinators, except pursuant to (i) any stock borrowing agreement to which any such Shareholder is a party and pursuant to which such Shareholder will lend Shares to facilitate the settlement of over-allotments, (ii) any pledge over Shares granted by En+, Onexim, SUAL Partners and Amokenga Holdings in connection with the Company's debt restructuring obligations to VEB and in the case of En+ its own debt restructuring obligations, and (iii) in the case of SUAL Partners, pursuant to any grant of security by SUAL Partners in respect of any Shares, securities or any interest in favour of any duly authorised bank or other financial institution for a bona fide commercial loan.

Commission and expenses

Under the terms and conditions of the International Placing Agreement, assuming an Offer Price of HK$10.80 per Share, being the mid-point of the estimated Offer Price range, the Underwriters will receive a gross commission of approximately HK$328 million assuming the Over-allotment Option is not exercised, or approximately HK$351 million assuming the Over-allotment Option is exercised in full. In addition, the Company may, in its sole discretion, pay the Underwriters an additional incentive fee of up to 0.5% of the aggregate amount of the aggregate gross proceeds of the Global Offering (including any proceeds raised pursuant to the exercise of the Over-allotment Option).

Based on an Offer Price of HK$10.80 per Share, being the mid-point of the estimated Offer Price range, total fees and commissions in connection with the Global Offering, together with the Hong Kong Stock Exchange and Euronext listing fees, the SFC transaction levy and the Hong Kong Stock Exchange trading fees, legal and other professional fees, printing and other expenses relating to the Global Offering, are estimated to amount to approximately HK$601 million if the Over-allotment Option is not exercised and no additional incentive fee is paid to the Underwriters, or to approximately HK$624 million if the Over-allotment Option is exercised in full and no additional incentive fee is paid to the Underwriters.

The Company has agreed to indemnify the Underwriters for certain losses which they may suffer, including losses incurred arising from their performance of their obligations under the International Placing Agreement and any breach by us of the International Placing Agreement.

Underwriters' Interests in the Company

Certain of the Joint Sponsors, other Underwriters or their respective affiliates have in the past provided, currently may provide and may in the future provide, investment and commercial banking and other services to the Group and its affiliates, as well as to the Company's shareholders and their respective affiliates, in the ordinary course of business for which they have received or may receive, as the case may be, customary compensation.

Underwriters' Interests under the Debt Restructuring

Affiliates of BNP Paribas and BNP Paribas Capital (Asia Pacific) Limited (collectively referred to as "BNP Paribas" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". BNP Paribas has a lending exposure to the Group of approximately US$415 million.

Affiliates of Credit Suisse (Hong Kong) Limited are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". Affiliates of Credit Suisse (Hong Kong) Limited have lending exposure to the Company of approximately US$32.3 million.

Affiliates of BOCI Asia Limited (collectively referred to as "Bank of China" for purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". According to the international override agreement, Bank of China has a lending exposure to the Group of approximately US$4 million. As far as BOCI Asia Limited is aware, Bank of China has no other lending exposure to the Group.

VTB Capital plc. and affiliates of VTB Capital plc. (collectively referred to as "VTB Group Members" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". VTB Group Members have a lending exposure to the Group of approximately US$61.1 million.

Affiliates of CLSA Limited (collectively referred to as "Calyon" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". Calyon has a lending exposure to the Group of approximately US$507.59 million.

Affiliates of UniCredit CAIB Securities UK Ltd (collectively referred to as "UCB" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". UCB has a lending exposure to the Group of approximately US$360.86 million.

Affiliates of Société Générale and Bank Société Générale Vostok ("BSGV") (collectively referred to as "SG" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condtion and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". SG has a lending exposure to the Group of approximately US$401 million.

ABN AMRO Bank N.V. (London Branch) and affiliates of ABN AMRO Bank N.V. (London Branch) (collectively referred to as "ABN AMRO" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". ABN AMRO has a lending exposure to the Group of approximately US$219.2 million.

Affiliates of Sberbank of the Russian Federation (collectively referred to as "Sberbank" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". Sberbank has a lending exposure to the Group of approximately US$822.15 million.

NATIXIS or affiliates of NATIXIS (collectively referred to as "NATIXIS" for the purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". NATIXIS has a lending exposure to the Group of approximately US$305 million.

Affiliates of ING Bank N.V., London Branch (collectively referred to as "ING" for purposes of this section) are parties to the international override agreement as further described under "Financial Information — Management's Discussion and Analysis of Financial Condtion and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Override". ING has a lending exposure to the Group of approximately US$458 million, including US$25 million in the BEMO facility which is 50% guaranteed by the Company.

As stated under "Future Plans and Use of Proceeds", the Company intends to use all of the net proceeds it will receive from the Global Offering to reduce its outstanding debt, reducing such lending exposure.

Furthermore, under the terms of the international override agreement, the Company will pay an upfront fee to the lender parties thereto, including (a) 0.5% of such lenders' exposure in cash and (b) nominal strike warrants ("fee warrants") entitling such lenders to 1% (in aggregate) of the Company's fully diluted share capital as at the date of effectiveness of the international override agreement.

Fee warrants representing, at the date of effectiveness of the international override agreement, 6.36122[1] Shares (not including fee warrants to be issued to Banca Nazionale del Lavoro ("BNL"), an affiliate of BNP Paribas) have been issued to BNP Paribas. BNP Paribas does not presently intend to settle the fee warrants in cash in connection with the Global Offering (except for BNL, which currently intends to settle fee warrants in cash).

Notes:

1 The Shares have subsequently been sub-divided by the Company from Shares with par value US$1.00 into Shares with par value US$0.01.

Fee warrants representing, at the date of effectiveness of the international override agreement, 0.54696[1] Shares have been issued to Credit Suisse AG. Credit Suisse AG will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 0.06766[1] Shares have been issued to Bank of China. Bank of China will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 1.20286[1] Shares have been issued to VTB Group Members. VTB Group Members will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 8.58592[1] Shares have been issued to Calyon. Calyon does not presently intend to settle the fee warrants in cash in connection with the Global Offering.

Fee warrants representing, at the date of effectiveness of the international override agreement, 6.10412[1] Shares have been issued to UCB. UCB will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 0.10664[1] Shares have been issued to BSGV and fee warrants representing, at the date of effectiveness of the international override agreement, 6.53262[1] Shares have been issued to SG. SG will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 3.70763[1] Shares have been issued to ABN AMRO. ABN AMRO will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 1.29231[1] Shares have been issued to Sberbank. Sberbank will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 4.61931[1] Shares were issued to NATIXIS. NATIXIS will settle the fee warrants in cash as contemplated herein.

Fee warrants representing, at the date of effectiveness of the international override agreement, 7.01611[1] Shares have been issued to ING. ING does not presently intend to settle the fee warrants in cash in connection with the Global Offering.

Shares to be issued upon exercise of such fee warrants on the Listing Date will remain subject to a 180 day lock-up as described under "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Warrants". All of the net proceeds from the Global Offering will be used to reduce outstanding debt and to satisfy other obligations to the Group's creditors (which include the settlement of fee warrants exercised for cash).

In addition the Company may, under certain circumstances have the obligation to issue zero strike warrants to the international lenders, including to affiliates of BNP Paribas, Credit Suisse (Hong Kong) Limited, Bank of China, VTB Group Members, Calyon, UCB, SG, ABN AMRO, NATIXIS and ING (see "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of the International Debt Restructuring — Disposal and Equity Injection Undertakings, Debt Repayment Targets").

Notes:

1 The Shares have subsequently been sub-divided by the Company from Shares with par value US$1.00 into Shares with par value US$0.01.

BNP Paribas SA (an affiliate of BNP Paribas Capital (Asia Pacific) Limited) is facility agent and security beneficiary in respect of three pre-existing facilities which have been restructured as part of the Debt Restructuring. In connection with the Debt Restructuring, BNP Paribas (Suisse) SA (an affiliate of BNP Paribas Capital (Asia Pacific) Limited), acted as co-chairman of the Coordinating Committee coordinating the restructuring efforts of the lenders under international bank facilities and has also been appointed by the lenders under the international bank facilities to act as sole administrative and security agent. As a compensation for such services, BNP Paribas SA and BNP Paribas (Suisse) SA have received and are entitled to receive fees from the Company.

In addition, certain of the Joint Sponsors, other Underwriters or their respective affiliates have in the past had, currently have and may in the future have disputes with the Company and its affiliates, as well as with the Shareholders and their respective affiliates, arising out of the provision of such investment and commercial banking and other services (including a dispute relating to the repayment of a shortfall of approximately US$80 million under an equity financing by BNP Paribas (which has been sub-participated in part, including with certain underwriters) to an indirect wholly-owned subsidiary of En+ shareholder Basic Element Limited in respect of the financing of a stake in Magna International Limited).

Save as disclosed above, none of the Underwriters is interested legally or beneficially in any shares of any members of the Group or has any right or option (whether legally enforceable or not) to subscribe for or purchase or to nominate persons to subscribe for or purchase securities in any members of the Group in the Global Offering.

THE GLOBAL OFFERING

The Company is offering 1,610,292,840 Offer Shares in the form of Shares or Global Depositary Shares (subject to an Over-allotment Option as described in the section headed "Underwriting — International Placing") in the Global Offering that comprises (1) the International Placing, *i.e.* an international private placing of Offer Shares outside the United States (including to professional investors within Hong Kong) in offshore transactions in reliance on Regulation S, and in the United States to QIBs in reliance on Rule 144A or another exemption from the registration requirements under the US Securities Act and (2) the Hong Kong Placing, *i.e.* a concurrent placing of Offer Shares (in the form of Shares) to certain eligible investors in Hong Kong. Request for admission to trading and listing of Global Depositary Shares on the Professional Segment of Euronext Paris has been made by the Company. This prospectus relates only to the Hong Kong Placing. The International Placing is being made pursuant to a separate offering document.

Pursuant to section 6(3)(b) of the Securities and Futures (Stock Market Listing) Rules, the Securities and Futures Commission is imposing the following conditions to the listing of the Shares on the Hong Kong Stock Exchange:

1. The provisions of the Management, Supervision and Internal Control Guidelines ("ICG") and the Code of Conduct for Persons Licensed by or Registered with the SFC ("Code") apply to the placing of the Offer Shares and must be complied with by intermediaries placing the Offer Shares in Hong Kong.

2. The offer for subscription or purchase of the Offer Shares in Hong Kong will be conducted by way of placing only. Where the Offer Shares are placed in Hong Kong, subscribers for or purchasers of the Offer Shares must be limited to:

   (a) persons falling under paragraphs (a) to (i) of the definition of "professional investors" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (where the provisions specified in paragraph 15.5 of the Code may be waived);

   (b) persons falling under paragraph (j) of the definition of "professional investors" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (where the provisions specified in paragraph 15.5 of the Code may be waived in relation to a person provided that the intermediary placing the Offer Shares in Hong Kong has, in respect of that person complied with paragraphs 15.3 and 15.4 of the Code); or

   (c) other clients of an intermediary provided that the subscription price or purchase price payable by each client is a minimum of HK$1 million and the intermediary complies with the requirements in respect of suitability set out in paragraph 5.2 of the Code.

3. The intermediaries placing the Offer Shares in Hong Kong confirm to the Joint Sponsors and the Company that condition 2 above has been fulfilled in respect of Offer Shares placed by them.

4. The Joint Sponsors confirm in writing to the SFC and the Hong Kong Stock Exchange by 17:00 hours Hong Kong time on the business day immediately preceding the Listing Date that condition 2 above has been fulfilled.

5. The trading board lot size of the Shares at and after listing of the Shares must be no less than the number of Shares that make up a minimum board lot trading value of HK$200,000 based on the Offer Price, or such other number of Shares as the SFC may from time to time specify by notice in writing to the Hong Kong Stock Exchange and the Company in response to any proposed corporate action in connection with the share capital of the Company which will or is reasonably likely to materially reduce the value of a board lot of Shares.

6. The conditions being imposed by the SFC for not objecting to the listing are set out in full in this prospectus.

THE INTERNATIONAL PLACING

Number of Offer Shares

The International Placing together with the Hong Kong Placing will consist of an offering of 1,610,292,840 new Shares in the form of Shares and in the form of Global Depositary Shares (subject to the Over-allotment Option).

Purchasers of Offer Shares will have the option of taking delivery of such shares either in the form of Shares or in the form of Global Depositary Shares. The Global Depositary Shares will be evidenced by Global Depositary Receipts and each Global Depositary Share will represent 20 Shares. The Global Depositary Receipts will be issued by Bank of New York Mellon, as depositary. The Shares underlying the Global Depositary Shares will be held by Hong Kong and Shanghai Banking Corp., as custodian for the Depositary. The Global Depositary Shares will be listed and traded on the Professional Segment of Euronext Paris.

Allocation

The International Placing will include selective marketing of Shares and/or Global Depositary Shares to institutional and professional investors and other investors anticipated to have a sizeable demand for Shares and/or Global Depositary Shares. Professional investors generally include brokers, dealers, companies (including fund managers) whose ordinary business involves dealing in shares and other securities and corporate entities which regularly invest in shares and other securities. Allocation of Shares and/or Global Depositary Shares pursuant to the International Placing will be effected in accordance with the "book-building" process described in the paragraph headed "Pricing and Allocation" below and based on a number of factors, including the level and timing of demand, the total size of the relevant investor's invested assets or equity assets in the relevant sector and whether or not it is expected that the relevant investor is likely to buy further Shares, and/or hold or sell its Shares, after the listing of the Shares on the Hong Kong Stock Exchange and Global Depositary Shares on Euronext Paris. Such allocation is intended to result in a distribution of the Shares and Global Depositary Shares on a basis which would lead to the establishment of a solid professional and institutional shareholder base to the benefit of the Company and its shareholders as a whole.

The Joint Global Coordinators (on behalf of the Underwriters) may require any investor who has been offered Shares and/or Global Depositary Shares under the International Placing, to provide sufficient information to the Joint Bookrunners so as to allow them to establish the investor's independence from the Company.

THE HONG KONG PLACING

Number of Offer Shares offered

The Hong Kong Placing, together with the International Placing, will consist of an offering of 1,610,292,840 new Shares representing all of the Offer Shares available under the Global Offering (subject to the Over-allotment Option).

The offer for subscription or sale of the Offer Shares in Hong Kong will be conducted by way of placing only. Where the Offer Shares are placed in Hong Kong, subscribers or purchasers of the Offer Shares will be limited to:

(a) persons falling under paragraphs (a) to (i) of the definition of "professional investors" in Part 1 to Schedule 1 to the SFO (where the provisions specified in paragraph 15.5 of the Code of Conduct for Persons Licensed by or Registered with the SFC (the "Code") may be waived);

(b) persons falling under paragraph (j) of the definition of "professional investors" in Part 1 of Schedule 1 to the SFO (where the provisions specified in paragraph 15.5 of the Code may be waived in relation to a person provided that the intermediary placing the Offer Shares in Hong Kong has, in respect of that person complied with paragraphs 15.3 and 15.4 of the Code); or

(c) other clients of an intermediary provided that the subscription price or purchase amount is a minimum of HK$1 million and the intermediary complies with the requirements in respect of suitability set out in paragraph 5.2 of the Code.

OVER-ALLOTMENT OPTION

In connection with the Global Offering, it is expected that the Company will grant the Over-allotment Option to the Underwriters, exercisable by the Joint Global Coordinators on behalf of the Underwriters.

Pursuant to the Over-allotment Option, the Underwriters have the right, exercisable by the Joint Global Coordinators at any time from the Listing Date and on or before 26 February 2010, being the 30th day from the Listing Date, to require the Company to issue and allot up to 225,000,000 new Shares, representing approximately 14.0% of the Offer Shares, at the same price per Share under the Global Offering, to, among other things, cover over-allocations in the Global Offering, if any. If the Over-allotment Option is exercised in full, the additional Offer Shares will represent approximately 1.5% of the Company's enlarged issued share capital immediately following the completion of the Global Offering and the exercise of the Over-allotment Option. In the event that the Over-allotment Option is exercised, an announcement will be made.

STOCK BORROWING AGREEMENT

In order to facilitate the settlement of over-allotments in connection with the Global Offering, Credit Suisse (Hong Kong) Limited may choose to borrow up to 225,000,000 Shares pursuant to a stock borrowing agreement to be entered on or about Price Determination Date.

STABILISATION

Stabilisation is a practice used by underwriters in some markets to facilitate the distribution of securities. To stabilise, the underwriters may bid for, or purchase, the newly issued securities in the secondary market, during a specified period of time, to retard and, if possible, prevent any decline in the market price of the securities below the offer price. In Hong Kong and a number of other jurisdictions, activity aimed at reducing the market price is prohibited, and the price at which stabilisation is effected is not permitted to exceed the offer price.

In connection with the Global Offering, Credit Suisse (Hong Kong) Limited, its affiliates or any person acting for it, as stabilising manager (the "Stabilisation Agent"), on behalf of the Underwriters, may effect transactions with a view to stabilising or supporting the market price of our Shares or Global Depositary Shares at a level higher than that which might otherwise prevail for a limited period after the Listing Date. However, there is no obligation on the Stabilisation Agent, its affiliates or any persons acting for it, to conduct any such stabilising action. Such stabilisation action, if commenced, may be discontinued at any time, and is required to be brought to an end after a limited period. Should stabilising transactions be effected in connection with the Global Offering, this will be at the absolute discretion of the Stabilisation Agent, its affiliates or any person acting for it.

Stabilisation action permitted in Hong Kong pursuant to the Securities and Futures (Price Stabilising) Rules, as amended, includes (i) over-allocating for the purpose of preventing or minimising any reduction in the market price of our Shares, (ii) selling or agreeing to sell our Shares so as to establish a short position in them for the purpose of preventing or minimising any reduction

in the market price of our Shares, (iii) purchasing or subscribing for, or agreeing to purchase or subscribe for, our Shares pursuant to the Over-allotment Option in order to close out any position established under (i) or (ii) above, (iv) purchasing, or agreeing to purchase, any of our Shares for the sole purpose of preventing or minimising any reduction in the market price of our Shares, (v) selling or agreeing to sell any Shares in order to liquidate any position established as a result of those purchases and (vi) offering or attempting to do anything as described in (ii), (iii), (iv) or (v) above.

Specifically, prospective applicants for and investors in the Offer Shares should note that:

- the Stabilisation Agent, its affiliates or any person acting for it, may, in connection with the stabilising action, maintain a long position in our Shares or Global Depositary Shares;

- there is no certainty regarding the extent to which and the time or period for which the Stabilisation Agent, its affiliates or any person acting for it, will maintain such a long position;

- liquidation of any such long position by the Stabilisation Agent, its affiliates or any person acting for it, may have an adverse impact on the market price of our Shares or Global Depositary Shares;

- no stabilising action can be taken to support the price of our Shares or Global Depositary Shares for longer than the stabilising period which will begin on the Listing Date, and is expected to expire on 26 February 2010, being the 30th day after the Listing Date. After this date, when no further stabilising action may be taken, demand for our Shares or Global Depositary Shares, and therefore the price of our Shares or Global Depositary Shares, could fall;

- the price of any security (including our Shares and the Global Depositary Shares) cannot be assured to stay at or above its offer price by the taking of any stabilising action; and

- stabilising bids may be made or transactions effected in the course of the stabilising action at any price at or below the Offer Price, which means that stabilising bids may be made or transactions effected at a price below the price paid by applicants for, or investors in, our Shares or Global Depositary Shares.

In addition, any stabilisation action is subject to compliance with applicable legal and regulatory requirements such as, with respect to the Global Depositary Shares, Regulation (EC) No. 2273/2003 of the European Commission dated 22 December 2003 applying the European Parliament and Council's 20036/06/EC directive of 28 January 2003 relating to insider dealing and market manipulation.

Over-allocation

Following any over-allocation of the Offer Shares in connection with the Global Offering, the Joint Global Coordinators, their affiliates or any person acting for them may cover such over-allocation by (among other methods) using Shares or Global Depositary Shares purchased by the Joint Global Coordinators, their affiliates or any person acting for them in the secondary market, exercising the Over-allotment Option in full or in part. Any such purchases will be made in accordance with the laws, rules and regulations in place in Hong Kong, including in relation to stabilisation, the Securities and Futures (Price Stabilising) Rules, as amended, made under the SFO. The number of Shares which can be over-allocated will not exceed the number of Shares which may be issued upon exercise of the Over-allotment Option, being 225,000,000 Shares, representing approximately 14.0% of the Offer Shares initially available under the Global Offering.

PRICING AND ALLOCATION

The Underwriters will be soliciting from prospective investors indications of interest in acquiring Offer Shares in the International Placing. Prospective professional and institutional investors will be required to specify the number of Offer Shares (in the form of Shares or Global Depositary Shares) under the International Placing they would be prepared to acquire either at different prices or at a particular price. This process, known as "book-building", is expected to continue up to, and to cease on or around, 22 January 2010.

Pricing for the Offer Shares for the purpose of the various offerings under the Global Offering will be fixed on the Price Determination Date, which is expected to be on or around 22 January 2010 and in any event on or before 25 January 2010, by agreement between the Joint Global Coordinators, on behalf of the Underwriters, and the Company and the number of Offer Shares to be allocated under the Global Offering will be determined shortly thereafter.

The Offer Price is expected to be no more than HK$12.50 per Offer Share and is expected to be no less than HK$9.10 per Offer Share. Prospective investors should be aware that the Offer Price to be determined on the Price Determination Date may be, but is not expected to be, outside of these boundaries.

The offer price per Global Depositary Shares in Euro (or in US dollars) will be determined based on one Global Depositary Shares representing 20 Shares and on the Offer Price per Offer Share in HK$ (inclusive of brokerage fee, Hong Kong Stock Exchange trading fee and SFC transaction levy), adjusted for a HK$/EUR (or HK$/US$, as appropriate) foreign exchange rate as of the date of pricing of the Global Offering.

The Joint Global Coordinators, on behalf of the Underwriters, may, where considered appropriate, based on the level of interest expressed by prospective professional and institutional investors during the book-building process, and with the consent of the Company, reduce the number of Offer Shares and/or the indicative Offer Price range above/below that stated in this prospectus at any time on or prior to 21 January 2010. In such a case, we will, as soon as practicable following the decision to make such reduction, and in any event not later than 22 January 2010 cause there to be published on the Company's website and the Hong Kong Stock Exchange's website notices of the variation. Upon issue of such a notice, the revised offer price range will be final and conclusive and the Offer Price, if agreed upon by the Joint Global Coordinators, on behalf of the Underwriters, and the Company, will be fixed within such revised offer price range. Investors should have regard to the possibility that any announcement of a reduction in the number of Offer Shares and/or the indicative offer price range may not be made until 22 January 2010. Such notice will also include confirmation or revision, as appropriate, of the working capital statement and the Global Offering statistics as currently set out in this prospectus, and any other financial information which may change as a result of any such reduction. In the absence of any such notice so published, the number of Offer Shares will not be reduced and/or the Offer Price, if agreed upon with the Company and the Joint Global Coordinators, will under no circumstances be set outside the offer price range as stated in this prospectus.

The net proceeds from the Global Offering accruing to the Company (after deduction of underwriting fees and estimated expenses payable by us in relation to the Global Offering, assuming that the Over-allotment Option is not exercised), are estimated to be approximately HK$16,790 million, assuming an Offer Price of HK$10.8 per Offer Share, being the approximate mid-point of the proposed offer price range of HK$9.10 to HK$12.50.

The Offer Price, the level of indications of interest and basis of allocation in the Global Offering are expected to be announced on or before 25 January 2010 on the Company's website and the website of Hong Kong Stock Exchange.

INTERNATIONAL PLACING AGREEMENT

We expect to enter into the International Placing Agreement relating to the Global Offering on the Price Determination Date.

The underwriting arrangements under the International Placing Agreement are summarised in the section headed "Underwriting" in this prospectus.

CONDITIONS OF THE GLOBAL OFFERING

The Global Offering will be conditional on:

(i) the Listing Committee of the Hong Kong Stock Exchange granting approval for the listing of, and permission to deal in, our Shares in issue (including the Shares that may be allocated pursuant to the exercise of the Over-allotment Option) and our Shares being offered pursuant to the Global Offering (subject only to allotment);

(ii) the execution and delivery of the International Placing Agreement on the Price Determination Date; and

(iii) the obligations of the Underwriters under the International Placing Agreement becoming and remaining unconditional and not having been terminated in accordance with the terms of the agreement,

in each case on or before the dates and times specified in the International Placing Agreement (unless and to the extent such conditions are validly waived on or before such dates and times) and in any event not later than 8:00 a.m., 27 January 2010.

If, for any reason, the Offer Price is not agreed between the Company and the Joint Global Coordinators (on behalf of the Underwriters) on or before 25 January 2010, the Global Offering will not proceed and will lapse.

If the above conditions are not fulfilled or waived prior to the times and dates specified, the Global Offering will lapse and the Hong Kong Stock Exchange will be notified immediately. Notice of the lapse of the Global Offering will be published by the Company on the Company's website and the Hong Kong Stock Exchange's website on the next day following such lapse.

Share certificates for the Offer Shares (in the case of Shares) will only become valid certificates of title at 8:00 a.m. on 27 January 2010 provided that (i) the Global Offering has become unconditional in all respects and (ii) the right of termination as described in the section headed "Underwriting — Global Offering — Grounds for termination" has not been exercised.

SHARES WILL BE ELIGIBLE FOR ADMISSION INTO CCASS

If the Hong Kong Stock Exchange grants the listing of, and permission to deal in, the Shares and the Company complies with the stock admission requirements of HKSCC, the Shares will be accepted as eligible securities by HKSCC for deposit, clearance and settlement in CCASS with effect from the date of commencement of dealings in the Shares on the Hong Kong Stock Exchange or any other date HKSCC chooses. Settlement of transactions between participants of the Hong Kong Stock Exchange is required to take place in CCASS on the second Business Day after any trading day.

All activities under CCASS are subject to the General Rules of CCASS and CCASS Operational Procedures in effect from time to time.

All necessary arrangements have been made enabling the Shares to be admitted into CCASS.

DEALING

Assuming that the Global Offering becomes unconditional at or before 8:00 a.m. in Hong Kong on 27 January 2010, it is expected that dealings in the Shares on the Stock Exchange will commence at 9:30 a.m. on 27 January 2010. The Shares will be traded in board lots of 24,000 Shares each.

CRU Cost Definitions and Cost Curves

This prospectus contains references to "cost curves". A cost curve is a graphical representation in which the production volume of a given commodity across the relevant industry is arranged on the basis of average unit costs of production from lowest to highest to permit comparisons of the relative cost positions of particular production sites, individual producers or groups of producers within a given country, region or market. Generally, a producer's position on a cost curve is described in terms of the particular quartile or tercile, in which the production of a given plant or producer or group of producers appears, the first quartile or tercile being the lowest cost and the fourth quartile or the third tercile being the highest.

The cost curves referred to in this document have been obtained by the Company from an independent industry analyst, CRU, with recognised experience in constructing cost curves for the relevant commodities. To construct cost curves, the industry analyst compiles information from a variety of sources, including reports made available by producers, site visits, personal contacts, trade publications and other analysts' reports. Although producers may thus participate to some extent in the process through which cost curves are constructed, they are typically unwilling to validate cost analyses directly because of commercial sensitivities. Inevitably, assumptions must be made by the analyst with respect to data that such analyst is unable to obtain and judgement must be brought to bear in the case of virtually all data, however obtained. In addition, the time required to produce cost curves means that even the most recent available examples will be unable to take account of recent developments; in some cases, the most recent available cost curve may be based on data that is several years old. Costs data for specific producers may be based on costs incurred by the producers over their respective accounting years; to the extent these differ, the direct comparability of their costs may be limited.

The cost curves referred to in this document reflect CRU's estimates of the Group's "Aluminium Business Costs" and "Alumina Business Costs". The Group's "Aluminium Business Costs" represent the production-weighted average of the Business Costs of each of the Group's aluminium smelters. "Business Costs" are, with respect to a specific aluminium smelter, all costs incurred at that smelter (including raw materials costs and conversion costs) and include the additional costs associated with the transportation, sale and marketing of aluminium products, as well as interest on working capital and sustaining capital investment, but exclude unrelated overhead, corporate liabilities, depreciation, interest and tax expenses. In calculating the Business Costs of an aluminium smelter, any alumina processed into aluminium in consideration of a tolling fee is treated as having been purchased from the tolling company at an arms-length market price, which is a composite price of the prevailing spot price and the price obtained in alumina contracts. Business Costs with respect to an aluminium smelter are expressed in terms of costs per tonne of aluminium produced. The Group's "Alumina Business Costs" represent the production-weighted average of the Business Costs of each of the Group's alumina refineries. "Business Costs" are, with respect to a specific alumina refinery, all costs incurred at that refinery (including raw materials costs and conversion costs) and include the additional costs associated with the transportation, sale and marketing of alumina products, as well as interest on working capital and sustaining capital investment, but exclude unrelated overhead, corporate liabilities, depreciation, interest and tax expenses. Business Costs with respect to an alumina refinery are expressed in terms of costs per tonne of alumina produced. All cost curves also embody a number of significant assumptions with respect to exchange rates and other variables. In summary, the manner in which cost curves are constructed means that they have a number of significant inherent limitations.

In certain cases, cost curves produced by more than one reputable industry analyst may exist with regard to a specific commodity. The methodologies employed and conclusions reached by such analysts may differ. Moreover, the reliability of any given cost curve may be difficult to assess, as the accuracy of the data, and the reasonableness of the assumptions on which it has been based, usually cannot be tested directly. Particular producers are, however, in a position to validate the accuracy of

the presentation with respect to their own costs subject to adjustments to bring their methodology in line with the methods of the others. This can provide a useful indication of the reliability of a cost curve overall and, notwithstanding their shortcomings, independently produced cost curves are widely used in the industries in which the Group operates.

The cost curves to which this prospectus refers are the most recent cost curves that have been obtained by the Company from CRU. All such cost curves are based on 2008 data. The cost curves have been prepared using cost data for the Group's and other producers' operations.

The Group's Cost Definitions

The Group's Cash Operating Costs are a key operating metric. The following specific parameters are used in the Group's management accounting.

"Aluminium Cash Operating Costs" represent the average weighted costs of aluminium production (including maintenance costs, pot rebuild costs, capacity expansion or capacity closure costs, changes in work in progress/inventory and warehouse costs of commodity aluminium) and sales costs (including transport, security and handling), as well as general administrative costs of the Group's management company.

"Alumina Cash Operating Costs" represent the average weighted costs of calcined alumina production (including changes in inventory, work in progress and warehouse costs of commodity alumina) and sales costs (including transport, security and handling).

The main difference between the principles for the calculation of Aluminium Cash Operating Costs by the Group and the calculation of Aluminium Business Costs by CRU are as follows:

- CRU calculates the cash cost of ingot production to eliminate the impact of casthouse costs at various smelters, whereas the Group calculates the cash cost of aluminium as average weighted for the entire product mix;

- CRU excludes certain overheads, but includes plant overheads and costs of sales and marketing, even if the latter is carried out centrally; and

- the Group does not include the refundable part of cash costs included in the aluminium price, such as aluminium freight.

The following is a reconciliation of CRU's Aluminium and Alumina Business Costs to UC RUSAL's Aluminium and Alumina Cash Operating Costs for the periods presented.

	Year ended 31 December 2008	Six months ended 30 June 2009
	(US$ per tonne)	
Aluminium		
UC RUSAL Aluminium Cash Operating Cost	1,915	1,402
Adjusted for:		
Overheads, charity, PR, GR, change of inventories	(3)	(15)
Interest cost on finished product	7	5
Casthouse shape realisation cost	(87)	(106)
CRU Aluminium Business Cost	**1,832**	**1,285**
Alumina		
UC RUSAL "cash operating costs excl freight"	349	249
Adjusted for:		
net realisation cost	(21)	(13)
CRU Alumina Business Cost	**328**	**235**

In this prospectus, unless the context otherwise requires, the following words and expressions have the following meanings. Certain other terms are explained in the sections headed "Presentation of Certain Cost Information" and "Glossary of Technical Terms".

"Achinsk alumina refinery" or "AGK"	OJSC RUSAL Achinsk, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"affiliate"	person or entity directly or indirectly controlled by, or under the direct or indirect common control of, one person or entity
"Alpart"	Alumina Partners of Jamaica, a company incorporated in Jamaica in which the Company indirectly holds a 65% equity interest
"ALSCON"	Aluminium Smelter Company of Nigeria, a company incorporated in Nigeria and in which the Company indirectly holds a 85% interest
"Alukom Taishet aluminium smelter"	A branch of OJSC RUSAL Bratsk, to which all property of CJSC Alukom Taishet, a wholly owned subsidiary of the Company, was transferred and which is being liquidated up to date.
"Amokenga Holdings"	Amokenga Holdings Limited, a company incorporated in Bermuda and which is a wholly owned subsidiary of Glencore and a shareholder of the Company;
"Aroaima Mining Company"	Aroaima Mining Company, Inc., a company incorporated in Guyana, which is an independent third party
"Articles of Association" or "Articles"	the articles of association of the Company, adopted on 24 November 2009 with effect from the admission of Shares to trading on the Main Board of the Hong Kong Stock Exchange and as amended from time to time, a summary of which is set forth in Appendix VII to this prospectus
"associate(s)"	has the meaning ascribed to such expression in the Listing Rules
"Aughinish alumina refinery"	Aughinish Alumina Ltd, a company incorporated in Ireland, which is a wholly owned subsidiary of the Company
"BCGI"	Bauxite Company of Guyana Inc., a company incorporated in Guyana in which the Company indirectly holds a 90% interest
"Board"	the board of Directors of the Company

"Bogoslovsk aluminium smelter", "Bogoslovsk alumina refinery" or "BAZ"	Bogoslovsk Aluminium Smelter, a branch of OJSC SUAL
"Boxitogorsk alumina refinery" or "BGZ"	OJSC RUSAL Boxitogorsk, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Bratsk aluminium smelter" or "BrAZ"	OJSC RUSAL Bratsk, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Business Day"	a day that is not a Saturday, Sunday or public holiday in Hong Kong
"BVI"	the British Virgin Islands
"Capitalisation Issue"	the issue of Shares to En+, SUAL Partners, Amokenga Holdings and Onexim to be made upon the capitalisation of certain sums standing to the credit of the share premium account of the Company so that such Shareholders hold the amounts of Shares set out against their names on page VIII-21 upon completion of the Global Offering
"CCASS"	the Central Clearing and Settlement System established and operated by HKSCC
"CCASS Clearing Participant"	a person admitted to participate in CCASS as a direct clearing participant or general clearing participant
"CCASS Custodian Participant"	a person admitted to participate in CCASS as a custodian participant
"CCASS Investor Participant"	a person admitted to participate in CCASS as an investor participant who may be an individual or joint individuals or a corporation
"CCASS Participant"	a CCASS Clearing Participant or a CCASS Custodian Participant or a CCASS Investor Participant
"China" or "PRC"	the People's Republic of China, but for the purpose of this prospectus and for geographical reference only and except where the context requires, references in this prospectus to "China" and the "PRC" do not apply to Taiwan, the Macau Special Administrative Region and Hong Kong
"CIS"	Commonwealth of Independent States

"Company", "our Company", "UC RUSAL", "we", "us" or "our"	United Company RUSAL Limited, a company incorporated under the laws of Jersey on 26 October 2006 and, except where the context otherwise requires, all of its subsidiaries or where the context refers to any time prior to its incorporation, the business which its predecessors or the predecessors of its present subsidiaries were engaged in and which were subsequently assumed by it
"connected person(s)"	has the meaning ascribed to such expression in the Listing Rules
"connected transaction(s)"	has the meaning ascribed to such expression in the Listing Rules
"controlling shareholder"	has the meaning ascribed to such expression in the Listing Rules and "controlling interest" shall be construed accordingly. Immediately following completion of the Global Offering, Mr. Oleg Deripaska and En+ will be the Company's controlling shareholders, the "Controlling Shareholders"
"CRU"	CRU Strategies Limited, a company incorporated in England and Wales, an independent business analysis and consulting group focused on the mining, metals, power cables, fertiliser and chemicals sectors
"Director(s)"	director(s) of the Company
"En+"	EN+ Group Limited, a company incorporated in Jersey, which is the Controlling Shareholder of the Company
"EPCM"	engineering, procurement, construction and maintenance
"EU"	European Union
"Euro", "EUR" or "€"	Euro, the lawful currency of the relevant member states of the EU that have adopted the Euro as their currency
"Friguia"	Friguia SA, a company incorporated in Guinea, which is a wholly owned subsidiary of the Company
"GBP" or "£"	Pound Sterling, the lawful currency of the United Kingdom
"Glencore"	Glencore International AG, a company incorporated in Switzerland and which is an indirect shareholder of the Company
"Global Depositary Receipts"	global depositary receipts evidencing Global Depositary Shares, each of which represents 20 Shares

"Global Depositary Shares"	global depositary shares evidenced by Global Depositary Receipts
"Global Offering"	the International Placing and the Hong Kong Placing
"Group"	UC RUSAL and its subsidiaries from time to time
"Hatch"	Hatch Associates Limited
"HK$" or "Hong Kong dollars" or "HK dollars"	Hong Kong dollars, the lawful currency of Hong Kong
"HKSCC"	Hong Kong Securities Clearing Company Limited
"HKSCC Nominees"	HKSCC Nominees Limited, a wholly-owned subsidiary of HKSCC
"Hong Kong" or "HK"	The Hong Kong Special Administrative Region of the PRC
"Hong Kong Companies Ordinance"	the Hong Kong Companies Ordinance (Chapter 32 of the Laws of Hong Kong) (as amended from time to time)
"Hong Kong Placing"	the conditional placing by the Underwriters to certain eligible investors in Hong Kong, as further described in the section headed "Structure of the Global Offering" in this prospectus
"Hong Kong Placing Shares"	the new Shares being offered by the Company for subscription or purchase under the Hong Kong Placing as part of the Global Offering, subject to the Over-allotment Option as described in the section headed "Structure of the Global Offering" in this prospectus
"Hong Kong Stock Exchange"	The Stock Exchange of Hong Kong Limited
"IFRS"	International Financial Reporting Standards
"International Placing"	the conditional placing by the Underwriters of the International Placing Shares, as further described in the section headed ''Structure of the Global Offering'' in this prospectus
"International Placing Agreement"	the international placing agreement relating to the International Placing and Hong Kong Placing to be entered into among the Company and the Underwriters on or around 22 January 2010
"International Placing Shares"	the new Shares being offered by the Company for subscription or purchase under the International Placing as part of the Global Offering, subject to the Over-allotment Option as described in the section headed "Structure of the Global Offering" in this prospectus

"Irkutsk aluminium smelter" or "IrkAZ"	Irkutsk Aluminium Smelter, a branch of OJSC SUAL
"Jersey Companies Law"	the Companies (Jersey) Law 1991, as amended
"Joint Bookrunners"	BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited, Merrill Lynch International, Nomura International plc, Renaissance Securities (Cyprus) Limited, Savings Bank of the Russian Federation, VTB Capital plc
"Joint Global Coordinators"	BNP Paribas Capital (Asia Pacific) Limited and Credit Suisse (Hong Kong) Limited
"Joint Sponsors"	BNP Paribas Capital (Asia Pacific) Limited and Credit Suisse (Hong Kong) Limited
"JSC RUSAL"	JSC "RUSAL", a company incorporated under the laws of the Russian Federation and which was a predecessor holding company for certain of the Russian facilities that are now part of the Group
"Kandalaksha aluminium smelter" or "KAZ"	Kandalaksha Aluminium Smelter, a branch of OJSC SUAL
"Khakas aluminium smelter" or "KhAZ"	Khakas Aluminium Smelter Ltd, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Kindia"	Compagnie de Bauxite de Kindia, a company incorporated in Guinea, which is a wholly owned subsidiary of the Company
"Krasnoyarsk aluminium smelter" or "KrAZ"	OJSC RUSAL Krasnoyarsk, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Kubikenborg aluminium smelter" or "KUBAL"	Kubikenborg Aluminium AB, a company incorporated in Sweden, which is a wholly owned subsidiary of the Company
"Latest Practicable Date"	24 December 2009, being the latest practicable date prior to the printing of this prospectus for the purpose of ascertaining certain information contained in this prospectus
"Listing Date"	the date, expected to be on 27 January 2010 on which dealings in the Company's Shares first commence on the Hong Kong Stock Exchange
"Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (as amended from time to time)

"LME"	London Metal Exchange
"Major Shareholders"	En+, SUAL Partners, Glencore and Onexim
"Memorandum of Association" or "Memorandum"	the memorandum of association of the Company effective simultaneously with the admission of Shares to trading on the Main Board of the Hong Kong Stock Exchange, which was conditionally adopted by special resolution on 26 December 2009 and as further amended from time to time, a summary of which is set forth in Appendix VII to this prospectus
"MMC Norilsk Nickel" or "Norilsk Nickel"	OJSC MMC Norilsk Nickel, a company incorporated in the Russia Federation, in which the Company holds a more than 25% equity interest
"Nadvoitsy aluminium smelter" or "NAZ"	Nadvoitsy Aluminium Smelter, a branch of OJSC SUAL
"Nikolaev alumina refinery" or "NGZ"	Mykolayiv Alumina Refinery Company Limited, a company incorporated under the laws of Ukraine, which is a wholly owned subsidiary of the Company
"North Urals"	OJSC Sevuralboxitruda (OJSC SUBR), a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Novokuznetsk aluminium smelter" or "NkAZ"	OJSC RUSAL Novokuznetsk, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Offer Price"	the final Hong Kong dollar price per Offer Share (exclusive of brokerage fee, Hong Kong Stock Exchange trading fee and SFC transaction levy) at which the Offer Shares are to be subscribed or purchased
"Offer Shares"	the 1,610,292,840 new Shares (in the form of Shares or Global Depositary Shares in case of the International Placing and in the form of Shares only in case of the Hong Kong Placing) being offered by the Company for subscription pursuant to the Global Offering which comprises the International Placing and Hong Kong Placing (subject to the Over-allotment Option)
"Onexim"	Onexim Holdings Limited, a company incorporated in Cyprus and which is a shareholder of the Company

"Over-allotment Option"	the option expected to be granted by the Company to the Underwriters exercisable by the Joint Global Coordinators under the International Placing Agreement pursuant to which the Company may be required by the Joint Global Coordinators to issue and allot up to an aggregate of 225,000,000 additional Shares at the Offer Price as described in the section headed "Structure of the Global Offering"
"Pikalyovo alumina refinery" or "PGZ"	Pikalyovo Alumina Refinery, a former branch of OJSC SUAL, which was sold by the Company to Basel-Cement in 2008
"Price Determination Date"	the date, expected to be on or around 22 January 2010, but no later than 25 January 2010, on which the Offer Price is fixed for the purposes of the Global Offering
"professional investor"	has the meaning ascribed to it in Part 1 of Schedule 1 to the SFO
"Qualified Institutional Buyers" or "QIBs"	qualified institutional buyers within the meaning of Rule 144A
"Queensland Alumina Limited" or "QAL"	Queensland Alumina Limited, a company incorporated in Queensland, Australia, in which the Company indirectly holds a 20% equity interest
"Regulation S"	Regulation S under the US Securities Act
"Restructuring"	the Group's debt restructuring detailed in "Management's Discussion and Analysis of Financial Condition and Results of Operations — Restructuring"
"Roubles" or "RUR"	Roubles, the lawful currency of the Russian Federation
"Rule 144A"	Rule 144A under the US Securities Act
"RUSAL"	RUSAL Limited, a company incorporated under the laws of Jersey and which is a wholly-owned subsidiary of the Company
"RusHydro"	JSC "Rushydro" (Federal Hydrogenation Company), a company organised under the laws of the Russian Federation, which is an independent third party
"Samruk-Energo"	Samruk-Energo, a company incorporated in Kazakhstan, which is an independent third party

"Sayanogorsk aluminium smelter" or "SAZ"	OJSC RUSAL Sayanogorsk, a company incorporated under the laws of the Russian Federation, which is a wholly owned subsidiary of the Company
"Securities and Futures Commission" or "SFC"	the Securities and Futures Commission of Hong Kong
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)
"Share(s)"	ordinary share(s) with nominal value of US$0.01 each in the share capital of the Company
"Shareholder(s)"	holder(s) of Share(s)
"Shareholders' Agreement with the Company"	the shareholders' agreement expected to be entered into before the Listing Date by En+, SUAL Partners, Glencore, Onexim and the Company
"Shareholders' Agreement between Major Shareholders only"	the shareholders' agreement expected to be entered into before the Listing Date by En+, SUAL Partners, Glencore and Onexim only
"Sibirsky Aluminium"	Sibirsky Aluminium, a company incorporated under the laws of the Russia Federation and which was a predecessor shareholder for certain of the businesses that now form part of the Group
"SRK"	SRK Consulting (UK) Limited, a company incorporated in England and Wales
"SUAL"	SUAL International Limited, a company incorporated in the British Virgin Islands, which is a wholly-owned subsidiary of the Company
"SUAL Partners"	SUAL Partners Limited, a company incorporated under the laws of the Bahamas, which is a shareholder of the Company
"subsidiary"	has the meaning ascribed to such expression under the Listing Rules
"substantial shareholder"	has the meaning ascribed to it under the Listing Rules
"Timan"	OJSC Boksit Timana, a company incorporated under the laws of the Russian Federation in which the Company indirectly holds an approximately 80% interest

"Underwriters"	the several underwriters of the Global Offering, led by the Joint Global Coordinators and expected to enter into the International Placing Agreement to underwrite the Global Offering
"United States" or "US"	the United States of America, its territories, its possessions and all areas subject to its jurisdiction
"Urals aluminium smelter", "Urals alumina refinery" or "UAZ"	Urals Aluminium Smelter, a branch of OJSC SUAL
"US$", "USD" or "US dollars"	United States dollars, the lawful currency of the United States
"US Securities Act"	the US Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder
"Volgograd aluminium smelter" or "VgAZ"	Volgograd Aluminium Smelter, a branch of OJSC SUAL
"Volkhov aluminium smelter" or "VAZ"	Volkhov Aluminium Smelter, a branch of OJSC SUAL
"Windalco"	West Indies Alumina Company, a company incorporated in Jamaica, in which the Company indirectly holds a 93% interest
"Yavoslavsky"	YAGRK Limited, a company incorporated under the laws of the Russian Federation and in which the Company indirectly holds a 50% interest
"Zaporozhye aluminium smelter", "Zaporozhye alumina refinery or "ZAlK"	OJSC Zaporozhye Aluminium Combine, a company incorporated in Ukraine, in which the Company indirectly holds a 97.55% interest

GLOSSARY OF TECHNICAL TERMS

The following is a glossary of technical terms used in this document.

"alumina"	An aluminium oxide, a white or nearly colourless crystalline substance that is used as a starting material for the smelting of aluminium. It also serves as the raw material for a broad range of advanced ceramic products and as an active agent in chemical processing.
"anode"	A positive terminal or electrode of an electrolytic cell at which oxidation occurs.
"anode paste"	Made from calcined petroleum coke or calcined coal tar coke and electrode grade coal tar pitch. Usually is used to fill Söderberg anodes and form anode blocks for further baking.
"bauxite"	A mineral, a mixture of hydrated aluminium oxides usually containing oxides of iron and silicon in varying quantities, characteristically composed of small, round concretions.
"Bayer Process"	A method of producing alumina from bauxite by extracting it with a sodium hydroxide solution. The modern version of the process (developed in the 1880s) maintains the four key steps of digestion, clarification, precipitation, and calcination to produce alumina.
"billet"	A piece of semi-finished aluminium nearly square in section made by rolling an ingot or bloom.
"calcinations"	The process of heating a substance, but below its melting point, causing a loss of moisture, oxidation and conversion into powder or lime. The reaction also causes the decomposition of carbonates.
"cathode"	A negative terminal or electrode through which electrons enter a direct current load, such as an electrolytic cell or an electron tube, and the positive terminal of a battery or other source of electrical energy through which they return.
"cathode block"	Rectangular shaped block with a specially shaped slot produced from anthracite and/or graphite that is utilised for construction of reduction cell cathodes.
"cell"	In aluminium production the electrolytic reduction cell, commonly called a "pot" in which alumina dissolved in molten cryolite is reduced to metallic aluminium. A series of cells connected electrically is called a "potline" (see below).
"coke"	Solid residue remaining after certain types of bituminous coals are heated to a high temperature out of contact with air until substantially all of the volatile constituents have been burnt off.

"Horizontal Stud Söderberg cell" or "HSS"	A Söderberg cell where electrical connections to the anode are made by a number of horizontal steel studs, baked into the carbon anode body.
"Indicated Mineral Resource"	The part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
"Inferred Mineral Resource"	A Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.
"JORC"	Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy; Australasian Institute of Geoscientists and the Minerals Council of Australia.
"JORC Code"	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (December 2004) published by JORC.
"kA"	Kilo Amperes.
"kWh"	Kilowatt-hour.
"Measured Mineral Resource"	A Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

"Mineral Resource"	A concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
"MW"	Megawatt.
"nepheline"	A hexagonal mineral that is a usually glassy crystalline silicate of sodium, potassium and aluminium common in igneous rocks.
"Nepheline Process"	A method of producing alumina from nepheline ore, a sodium/potassium alumino-silicate. The Nepheline Process is a variation on the Sintering Process. Nepheline ore is first sintered with limestone. The resulting sinter cake is crushed, ground and leached, and alumina hydrate precipitated by carbonation. The alumina hydrate is washed, dried and calcined to produce alumina.
"Ore Reserve"	The economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
"pitch"	A black or dark viscous substance obtained as a residue in the distillation of organic materials and especially tars.
"Point Feeded Pre-Bake cell" or "PFPB"	A cell utilising pre-baked anodes during the reduction process, which is equipped with special systems consisting of point breakers and feeders which feed the cell with alumina according to a predefined algorithm.
"potline"	A single, discrete group of electrolytic reduction cells electrically connected in series, in which alumina is reduced to form aluminium.
"potroom"	A building unit combining a group of electrolytic cells in which aluminium is produced.

"pre-bake"	A method of primary aluminium reduction using an anode that was baked in an anode-baking furnace, which is introduced into the top of the reduction cell and consumed as part of the reduction process.
"pre-baked anode"	An anode (usually rectangular in shape) produced from calcined petroleum coke and coal tar pitch and baked in an anode-baking furnace.
"Probable Ore Reserve"	The economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.
"Proved Ore Reserve"	The economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.
"rod"	Round, thin semi-finished aluminium length that is rolled from a billet and coiled for further processing.
"Side-Worked Pre-Bake cell" or "SWPB"	A cell wing pre-based anodes during the reduction process, which has anodes spaced down the centre of the pot where alumina feeding and other cell activities are performed along the longitudinal sides of the cell
"Sintering Process"	A method of producing alumina from bauxite containing high silica content. The ore is sintered (roasted) with limestone, and the resulting sinter cake is crushed, ground and leached, and alumina hydrate precipitated by carbonation. The alumina hydrate is washed, dried and calcined to produce alumina.
"Söderberg"	A method of primary aluminium reduction using a self-baked anode that utilises the heat of the reduction process in a cell that is introduced into the top of the reduction cell in the form of anode paste and consumed as part of the reduction process.
"Vertical Stud Söderberg cell" or "VSS"	A Söderberg cell where electrical connections to the anode are made by a number of vertical steel studs, baked into the carbon anode body.

[PAGES I-1 TO I-3 INTENTIONALLY OMITTED]

A BASIS OF PRESENTATION

United Company RUSAL Limited (the "Company" or "UC RUSAL") was established by the controlling shareholder of RUSAL Limited ("RUSAL") as a limited liability company under the laws of Jersey on 26 October 2006. On 27 March 2007, the Company (which had no business or assets of its own) became the holding company of the Group through transfer of the interest in RUSAL from the controlling shareholder and the acquisitions of SUAL International Limited ("SUAL") and the alumina and aluminium businesses of Glencore International AG (the "Glencore Businesses") from third parties. For accounting and financial reporting purposes, this transaction has been treated as follows:

- The formation of the Company and its acquisition of RUSAL is considered to be a non-substantive transaction, meaning that the Group's consolidated financial information prior to 27 March 2007 is that of RUSAL and that the financial information of the Group has been prepared as if the combination of the Company and RUSAL had taken place on 1 January 2006; and

- The acquisition by the Company of SUAL and the Glencore Businesses is treated as a purchase of these entities on 27 March 2007.

Further details relating to this acquisition are provided in note 5 of Section C.

Intra-group balances and transactions and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the Financial Information. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Details of the principal subsidiaries, in which the Company has direct and indirect interests as at 30 June 2009, are set out in note 36 of Section C of this report.

B FINANCIAL INFORMATION

1 Consolidated income statements

	Section C Note	Year ended 31 December			Six months ended 30 June	
		2006	2007	2008	2008	2009
		USD million	USD million	USD million	USD million (unaudited)	USD million
Revenue	7	**8,429**	**13,588**	**15,685**	**8,354**	**3,757**
Cost of sales		(4,186)	(8,356)	(11,073)	(5,306)	(3,449)
Gross profit		**4,243**	**5,232**	**4,612**	**3,048**	**308**
Distribution expenses		(328)	(528)	(798)	(383)	(284)
Administrative expenses		(455)	(842)	(1,103)	(585)	(311)
Loss on disposal of property, plant and equipment		(5)	(97)	(56)	(8)	(7)
Impairment of non-current assets	17,18	—	—	(3,668)	(344)	(37)
Other operating expenses	8	(143)	(118)	(215)	(62)	(156)
Results from operating activities		**3,312**	**3,647**	**(1,228)**	**1,666**	**(487)**
Finance income	9	176	101	106	120	23
Finance expenses	9	(265)	(494)	(1,594)	(302)	(680)
Share of (losses)/profits and impairment of associates	19	(16)	(14)	(3,302)	79	348
Share of (losses)/profits and impairment of jointly controlled entities	20	(12)	(15)	(35)	40	(8)
Excess of the Group's share in net identifiable assets over the cost of acquisition		28	—	—	—	—
Profit/(loss) before taxation		**3,223**	**3,225**	**(6,053)**	**1,603**	**(804)**
Income tax	10	(336)	(419)	69	(194)	(64)
Profit/(loss) from continuing operations		**2,887**	**2,806**	**(5,984)**	**1,409**	**(868)**
Profit for the year/period from discontinued operations (net of income tax)	6	10	—	—	—	—
Net profit/(loss) for the year/period		**2,897**	**2,806**	**(5,984)**	**1,409**	**(868)**
Attributable to:						
Shareholders of the Company		2,897	2,809	(5,952)	1,411	(868)
Non-controlling interests		—	(3)	(32)	(2)	—
Profit/(loss) for the year/period		**2,897**	**2,806**	**(5,984)**	**1,409**	**(868)**
Earnings/(loss) per share	16					
Basic and diluted earnings/(loss) per share (USD)			3,465	(5,354)	1,331	(746)

The accompanying notes form part of the Financial Information.

2 Consolidated statements of comprehensive income

	Section C Note	Year ended 31 December			Six months ended 30 June	
		2006	2007	2008	2008	2009
		USD million	USD million	USD million	USD million (unaudited)	USD million
Net profit/(loss) for the year/period		**2,897**	**2,806**	**(5,984)**	**1,409**	**(868)**
Other comprehensive income/(loss)						
Actuarial gains/(losses) on post retirement benefit plans	30(a)	4	13	(25)	(25)	21
Share of other comprehensive income of associate		—	—	—	—	71
Revaluation of previously held jointly controlled entities upon business combinations	5(c)	—	16	—	—	—
Net change in fair value of available-for-sale investments		70	—	—	—	—
Net change in fair value of available-for-sale investments transferred to the income statement		(68)	—	—	—	—
Foreign currency translation differences for foreign operations		18	364	(3,623)	345	(645)
		24	**393**	**(3,648)**	**320**	**(553)**
Total comprehensive income/(loss) for the year/period		**2,921**	**3,199**	**(9,632)**	**1,729**	**(1,421)**
Attributable to:						
Shareholders of the Company		2,921	3,202	(9,600)	1,731	(1,421)
Non-controlling interests		—	(3)	(32)	(2)	—
Total comprehensive income/(loss) for the year/period		**2,921**	**3,199**	**(9,632)**	**1,729**	**(1,421)**

There was no tax effect relating to each component of other comprehensive income/(loss).

The accompanying notes form part of the Financial Information.

3 Consolidated balance sheets

	Section C Note	31 December 2006	31 December 2007	31 December 2008	30 June 2009
		USD million	USD million	USD million	USD million
ASSETS					
Non-current assets					
Property, plant and equipment	17	4,514	10,429	6,602	6,201
Intangible assets	18	1,342	4,895	4,187	4,044
Interests in associates	19	442	443	7,536	7,566
Interests in jointly controlled entities	20	127	219	506	502
Financial investments	21	—	606	—	—
Loans to related parties		—	2	—	—
Deferred tax assets	23	33	105	59	44
Other non-current assets		182	63	43	51
Total non-current assets		**6,640**	**16,762**	**18,933**	**18,408**
Current assets					
Inventories	24	1,378	2,883	2,938	2,159
Loans to related parties		39	7	—	—
Trade and other receivables	25	954	2,150	1,426	1,388
Cash and cash equivalents	26	241	261	708	264
Total current assets		**2,612**	**5,301**	**5,072**	**3,811**
Total assets		**9,252**	**22,063**	**24,005**	**22,219**

The accompanying notes form part of the Financial Information.

3 Consolidated balance sheets (continued)

	Section C Note	31 December 2006	31 December 2007	31 December 2008	30 June 2009
		USD million	USD million	USD million	USD million
EQUITY AND LIABILITIES					
Equity	27				
Share capital		—	—	—	—
Share premium		—	6,425	12,517	12,517
Other reserves		2,808	2,937	2,912	3,014
Currency translation reserve		2	366	(3,257)	(3,902)
Retained profits/(accumulated losses)		268	367	(7,684)	(8,552)
Total equity attributable to shareholders of the Company		**3,078**	**10,095**	**4,488**	**3,077**
Non-controlling interests		61	44	—	—
Total equity		**3,139**	**10,139**	**4,488**	**3,077**
Non-current liabilities					
Loans and borrowings	28	3,213	6,622	—	—
Provisions	30	156	465	393	388
Deferred tax liabilities	23	541	1,021	509	526
Other non-current liabilities		98	33	27	20
Bonds outstanding	29	228	—	—	—
Total non-current liabilities		**4,236**	**8,141**	**929**	**934**
Current liabilities					
Loans and borrowings	28	1,011	1,789	13,878	13,690
Bonds outstanding	29	108	245	—	—
Income tax payable	23(e)	116	52	48	40
Trade and other payables	31	565	1,611	1,711	1,424
Deferred consideration	19(a)	—	—	2,782	2,867
Provisions	30	77	86	169	187
Total current liabilities		**1,877**	**3,783**	**18,588**	**18,208**
Total liabilities		**6,113**	**11,924**	**19,517**	**19,142**
Total equity and liabilities		**9,252**	**22,063**	**24,005**	**22,219**
Net current assets/(liabilities)		**735**	**1,518**	**(13,516)**	**(14,397)**
Total assets less current liabilities		**7,375**	**18,280**	**5,417**	**4,011**

The accompanying notes form part of the Financial Information.

4 Balance sheets of the Company

	Section C Note	31 December 2006	31 December 2007	31 December 2008	30 June 2009
		USD million	USD million	USD million	USD million
ASSETS					
Non-current assets					
Investments in subsidiaries	22	—	9,651	13,533	13,506
Total non-current assets		**—**	**9,651**	**13,533**	**13,506**
Current assets					
Loans to group companies	35	—	3,351	2,957	3,001
Other receivables	25	—	13	349	10
Cash and cash equivalents	26	—	—	6	1
Total current assets		**—**	**3,364**	**3,312**	**3,012**
Total assets		**—**	**13,015**	**16,845**	**16,518**
EQUITY AND LIABILITIES					
Equity	27				
Share capital		—	—	—	—
Share premium		—	6,425	12,517	12,517
Additional paid-in capital		—	100	100	100
Accumulated losses		—	(22)	(9,357)	(9,659)
Total equity		**—**	**6,503**	**3,260**	**2,958**
Non-current liabilities					
Loans and borrowings	28	—	5,314	—	—
Total non-current liabilities		**—**	**5,314**	**—**	**—**
Current liabilities					
Loans and borrowings	28	—	1,097	10,613	10,435
Deferred consideration	19(a)	—	—	2,782	2,867
Trade and other payables	31	—	101	190	258
Total current liabilities		**—**	**1,198**	**13,585**	**13,560**
Total liabilities		**—**	**6,512**	**13,585**	**13,560**
Total equity and liabilities		**—**	**13,015**	**16,845**	**16,518**
Net current assets/(liabilities)		**—**	**2,166**	**(10,273)**	**(10,548)**
Total assets less current liabilities		**—**	**11,817**	**3,260**	**2,958**

The accompanying notes form part of the Financial Information.

5 Consolidated statements of changes in equity

	Section C Note	Attributable to the shareholders of the Company						Non-controlling interests	Total equity
		Share capital	Share premium	Other reserves	Currency translation reserve	Retained profits/ (accumulated losses)	Total		
		USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million
Balance at 1 January 2006		**—**	**—**	**2,803**	**(16)**	**1,446**	**4,233**	**43**	**4,276**
Total comprehensive income for the year		—	—	6	18	2,897	2,921	—	2,921
Acquisition of non-controlling interest		—	—	—	—	—	—	(40)	(40)
Acquisition of subsidiaries	5(a)	—	—	—	—	—	—	61	61
Transfer to other reserves upon capitalisation		—	—	11	—	(11)	—	—	—
Distributions to shareholders	27(e)	—	—	(12)	—	(313)	(325)	(3)	(328)
Dividends to shareholders	15	—	—	—	—	(3,751)	(3,751)	—	(3,751)
Balance at 31 December 2006		**—**	**—**	**2,808**	**2**	**268**	**3,078**	**61**	**3,139**
Balance at 1 January 2007		**—**	**—**	**2,808**	**2**	**268**	**3,078**	**61**	**3,139**
Total comprehensive income for the year		—	—	29	364	2,809	3,202	(3)	3,199
Shares issue for acquisition of subsidiaries		—	6,425	—	—	—	6,425	(14)	6,411
Capital contribution from shareholders	5(c)	—	—	100	—	—	100	—	100
Distributions to shareholders	27(e)	—	—	—	—	(210)	(210)	—	(210)
Dividends to shareholders	15	—	—	—	—	(2,500)	(2,500)	—	(2,500)
Balance at 31 December 2007		**—**	**6,425**	**2,937**	**366**	**367**	**10,095**	**44**	**10,139**

The accompanying notes form part of the Financial Information.

	Section C Note	Attributable to the shareholders of the Company						Non-controlling interests	Total equity
		Share capital	Share premium	Other reserves	Currency translation reserve	Retained profits/ (accumulated losses)	Total		
		USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million
Balance at 1 January 2008		**—**	**6,425**	**2,937**	**366**	**367**	**10,095**	**44**	**10,139**
Total comprehensive loss for the year		—	—	(25)	(3,623)	(5,952)	(9,600)	(32)	(9,632)
Shares issue for acquisition of associates	19	—	6,092	—	—	—	6,092	—	6,092
Acquisition of non-controlling interest		—	—	—	—	—	—	(12)	(12)
Dividends to shareholders	15	—	—	—	—	(2,099)	(2,099)	—	(2,099)
Balance at 31 December 2008		**—**	**12,517**	**2,912**	**(3,257)**	**(7,684)**	**4,488**	**—**	**4,488**
Balance at 1 January 2009		**—**	**12,517**	**2,912**	**(3,257)**	**(7,684)**	**4,488**	**—**	**4,488**
Total comprehensive loss for the period		—	—	92	(645)	(868)	(1,421)	—	(1,421)
Other changes resulting from transactions with entities under common control		—	—	10	—	—	10	—	10
Balance at 30 June 2009		**—**	**12,517**	**3,014**	**(3,902)**	**(8,552)**	**3,077**	**—**	**3,077**

	Section C Note	Attributable to the shareholders of the Company						Non-controlling interests	Total equity
		Share capital	Share premium	Other reserves	Currency translation reserve	Retained profits/ (accumulated losses)	Total		
		USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million
		(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
Balance at 1 January 2008		**—**	**6,425**	**2,937**	**366**	**367**	**10,095**	**44**	**10,139**
Total comprehensive income for the period		—	—	(25)	345	1,411	1,731	(2)	1,729
Shares issue for acquisition of associates	19	—	6,092	—	—	—	6,092	—	6,092
Acquisition of non-controlling interest		—	—	—	—	—	—	(12)	(12)
Dividends to shareholders	15	—	—	—	—	(1,203)	(1,203)	—	(1,203)
Balance at 30 June 2008		**—**	**12,517**	**2,912**	**711**	**575**	**16,715**	**30**	**16,745**

The accompanying notes form part of the Financial Information.

6 Consolidated cash flow statements

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
OPERATING ACTIVITIES					
Net profit/(loss) for the year/period	2,897	2,806	(5,984)	1,409	(868)
Adjustments for:					
Depreciation (note 11(b))	361	794	914	511	291
Amortisation (note 11(b))	2	82	116	56	8
Impairment of non-current assets (notes 17, 18)	—	—	3,668	344	37
Loss on fair-value adjustment on financial investments (note 21)	—	—	554	—	—
Gain on disposal of financial investments	—	—	(42)	(42)	—
Excess of the Group's share in net identifiable assets over the cost of acquisition	(28)	—	—	—	—
Impairment loss of trade and other receivables (note 8)	21	27	117	3	54
Impairment loss/(reversal of impairment loss) of inventories	—	2	339	—	(133)
Provision for legal claims (note 8)	23	—	50	—	30
Foreign exchange (gains)/losses	(1)	(16)	119	24	56
Loss on disposal of property, plant and equipment	5	97	56	8	7
Loss on disposal of intangible assets	—	—	—	—	10
Interest expense	238	466	711	274	501
Interest income	(54)	(36)	(41)	(21)	(19)
Changes in fair value of financial instruments (note 9)	(37)	(20)	(23)	(13)	(4)
Income tax expense/(benefit)	336	419	(69)	194	64
Share of losses/(profits) and impairment of associates (note 19)	16	14	3,302	(79)	(348)
Share of losses/(profits) and impairment of jointly controlled entities (note 20)	12	15	35	(40)	8
Gain from disposal of available-for-sale investments	(68)	—	—	—	—
	3,723	**4,650**	**3,822**	**2,628**	**(306)**
(Increase)/decrease in inventories	(270)	(453)	(341)	(447)	864
(Increase)/decrease in trade and other receivables	(282)	(251)	439	110	(49)
(Increase)/decrease in prepaid expenses and other assets	(48)	(22)	17	(3)	(20)
Increase/(decrease) in trade and other payables	71	525	122	26	(294)
Increase/(decrease) in provisions	103	(46)	(75)	(3)	(13)
Cash generated from operations	**3,297**	**4,403**	**3,984**	**2,311**	**182**
Income taxes paid	(254)	(561)	(368)	(228)	(6)
Interest paid	(253)	(496)	(599)	(205)	(408)
Net cash generated from/(used in) operating activities	**2,790**	**3,346**	**3,017**	**1,878**	**(232)**

The accompanying notes form part of the Financial Information.

6 Consolidated cash flow statements (continued)

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
INVESTING ACTIVITIES					
Proceeds from disposal of property, plant and equipment	25	68	32	33	43
Interest received	37	21	15	6	2
Proceeds from bank deposits	—	26	79	54	—
Repayment of loans to related parties	291	4	—	—	—
Payment for acquisition of property, plant and equipment	(867)	(1,684)	(1,348)	(790)	(69)
Proceeds from disposal of jointly controlled entities (note 20)	—	—	345	—	—
Cash (outflow)/inflow on disposal of subsidiaries	—	—	(47)	(47)	25
Dividends from associate	—	—	231	17	—
Dividends from jointly controlled entities	—	—	125	—	—
Payment for acquisition of intangible assets	—	(35)	(26)	—	(5)
Acquisition of subsidiaries, net of cash acquired	(65)	(1,304)	—	—	—
Cash deposited by the Glencore Businesses	—	210	—	—	—
Acquisition of associates	(11)	—	(4,438)	(4,438)	—
Acquisition of jointly controlled entities	(34)	(157)	—	—	—
Acquisition of financial instruments	—	—	(554)	—	—
Proceeds from disposals of other investments	15	—	—	—	—
Contributions to jointly controlled entities	—	—	(195)	(100)	(55)
Reduction of original purchase price of jointly controlled entities	70	—	—	—	—
Payment for acquisition of non-controlling interest	(48)	—	(12)	(12)	—
Change in restricted cash	3	(2)	(9)	6	(2)
Net cash used in investing activities	**(584)**	**(2,853)**	**(5,802)**	**(5,271)**	**(61)**
FINANCING ACTIVITIES					
Proceeds from borrowings	8,145	13,186	16,530	7,128	909
Repayment of borrowings	(6,741)	(10,845)	(10,943)	(2,546)	(1,052)
Repayment of bonds	—	(108)	(238)	—	—
Distributions to shareholders	(19)	(210)	—	—	—
Dividends paid	(3,751)	(2,500)	(2,099)	(1,203)	—
Net cash (used in)/generated from financing activities	**(2,366)**	**(477)**	**3,250**	**3,379**	**(143)**
Net (decrease)/increase in cash and cash equivalents	**(160)**	**16**	**465**	**(14)**	**(436)**
Cash and cash equivalents at beginning of year/period	385	229	247	247	685
Effect of exchange rate fluctuations on cash and cash equivalents	4	2	(27)	4	(10)
Cash and cash equivalents at end of year/period (note 26)	**229**	**247**	**685**	**237**	**239**

The accompanying notes form part of the Financial Information.

(a) Cash flows used in discontinued operations

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Cash used in operating activities	(22)	—	—	—	—
Cash generated from investing activities	89	—	—	—	—
Cash used in financing activities	(82)	—	—	—	—
Cash used in discontinued operations	(15)	—	—	—	—

Notes:

Major non-cash transactions

(i) On 29 December 2006 as required by pre-completion conditions of the acquisition agreement with SUAL Partners Ltd. and Glencore International AG the Group transferred all packaging, aluminium constructions and magnesium assets to the shareholder as a distribution at their carrying values which totalled USD313 million. Details are disclosed in note 5 of Section C.

(ii) On 27 March 2007, the Company became the holding company of the Group through exchange of its newly issued shares and certain cash consideration for 100% interests in RUSAL, SUAL and the Glencore Businesses with the respective shareholders of the combining groups. To effect the transaction the Company issued 2,200 shares in exchange for a 100% interest in SUAL and 1,200 shares in exchange for a 100% interest in the Glencore Businesses. Details of the transactions are disclosed in note 5 of Section C.

(iii) On 24 April 2008, the Company issued 1,628 shares as part of the consideration for the acquisition of 25% plus 1 share of OSJC MMC Norilsk Nickel. Details of the transaction are disclosed in notes 19(a) and 27(c) of Section C.

C NOTES TO THE FINANCIAL INFORMATION

1 Background

(a) Organisation

United Company RUSAL Limited (the "Company" or "UC RUSAL") was established by the controlling shareholder of RUSAL Limited ("RUSAL") as a limited liability company under the laws of Jersey on 26 October 2006.

The Company's registered office is Whiteley Chambers, Don Street, St. Helier, Jersey JE4 9WG, Channel Islands.

The Company directly or through its wholly owned subsidiaries controls a number of production and trading entities (see note 36) engaged in the aluminium business and other entities, which together with the Company are referred to as "the Group".

On 27 March 2007, the Company (which had no business or assets of its own) became the holding company of the Group through transfer of the interest in RUSAL from the common control shareholder and the acquisitions of SUAL International Limited ("SUAL") and the alumina and aluminium businesses of Glencore International AG (the "Glencore Businesses") from third parties. For accounting purposes, this transaction has been treated as follows:

- The formation of the Company and its acquisition of RUSAL is considered to be a non-substantive transaction, meaning that the Company's consolidated financial history prior to 27 March 2007 is that of RUSAL and that the financial information of the Group has been prepared as if the combination of the Company and RUSAL had taken place on 1 January 2006; and

- The acquisition by the Company of SUAL and the Glencore Businesses is treated as a purchase of these entities on 27 March 2007.

Further details relating to this acquisition are provided in note 5.

In April 2008 the Company issued 1,628 new shares to Onexim Holdings Limited representing 14% of the total shares outstanding post issue (refer to note 27). The shares were issued as a partial consideration upon acquisition of 25%+1 share investment in OJSC MMC Norilsk Nickel (refer to note 19).

As at 30 June 2009, the Group is controlled by En+ Group Limited, which holds 56.76% of the Company's shares with SUAL Partners Limited, Onexim Holdings Limited and Amokenga Holdings Limited holding 18.92%, 14.00% and 10.32% of the Company's shares, respectively.

En+ Group Limited is controlled by Mr. Oleg V. Deripaska. SUAL Partners Limited is controlled by Mr. Victor Vekselberg and Mr. Len Blavatnik together. Onexim Holdings Limited is controlled by Mr. Mikhail Prokhorov. Amokenga Holdings Limited is a wholly owned subsidiary of Glencore International AG which is controlled by its management and key employees.

Related party transactions are detailed in note 35.

(b) Operations

The Group operates in the aluminium industry primarily in the Russian Federation, Ukraine, Guinea, Jamaica, Ireland, Italy, Nigeria and Sweden and is principally engaged in the mining and refining of bauxite and nepheline ore into alumina, the smelting of primary aluminium from alumina and the fabrication of aluminium and aluminium alloys into semi-fabricated and finished products. The Group sells its products primarily in Europe, the Commonwealth of Independent States ("CIS"), Asia and North America.

(c) Business environment in emerging economies

The Russian Federation, Ukraine, Jamaica, Nigeria and Guinea have been experiencing political and economic changes that have affected, and may continue to affect, the activities of enterprises operating in these environments. Consequently, operations in these countries involve risks that typically do not exist in other markets, including reconsideration of privatisation terms in certain countries where the Group operates following changes in governing political powers. In addition, the recent contraction in the capital and credit markets has further increased the level of economic uncertainty in these environments.

The Financial Information reflects management's assessment of the impact of the Russian, Ukrainian, Jamaican, Nigerian and Guinean business environments on the operations and the financial position of the Group. The future business environment may differ from management's assessment.

2 Basis of preparation

(a) Statement of compliance

The Financial Information has been prepared in accordance with the International Financial Reporting Standards ("IFRSs"), which collective term includes all International Accounting Standards and related interpretations, promulgated by the International Accounting Standards Board ("IASB").

The IASB has issued a number of new and revised IFRSs. For the purpose of preparing this Financial Information, the Group has adopted all these new and revised IFRSs in the Relevant Period, except for any new standards or interpretations that are not yet effective for accounting periods beginning after 1 January 2009. The revised and new accounting standards and interpretations issued but not yet effective for the accounting year beginning on 1 January 2009 are set out in note 40.

This Financial Information also complies with the disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

The accounting policies set out below have been applied consistently to all periods presented in the Financial Information.

(b) Basis of measurement

The Financial Information comprises the Company and its subsidiaries and the Group's interests in associates and jointly controlled entities. For periods prior to 27 March 2007, the Financial Information has been presented as if the combination of the Company and RUSAL had taken place on 1 January 2006.

The Financial Information is prepared on the historical cost basis except as set out in the significant accounting policies in note 3 below.

The carrying amounts of assets, liabilities and equity items in existence at 31 December 2002 include adjustments for the effect of hyperinflation, which were calculated using conversion factors derived from the Russian Federation Consumer Price Index published by the Russian Statistics Agency, GosKomStat. Russia ceased to be hyperinflationary for IFRSs purposes as of 1 January 2003.

(c) Functional and presentation currency

The Company's functional currency is the United States Dollar ("USD") because it reflects the economic substance of the underlying events and circumstances of the Company. The functional currencies of the Group's significant subsidiaries are the currencies of the primary economic environment and key business processes of these subsidiaries and include USD, Russian Roubles ("RUR"), Ukrainian Hryvna and Euros ("EUR"). The Financial Information is presented in USD, rounded to the nearest million, except as otherwise stated herein.

(d) Going concern

In the second half of 2008, the ongoing global liquidity crisis resulted in, among other things, a lower level of capital markets funding, lower liquidity levels across the international and Russian banking sectors, higher interbank lending rates and significant contractions in many sectors of the real economy. In the fourth quarter of 2008, aluminium prices suffered a sharp decline due to a significant decrease in the demand for aluminium which forced the Group to decrease production at a number of its production sites. During the six months ended 30 June 2009, the Group reduced production levels by 10% for aluminium, by 33% for alumina and by 37% for bauxite compared to the same period of the prior year.

These factors have had a significant adverse impact on the revenue and profitability of the Group. As a result, at 31 December 2008 the Group was in breach of a number of covenants relating to its debt agreements and subsequently suspended servicing certain loans and borrowings. At 30 June 2009, the Group's current liabilities exceeded its current assets by USD14,397 million.

Future unfavourable changes in the prices of aluminium and alumina could have a further material adverse effect on the Group's business, financial condition and results of operations. A sustained fall in the price of or demand for aluminium could also adversely affect the Company's ability to meet certain targets and financial covenants under its debt restructuring agreements (see below).

In December 2009, the Group completed restructuring negotiations with its lenders in order to establish financial stability and to put the necessary arrangements in place to allow the Group to meet its obligations when they fall due as part of ongoing operations. The restructuring arrangements contain a number of terms and conditions, including conditions subsequent (see note 38 (b)). Details of the debt restructuring arrangements are set out in note 38(b). The following summarises the principal terms of the debt restructuring:

- The Group signed an international override agreement, subject to certain conditions subsequent, with its international lenders implementing the long-term restructuring of the Group's debt to the international lenders which became effective on 7 December 2009 with all conditions precedent having been satisfied by that date. In addition, in November 2009 the Group signed amendments to the bilateral loan agreements with its Russian and Kazakh lenders providing for the long-term restructuring of these loans on similar terms, except in the case of the loan agreement with Vnesheconombank ("VEB"), which was extended until 29 October 2010.

- In addition, on 1 December 2009 the Group entered into an amendment agreement in relation to a stock purchase agreement between the Group, Onexim Holdings Limited ("Onexim") and certain other parties relating to the acquisition of shares in OJSC MMC Norilsk Nickel ("Norilsk Nickel") (see note 19), in order to restructure the outstanding deferred consideration in the amount of USD2,700 million plus accrued interest. In accordance with the amendment agreement, on the date of the effectiveness of the international override agreement, part of the Group's obligations were converted into ordinary shares of the Company representing 6% of the Company's share capital post conversion. In addition, USD880 million plus interest will be settled on the terms similar to those agreed under the international override agreement and the accrued interest of USD226 million and a restructuring fee of USD49 million will be paid in cash.

- No fixed amortisation schedule applies to the Group's loans to its international, Russian and Kazakh lenders and Onexim during the override period (four years from the override date as defined in the international override agreement), with all debt outstanding under the international, Russian and Kazakh facilities and Onexim, except the VEB loan, becoming due at the end of the override period. As there is no fixed amortisation schedule for the debt, debt repayment is based on a cash sweep mechanism, which is designed to structure the repayment of debt based on the Group's financial performance and is subject to minimum debt reduction covenants.

- The debt restructuring agreements provide for the acceleration of debt repayment if a person other than Mr. Oleg Deripaska acquires effective control of the Company.

- The debt restructuring agreements contain certain targets and financial covenants, which, if not met, could result in acceleration of the Group's debt repayment, as described below, or require the Group to dispose of certain assets, including the compulsory disposal of shares in Norilsk Nickel.

- The Group is required to fulfill certain conditions subsequent which are described in note 38(b).

Failure to comply with the terms and conditions of the debt restructuring agreements (including the conditions subsequent) could, if the required majority of lenders so elects, result in the acceleration of the Group's debt repayment and the realisation by its lenders of the security provided, which could have a material adverse impact on the Group and its shareholders. Further, adverse outcomes in litigation involving any member of the Group, except certain currently pending litigation or alleged claims, in excess of USD50 million in aggregate could also potentially lead to an event of default under the terms of the international override agreement, which could, if the required majority of lenders so elects, again result in the acceleration of the Group's debt repayment and realisation by its lenders of the security provided.

The Directors believe that the restructuring terms will allow the Group to successfully continue its operations and repay its debts as and when they fall due and, therefore, the Directors have prepared the Financial Information on a going concern basis. As part of their assessment of the applicability of the going concern basis of preparation of the Financial Information, the Directors have considered additional sources of financing and are of the opinion that:

- The likelihood of an adverse outcome in any litigation in excess of USD50 million resulting in an event of default and acceleration of the Group's debt repayment and realisation by its lenders of the security provided as described above is remote;

- The Group will be able to raise additional funds as a result of an equity offering in one of the international capital markets which will be used to reduce the Group's indebtedness;

- The VEB loan may be assigned to Sberbank upon the request of the Company should the VEB loan not be extended beyond 29 October 2010, as is currently anticipated. For these purposes, the Group has obtained an irrevocable and unconditional letter from Sberbank which allows the Group to request Sberbank to assume the rights, claims and obligations under the VEB loan by notifying Sberbank in writing during the period from 1 August to 1 September of each year from 2010 to 2013, inclusive. Following such assumption, the maturity of the existing VEB loan will be extended to 7 December 2013 from the original repayment date. Commission of 2.00% of the outstanding principal amount and any other outstanding as of the date of the assignment will be payable to Sberbank by the Group as follows: a) USD22.5 million by 31 December 2009, b) ¼ (one quarter) of the commission annually by 31 December of the years 2010, 2011 and 2012, provided that no assignment occurred in such year or any previous year and c) the amount of the commission to be reduced by amounts paid in a) and b) once the assignment has occured. The Company has also entered into an unconditional and irrevocable deed with its current shareholders, pursuant to which the current shareholders guarantee to Sberbank to pay on demand the commission when it falls due should the payment be inconsistent with the obligations of the Group under the international override agreement.

- The Group has an agreement in place to draw up to USD100 million from Sberbank, and plans to use this facility in December 2009.

If the repayment of the whole of the Group's indebtedness is accelerated, for example, because a relevant member of the Group is unable to comply with or satisfy any of the terms or conditions of, or triggers any event of default under, the debt restructuring or other debt obligations, or if the Company should be unable to extend or refinance or repay the VEB loan as and when it falls due, the Group may cease to continue as a going concern.

The Financial Information does not include any adjustments relating to the recoverability and classification of recorded asset amounts or to the amount and classification of liabilities that may be necessary if the Group were unable to comply with the terms of its debt restructuring agreements and/or if the Group were unable to continue as a going concern.

(e) Use of judgements, estimates and assumptions

The preparation of Financial Information in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the Financial Information, and the reported revenue and costs during Relevant Period.

Management bases its judgements and estimates on historical experience and various other factors that are believed to be appropriate and reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on the Financial Information and estimates with a significant risk of material adjustment in the next year are discussed in note 39.

3 Significant accounting policies

The following significant accounting policies have been applied in the preparation of the Financial Information. These accounting policies have been consistently applied to all periods presented in this Financial Information.

(a) Basis of consolidation

(i) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. Control exists when the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable are taken into account. The financial information of subsidiaries is included in the Financial Information from the date that control commences until the date that control ceases.

Non-controlling interests represent the portion of the net assets of subsidiaries attributable to interests that are not owned by the Company, whether directly or indirectly through subsidiaries, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. Non-controlling interests are presented in the consolidated balance sheet within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated income statements and the consolidated statements of comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year/period between non-controlling interests and the equity shareholders of the Company.

Where losses applicable to the non-controlling interests exceed the non-controlling shareholder's interest in the equity of a subsidiary, the excess, and any further losses applicable to the non-controlling shareholder, are charged against the Group's interest except if the non-controlling shareholder has a binding obligation to, and is able to, make additional investment to cover the losses. If the subsidiary subsequently reports profits, the Group's interest is allocated all such profits until the non-controlling shareholder's share of losses previously absorbed by the Group has been recorded.

In the Company's balance sheet, an investment in a subsidiary is stated at cost less impairment losses.

(ii) Acquisitions of non-controlling interests

The acquisition of an additional non-controlling interest in an existing subsidiary after control has been obtained is accounted for as an equity transaction with any difference between the cost of the additional investment and the carrying amount of the net assets acquired at the date of exchange recognised directly in equity.

(iii) Acquisitions from entities under common control

Business combinations arising from transfers of interests in entities that are under the common control of the shareholder that controls the Company are accounted for as if the acquisition had occurred at the beginning of the earliest period presented or, if later, at the date that common control was established. The assets and liabilities acquired are recognised at the carrying amounts recognised previously in the Group's controlling shareholder's consolidated financial statements. The components of the equity of the acquired entities are added to the same components within Group equity except that any share capital of the acquired entities is recognised as part of additional paid-in capital.

(iv) Associates and jointly controlled entities (equity accounted investees)

Associates are those entities in which the Group has significant influence, but not control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of another entity. Jointly controlled entities are those entities over whose activities the Group has joint control, established by contractual agreement and requiring unanimous consent for strategic financial and operating decisions.

Investments in associates and jointly controlled entities are accounted for using the equity method (equity accounted investees) and are recognised initially at cost. The Group's investment includes goodwill identified on acquisition, net of any accumulated impairment losses. The Financial Information includes the Group's share of the income and expenses and equity movements of equity accounted investees, after adjustments to align the accounting policies with those of the Group, from the date that significant influence or joint control commences until the date that significant influence or joint control ceases. When the Group's share of losses exceeds its interest in an equity accounted investee, the carrying amount of that interest, including any long-term investments, is reduced to nil, and the recognition of further losses is discontinued except to the extent that the Group has an obligation or has made payments on behalf of the investee.

(v) Jointly controlled assets and operations

The Group has certain contractual arrangements with other participants to engage in joint activities that do not in substance give rise to a jointly controlled entity. These arrangements involve the joint ownership of assets dedicated to the purposes of each venture. These contractual arrangements do not create a jointly controlled entity due to the fact that the joint venture operates under the policies of the venturers that directly derive the benefits of operation of their jointly owned assets, rather than deriving returns from an interest in a separate entity.

The Financial Information includes the Group's share of the assets in such joint ventures, together with the liabilities, revenues and expenses arising jointly or otherwise from those operations. All such amounts are measured in accordance with the terms of each arrangement, which are usually in proportion to the Group's interest in the jointly controlled assets or operations.

(vi) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the Financial Information. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

(b) Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated into the respective functional currencies of Group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between the amortised cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortised cost in foreign

currency translated at the exchange rate at the end of the reporting period. Foreign currency differences arising on retranslation are recognised in the income statement, except for differences arising on the retranslation of available-for-sale equity instruments which is recognised in the statement of comprehensive income.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated from their functional currencies to USD at the exchange rates ruling at the reporting date. The income and expenses of foreign operations are translated to USD at exchange rates approximating exchange rates at the dates of the transactions.

Foreign currency differences arising on translation are recognised in other comprehensive income. For the purposes of foreign currency translation, the net investment in a foreign operation includes foreign currency intra-group balances for which settlement is neither planned nor likely in the foreseeable future and foreign currency differences arising from such a monetary item is recognised in the statement of comprehensive income.

When a foreign operation is disposed of, in whole or in part, the relevant amount of the currency translation reserve is transferred to the profit or loss as part of the gain or loss on disposal.

(c) Financial instruments

(i) Non-derivative financial instruments

Non-derivative financial instruments comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings and trade and other payables.

Non-derivative financial instruments are recognised initially at fair value plus, for instruments not classified as at fair value through profit or loss (see below), any directly attributable transaction costs.

A financial instrument is recognised when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised if the Group's contractual rights to the cash flows from the financial assets expire or if the Group transfers the financial asset to another party without retaining control or substantially all risks and rewards of the asset. Financial liabilities are derecognised if the Group's obligations specified in the contract expire or are discharged or cancelled.

Financial assets and liabilities are offset and the net amount presented in the balance sheets when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Subsequent to initial recognition non-derivative financial instruments are measured as described below.

Cash and cash equivalents comprise cash balances and call deposits.

Accounting for finance income and expenses is discussed in note 3(o).

<u>Held-to-maturity investments</u>

If the Group has the positive intent and ability to hold debt securities to maturity, then they are classified as held-to-maturity. Held-to-maturity investments are measured at amortised cost using the effective interest method, less any impairment losses.

Available-for-sale financial assets

The Group's investments in equity securities and certain debt securities are classified as available-for-sale financial assets. Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses (see note 3(h)(i)), and foreign currency differences on available-for-sale equity instruments (see note 3(b)(i)), are recognised in other comprehensive income and presented within equity. When an investment is derecognised, the cumulative gain or loss in equity is transferred to the income statement.

Other

Other non-derivative financial instruments are measured at amortised cost using the effective interest method, less any impairment losses. Investments in equity securities that are not quoted on a stock exchange and where fair value cannot be estimated on a reasonable basis by other means are stated at cost less impairment losses.

(ii) Derivative financial instruments

Derivatives are recognised initially at fair value; attributable transaction costs are recognised in profit or loss when incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes therein are recognised immediately in the income statement.

Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative are not closely related, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the combined instrument is not measured at fair value through profit or loss.

(d) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment, are measured at cost less accumulated depreciation and impairment losses. The cost of property, plant and equipment at 1 January 2004, the date of transition to IFRSs, was determined by reference to its fair value at that date.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, the costs of dismantling and removing the items and restoring the site on which they are located and capitalised borrowing costs (see note 3(o)). Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The cost of periodic relining of electrolyse cells is capitalised and depreciated over the expected production period.

Gains or losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised net within gain/(loss) on disposal of property, plant and equipment in the income statement.

(ii) Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in the income statement as incurred.

(iii) Exploration and evaluation assets

Exploration and evaluation activity involves the search for mineral resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource. Exploration and evaluation activity includes:

- researching and analysing historical exploration data;
- gathering exploration data through topographical, geochemical and geophysical studies;
- exploratory drilling, trenching and sampling;
- determining and examining the volume and grade of the resource;
- surveying transportation and infrastructure requirements; and
- conducting market and finance studies.

Administration costs that are not directly attributable to a specific exploration area are charged to the income statement.

License costs paid in connection with a right to explore in an existing exploration area are capitalised and amortised over the term of the permit.

Exploration and evaluation expenditure is capitalised as exploration and evaluation assets when it is expected that expenditure related to an area of interest will be recouped by future exploitation, sale, or, at the reporting date, the exploration and evaluation activities have not reached a stage that permits a reasonable assessment of the existence of commercially recoverable ore reserves. Capitalised exploration and evaluation expenditure is recorded as a component of property, plant and equipment at cost less impairment losses. As the asset is not available for use, it is not depreciated. All capitalised exploration and evaluation expenditure is monitored for indications of impairment. Where there are indicators of potential impairment, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration is attributed. Exploration areas at which reserves have been discovered but that require major capital expenditure before production can begin are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is underway or planned. To the extent that capitalised expenditure is not expected to be recovered it is charged to the income statement.

Exploration and evaluation assets are transferred to mining property, plant and equipment or intangible assets when development is sanctioned.

(iv) Stripping costs

Expenditure relating to the stripping of overburden layers of ore, including estimated site restoration costs, is included in the cost of production in the period in which it is incurred.

(v) Mining assets

Mining assets are recorded as construction in progress and transferred to mining property, plant and equipment when a new mine reaches commercial production.

Mining assets include expenditure incurred for:

- Acquiring mineral and development rights;
- Developing new mining operations.

Mining assets include interest capitalised during the construction period, when financed by borrowings.

(vi) Depreciation

The carrying amounts of property, plant and equipment (including initial and any subsequent capital expenditure) are depreciated to their estimated residual value over the estimated useful lives of the specific assets concerned, or the estimated life of the associated mine or mineral lease, if shorter. Estimates of residual values and useful lives are reassessed annually and any change in estimate is taken into account in the determination of remaining depreciation charges. Leased assets are depreciated over the shorter of the lease term and their useful lives. Freehold land is not depreciated.

The property, plant and equipment is depreciated on a straight-line or units of production basis over the respective estimated useful lives as follows:

• Buildings	40 to 50 years
• Plant, machinery and equipment	15 to 40 years
• Electrolysers	4 to 15 years
• Mining assets	units of production on proven and probable reserves
• Other (except for exploration and evaluation assets)	5 to 20 years

(e) Intangible assets

(i) Goodwill

On the acquisition of a subsidiary, an interest in a jointly controlled entity or an associate or an interest in a joint arrangement that comprises a business, the identifiable asset, liabilities and contingent liabilities of the acquired business (or interest in a business) are recognised at their fair values unless the fair values cannot be measured reliably. Where the fair values of assumed contingent liabilities cannot be measured reliably, no liability is recognised but the contingent liability is disclosed in the same manner as other contingent liabilities.

Goodwill arises when the cost of acquisition exceeds the fair value of the Group's interest in the net fair value of identifiable net assets acquired. Goodwill is not amortised but is tested for impairment annually. For this purpose, goodwill arising on a business combination is allocated to the cash-generating units expected to benefit from the acquisition and any impairment loss

recognised is not reversed even where circumstances indicate a recovery in value. In respect of associates or jointly controlled entities, the carrying amount of goodwill is included in the carrying amount of the interest in the associate and jointly controlled entity and the investment as a whole is tested for impairment whenever there is objective evidence of impairment.

When the fair value of the Group's share of identifiable net assets acquired exceeds the cost of acquisition, the difference is recognised immediately in the income statement.

(ii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the income statement when incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use and capitalised borrowing costs. Other development expenditure is recognised in the income statement when incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses.

(iii) Other intangible assets

Other intangible assets that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses.

(iv) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in the income statement when incurred.

(v) Amortisation

Amortisation is recognised in the income statement on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The estimated useful lives for the current and comparative periods are as follows:

- software 5 years;
- contracts, acquired on business combinations 2-8 years.

The amortisation method, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

(f) Leased assets

Leases under the terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

The corresponding finance lease obligation is included within interest bearing liabilities. The interest element is allocated to accounting periods during the lease term to reflect a constant rate of interest on the remaining balance of the obligation for each accounting period.

Assets held under other leases (operating leases) are not recognised in the balance sheet. Payments made under the lease are charged to the income statement in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased assets. Lease incentives received are recognised in the income statement as an integral part of the aggregate net lease payments made. Contingent rentals are charged to the income statement in the accounting period in which they incurred.

(g) Inventories

Inventories are measured at the lower of cost or net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

The cost of inventories is principally determined under the weighted average cost method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

The production costs include mining and concentrating costs, smelting, treatment and refining costs, other cash costs and depreciation and amortisation of operating assets.

(h) Impairment

(i) Financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

Objective evidence that financial assets (including equity securities) are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Group on terms that the Group would not consider otherwise, indications that a debtor or issuer will enter bankruptcy and the disappearance of an active market for a security. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.

An impairment loss in respect of a financial asset measured at cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the original effective interest rate. An impairment loss in respect of an available-for-sale financial asset is calculated by reference to its fair value.

An impairment loss in respect of an investment in associate or jointly controlled entity is calculated as the difference between its carrying amount after application of the equity method of accounting (note 3(a)(iv)) and its recoverable amount. The recoverable amount of such investment is the greater of its value in use and its fair value less cost to sell. In determining the value in use of the investment the Company estimates: (a) its share of the present value of the estimated future cash flows expected to be generated by the investee, including the cash flows from the operations of the investee and the proceeds on the ultimate disposal of the investment; or (b) the present value of the estimated future cash flows expected to arise from the dividends to be received from the investee and from its ultimate disposal depending on which available information with respect to each investee is more reliable. An impairment loss is reversed to the extent that the recoverable amount of the investment subsequently increases and the resulting carrying amount does not exceed the carrying amount that would have been determined, after application of the equity method, had no impairment loss previously been recognised.

Individually significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics.

All impairment losses are recognised in the income statement. Any cumulative loss in respect of an available-for-sale financial asset recognised in the statement of comprehensive income, and presented in equity, is transferred to the income statement.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and available-for-sale financial assets that are debt securities, the reversal is recognised in the income statement. For available-for-sale financial assets that are equity securities, the reversal is recognised in the statement of comprehensive income.

Impairment losses for trade receivables included within trade and other receivables whose recovery is considered doubtful but not remote are recorded using an allowance account. When the Group is satisfied that recovery is remote, the amount considered irrecoverable is written off against trade receivables directly and any amounts held in the allowance account relating to that receivable are reversed. Subsequent recoveries of amounts previously charged to the allowance account are reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly are recognised in the income statement.

(ii) Non-financial assets

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists then the asset's recoverable amount is estimated. For goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated at each reporting date.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. A cash-generating unit is the smallest identifiable asset group that generates cash flows that are largely independent from other assets and groups. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Goodwill that forms part of the carrying amount of an investment in an associate or a jointly controlled entity is not recognised separately and, therefore, is not tested for impairment separately. Instead, the entire amount of the investment is tested for impairment as a single asset when there is objective evidence that the investment in an associate or a jointly controlled entity may be impaired.

(i) Insurance contracts

Where the Group enters into financial guarantee contracts to guarantee the indebtedness of other companies, controlled by the beneficial shareholder of the Group, the Group considers these to be insurance arrangements and accounts for them as such. In this respect, the Group treats the guarantee contract as a contingent liability until such time as it becomes probable that the Group will be required to make a payment under the guarantee.

(j) Dividends

Dividends on ordinary shares are recognised as a liability in the period in which they are declared.

(k) Employee benefits

(i) Salaries, annual bonuses, paid annual leave and cost of non-monetary benefits

Salaries, annual bonuses, paid annual leave and cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Defined benefit pension and other post-retirement plans

The Group's net obligation in respect of defined benefit pension and other post-retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value and any unrecognised past service costs and the fair value of any plan assets are deducted. The discount rate is the yield at the reporting date on government bonds that have maturity dates approximating the terms of the Group's obligations. The calculation is performed using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the net total of any unrecognised past service costs and the present value of any future refunds from the plan or reductions in future contributions to the plan.

Where there is a change in actuarial assumptions, the resulting actuarial gains and losses are recognised directly in the statement of comprehensive income.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised in the income statement on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the expense is recognised immediately.

(iii) State pension funds

The Group makes contributions for the benefit of employees to Russia's and the Ukrainian State's pension funds. The contributions are expensed as incurred.

(l) Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

(i) Site restoration

The mining, refining and smelting activities of the Group can give rise to obligations for site restoration and rehabilitation. Restoration and rehabilitation works can include facility decommissioning and dismantling; removal or treatment of waste materials; land rehabilitation; and site restoration. The extent of work required and the associated costs are dependent on the requirements of law and the interpretations of the relevant authorities.

Provisions for the cost of each restoration and rehabilitation program are recognised at the time that environmental disturbance occurs. When the extent of disturbance increases over the life of an operation, the provision is increased accordingly. Costs included in the provision encompass obligated and reasonably estimable restoration and rehabilitation activity expected to occur progressively over the life of the operation and at the time of closure in connection with disturbances at the reporting date. Routine operating costs that may impact the ultimate restoration and rehabilitation activities, such as waste material handling conducted as an integral part of a mining or production process, are not included in the provision. Costs arising from unforeseen circumstances, such as the contamination caused by unplanned discharges, are recognised as an expense and liability when the event gives rise to an obligation which is probable and capable of reliable estimation.

Restoration and rehabilitation provisions are measured at the expected value of future cash flows, discounted to their present value and determined according to the probability of alternative estimates of cash flows occurring for each operation. Discount rates used are specific to the country in which the operation is located. Significant judgements and estimates are involved in forming expectations of future activities and the amount and timing of the associated cash flows. Those expectations are formed based on existing environmental and regulatory requirements.

When provisions for restoration and rehabilitation are initially recognised, the corresponding cost is capitalised as an asset, representing part of the cost of acquiring the future economic benefits of the operation. The capitalised cost of restoration and rehabilitation activities is amortised over the estimated economic life of the operation on a units of production or straight-line basis. The value of the provision is progressively increased over time as the effect of discounting unwinds, creating an expense recognised as part of finance expenses.

Restoration and rehabilitation provisions are also adjusted for changes in estimates. Those adjustments are accounted for as a change in the corresponding capitalised cost, except where a reduction in the provision is greater than the unamortised capitalised cost, in which case the capitalised cost is reduced to nil and the remaining adjustment is recognised in the income statement. Changes to the capitalised cost result in an adjustment to future amortisation charges. Adjustments to the estimated amount and timing of future restoration and rehabilitation cash flows are a normal occurrence in light of the significant judgements and estimates involved. Factors influencing those changes include revisions to estimated reserves, resources and lives of operations; developments in technology; regulatory requirements and environmental management strategies; changes in the estimated costs of anticipated activities, including the effects of inflation and movements in foreign exchange rates; and movements in general interest rates affecting the discount rate applied.

(ii) Restructuring

A provision for restructuring is recognised when the Group has approved a detailed and formal restructuring plan and the restructuring either has commenced or has been announced publicly. Future operating costs are not provided for.

(m) Revenue

(i) Goods sold

Revenue from the sale of goods is recognised when the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably and there is no continuing management involvement with the goods. This is generally when title passes.

In the majority of sales, sales agreements specify that title passes on the bill of lading date, which is the date the commodity is delivered to the shipping agent. Revenue is recognised on the bill of lading date.

Revenue is not reduced for royalties or other taxes payable from production.

(n) Other expenses

(i) Social expenditure

To the extent that the Group's contributions to social programs benefit the community at large and are not restricted to the Group's employees, they are recognised in the income statement as incurred.

(o) Finance income and expenses

Finance income comprises interest income on funds invested, dividend income, gains on the disposal of available-for-sale financial assets, changes in the fair value of financial assets at fair value through profit or loss and foreign currency gains. Interest income is recognised as it accrues, using the effective interest method. Dividend income is recognised on the date that the Group's right to receive payment is established.

Finance expenses comprise interest expense on borrowings, unwinding of the discount on provisions, foreign currency losses and changes in the fair value of financial assets at fair value through profit or loss. All borrowing costs are recognised in the income statement using the effective interest method, except for borrowing costs related to the acquisition, construction and production of qualifying assets which are recognised as part of the cost of such assets.

Foreign currency gains and losses are reported on a net basis.

(p) Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit, and differences relating to investments in subsidiaries to the extent that they probably will not reverse in the foreseeable future. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the Group has both the right and the intention to settle its current tax assets and liabilities on a net or simultaneous basis.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which temporary difference can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of dividends are recognised at the same time as the liability to pay the related dividend is recognised.

(q) Non-current assets held for sale and discontinued operations

Non-current assets (or disposal groups comprising assets and liabilities), that are expected to be recovered primarily through sale rather than through continuing use, are classified as held for sale. Immediately before classification as held for sale, the measurement of the assets (or all assets and liabilities in a disposal group) is brought up-to-date in accordance with applicable IFRSs. Then, on initial classification as held for sale, non-current assets or disposal groups are recognised at the lower of carrying amount and fair value less costs to sell. Any impairment loss on a disposal group first is allocated to goodwill and then to remaining assets and liabilities on pro rata basis, except that no loss is allocated to inventories, financial assets, deferred tax assets and employee benefit assets, which continue to be measured in accordance with the Group's accounting policies.

A discontinued operation is a component of the Group's business that represents a separate major line of business or geographical area of operations or is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier.

(r) Segment reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenue and expenses that relate to transactions with any of the Group's other components. All operating segments' operating results are reviewed regularly by the Group's CEO to make decisions about resources to be allocated to the segment and assess its performance and for which discrete financial information is available.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

(s) Related parties

For the purposes of the Financial Information, a party is considered to be related to the Group if:

(i) the party has the ability, directly or indirectly through one or more intermediaries, to control the Group or exercise significant influence over the Group in making financial and operating policy decisions, or has joint control over the Group;

(ii) the Group and the party are subject to common control;

(iii) the party is an associate of the Group or joint venture in which the Group is a venturer;

(iv) the party is a member of key management personnel of the Group or the Group's parent, or a close family member of such an individual, or is an entity under the control, joint control or significant influence of such individuals;

(v) the party is a close family member of a party referred to in (i) or is an entity under the control, joint control or significant influence of such individuals; or

(vi) the party is a post-employment benefit plan which is for the benefit of employees of the Group or of any entity that is a related party of the Group.

Close family members of an individual are those family members who may be expected to influence, or be influenced by, that individual in their dealings with the entity

4 Segment reporting

Reportable segments

The Group has four reportable segments, as described below, which are the Group's strategic business units. These business units are managed separately and results of their operations are reviewed by the CEO on a regular basis.

Aluminium. The Aluminium segment is involved in the production and sale of primary aluminum and related products.

Alumina. The Alumina segment is involved in the mining and refining of bauxite into alumina and the sale of alumina.

Energy. The Energy segment includes the Group companies and projects engaged in the mining and sale of coal and the generation and transmission of electricity produced from various sources. Where the generating facility is solely a part of alumina or aluminium production facility it is included in the respective reportable segment.

Mining and Metals. The Mining and Metals segment includes the equity investment in Norilsk Nickel.

Other operations include manufacturing of semi-finished products from primary aluminium for the transportation, packaging, building and construction, consumer goods and technology industries; and the activities of the Group's administrative centres. Other operations in 2006 also included packaging, aluminium construction and magnesium operations which were disposed of in 2006 (see note 6). None of these segments meets any of the quantitative thresholds for determining reportable segments during the Relevant Period.

The Aluminium and Alumina segments are vertically integrated whereby the Alumina segment supplies alumina to the Aluminium segment for further refining and smelting with limited sales of alumina outside the Group. Integration between the Aluminium, Alumina and Energy segments also includes shared servicing and distribution.

Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitor the results, assets and liabilities attributable to each reportable segment on the following bases:

Segment assets include all tangible, intangible assets and current assets with the exception of income tax assets and corporate assets. Segment liabilities include trade and other payables attributable to the production and sales activities of the individual segments. Loans and borrowings are not allocated to individual segments as they are centrally managed by the head office.

Revenue and expenses are allocated to the reportable segments with reference to sales generated by those segments and the expenses incurred by those segments or which otherwise arise from the depreciation or amortisation of assets attributable to those segments.

The measure used for reporting segment results is profit or loss before income tax adjusted for items not specifically attributed to individual segments, such as finance income, costs of loans and borrowings and other head office or corporate administration costs. The segment profit or loss is included in the internal management reports that are reviewed by the Group's CEO. Segment profit or loss is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

In addition to receiving segment information concerning segment results, management is provided with segment information concerning revenue (including inter-segment revenue), the carrying value of investments and share of (losses)/profits of associates and jointly controlled entities, depreciation, amortisation, impairment and additions of non-current segment assets used by the segments in their operations. Inter-segment pricing is determined on a consistent basis using market benchmarks.

(i) Reportable segments

At 31 December 2006

	Aluminium	Alumina	Energy	Other operations	Total
	USD million	USD million	USD million	USD million	USD million
Revenue from external customers	7,434	692	—	541	8,667
Sales to discontinued operations	110	—	—	—	110
Inter-segment revenue	410	1,305	—	180	1,895
Total segment revenue	7,954	1,997	—	721	10,672
Segment profit/(loss)	2,882	675	—	(30)	3,527
Share of losses of associates	—	(16)	—	—	(16)
Share of losses of jointly controlled entities	(4)	(8)	—	—	(12)
Excess of the Group's share in net identifiable assets over the cost of acquisition	—	28	—	—	28
Depreciation/amortisation	(245)	(95)	—	(14)	(354)
Non-cash expenses other than depreciation	(67)	(9)	—	(12)	(88)
Additions to non-current segment assets during the year	710	128	—	29	867
Segment assets	7,000	2,120	13	492	9,625
Interests in associates	—	419	23	—	442
Interests in jointly controlled entities	20	107	—	—	127
Total segment assets					10,194
Segment liabilities	(1,055)	(670)	(1)	(125)	(1,851)
Total segment liabilities					(1,851)

At 31 December 2007

	Aluminium	Alumina	Energy	Other operations	Total
	USD million	USD million	USD million	USD million	USD million
Revenue from external customers	10,951	1,895	345	397	13,588
Inter-segment revenue	785	2,358	—	207	3,350
Total segment revenue	11,736	4,253	345	604	16,938
Segment profit/(loss)	3,066	756	47	(5)	3,864
Share of losses of associates	—	(14)	—	—	(14)
Share of losses of jointly controlled entities	—	—	—	(15)	(15)
Depreciation/amortisation	(458)	(431)	(1)	(21)	(911)
Non-cash (expenses)/income other than depreciation	(28)	16	—	8	(4)
Additions to non-current segment assets during the year	1,198	470	7	44	1,719
Segment assets	14,967	7,119	640	573	23,299
Interests in associates	—	433	—	10	443
Interests in jointly controlled entities	—	—	219	—	219
Total segment assets					23,961
Segment liabilities	(2,619)	(1,531)	(23)	(155)	(4,328)
Total segment liabilities					(4,328)

At 31 December 2008

	Aluminium	Alumina	Energy	Mining and Metals	Other operations	Total
	USD million	USD million	USD million	USD million	USD million	USD million
Revenue from external customers	12,497	2,511	372	—	305	15,685
Inter-segment revenue	325	3,804	3	—	500	4,632
Total segment revenue	12,822	6,315	375	—	805	20,317
Segment profit/(loss)	1,068	1,407	74	(3,290)	25	(716)
Impairment of non-current assets	(934)	(2,734)	—	—	—	(3,668)
Share of losses of associates	—	(12)	—	—	—	(12)
Share of losses of jointly controlled entities	—	—	(35)	—	—	(35)
Depreciation/amortisation	(542)	(527)	(4)	—	(12)	(1,085)
Non-cash expenses other than depreciation	(867)	(172)	—	—	(21)	(1,060)
Additions to non-current segment assets during the year	1,104	238	6	—	26	1,374
Segment assets	13,615	4,373	50	—	470	18,508
Interests in associates	—	369	—	7,158	9	7,536
Interests in jointly controlled entities	—	—	506	—	—	506
Total segment assets						26,550
Segment liabilities	(3,099)	(1,565)	(16)	—	(199)	(4,879)
Total segment liabilities						(4,879)

At 30 June 2008

	Aluminium	Alumina	Energy	Mining and Metals	Other operations	Total
	USD million (unaudited)	USD million (unaudited)	USD million (unaudited)	USD million (unaudited)	USD million (unaudited)	USD million (unaudited)
Revenue from external customers	6,652	1,272	251	—	179	8,354
Inter-segment revenue	182	1,853	—	—	256	2,291
Total segment revenue	6,834	3,125	251	—	435	10,645
Segment profit/(loss)	1,218	812	47	82	12	2,171
Impairment of non-current assets	—	(333)	(11)	—	—	(344)
Share of losses of associates	—	(3)	—	—	—	(3)
Share of profits of jointly controlled entities	—	—	40	—	—	40
Depreciation/amortisation	(280)	(281)	(3)	—	(8)	(572)
Non-cash expenses other than depreciation	(6)	(4)	—	—	—	(10)
Additions to non-current segment assets during the period	608	152	3	—	27	790

At 30 June 2009

	Aluminium	Alumina	Energy	Mining and Metals	Other operations	Total
	USD million	USD million	USD million	USD million	USD million	USD million
Revenue from external customers	3,320	315	60	—	62	3,757
Inter-segment revenue	68	744	—	—	136	948
Total segment revenue	3,388	1,059	60	—	198	4,705
Segment profit/(loss)	(327)	(66)	9	350	(47)	(81)
Impairment of non-current assets	(22)	(15)	—	—	—	(37)
Share of losses of associates	—	(2)	—	—	—	(2)
Share of losses of jointly controlled entities	—	—	(8)	—	—	(8)
Depreciation/amortisation	(185)	(56)	(7)	—	(8)	(256)
Non-cash income other than depreciation	96	36	—	—	(3)	129
Additions to non-current segment assets during the period	49	18	4	—	3	74
Segment assets	11,994	3,729	19	—	391	16,133
Interests in associates	—	399	—	7,158	9	7,566
Interests in jointly controlled entities	—	—	502	—	—	502
Total segment assets						24,201
Segment liabilities	(2,511)	(1,353)	(7)	—	(164)	(4,035)
Total segment liabilities						(4,035)

(ii) Reconciliation of reportable segment revenue, profit or loss, assets and liabilities

	31 December			30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Revenue					
Reportable segment revenue	10,672	16,938	20,317	10,645	4,705
Elimination of inter-segment revenue	(1,895)	(3,350)	(4,632)	(2,291)	(948)
Revenue from discontinued operations	(348)	—	—	—	—
Consolidated revenue	8,429	13,588	15,685	8,354	3,757

	31 December			30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Profit/(loss)					
Reportable segment profit/(loss)	3,527	3,864	(716)	2,171	(81)
Profit from discontinued operations before taxation	(13)	—	—	—	—
Impairment of non-current assets	—	—	(3,668)	(344)	(37)
Share of losses of associates	(16)	(14)	(12)	(3)	(2)
Share of (losses)/profits of jointly controlled entities	(12)	(15)	(35)	40	(8)
Excess of the Group's share in net identifiable assets over the cost of acquisition	28	—	—	—	—
Finance income	176	101	106	120	23
Finance expenses	(265)	(494)	(1,594)	(302)	(680)
Unallocated expenses	(202)	(217)	(134)	(79)	(19)
Consolidated profit/(loss) before taxation	3,223	3,225	(6,053)	1,603	(804)

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Assets				
Reportable segment assets	10,194	23,961	26,550	24,201
Eliminations of inter-segment receivables	(1,070)	(2,116)	(2,627)	(2,071)
Unallocated assets	128	218	82	89
Consolidated total assets	9,252	22,063	24,005	22,219

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Liabilities				
Reportable segment liabilities	(1,851)	(4,328)	(4,879)	(4,035)
Eliminations of inter-segment payables	1,070	2,116	2,627	2,071
Unallocated liabilities	(5,332)	(9,712)	(17,265)	(17,178)
Consolidated total liabilities	(6,113)	(11,924)	(19,517)	(19,142)

(iii) Geographic information

The Group's business segments are managed on a worldwide basis, but operate in four principal geographical areas: the CIS, Europe, Africa and the Americas. In the CIS, production facilities operate in Russia and Ukraine. In Europe, production facilities are located in Italy, Ireland and Sweden. African production facilities are represented by the bauxite mines and an alumina refinery in Guinea and an aluminium plant under construction in Nigeria. In the Americas the Group operates two production facilities in Jamaica, one in Guyana and a trading subsidiary in the United States of America.

The following table sets out information about the geographical location of (i) the Group's revenue from external customers and (ii) the Group's property, plant and equipment, intangible assets, goodwill and interests in associates and jointly controlled entities ("specified non-current assets"). The geographical location of customers is based on the location at which the services were provided or the goods delivered. The geographical location of the specified non-current assets is based on the physical location of the asset. Unallocated specified non-current assets comprise mainly goodwill and interests in associates and jointly controlled entities.

	Revenue from external customers			Revenue from external customers	
	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Netherlands	659	1,612	1,878	954	549
Russia	1,813	2,483	3,366	1,498	533
USA	1,458	1,254	1,523	703	490
China	47	100	397	207	379
South Korea	837	662	1,117	589	332
Turkey	593	1,135	1,204	600	231
United Kingdom	20	286	399	163	208
Japan	808	1,122	1,275	712	174
Italy	135	373	242	161	141
Norway	289	974	854	535	94
Sweden	148	488	334	197	70
Germany	240	137	271	165	61
Greece	219	283	297	191	32
Canada	11	198	242	114	9
Other countries	1,152	2,481	2,286	1,565	454
	8,429	13,588	15,685	8,354	3,757

	Specified non-current assets			Specified non-current assets
	At 31 December			At 30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Russia	3,772	7,029	5,512	5,163
Italy	301	220	—	—
Sweden	—	212	131	133
Ireland	—	1,202	315	310
Ukraine	298	320	237	227
Guinea	215	257	238	222
Nigeria	—	183	—	—
Guyana	23	26	31	30
Jamaica	—	876	—	—
Unallocated	2,031	6,437	12,469	12,323
	6,640	16,762	18,933	18,408

5 Acquisitions of subsidiaries and non-controlling interests

(a) Acquisition of Belis Ltd and Eurallumina SpA

During the year ended 31 December 2006, the Group acquired a 100% stake in Belis Ltd for USD13 million. Belis Ltd owns a plant involved in the production of secondary aluminium alloys. The purchase price allocation resulted in goodwill of USD11 million, representing synergies from the transaction which strengthened the Group's competitive advantage by creating an enhanced platform for growth.

During the year ended 31 December 2006, the Group entered into agreement with Rio Tinto Aluminium Ltd and acquired a 56.2% interest in Eurallumina SpA, an alumina refinery in Italy, for USD53 million. The purchase price allocation resulted in an excess of the fair value of the Group's share of Eurallumina SPA's identifiable assets over the cost of acquisition of USD3 million.

The remaining 43.8% interest in Eurallumina SpA was owned by Glencore International AG and was acquired by the Company as part of the acquisition of SUAL and Glencore Business during the year ended 31 December 2007 (see note 5(c)).

Acquisition of subsidiaries had the following effect on the Group's assets and liabilities:

	At 31 December 2006
	USD million
Property, plant and equipment	166
Inventories	39
Trade receivables	68
Cash and cash equivalents	1
Other assets	12
Loans and borrowings	(39)
Trade and other payables and provisions	(126)
Deferred tax liabilities	(2)
Net identifiable assets and liabilities	**119**
Non-controlling interest	(61)
Goodwill	11
Excess of the Group's share in net identifiable assets over the cost of acquisition	(3)
Cash acquired	(1)
Net cash outflow	**65**

(b) Acquisitions of Friguia S.A. and non-controlling interest

During the year ended 31 December 2006, the Group and the Government of the Republic of Guinea signed an agreement for the privatisation of the Friguia bauxite and alumina complex. Under the agreement, the Group acquired an additional 15% of the common shares of ACG Ltd and 100% of ordinary shares of Friguia S.A. for a total amount of USD30 million.

In addition, the Group arranged a non-controlling interest buy-out of significant production entities in which the Groups' equity interest was more than 95%, including OJSC RUSAL Achinsk, OJSC RUSAL Boxitogorsk Alumina, OJSC RUSAL Bratsk, OJSC RUSAL Krasnoyarsk, OJSC RUSAL Novokuznetsk and OJSC RUSAL Sayanogorsk for USD14 million. As a result of this buy-out the non-controlling interest in the net assets of these entities decreased by USD14 million.

During the year ended 31 December 2006, the Group paid USD4 million for the remaining 25% interest in CJSC Alucom-Taishet with a carrying value of USD4 million.

(c) Acquisition of SUAL and the Glencore Businesses

On 27 March 2007, the Company became the holding company of the Group through exchange of its newly issued shares and certain cash consideration for a 100% interest in RUSAL, SUAL and the Glencore Businesses with the respective shareholders of the combining groups. For accounting purposes, this transaction has been treated as follows:

- The formation of the Company and its acquisition of RUSAL from the common control shareholder is considered to be a non-substantive transaction, meaning that the Company's consolidated financial history prior to 27 March 2007 is that of RUSAL; and

- The acquisition by the Company of SUAL and the Glencore Businesses is treated as a purchase of these entities on 27 March 2007.

SUAL operates in the aluminium industry in the Russian Federation and Ukraine and is principally engaged in the mining and refining of bauxite into alumina, the smelting of primary aluminium from alumina and the fabrication of aluminium and aluminium alloys into semi-fabricated and finished products.

The Glencore Businesses comprise three production facilities engaged in the mining and refining of bauxite into alumina located in Jamaica and Ireland, one production facility engaged in the smelting of primary aluminium from alumina located in Sweden and a 43.8% equity interest in Eurallumina SpA.

During the period from 27 March 2007 to 31 December 2007 SUAL and the Glencore Businesses contributed USD3,385 million to the consolidated revenue and USD421 million to the consolidated net profit of the Group.

If the acquisitions had occurred on 1 January 2007, management estimates that, on a pro forma basis, consolidated revenue for the period from 1 January to 31 December 2007 would have been USD14,962 million, consolidated profit before taxation would have been USD3,471 million and consolidated profit for the period would have been USD3,033 million. In determining these figures it has been assumed that the fair value adjustments at 1 January 2007 would have been the same as the fair value adjustments that arose at the date of acquisition. This pro forma information has been prepared taking into account additional depreciation and amortisation resulting from recording non-current assets at fair value, interest costs relating to the cash consideration paid and the pre-closing distributions to shareholders, additional cost of sales relating to recording finished goods and work in progress at fair value and related tax effects but does not purport to represent the results of the Group that actually would have occurred had the acquisition taken place on 1 January 2007 and should not be taken to be representative of future results.

The pre-acquisition book values (based on IFRSs), the fair value adjustments and the recognised fair values of the net assets of the acquired businesses were as follows at the date of acquisition:

	Book values	Fair value adjustments	Fair values
	USD million	USD million	USD million
Property, plant and equipment	3,018	1,792	4,810
Intangible assets	64	242	306
Cash deposited with the Company in connection with the acquisitions	210	—	210
Investment in associates and joint ventures	29	35	64
Financial investments (a)	—	606	606
Deferred tax assets	87	27	114
Inventories	915	135	1,050
Trade and other receivables	639	—	639
VAT recoverable	171	—	171
Cash and cash equivalents	105	—	105
Other assets	14	—	14
Loans and borrowings	(1,820)	—	(1,820)
Deferred tax liabilities	(122)	(433)	(555)
Provisions	(302)	(40)	(342)
Trade and other payables	(569)	—	(569)
Other liabilities	(13)	—	(13)
Net identifiable assets, liabilities and contingent liabilities	**2,426**	**2,364**	**4,790**
Non-controlling interest	(10)	(3)	(13)
Net identifiable assets, liabilities and contingent liabilities attributable to shareholders	**2,416**	**2,361**	**4,777**
Goodwill on acquisition			3,070
Equity investment with SUAL			(120)
Revaluation of previously held jointly controlled entities upon business combinations			(16)
Consideration paid			**7,711**
Consideration paid through the share exchange (b)			6,425
Consideration paid by the shareholders (c)			100
Consideration paid in cash			1,186
			7,711
Consideration paid in cash			1,186
Cash acquired			(105)
Net cash outflow			**1,081**

Note (a)

Financial investments of SUAL include the right to receive a 100% interest in LLP Bogatyr Komir (formerly LLP Bogatyr Access Komir ("BAK")), a partnership organised under the laws of Kazakhstan and engaged in the mining and processing of coal at Ekibazstuz, Kazakhstan together with related entities. This right initially was recorded at the estimated fair value of BAK of USD606 million and was subject to the approval by the Kazakh Government. On 14 April 2008 the Company and OJSC Samruk Energo signed an agreement for sale of a 50% of BAK by the Company for a consideration of USD345 million and the Kazakh Government approved this sale (see notes 20 and 21).

Note (b)

To effect the transaction the Company issued 2,200 shares in exchange for a 100% interest in SUAL and 1,200 shares in exchange for a 100% interest in the Glencore Businesses.

At the time of the acquisition, there were no published market prices for equity instruments issued by the Company or equity instruments of any of RUSAL, SUAL or the Glencore Businesses. In order to determine value of the shares exchanged, management engaged independent appraisers to evaluate RUSAL, SUAL and the Glencore Businesses.

The independent appraiser determined ranges of equity values for each of the entities using a variety of valuation techniques including discounted cash flow models; comparable companies' valuation (application of publicly traded companies to various financial metrics); precedent transactions valuation (application of multiples from recent transactions to various financial metrics). Based on this data, management used the mid-range independent valuation for RUSAL as the basis for determining relative amounts of consideration given to the shareholders of SUAL and the Glencore Businesses.

Note (c)

In accordance with the terms of the transaction the shareholder of RUSAL was required to make a payment directly to SUAL Partners Limited in addition to the share exchange and consideration paid in cash by the Company. The amount has been recorded as a contribution to other reserves in this Financial Information.

In most business acquisitions, there is part of the cost that is not capable of being attributed in accounting terms to identifiable assets and liabilities acquired and is therefore recognised as goodwill. In the case of the acquisitions of SUAL and the Glencore Businesses, this goodwill is underpinned by a number of elements, which individually cannot be quantified. Goodwill recognised on the acquisitions is primarily attributable to expected synergies that are specific to the Group, to the potential value of expansion opportunities and to the leading market position attained by the Group. Prior to the acquisitions, RUSAL needed to acquire significant quantities of alumina and bauxite necessary for its smelting operations from third parties. As a result of the acquisitions, the Group became the world's leading vertically integrated aluminium producer, self-sufficient in alumina refining capacity and largely self-sufficient in bauxite mining capacity with a significant pipeline of approved and potential expansion opportunities.

(d) Acquisition of Fairfex Transportation Holding Ltd

In October 2007, the Group acquired a 100% interest in a transportation business located in Kazakhstan for USD95 million in cash. The acquired business is engaged in the transportation of coal and iron ore from the Bogatyr strip mine in Kazakhstan to Russia by railway. The purchase price allocation resulted in goodwill of USD3 million.

(e) Acquisition of Alscon

In February 2006, the Group signed an agreement with the Government of Nigeria to purchase 77.5% of the issued shares of Aluminium Smelter Company of Nigeria ("Alscon") for USD250 million. The initially agreed purchase price of USD250 million was decreased to USD130 million as the seller of the shares was released from the obligation to dredge the river adjoining the smelter, a condition included in the initial acquisition agreement. The transaction was finalised in February 2007. Legal fees of USD10 million were paid in connection with the acquisition and were included in the amount of consideration paid.

Alscon is now under construction and had been in "care and maintenance" for a number of years preceding acquisition by the Group.

The impact of acquisition on the financial results of the Group for the year ended 31 December 2007 was not significant.

(f) Acquisition of non-controlling interest

In December 2007 the Group signed an agreement with MAN Ferrostaal AG for the purchase of 7.5% of the ordinary shares of Aluminium Smelter Company of Nigeria Plc for USD12 million in addition to the Group's existing controlling interests. The transaction was completed in January 2008.

6 Discontinued operations

Packaging, aluminium construction and magnesium assets

On 29 December 2006 as required by pre-completion conditions of the acquisition agreement with SUAL Partners Ltd. and Glencore International AG the Group transferred all packaging, aluminium construction and magnesium assets, including RUSAL MOSMEK, RUSAL Dmitrov, RUSAL ROSTAR, RUSAL ROSTAR Vsevolozhsk, RusAlumStroy, Trade House "Russian Aluminium Tara" as well as certain energy assets (investment in shares of Sayano-Shushensk hydropower station) to the shareholder as a distribution at the carrying values of these assets which totalled USD313 million.

Operations of the packaging, aluminium construction and magnesium companies were treated as discontinued in this Financial Information.

Income and expenses from discontinued operations are presented below:

	Year ended 31 December 2006
	USD million
Revenue	348
Cost of sales	(279)
Other operating expenses	(44)
Net finance expense	(12)
Income tax expense	(3)
Net income	**10**

7 Revenue

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Sales of primary aluminium and alloys	**7,484**	**10,747**	**12,057**	**6,404**	**3,160**
Third parties	*7,050*	*8,925*	*10,118*	*5,338*	*2,412*
Related parties — companies capable of exerting significant influence	*—*	*1,272*	*1,607*	*873*	*683*
Related parties — companies under common control	*434*	*550*	*332*	*193*	*65*
Sales of alumina	**396**	**1,503**	**1,948**	**994**	**169**
Third parties	*396*	*193*	*1,232*	*628*	*111*
Related parties — companies capable of exerting significant influence	*—*	*1,310*	*716*	*366*	*58*
Sales of foil	**155**	**270**	**271**	**146**	**104**
Third parties	*155*	*268*	*263*	*142*	*101*
Related parties — companies under common control	*—*	*2*	*8*	*4*	*3*
Other revenue including chemicals and energy	**394**	**1,068**	**1,409**	**810**	**324**
Third parties	*361*	*954*	*1,146*	*706*	*246*
Related parties — companies capable of exerting significant influence	*—*	*64*	*11*	*6*	*4*
Related parties — companies under common control	*—*	*28*	*14*	*7*	*5*
Related parties — associates	*33*	*22*	*238*	*91*	*69*
	8,429	**13,588**	**15,685**	**8,354**	**3,757**

8 Other operating expenses

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Impairment loss on trade and other receivables	21	27	117	3	54
Provision for legal claims	23	—	50	—	30
Write off of investment in jointly controlled entities	37	—	—	—	—
Charitable donations	34	51	31	18	3
Other operating expenses	28	40	17	41	69
	143	**118**	**215**	**62**	**156**

9 Finance income and expenses

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Finance income					
Interest income on third party loans and deposits	21	29	38	18	18
Interest income on loans to related parties	33	7	3	3	1
Net foreign exchange gain	17	45	—	44	—
Gain on disposal of financial investments	—	—	42	42	—
Change in fair value of financial instruments	37	20	23	13	4
Gain on disposal of available-for-sale investments reclassified from equity	68	—	—	—	—
	176	**101**	**106**	**120**	**23**
Finance expenses					
Interest expense on bank loans wholly repayable within five years and other bank charges (a)	230	358	766	282	497
Interest expense on bank loans wholly repayable after five years	66	148	—	—	—
Interest expense on loans to related parties wholly repayable within five years	16	—	—	—	—
Total interest expense on financial liabilities	312	506	766	282	497
Less: interest expense capitalised into property, plant and equipment	(53)	(52)	(58)	(30)	—
Total interest expense	259	454	708	252	497
Loss on fair-value adjustment on financial instruments (note 21)	—	—	554	—	—
Interest expense on deferred consideration (note 19(a))	—	—	99	25	85
Net foreign exchange loss	—	—	201	—	79
Interest expense on provisions	6	40	32	25	19
	265	**494**	**1,594**	**302**	**680**

(a) During the six months ended 30 June 2009, the Group incurred charges of USD82 million under the Standstill and waiver agreement and Waiver agreement referred to in note 28, which is included in this line.

10 Income tax

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Current tax - overseas					
Current tax for the year/period	341	483	410	250	29
(Over)/under-provision in respect of prior years/periods	(4)	6	(14)	(6)	3
Deferred tax					
Origination and reversal of temporary differences	(1)	(70)	(364)	(50)	32
Changes in enacted tax rates	—	—	(101)	—	—
Actual tax expense/(benefit)	**336**	**419**	**(69)**	**194**	**64**

Pursuant to the rules and regulations of Jersey, the Company is not subject to any income tax in Jersey. Subsidiaries pay income taxes in accordance with the legislative requirements of their respective tax jurisdictions. During the three years ended 2006, 2007, 2008, for subsidiaries domiciled in Russia, the applicable tax rate is 24%; in Ukraine – 25%, Guinea and Kazakhstan – 30%; Australia – 31.3%; Jamaica – 33.3%; Ireland – 10%; Sweden – 26.3% (2007 – 28%) and Italy – 37.25%. For the Group's subsidiaries domiciled in Switzerland the applicable tax rate for the year is the corporate income tax rate in the Canton of Zug, Switzerland, which may vary depending on company's tax status. This rate consists of a federal income tax and a cantonal/communal income and capital taxes. The latter includes a base rate and a multiplier, which may change from year to year. Applicable income tax rates in 2008 were 10.1% and 16.1% for different subsidiaries (2007: 8.7% and 16.1%). Prior to 2007 the Group did not have any Swiss based subsidiaries. For a number of the Group's holding subsidiaries domiciled in Cyprus the applicable tax rate is 10%. The same rates were used in measuring deferred taxes except for Russia, Kazakhstan and Sweden.

During the year ended 31 December 2008, the Russian, Kazakh and Swedish governments enacted a change in the national income tax rates from 24% to 20%, from 30% to 20% and from 28% to 26.3% respectively. The new tax rates are applicable for financial year starting 1 January 2009 and deferred taxes at 31 December 2008 for Russian, Kazakh and Swedish entities were measured using these rates. For subsidiaries in other jurisdictions tax rates remained the same as for years 2006, 2007 and 2008 and period ended 30 June 2009.

	Year ended 31 December					
	2006		2007		2008	
	USD million	%	USD million	%	USD million	%
Profit/(loss) before taxation	3,223	100%	3,225	100%	(6,053)	100%
Income tax at applicable tax rates	774	24%	774	24%	(1,453)	24%
Non-deductible expenses	45	1%	32	1%	92	(2%)
Effect of unrecognised tax assets	—	—	45	1%	552	(9%)
(Over)/under-provision in respect of prior years/periods	(4)	(0%)	6	0%	(14)	0%
Change in assessment of temporary difference	—	—	(31)	(1%)	—	0%
Effect from changes in enacted tax rates	—	—	—	—	(101)	2%
Effect of different income tax rates	(479)	(15%)	(407)	(12%)	855	(14%)
Actual tax expense/(benefit)	**336**	**10%**	**419**	**13%**	**(69)**	**1%**

	Six months ended 30 June			
	2008		2009	
	USD million (unaudited)	%	USD million	%
Profit/(loss) before taxation	1,603	100%	(720)	100%
Income tax at applicable tax rates	385	24%	(144)	20%
Non-deductible expenses	—	—	4	(1%)
Non-taxable income	(3)	(0%)	—	—
Effect of unrecognised tax assets	160	10%	117	(16%)
(Over)/under-provision in respect of prior years/periods	(6)	(0%)	3	(0%)
Effect of different income tax rates	(342)	(22%)	84	(12%)
Actual tax expense/(benefit)	**194**	**12%**	**64**	**(9%)**

11 Profit for the year/period

Profit for the year/period is arrived at after charging/(crediting):

(a) *Personnel costs*

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Wages and salaries	499	1,060	1,365	752	496
Contributions to defined contribution retirement plans	7	18	21	11	6
Contributions to defined benefit retirement plans	7	21	21	13	6
	513	1,099	1,407	776	508

The employees of the Group are members of the retirement schemes operated by local authorities. The Group is required to contribute a certain percentage of their payroll to these schemes to fund the benefits.

The Group's total contribution to those schemes charged to the income statement during the Relevant Period is shown above.

(b) *Other items*

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Amortisation of intangible assets	2	82	116	56	8
Depreciation (net of amount included in inventories)	361	794	914	511	291
Impairment losses/(reversal of impairment loss) of:					
- property, plant and equipment	—	—	3,532	203	37
- interests in associates	—	—	2,408	—	(308)
- interests in jointly controlled entities	—	—	144	—	13
- goodwill	—	—	67	67	—
- other intangible assets	—	—	69	69	—
Mineral restoration tax	6	48	77	29	11
Increase in provisions (including provision for legal claims)	72	156	48	33	58
Auditors' remuneration	2	7	7	3	3
Operating lease charges in respect of property	21	28	42	21	7
Cost of inventories (note 24)	2,770	4,824	6,374	2,951	1,670

12 Directors' remuneration

Directors' remuneration disclosed pursuant to the disclosure requirements of section 161 of the Hong Kong Companies Ordinance is as follow:

	Year ended 31 December 2006			
	Directors' fees	Salaries, allowances, benefits in kind and discretionary bonuses	Retirement scheme contributions	Total
	USD thousand	USD thousand	USD thousand	USD thousand
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	—	—	—	—
Alexander Bulygin (note (a))	—	18,867	—	18,867
Ivan Glasenberg	—	—	—	—
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev	—	—	—	—
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	—	—	—	—
Philip Lader	—	—	—	—
Simon Thompson	—	—	—	—
	—	18,867	—	18,867

Note:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

	Year ended 31 December 2007			
	Directors' fees	Salaries, allowances, benefits in kind and discretionary bonuses	Retirement scheme contributions	Total
	USD thousand	USD thousand	USD thousand	USD thousand
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	—	—	—	—
Alexander Bulygin (note (a))	—	15,864	—	15,864
Ivan Glasenberg	—	—	—	—
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev (note (b))	—	6,110	—	6,110
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	—	—	—	—
Philip Lader	—	—	—	—
Simon Thompson	—	—	—	—
	—	21,974	—	21,974

Notes:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

(b) Vladislav Soloviev was CFO of the Company during the year ended 31 December 2007 and resigned from the position of CFO in February 2008.

	Year ended 31 December 2008			
	Directors' fees	Salaries, allowances, benefits in kind and discretionary bonuses	Retirement scheme contributions	Total
	USD thousand	USD thousand	USD thousand	USD thousand
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	—	—	—	—
Alexander Bulygin (note (a))	—	2,362	—	2,362
Ivan Glasenberg	—	—	—	—
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev (note (b))	—	11,713	—	11,713
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	—	—	—	—
Philip Lader	—	—	—	—
Simon Thompson	—	—	—	—
	—	14,075	—	14,075

Notes:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

(b) Vladislav Soloviev was CFO of the Company during the year ended 31 December 2007 and resigned from the position of CFO in February 2008.

(unaudited)	Six months ended 30 June 2008			
	Directors' fees	Salaries, allowances, benefits in kind and discretionary bonuses	Retirement scheme contributions	Total
	USD thousand	USD thousand	USD thousand	USD thousand
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	—	—	—	—
Alexander Bulygin (note (a))	—	—	—	—
Ivan Glasenberg	—	—	—	—
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev (note (b))	—	11,713	—	11,713
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	—	—	—	—
Philip Lader	—	—	—	—
Simon Thompson	—	—	—	—
	—	11,713	—	11,713

Notes:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

(b) Vladislav Soloviev was CFO of the Company during the year ended 31 December 2007 and resigned from the position of CFO in February 2008.

	Six months ended 30 June 2009			
	Directors' fees	Salaries, allowances, benefits in kind and discretionary bonuses	Retirement scheme contributions	Total
	USD thousand	USD thousand	USD thousand	USD thousand
Executive Director				
Oleg Deripaska (note (a))	—	659	—	659
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	—	—	—	—
Alexander Bulygin (note (a))	—	139	—	139
Ivan Glasenberg	—	—	—	—
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev	—	—	—	—
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	—	—	—	—
Philip Lader	—	—	—	—
Simon Thompson	—	—	—	—
	—	798	—	798

Note:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

Except as noted above the Group did not pay any remuneration to other executive and non-executive directors during the Relevant Period. These directors have agreed to waive their remuneration during the Relevant Period in order to enhance the capital base of the Group and facilitate the Group's expansion. The executive directors will receive directors' fees determined by reference to market rates after listing.

No emoluments have been paid to directors as an inducement to join or upon joining the Group or as compensation for loss of the office during the Relevant Period.

13 Individuals with highest emoluments

Of the five individuals with the highest emoluments, one, two, one, one and one are directors during the years ended 31 December 2006, 2007, 2008 and the six months ended 30 June 2008 and 2009 respectively whose emoluments are disclosed in note 12. The aggregate of the emoluments in respect of the other individuals are as follows:

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Salaries and bonuses	6,661	8,041	14,729	11,235	2,356

The emoluments of the other individuals with the highest emoluments are with the following bands:

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	Number of individuals	Number of individuals	Number of individuals	Number of individuals (unaudited)	Number of individuals
HK$3,500,001 - HK$4,000,000	1	—	—	—	2
HK$4,000,001 - HK$4,500,000	—	—	—	—	1
HK$4,500,001 - HK$5,000,000	—	—	—	—	1
HK$5,000,001 - HK$10,000,000	1	—	—	—	—
HK$10,000,001 - HK$20,000,000	—	2	—	2	—
HK$20,000,001 - HK$30,000,000	1	1	3	2	—
HK$30,000,001 - HK$40,000,000	1	—	1	—	—

No emoluments have been paid to these individuals as an inducement to join or upon joining the Group or as compensation for loss of office during the Relevant Period.

14 Profit/(loss) attributable to equity shareholders of the Company

The consolidated profit/(loss) attributable to equity shareholders of the Company includes profits of nil for the year ended 31 December 2006 and USD2,340 million for the year ended 31 December 2007, and losses of USD7,236 million for the year ended 31 December 2008 and USD302 million for six months ended 30 June 2009, which have been dealt with in the financial statements of the Company.

15 Dividends

Dividends totalling USD2,362 million, USD2,099 million, USD1,203 million and nil per ordinary share were declared and paid by the Company during the years ended 31 December 2007 and 2008 and the six months ended 30 June 2008 and 2009 respectively. In addition, during the years ended 31 December 2006 and 2007 the Group distributed dividends of USD3,751 million and USD138 million, respectively to its then shareholders.

The directors consider that the dividend payments made during the Relevant Period are not indicative of the future dividend policy of the Company. The Company is subject to external capital requirements described in note 38(b).

For details of distributions to shareholders other than cash dividends during the Relevant Period, please refer to note 27(e).

16 Earnings/(loss) per share

The calculation of basic earnings/(loss) per share is based on the profit/(loss) attributable to ordinary equity shareholders of the Company and the weighted average number of shares in issue during the years ended 31 December 2007 and 2008 and the periods ended 30 June 2008 and 2009. Earnings/(loss) per share was not calculated for the year ended 31 December 2006, since the transfer of the interest in RUSAL was not completed until 27 March 2007. The Company had no dilutive potential ordinary shares in existence during the Relevant Period. On 24 December 2009, the Company effected a share subdivision as further described in note 38(a). Accordingly, earnings/(loss) per share of all periods presented have been retrospectively adjusted to give the effect of the share subdivision.

Weighted average number of ordinary shares:

	Year ended 31 December		Six months ended 30 June	
	2007	2008	2008	2009
			(unaudited)	
Issued ordinary shares at the beginning of year/period	2	10,000	10,000	11,628
Effect of share issuance (note 27(a))	8,104	1,116	599	—
	8,106	11,116	10,599	11,628
Effect of share subdivision (note 38(a))	802,494	1,100,484	1,049,301	1,151,172
Weighted average number of ordinary shares at the end of the year/period, as adjusted	810,600	1,111,600	1,059,900	1,162,800

Pursuant to the written resolutions passed by the Company's shareholders on 26 December 2009, the Company's ordinary shares will be further effected by a capitalisation issue, as described in more detail in note 38(a), in conjunction with the Global Offering. The historical earnings/(loss) per share of the Group for all periods presented in the Financial Information have not been adjusted to reflect the impact of this capitalisation issue to be effected in conjunction with the Global Offering. The pro forma weighted average number of ordinary shares and the pro forma earnings/(loss) per share giving effect to the capitalisation issue as if it had been completed as of the beginning of the Relevant Period, are as follows:

	Year ended 31 December		Six months ended 30 June	
	2007	2008	2008	2009
			(unaudited)	
Pro forma weighted average number of ordinary shares at the end of the year/period	8,846,888,400	12,132,002,400	11,567,748,600	12,690,799,200
Pro forma earnings/(loss) per share				
Pro forma basic and diluted earnings/(loss) per share (USD)	0.32	(0.49)	0.12	(0.07)

17 Property, plant and equipment

	Land and buildings	Machinery and equipment	Electro-lysers	Other	Mining assets	Construct-ion in progress	Total
	USD million	USD million	USD million	USD million	USD million	USD million	USD million
Cost/deemed cost							
Balance at 1 January 2006	1,808	1,854	433	40	—	574	4,709
Acquisitions through business combinations	—	165	—	—	—	1	166
Additions	36	49	138	13	—	622	858
Disposals	(6)	(25)	—	(3)	—	(6)	(40)
Distributions to shareholders	(33)	(141)	—	(2)	—	(17)	(193)
Transfers	32	218	17	4	—	(271)	—
Balance at 31 December 2006	1,837	2,120	588	52	—	903	5,500
Balance at 1 January 2007	1,837	2,120	588	52	—	903	5,500
Acquisitions through business combinations	1,165	2,073	114	220	663	809	5,044
Additions	—	5	206	35	30	1,408	1,684
Disposals	(19)	(75)	(5)	(7)	(28)	(66)	(200)
Transfers	320	769	103	41	4	(1,237)	—
Foreign currency translation	64	38	9	12	31	37	191
Balance at 31 December 2007	3,367	4,930	1,015	353	700	1,854	12,219
Balance at 1 January 2008	3,367	4,930	1,015	353	700	1,854	12,219
Additions	3	103	196	10	2	1,034	1,348
Disposals	(18)	(82)	—	(7)	(5)	(22)	(134)
Transfers	363	809	201	(165)	83	(1,291)	—
Foreign currency translation	(193)	(191)	(72)	(20)	(108)	(108)	(692)
Balance at 31 December 2008	3,522	5,569	1,340	171	672	1,467	12,741
Balance at 1 January 2009	3,522	5,569	1,340	171	672	1,467	12,741
Additions	1	1	48	—	—	19	69
Disposals	(5)	(15)	—	(1)	—	(56)	(77)
Transfers	107	78	9	(29)	—	(165)	—
Transfers to intangible assets	—	—	—	—	—	(19)	(19)
Foreign currency translation	(58)	(61)	(19)	(1)	(35)	(40)	(214)
Balance at 30 June 2009	3,567	5,572	1,378	140	637	1,206	12,500
Depreciation and impairment losses							
Balance at 1 January 2006	128	340	214	9	—	—	691
Depreciation charge	48	183	115	6	—	—	352
Distributions to shareholders	(4)	(42)	—	(1)	—	—	(47)
Disposals	—	(9)	—	(1)	—	—	(10)
Balance at 31 December 2006	172	472	329	13	—	—	986

	Land and buildings	Machinery and equipment	Electro-lysers	Other	Mining assets	Construct-ion in progress	Total
	USD million	USD million	USD million	USD million	USD million	USD million	USD million
Balance at 1 January 2007	172	472	329	13	—	—	986
Depreciation charge	142	399	189	32	67	—	829
Disposals	(3)	(23)	(5)	(3)	(1)	—	(35)
Foreign currency translation	2	3	2	1	2	—	10
Balance at 31 December 2007	313	851	515	43	68	—	1,790
Balance at 1 January 2008	313	851	515	43	68	—	1,790
Depreciation charge	143	497	216	2	111	—	969
Impairment loss (note a)	821	1,650	187	19	499	356	3,532
Disposals	(5)	(35)	—	(5)	(1)	—	(46)
Foreign currency translation	(17)	(36)	(23)	(3)	(24)	(3)	(106)
Balance at 31 December 2008	1,255	2,927	895	56	653	353	6,139
Balance at 1 January 2009	1,255	2,927	895	56	653	353	6,139
Depreciation charge	86	103	57	2	—	—	248
Impairment loss/(reversal of impairment loss) (note a)	13	27	—	1	—	(4)	37
Disposals	(3)	(6)	—	(1)	—	(5)	(15)
Foreign currency translation	(18)	(24)	(13)	(9)	(34)	(12)	(110)
Balance at 30 June 2009	1,333	3,027	939	49	619	332	6,299
Net book value							
At 31 December 2006	1,665	1,648	259	39	—	903	4,514
At 31 December 2007	3,054	4,079	500	310	632	1,854	10,429
At 31 December 2008	2,267	2,642	445	115	19	1,114	6,602
At 30 June 2009	2,234	2,545	439	91	18	874	6,201

Interest costs capitalised during the years ended 31 December 2006, 2007, 2008 and six months ended 30 June 2008 and 2009 amounted to USD53 million, USD52 million, USD58 million, USD30 million and nil respectively. The capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation during the years ended 31 December 2006, 2007, 2008 and six months ended 30 June 2008 and 2009 was 6.79%, 6.67%, 5.04%, 4.45% and nil respectively.

Included into construction in progress at 31 December 2006, 31 December 2007, 31 December 2008 and 30 June 2009 are advances to suppliers of property, plant and equipment of USD67 million, USD198 million, USD223 million and USD134 million respectively.

(a) Impairment

At 31 December 2008, following the sharp decline in aluminium price in the fourth quarter of 2008 resulting from the general economic downturn around the world and a significant decrease in demand for aluminium, management considered that it was necessary to carry out impairment tests for all significant cash-generating units of the Group at that date. The recoverable amount of each cash-generating unit was determined by discounting expected future net cash flows of each cash-generating unit. Key assumptions and results of the impairment tests are set out below:

Cash generating unit	Production	Carrying amount	Impairment
	000' tones	USD million	USD million
RUSAL Krasnoyarsk, RUSAL Achinsk	957(a)	1,414	—
RUSAL Bratsk	980(a)	646	—
RUSAL Novokuznetsk	224(a)	213	—
RUSAL Sayanogorsk, RUSAL Khakassky Aluminum Smelter	818(a)	1,339	—
RUSAL Taishet	750(a)	309	—
Aluminium Smelter of Nigeria	22(a)	157	157
Friguia	622(b)	176	—
Severouralboksitruda, Bogoslovsky Aluminium Smelter, Ural Aluminium Smelter	191(a)	963	963
Irkutsk Aluminium Smelter	332(a)	654	16
Boksitogorsk Alumina Refinery	139(a)	34	34
Volgograd Aluminium Smelter	141(a)	137	—
Kandalaksha Aluminium Smelter	53(a)	68	68
Nadvoitsk Aluminium Smelter	54(a)	63	63
Volkhov Aluminium Smelter	16(a)	20	20
Nikolaev Alumina Refinery	1,500(b)	334	98
Zaporozhye Aluminum Smelter	107(a)	9	9
Sual Komi B.V.	2,244(c)	280	161
Aughinish	1,214(b)	1,130	815
Kubal	74(a)	290	159
Compagnie Des Bauxite De Kindia	3,001(c)	41	—
Alpart	258(b)	281	281
Windalco	196(b)	428	428
Eurallumina	88(b)	199	199
Other cash generating units	N/A	949	43
Total		**10,134**	**3,514**

(a) – aluminium production, (b) – alumina production and (c) – bauxite mining.

- Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources of USD1,566 per metric tonne for primary aluminium in 2009, USD1,912 in 2010, USD2,143 in 2011, USD2,409 for 2012-2014 and thereafter. The Group is expected to consume substantially all alumina produced internally following the planned reduction in production. Projected prices for alumina for the purposes of determining recoverable amounts for individual cash-generating units were estimated to be 13% of the aluminium price per tonne;

- Cash flow projections are in nominal terms and cover a period of seven years. A terminal value is derived following the forecast period assuming a 2% annual growth rate;

- The Group is at a mature stage of operations and volume of production is assumed to continue at the current planned levels for 2009 during the initial forecast period and thereafter. Operating costs were projected based on the historical performance of the Group and adjusted for planned cost reductions;

- Real foreign currency exchange rates applied to convert operating costs of the Group denominated in RUR into USD were RUR30 for one USD in 2009, RUR29 for one USD in 2010-2015 and thereafter. Inflation of 6.0 − 11.4% in RUR and 2% in USD was assumed in determining recoverable amounts;

- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was in the range of 15.97% - 19.66%.

Values assigned to key assumptions and estimates used to measure the units' recoverable amounts are consistent with external sources of information and historical data for each cash generating unit. Management believes that the values assigned to the key assumptions and estimates represent the most realistic assessment of future trends.

At 30 June 2009, management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2008 and concluded that no significant changes occurred during this period that may give rise to additional impairment of the Group's cash-generating units.

In addition to the above, an impairment loss of USD37 million and USD18 million was recognised in relation to specific items that are no longer used at 30 June 2009 and 31 December 2008 respectively.

(b) Determination of the fair value of property, plant and equipment of SUAL and the Glencore Businesses

Management commissioned an independent appraiser to assist in determining the fair values of identifiable net assets of SUAL and the Glencore Businesses on 27 March 2007, the date of acquisition (see note 5).

The majority of the property, plant and equipment of these acquired subsidiaries, other than immovable property and land, is specialised in nature and is rarely sold on the open market other than as part of a continuing business. The market for similar plant and equipment is not active in Russia and does not provide a sufficient number of sales of comparable plant and equipment for using a market-based approach for determining fair value.

Consequently the fair value of plant and equipment was primarily determined using the depreciated replacement cost ("DRC") method. This method estimates the cost required to reproduce or replace the plant and equipment, adjusted for physical, functional or economic depreciation and obsolescence. The fair value of immovable property and land owned by the acquired subsidiaries was primarily determined using a market-based approach.

The DRC was estimated based on internal sources and analysis of the Russian and international markets for similar plant and equipment. Various market data was collected from published information, catalogues and statistical data, and industry experts and suppliers of plant and equipment were contacted both in Russia and abroad.

In addition to the determination of the DRC, cash flow testing was conducted in order to assess the reasonableness of those values. Key assumptions and results of the valuation are set out below:

	Production levels			
Cash generating unit	**Bauxite**	**Alumina**	**Aluminium**	**Fair value**
	000' tonnes	**000' tonnes**	**000' tonnes**	**USD million**
SUBR, Bogoslovsky Aluminium Smelter, Ural Aluminium Smelter	3,646	1,826	314	1,211
Irkutsk Aluminium Smelter	—	—	362	605
Volgograd Aluminium Smelter	—	—	158	192
Kandalaksha Aluminium Smelter	—	—	74	85
Nadvoitsk Aluminium Smelter	—	—	81	84
Volkhov Aluminium Smelter	—	—	23	23
Pikalevsky Alumina Refinery	—	252	—	—
ZALK	—	235	112	—
SUAL Komi B.V.	6,607	—	—	265
Aughinish	—	1,820	—	1,226
Kubal	—	—	140	122
Alpart	2,981	1,202	—	292
Windalco	3,171	884	—	533
Other	—	—	—	172
Total	**16,405**	**6,219**	**1,264**	**4,810**

Cash flows were calculated based on the current production capacity and the 10-year business plan with the exception of Alpart and Windalco. For Alpart and Windalco cash flows were calculated based on the expected remaining life of the mines of seven and nine years, respectively.

Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources of USD2,586 per metric tonne for primary aluminium and 13% of the London Metal Exchange ("LME") price for alumina. Sales prices of bauxite for SUAL Komi B.V. were estimated at cost plus 10% mark-up. For other bauxite producing cash-generating units, bauxite was assumed to be utilised internally within each unit.

A terminal value was calculated at the end of a 10-year period. A growth rate of 3% was used when calculating the terminal value of cash generating units.

(c) Security

The carrying value of property, plant and equipment subject to lien under loan agreements was USD438 million, USD431 million, USD739 million and USD702 million at 31 December 2006, 31 December 2007, 31 December 2008 and 30 June 2009 respectively (see note 28).

(d) The analysis of the net book value of properties is as follows:

The Group	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Medium leases				
In the Russian Federation	1,418	2,484	2,022	1,994
Outside the Russian Federation	247	570	245	240
	1,665	**3,054**	**2,267**	**2,234**
Representing				
Land and buildings	**1,665**	**3,054**	**2,267**	**2,234**

18 Intangible assets

	Goodwill	Other intangible assets	Total
	USD million	USD million	USD million
Cost			
Balance at 1 January 2006	1,313	72	1,385
Acquisitions through business combinations	11	—	11
Additions	—	9	9
Balance at 31 December 2006	1,324	81	1,405
Balance at 1 January 2007	1,324	81	1,405
Acquisitions through business combinations	3,073	362	3,435
Additions	—	35	35
Foreign currency translation	165	—	165
Balance at 31 December 2007	4,562	478	5,040
Balance at 1 January 2008	4,562	478	5,040
Additions	—	26	26
Disposals	—	(6)	(6)
Transfers	—	10	10
Foreign currency translation	(481)	(6)	(487)
Balance at 31 December 2008	4,081	502	4,583
Balance at 1 January 2009	4,081	502	4,583
Additions	—	5	5
Disposals	—	(10)	(10)
Transfers from property, plant and equipment	—	19	19
Foreign currency translation	(149)	—	(149)
Balance at 30 June 2009	3,932	516	4,448

	Goodwill	Other intangible assets	Total
	USD million	USD million	USD million
Amortisation and impairment losses			
Balance at 1 January 2006	—	61	61
Amortisation charge	—	2	2
Balance at 31 December 2006	—	63	63
Balance at 1 January 2007	—	63	63
Amortisation charge	—	82	82
Balance at 31 December 2007	—	145	145
Balance at 1 January 2008	—	145	145
Impairment loss (note 18(c))	67	69	136
Amortisation charge	—	116	116
Foreign currency translation	—	(1)	(1)
Balance at 31 December 2008	67	329	396
Balance at 1 January 2009	67	329	396
Amortisation charge	—	8	8
Balance at 30 June 2009	67	337	404
Net book value			
At 31 December 2006	1,324	18	1,342
At 31 December 2007	4,562	333	4,895
At 31 December 2008	4,014	173	4,187
At 30 June 2009	3,865	179	4,044

(a) Amortisation charge

The amortisation charge is included in cost of sales in the consolidated income statements.

(b) Goodwill

Goodwill existing at 1 January 2006 principally arose on the formation of the Group in 2000 and the acquisition of a 25% additional interest in the Group by its controlling shareholder in 2003.

Acquisitions of goodwill and other intangible assets during the year ended 31 December 2007 principally relate to the acquisitions of SUAL and the Glencore Businesses (see note 5(a)).

(c) Impairment testing of goodwill

For the purposes of impairment testing, the entire amount of goodwill is allocated to the Aluminium segment of the Group's operations. This segment is expected to benefit from the synergies resulting from the acquisitions of SUAL and the Glencore Businesses and created by the original formation of the RUSAL Group. The Aluminium segment represents the lowest level

within the Group at which the goodwill is monitored for internal management purposes. The recoverable amount represents value in use as determined by discounting the future cash flows generated from the continuing use of the plants within the Group's Aluminium segment.

The recoverable amount of net assets of the Aluminium segment at 31 December 2006 exceeded the carrying amount of net assets of this segment including goodwill.

The following key assumptions were used in determining the recoverable amount of the segment:

- The Aluminium segment was at the mature stage of business growth; a seven year cash flow projection period was used for the purpose of estimating the recoverable amount.

- The total production of the Aluminium segment was projected at approximately 2.6 million metric tonnes. The Aluminium smelters within the segment currently were operating at their maximum capacity; therefore no production growth was included in the cash flow projections.

- Sales prices were based on the LME price of aluminium price in range between USD2,300 and USD2,800 per metric tonne.

- A discount rate of 11.4% was applied in determining the recoverable amount for the plants. The discount rate was estimated based on the industry weighted average cost of capital, which was based on a debt leveraging of 20% at an interest rate of 10% and long-term inflation rate of 2.6%.

- A terminal value was derived at the end of a seven-year period assuming no future growth.

The values assigned to the key assumptions represent management's assessment of future trends in the primary aluminum production industry and are based on both external sources (Report of Brook Hunt on the metal industry) and internal sources (historic company data).

Impairment testing of goodwill at 31 December 2007, which did not result in impairment charges, was based on the following key assumptions:

- Total production was estimated based on existing sustainable production levels of 3.9 million metric tonnes of primary aluminium, 6.2 million metric tonnes of alumina and 16.4 million metric tonnes of bauxite. Bauxite and alumina will be used primarily internally for production of primary aluminium. The aluminium smelters within the segment currently were operating at their maximum capacity; therefore no production growth was included in the cash flow projections.

- Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources of USD2,586 per metric tonne for primary aluminium and 13% of the LME price for alumina.

- A discount rate of 11.98% was applied in determining the recoverable amount for the plants. The discount rate was estimated based on the industry weighted average cost of capital, which was based on a debt leveraging of 20% at an interest rate of 10% and a long-term inflation rate of 2.6%.

- A terminal value was derived at the end of a seven-year period assuming no future growth.

At 31 December 2008, management analysed developments in the aluminium industry and the Group's operations since 31 December 2007. The economic environment in the aluminium industry has changed significantly compared to 2007 and the impairment testing for goodwill was carried out at 31 December 2008 using the following revised assumptions to determine the recoverable amount of the segment:

- Total production was estimated based on adjusted sustainable production levels of 3.9 million metric tonnes of primary aluminium, 7.6 million metric tonnes of alumina and 12.6 million metric tonnes of bauxite. This represents a 10% decrease in aluminium production, a 33% decrease in alumina production and a 29% decrease in bauxite production compared to 2007 production levels. Bauxite and alumina will be used primarily internally for production of primary aluminium. No production growth was included in the cash flow projections;

- Sales prices were based on the long-term aluminium price outlook derived from available industry and market sources. For details refer to note 17 above. Operating costs were projected based on the historical performance of each cash generating unit and adjusted for planned cost reductions;

- Real foreign currency exchange rates applied to convert operating costs of the Group denominated in RUR into USD were RUR30 for 1 USD in 2009, RUR29 for 1 USD in 2010-2015 and thereafter. Long-term inflation of 6% in RUR and 2% in USD was assumed in determining recoverable amounts;

- The pre-tax discount rate was estimated in nominal terms based on the weighted average cost of capital basis and was 17.26%; and

- A terminal value was derived at the end of a seven-year period assuming a 2% annual growth rate.

Values assigned to key assumptions and estimates used to measure the unit's recoverable amount are consistent with external sources of information and historic data for the Group's Aluminium segment. Management believes that the values assigned to the key assumptions and estimates represent the most realistic assessment of future trends. The results are particularly sensitive to the following key assumptions:

- A 5% reduction in the projected aluminium price level would result in a decrease in the recoverable amount by 19% and would not lead to impairment;

- A 5% increase in the projected level of operating costs would result in a 18% decrease in the recoverable amount and would not lead to the additional impairment;

- A 1% increase in the discount rate would result in a 7% change in the recoverable amount and would not lead to impairment.

At 31 December 2008 goodwill and intangible assets of USD67 million and USD69 million, respectively, were considered to be impaired.

Management analysed changes in the economic environment and developments in the aluminium industry and the Group's operations since 31 December 2008 and concluded that no significant changes occurred during this period that may give rise to additional impairment and therefore no impairment assessment has been performed as at 30 June 2009.

19 Interests in associates

The Group has the following investments in associates:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Interests in associates	442	443	9,944	9,666
Less: impairment losses net of reversal	—	—	(2,408)	(2,100)
	442	**443**	**7,536**	**7,566**
Goodwill included in interests in associates	180	180	5,745	5,405

The following list contains only the particulars of associates, all of which are corporate entities, which principally affected the results or assets of the Group.

				Proportion of ownership interest		
Name of associate	Form of business structure	Place of incorporation and operation	Particulars of issued and paid up capital	Group's effective interest	Group's nominal interest	Principal activity
OJSC MMC Norilsk Nickel	Incorporated	Russian Federation	190,627,747 shares, RUR1 par value	27.34%	25% + 1 share	Nickel production
Queensland Alumina Limited	Incorporated	Australia	2,212,000 shares, 2 Australian Dollars par value	20%	20%	Production of alumina under a tolling agreement

The summary of financial information on associates is presented below:

	Assets	Liabilities	Equity	Revenues	Profit/ (loss)	Foreign currency translation difference
	USD million	USD million	USD million	USD million	USD million	USD million
30 June 2009						
100 per cent	21,437	9,325	12,112	4,407	442	—
Group's effective interest	**7,374**	**3,180**	**4,194**	**1,243**	**40**	**(389)**
31 December 2008						
100 per cent	21,643	9,713	11,930	2,126	(550)	—
Group's effective interest	**7,522**	**3,326**	**4,196**	**505**	**(894)**	**(2,629)**
31 December 2007 (note)						
100 per cent	888	709	169	584	(7)	—
Group's effective interest	**511**	**248**	**263**	**117**	**(14)**	**28**
31 December 2006 (note)						
100 per cent	706	525	181	480	(2)	—
Group's effective interest	**470**	**208**	**262**	**96**	**(16)**	**18**

Note: The financial information for 31 December 2006 and 2007 represents the summary financial information of Queensland Alumina Limited.

(a) OJSC MMC Norilsk Nickel

In November 2007, the Group entered into a number of agreements with Onexim Holdings Limited relating to the purchase of 25%+1 share in OJSC MMC Norilsk Nickel. On 24 April 2008, (the Completion date), the acquisition was completed for a total consideration of USD13,230 million. For reporting purposes, the fair value of the investment has been determined by reference to the quoted market price on the Russian Trading System stock exchange on the dates of transfer of the 25%+1 shares of OJSC MMC Norilsk Nickel to the Company.

To effect the transaction, the Company issued 1,628 shares to Onexim Holdings Limited in partial consideration (note 27) which following their allotment and issue, represent approximately 14% of the Company's ordinary shares. The cash component of the consideration amounted to USD7,138 million, of which USD2,700 million was deferred at the date of acquisition and payable over 12 months following the Completion date bearing interest at 5% per annum. In the second half of 2008, the maturity of a portion of the deferred consideration amounting to USD700 million plus interest was extended from 24 October 2008 to 1 December 2008 and the interest payable on the outstanding portion was increased to 10% per annum. On 20 March 2009, the Group reached an amended agreement with Onexim Holdings Limited and restructured the amounts payable as deferred consideration.

The Group's share in net loss of OJSC MMC Norilsk Nickel operations for the period from the date of acquisition to 31 December 2008 was USD881 million. Revenue of OJSC MMC Norilsk Nickel for that period was USD8,453 million. In August 2008 the Group received dividends from OJSC MMC Norilsk Nickel in the amount of USD225 million reduced by tax of USD20 million.

The carrying value and market value of the Group's investment in OJSC MMC Norilsk Nickel as at 31 December 2008 and 30 June 2009 were as follows:

	31 December 2008	30 June 2009
	USD million	USD million
Carrying value	7,158	7,158
Market value	3,011	4,527

The Group engaged an independent appraiser to determine the fair values of assets acquired and liabilities assumed upon acquisition of the equity investment in OJSC MMC Norilsk Nickel. The purchase price allocation resulted in goodwill of USD6,970 million recognised upon acquisition as part of the carrying value of investment in an associate.

Following the sharp decline in demand for metals of OJSC MMC Norilsk Nickel resulting from a significant decrease in share price and the worldwide general economic downturn, management considered that it was necessary to carry out an impairment test of its investment at 31 December 2008 after the application of the equity method of accounting. The recoverable amount of the investment was determined based on the underlying value in use of its businesses with the following significant assumptions:

- The long term commodity price forecasts for nickel, copper and other by-products, are management's estimates based on their experience of the specific commodities markets as at the date of the impairment test, and are within the range of external market forecasts. The prices used are as follows:

Type of metal	Units	2009	2010	2011	2012	2013	2014	2015
Nickel	USD/ton	11,088	13,163	15,542	17,094	17,436	17,785	18,140
Copper	USD/ton	4,161	4,740	5,579	5,952	6,071	6,192	6,316
Platinum	USD/kg	29,859	34,214	34,214	38,102	38,864	39,641	40,434
Palladium	USD/kg	6,532	8,553	10,186	12,690	12,944	13,203	13,467

- Total production volume was based on the existing sustainable production levels of 317 thousand tons of nickel, 382 thousand tons of copper, 25.4 tons of platinum and 97 tons of palladium.

- The real foreign currency exchange rates applied to convert operating costs denominated in RUR into USD, were RUR30 for one USD in 2009, RUR29 for one USD in 2010-2015 and thereafter. Inflation of 6.0 − 11.4% in RUR was assumed in determining the recoverable amounts.

Discount rates reflect management's assessment of the risks specific to each production unit. This rate is based on the weighted average cost of capital specific to each cash-generating unit and averaged 16.68% pre-tax. As a result, an impairment loss of USD2,408 million was recognised in addition to the Group's share of losses of the associate at 31 December 2008.

During the six months ended 30 June 2009 there was a decrease in the carrying amount of the Group's investment in Norilsk Nickel after application of the equity method of accounting including recognition of the Group's share of the net profit of Norilsk Nickel and the effect of foreign currency translation of the investment to US dollars from its functional currency. Following the application of the equity method management analysed changes in the economic environment and nickel and related industries since 31 December 2008 and concluded that the value in use or the recoverable amount of the Group's investment in Norilsk Nickel increased in its functional currency and remained unchanged in US dollars. As a result, the Group recognised a partial reversal of the previously recorded impairment in the amount of US$308 million during the six months ended 30 June 2009.

(b) Queensland Alumina Limited ("QAL")

In October 2004 the Group won the auction sale of 20% percent of the common shares of QAL and signed the purchase agreement with the seller subject to the United States Bankruptcy Court, Australian state authorities, QAL's shareholders and creditors approvals, which were obtained in 2005. This acquisition was completed on 1 April 2005. In accordance with the agreement the Group paid USD418 million in cash, assumed the sellers' debt to QAL of USD35 million and a guarantee of QAL's debts of USD60 million and acquired alumina and bauxite inventory of the former shareholder of QAL of USD10 million.

20 Interests in jointly controlled entities

The Group has the following investments in jointly controlled entities:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Interests in jointly controlled entities	127	219	650	659
Less: impairment loss	—	—	(144)	(157)
	127	**219**	**506**	**502**
Goodwill included in interests in jointly controlled entities	**67**	**—**	**—**	**—**

Details of the Group's interest in the jointly controlled entities are as follows:

Name of jointly controlled entity	Form of business structure	Place of incorporation and operation	Particulars of issued and paid up capital	Proportion of ownership interest: Group's effective interest	Proportion of ownership interest: Held by a subsidiary	Principal activity
Bogatyr Access Komir and its trading companies (FORUM Muider BV)	Incorporated	Russian Federation/ Kazakhstan	18,150 shares, EUR1	50%	50%	Coal mining
BEMO project	Incorporated	Russian Federation	BOGES Limited - 10,000 shares EUR1.71; BALP Limited - 10,000 shares EUR1.71	50%	50%	Energy / Aluminium production
Rounio Limited *	Incorporated	Cyprus/ Russian Federation	1,000 shares, USD2.681	50%	50%	Cryolite production
Sual Komi BV *	Incorporated	Netherlands/ Russian Federation	18,000 shares, EUR1	50%	50%	Bauxite mining

* prior to 27 March 2007 investments in Rounio Limited and Sual Komi BV were accounted for using the equity method. During the year ended 31 December 2008, the Group acquired the remaining interests from the other shareholders and Rounio Limited and Sual Komi BV became the wholly-owned subsidiaries of the Group. The results of Rounio Limited and Sual Komi BV have been consolidated in the Group's consolidated financial statements since control was obtained.

Summary financial information on jointly controlled entities — Group's effective interest is presented below:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Non-current assets	221	374	810	806
Current assets	67	116	130	84
Non-current liabilities	(65)	(261)	(402)	(351)
Current liabilities	(96)	(10)	(32)	(37)
Net assets	127	219	506	502
Income	113	76	557	88
Expenses	(125)	(91)	(448)	(83)
(Loss)/profit for the year/period	(12)	(15)	109	5
Foreign currency translation differences for foreign operations	—	13	(64)	(51)

(a) LLP Bogatyr Komir and trading companies

On 27 March 2007, as a consequence of the acquisition of SUAL, the Group acquired the right to receive a 100% interest in LLP Bogatyr Komir (formerly LLP Bogatyr Access Komir), a partnership organised under the laws of Kazakhstan and engaged in the mining and processing of coal at Ekibastuz, Kazakhstan together with related trading companies. The trading companies were transferred to the Group with effect from this date. However, the transfer of the interest in LLP Bogatyr Komir to the Group was pending receipt of regulatory approvals in Kazakhstan (see note 5). This right was recorded at the estimated fair value of LLP Bogatyr Komir of USD606 million as at 31 December 2007.

In November 2007 the Group has signed a memorandum of cooperation with the Government of Kazakhstan whereby it has agreed to sell a 50% interest in LLP Bogatyr Komir to the Government immediately upon receipt of the necessary governmental approvals. In April 2008 the necessary approvals were received and the Group signed a sale-and-purchase agreement with OJSC Samruk Energo, a company controlled by the state of Kazakhstan, to sell a 50% interest in LLP Bogatyr Komir and a 50% interest in related coal traders for USD345 million. This transaction resulted in a gain of USD42 million.

According to the sale-and-purchase agreement the Group controlled and could distribute 100% of net income and retained earnings of LLP Bogatyr Komir and related coal traders generated before OJSC Samruk Energo made the final payment. The full consideration under agreement was received on 24 December 2008.

Management carried out an impairment test of its investment in LLP Bogatyr Komir and coal trading companies and recognised an impairment loss of USD144 million in addition to application of the equity method at 31 December 2008. Additional impairment of USD13 million was recognised at 30 June 2009.

(b) BEMO project

In May 2006, the Group signed a Co-operation agreement with OJSC RosHydro and RAO UES. Under this Co-operation agreement, OJSC RosHydro and the Group jointly committed to finance the construction and future operation of Boguchansk hydropower station (BoGES) and an aluminum plant which is planned to be the main customer of the hydropower station (note 33(a)), together referred to as the "BEMO project".

During 2007, the Group and HydroOGK established two joint companies to control BoGES and the Boguchansky Aluminium Smelter (BoAZ). By 31 December 2007, the Group had contributed USD206 million to the joint companies as total consideration for its 50% interest in the joint business including its 29.4% interest in BoGES valued at USD23 million. During the year ended 31 December 2008 and the six months ended 30 June 2009 the Group contributed an additional USD195 million and USD55 million to the project, respectively.

(c) Sual Komi BV

In April 2005, the Group signed a Joint Venture and Shareholders' Agreement with SUAL to develop the Timan bauxite mine and to construct an alumina refinery. The Group paid USD137 million as consideration for a 50% interest in the joint business in July 2005. In January 2006, the parties renegotiated certain acquisition terms, which resulted in a reduction of the original purchase price paid by the Group by USD70 million and an agreement to provide 50% proportionate share of a USD150 million long-term financing to the joint venture in the form of a loan.

(d) *Rounio Limited*

In April 2005 the Group paid USD24 million for a 50 % interest in Rounio Limited ("Rounio"), a holding company established by SUAL. Rounio Limited owns the controlling interests in two plants involved in the production of aluminium fluoride.

21 Financial investments

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Non-current				
Other investments	—	606	—	—
	—	**606**	**—**	**—**

On 27 March 2007, as a consequence of the acquisition of SUAL, the Group acquired the right to receive a 100% interest in LLP Bogatyr Access Komir, a partnership organised under the laws of Kazakhstan and engaged in the mining and processing of coal at Ekibazstuz, Kazakhstan together with related trading companies. The trading companies were transferred to the Group with effect from this date. However, the transfer of the interest in LLP Bogatyr Access Komir to the Group was pending receipt of regulatory approvals in Kazakhstan (note 5). This right was recorded at the estimated fair value of LLP Bogatyr Access Komir of USD606 million as at 31 December 2007. Following the signing of a sale-purchase agreement with OJSC Samruk Energo in April 2008 to sell a 50% interest in LLP Bogatyr Access Komir and a 50% interest in the related coal traders the Group's interest in LLP Bogatyr Access Komir was recorded as an investment in a jointly controlled entity (note 20).

In the second half of 2008 the Group acquired a derivative financial instrument linked to the price of shares of OJSC MMC Norilsk Nickel for a total consideration of USD554 million. Under the terms of the contract the Group also has an option to acquire up to 5% of the shares of OJSC MMC Norilsk Nickel from a third party on certain future dates at the market prices prevailing at those future dates. Management estimated the fair value of the instrument at 31 December 2008 and 30 June 2009 at nil. The change in fair value is included in "finance expenses" in the consolidated income statements. Subsequent to 30 June 2009 the Group has partially unwound this arrangement in respect of an option to acquire up to 3% of the shares of OJSC MMC Norilsk Nickel with a resulting gain of USD23 million.

22 Investments in subsidiaries

The Company

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Unlisted shares, at cost	—	9,651	23,057	23,043
Less: impairment	—	—	(9,524)	(9,537)
	—	9,651	13,533	13,506

Details of the principal subsidiaries are set out in note 36 to the Financial Information.

23 Deferred tax assets and liabilities

(a) *Recognised deferred tax assets and liabilities*

Deferred tax assets and liabilities are attributable to the following temporary differences:

	Assets				Liabilities				Net			
	31 December			30 June	31 December			30 June	31 December			30 June
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million
Property, plant and equipment	—	56	14	41	(559)	(1,072)	(537)	(584)	(559)	(1,016)	(523)	(543)
Inventories	37	2	59	43	—	(13)	(3)	(22)	37	(11)	56	21
Trade and other receivables	7	19	12	2	—	(2)	(8)	(14)	7	17	4	(12)
Others	11	153	38	66	(4)	(59)	(25)	(14)	7	94	13	52
Deferred tax assets/(liabilities)	55	230	123	152	(563)	(1,146)	(573)	(634)	(508)	(916)	(450)	(482)
Set off of deferred taxation	(22)	(125)	(64)	(108)	22	125	64	108	—	—	—	—
Net deferred tax assets/(liabilities)	**33**	**105**	**59**	**44**	**(541)**	**(1,021)**	**(509)**	**(526)**	**(508)**	**(916)**	**(450)**	**(482)**

(b) Movement in deferred tax assets/(liabilities) during the years/period

	1 January 2006	Recognised in the income statement	Acquired/ disposed of	31 December 2006
	USD million	USD million	USD million	USD million
Property, plant and equipment	(570)	3	8	(559)
Inventories	31	6	—	37
Trade and other receivables	9	(2)	—	7
Others	15	(6)	(2)	7
	(515)	**1**	**6**	**(508)**

	1 January 2007	Recognised in the income statement	Foreign currency translation	Acquired/ disposed of	31 December 2007
	USD million	USD million	USD million	USD million	USD million
Property, plant and equipment	(559)	78	—	(535)	(1,016)
Inventories	37	(37)	—	(11)	(11)
Trade and other receivables	7	1	—	9	17
Others	7	28	(12)	71	94
Total	**(508)**	**70**	**(12)**	**(466)**	**(916)**

	1 January 2008	Recognised in the income statement	Recognised in the income statement due to changes in enacted tax rates	Foreign currency translation	31 December 2008
	USD million	USD million	USD million	USD million	USD million
Property, plant and equipment	(1,016)	386	107	—	(523)
Inventories	(11)	69	(2)	—	56
Trade and other receivables	17	(12)	(1)	—	4
Others	94	(79)	(3)	1	13
Total	**(916)**	**364**	**101**	**1**	**(450)**

	1 January 2009	Recognised in the income statement	30 June 2009
	USD million	USD million	USD million
Property, plant and equipment	(523)	(20)	(543)
Inventories	56	(35)	21
Trade and other receivables	4	(16)	(12)
Others	13	39	52
Total	**(450)**	**(32)**	**(482)**

(c) Unrecognised deferred tax assets

The Group

Deferred tax assets have not been recognised in respect of the following items:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Deductible temporary differences	—	—	344	377
Tax loss carry-forwards	4	49	257	341
	4	49	601	718

Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profits will be available against which the Group can utilise the benefits therefrom. Tax losses expire in the following years:

	31 December			30 June
Year of expiry	**2006**	**2007**	**2008**	**2009**
	USD million	**USD million**	**USD million**	**USD million**
Without expiry	—	—	7	33
2019	—	—	—	47
2018	—	—	14	13
2017	—	5	4	3
2016	—	2	2	2
2015	—	5	4	3
2014	—	—	—	14
2013	—	—	188	188
2012	1	22	1	2
2011	1	14	36	36
2010	1	1	1	—
2009	—	—	—	—
2008	1	—	—	—
	4	49	257	341

(d) Unrecognised deferred tax liabilities

The Group

Retained earnings of the Group's subsidiaries where dividend distributions are subject to taxation included USD3,521 million, USD4,916 million, USD3,816 million and USD3,285 million as at 31 December 2006, 2007 and 2008 and 30 June 2009 respectively for which deferred taxation has not been provided because remittance of the earnings has been indefinitely postponed through reinvestment and, as a result, such amounts are considered to be permanently invested. It was not practicable to determine the amount of temporary differences relating to investments in subsidiaries where the Group is able to control the timing of reversal of the difference. Reversal is not expected in the foreseeable future. For other Group subsidiaries, including the significant trading companies, the distribution of dividends does not give rise to taxes.

(e) Current taxation in the consolidated balance sheets represents:

The Group

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Income tax for the year/period	341	483	410	29
Income tax paid	(309)	(523)	(422)	(15)
	32	(40)	(12)	14
Represented by:				
Income tax payable	116	52	48	40
Income tax recoverable (note 25)	(84)	(92)	(60)	(26)
Net income tax payable/(recoverable)	32	(40)	(12)	14

24 Inventories

The Group

	At 31 December			At 30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Raw materials and consumables	509	1,240	1,379	1,012
Work in progress	343	733	808	614
Finished goods and goods held for resale	537	923	1,103	752
	1,389	2,896	3,290	2,378
Provision for inventory obsolescence	(11)	(13)	(352)	(219)
	1,378	**2,883**	**2,938**	**2,159**

Inventories at 31 December 2006 and 31 December 2007 are stated at cost. Inventories at 31 December 2008 and 30 June 2009 included USD1,985 million and USD1,262 million of inventories stated at net realisable value.

Inventories with a carrying value of USD103 million and USD142 million were pledged as collateral for secured bank loans at 31 December 2006 and 31 December 2007 respectively (note 28). No inventories were pledged at 31 December 2008 and 30 June 2009.

The analysis of the amount of inventories recognised as an expense is as follows:

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Carrying amount of inventories sold	2,770	4,822	6,035	2,951	1,803
Write-down/(reversal of write-down) of inventories	—	2	339	—	(133)
	2,770	4,824	6,374	2,951	1,670

25 Trade and other receivables

The Group

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Trade receivables from third parties	270	597	274	196
Impairment loss on trade receivables	(19)	(37)	(35)	(21)
Net trade receivables from third parties	**251**	**560**	**239**	**175**
Trade receivables from related parties, including:	**114**	**306**	**122**	**144**
Related parties — companies capable of exerting significant influence	—	*184*	*47*	*48*
Related parties — companies under common control	*114*	*120*	*65*	*87*
Related parties — associates	—	*2*	*10*	*9*
VAT recoverable	217	474	548	614
Impairment loss on VAT recoverable	(8)	(4)	(3)	(53)
Net VAT recoverable	**209**	**470**	**545**	**561**
Advances paid to third parties	**118**	**214**	**115**	**104**
Advances paid to related parties, including:	**32**	**135**	**57**	**63**
Related parties — companies capable of exerting significant influence	—	*70*	*3*	*4*
Related parties — companies under common control	*3*	*5*	—	*3*
Related parties — associates	*29*	*60*	*54*	*56*
Prepaid expenses	**26**	**31**	**43**	**77**
Prepaid income taxation (note 23(e))	**84**	**92**	**60**	**26**
Prepaid other taxes	**5**	**104**	**61**	**43**
Other receivables	127	252	184	195
Impairment loss on other receivables	(12)	(14)	—	—
Net other receivables	**115**	**238**	**184**	**195**
	954	**2,150**	**1,426**	**1,388**

(a) Ageing analysis

Included in trade and other receivables are trade receivables (net of allowance for doubtful debts) with the following ageing analysis as of the balance sheet dates:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Current	332	786	231	138
Past due 0-90 days	32	47	109	85
Past due 91-365 days	1	2	19	93
Past due over 365 days	—	31	2	3
Amounts past due	33	80	130	181
	365	866	361	319

Trade receivables are on average due within 60 days from the date of billing. Further details of the Group's credit policy are set out in note 32(e).

(b) Impairment of trade receivables

Impairment losses in respect of trade receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade receivables directly.

The movement in the allowance for doubtful debts during the year/period, including both specific and collective loss components, is as follows:

	Year ended 31 December			Six months ended 30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Balance at the beginning of the year/period	(10)	(19)	(37)	(35)
Impairment loss recognised	(9)	(18)	(117)	(4)
Uncollectible amounts written off	—	—	119	18
Balance at the end of the year/period	(19)	(37)	(35)	(21)

As at 31 December 2006, 2007 and 2008 and 30 June 2009, the Group's trade receivables of USD19 million, USD37 million, USD35 million and USD21 million respectively were individually determined to be impaired. Management assessed that the receivables are not expected to be recovered. Consequently, specific allowances for doubtful debts were recognised.

The Group does not hold any collateral over these balances.

(c) Trade receivables that are not impaired

Ageing analysis of trade receivables that are neither individually nor collectively considered to be impaired is as follows:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Neither past due nor impaired	332	786	231	138
Past due 0-90 days	32	47	109	85
Past due 91-365 days	1	2	19	93
Past due over 365 days	—	31	2	3
	33	80	130	181
	365	866	361	319

Receivables that were neither past due nor impaired related to a wide range of customers for whom there was no recent history of default.

Receivables that were past due but not impaired related to a number of customers that have a good track record with the Group. Based on past experience, management believes that no impairment allowance is necessary in respect of these balances as there has not been a significant change in credit quality and the balances are still considered fully recoverable. The Group does not hold any collateral over these balances.

The Company

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Receivable on disposal of subsidiary	—	—	345	—
Other receivables	—	13	4	10
	—	13	349	10

26 Cash and cash equivalents

The Group

	At 31 December			At 30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Bank balances, USD	96	89	419	140
Bank balances, RUR	19	51	237	79
Bank balances, other currencies	6	35	17	15
Cash in transit	3	1	10	3
Short-term bank deposits	105	71	2	2
Cash and cash equivalents in the statement of cash flows	229	247	685	239
Restricted cash	12	14	23	25
Cash and cash equivalents in the balance sheet	**241**	**261**	**708**	**264**

As at 31 December 2006, 31 December 2007, 31 December 2008 and 30 June 2009 included in cash and cash equivalents was restricted cash of USD12 million, USD14 million, USD23 million and USD25 million, respectively, for letters of credit pledged with the banks.

Included in cash and cash equivalents at 31 December 2006, 31 December 2007, 31 December 2008 and 30 June 2009 are cash balances denominated in RUR of approximately nil, USD4 million, USD137 million and nil, respectively, at a bank, which is a related party.

The Company

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Bank balances, USD	—	—	6	1
	—	—	6	1

27 Equity

(a) *Share capital*

Number of shares unless otherwise stated

	Ordinary shares			
	As at 31 December			As at 30 June
	2006	2007	2008	2009
Authorised				
Ordinary shares of USD 1 each	—	2	11,628	11,628
Ordinary shares issued and fully paid at 1 January	—	2	10,000	11,628
Ordinary shares issued	2	9,998	1,628	—
Ordinary shares at the end of reporting period	**2**	**10,000**	**11,628**	**11,628**

The Company was incorporated on 26 October 2006 with an authorised share capital of USD10,000 divided into 10,000 ordinary shares of USD1 each, of which one subscriber share was issued to each of two subscribers on incorporation. On 27 October 2006, these two shares were transferred to En+ Group Limited. In March 2007, 6,598 ordinary shares were issued to En+ Group Limited, 2,200 ordinary shares were issued to SUAL Partners Limited and 1,200 ordinary shares were issued to a wholly owned subsidiary of Glencore International AG in partial consideration for the transfer to the Company of RUSAL Limited, SUAL International Limited and the Glencore Businesses respectively.

On 24 April 2008, the authorised share capital of the Company was increased to USD11,628 divided into 11,628 ordinary shares of USD1 each. In April 2008, 1,628 ordinary shares were issued to Onexim Holdings Limited in partial consideration for the acquisition of 25%+1 share of OJSC MMC Norilsk Nickel (refer to note 19).

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at general meetings of the Company. All ordinary shares rank equally with regard to the Company's residual assets.

(b) Movement in components of the equity within the Company

	Share capital	Share premium	Additional paid-in capital	Retained profits/ (accumulated losses)	Total
	USD million	USD million	USD million	USD million	USD million
Balance at 26 October 2006 (date of incorporation)	—	—	—	—	—
Issue of shares	—	—	—	—	—
Balance at 31 December 2006	**—**	**—**	**—**	**—**	**—**
Balance at 1 January 2007	**—**	**—**	**—**	**—**	**—**
Total comprehensive income for the year	—	—	—	2,340	2,340
Acquisition of subsidiaries	—	6,425	100	—	6,525
Dividends to shareholders	—	—	—	(2,362)	(2,362)
Balance at 31 December 2007	**—**	**6,425**	**100**	**(22)**	**6,503**
Balance at 1 January 2008	—	6,425	100	(22)	6,503
Total comprehensive loss for the year	—	—	—	(7,236)	(7,236)
Acquisition of subsidiaries	—	6,092	—	—	6,092
Dividends to shareholders	—	—	—	(2,099)	(2,099)
Balance at 31 December 2008	**—**	**12,517**	**100**	**(9,357)**	**3,260**
Balance at 1 January 2009	—	12,517	100	(9,357)	3,260
Total comprehensive loss for the period	—	—	—	(302)	(302)
Balance at 30 June 2009	**—**	**12,517**	**100**	**(9,659)**	**2,958**

(c) Changes in equity

As the acquisition of RUSAL Limited is treated as a non-substantive acquisition, the components of consolidated equity of the Group prior to the acquisition of RUSAL Limited are the amounts recorded by RUSAL Limited but adjusted to reflect the actual share capital and share premium of the Company. Such adjustment is recognised as additional paid-in capital of the Company.

During the year ended 31 December 2007, 3,400 shares were issued as partial consideration for the acquisition of SUAL and the Glencore Businesses. The Company estimated the total value of these shares at USD6,425 million. The issue of these shares gave rise to an increase in share premium of this amount.

During the year ended 31 December 2008, 1,628 shares were issued by the Company in partial consideration for the acquisition of 25%+1 share OJSC MMC Norilsk Nickel. The Directors estimated the total value of these shares at USD6,092 million. The issue of these shares gave rise to an increase in share premium of this amount.

In connection with this acquisition, the Company entered into a put and call option deed with Onexim Holdings Limited ("the Option Deed"). The Option Deed was amended and restated on 11 April 2008 and came into effect on 24 April 2008 upon completion of the acquisition. The Option Deed gives Onexim Holdings Limited a right to sell its shares in the Company to the Group at the higher of the market value determined by an independent investment bank and USD6,227 million or USD7,325 million (depending on certain payment conditions), if the Company does not achieve a listing on a major international stock exchange on or before 15 November 2009. Under the conditions of the Option Deed the Group can avoid the exercise of the put option by using its best endeavours to achieve a listing on a major international stock exchange on or before 15 November 2009. Shall the parties disagree on whether the Company has used its best endeavors to achieve a listing by a set date, it shall successfully demonstrate in the London Court of International Arbitration (the "LCIA") arbitration proceedings that it has done so beyond reasonable doubt.

At the time of entering into the Option Deed, the Company and its shareholders had full intention and ability to achieve a listing on a major international stock exchange meeting the necessary conditions as required by the Option Deed on or before 15 November 2009. Therefore, management concluded that the Group had an unconditional right to avoid delivering cash upon exercise of the put option by Onexim Holdings Limited and, therefore, shares issued by UC RUSAL to Onexim Holdings Limited were recorded as equity at the carrying value determined as described above.

On 1 December 2009 the Company entered into an amendment agreement in relation to the Option Deed in order to restructure the outstanding deferred consideration in the amount of USD2,700 million plus accrued interest (refer to note 2(d)). The original Option Deed was also further amended on the same date to extend the period for completing an IPO from 15 November 2009 (as described above) to 31 December 2013.

(d) Other reserves

The acquisition of RUSAL Limited by the Company has been accounted for as a non-substantive acquisition. The consolidated share capital and share premium represent only the share capital and share premium of the Company and the share capital and other paid in capital of RUSAL Limited prior to the acquisition has been included in other reserves. In addition other reserves include the cumulative unrealised actuarial gains and losses on the Group's defined post retirement benefit plans and cumulative unrealised gains and losses on its available-for-sale investments which have been recognised directly in equity.

(e) Distributions

During 2006 the Group transferred subsidiaries to the shareholder as required by the pre-completion conditions of the agreement with SUAL Partners Ltd. and Glencore International AG. The following table summarises the carrying values of distributed assets and liabilities:

	USD million
Property, plant and equipment	146
Equity investments	17
Other investments	117
Cash and cash equivalents	7
Receivables	53
Inventories	79
VAT recoverable	9
Other non-current assets	3
Current liabilities	(40)
Short-term borrowing	(6)
Long-term borrowing	(61)
Deferred tax liabilities	(8)
Non-controlling interests	(3)
Distribution to shareholder	**313**

During 2006, the Group distributed another USD12 million of amounts previously contributed by the shareholder and included within other reserves in equity.

During the year ended 31 December 2007, RUSAL Limited distributed an additional USD210 million in cash to its then shareholders as payment for the foil assets of RUSAL in accordance with the requirement of the agreement with SUAL Partners Ltd and Glencore International AG.

During the first quarter 2007 the Group distributed dividends of USD138 million prior to the acquisition of SUAL and the Glencore Businesses.

In accordance with the Companies Law of Jersey, the Company may make distributions at any time in such amounts as are determined by the Company out of the assets of the Company other than the capital redemption reserve and nominal capital accounts, provided that the Directors of the Company make a solvency statement in accordance with that Law at the time the distributions are proposed. As at 31 December 2006, 2007 and 2008 and 30 June 2009, the aggregate amount of reserves available for distribution to equity shareholders of the Company was nil, USD7,308 million, USD3,260 million and USD2,958 million respectively.

(f) Currency translation reserves

The currency translation reserve comprises all foreign exchange differences arising from the translation of the financial information of foreign operations. The reserve is dealt with in accordance with the accounting policies set out in note 3(b).

28 Loans and borrowings

This note provides information about the contractual terms of the Group's loans and borrowings. For more information about the Group's exposure to interest rate and foreign currency risk, refer to note 32.

The Group

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Non-current liabilities				
Secured bank loans	2,896	5,834	—	—
Unsecured bank loans	317	788	—	—
	3,213	**6,622**	**—**	**—**
Current liabilities				
Current portion of secured bank loans	68	515	—	—
Secured bank loans	113	134	10,575	10,487
Current portion of unsecured bank loans	18	116	—	—
Unsecured bank loans	811	1,024	3,303	3,203
Loans from other parties	1	—	—	—
	1,011	**1,789**	**13,878**	**13,690**

Terms and debt repayment schedule as at 31 December 2006

	TOTAL	Within 1 year	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years
	USD million	USD million	USD million	USD million	USD million
Secured bank loans					
Variable					
USD - Libor + 1.5% and less	2,189	98	203	1,551	337
USD - Libor + 1.6 % - 2.5 %	297	7	62	163	65
USD - Libor + 2.6% and more	39	22	17	—	—
Euro - Euribor + 0.6%	24	24	—	—	—
Fixed					
USD - 2.0%	97	7	14	42	34
USD - 7.0% and more	429	21	42	263	103
Euro - 3.74%	1	1	—	—	—
Unsecured bank loans					
Variable					
USD - Libor + 1.5% and less	699	699	—	—	—
USD - Libor + 1.6 % - 2.5 %	194	—	—	194	—
Euro - Euribor + 0.35% - 2.5%	113	17	20	51	25
Euro - Euribor + 0.6%	13	13	—	—	—
Fixed					
USD - 4.41%	5	1	1	3	—
USD - 6.85%	23	—	—	23	—
USD - 7.0% and more	100	100	—	—	—
Loans from other parties	1	1	—	—	—
	4,224	1,011	359	2,290	564

The secured bank loans were secured by pledges of shares of the following Group companies:

— 100% of the shares of Albaco;

— 100% of Khakas Aluminium Smelter;

— 25% of RUSAL Sayanogorsk;

— 11.9% of RUSAL Bratsk.

The secured bank loans were also secured by the following:

— Properties with a carrying amount of USD438 million;

— Inventories with a carrying amount of USD103 million;

— Assignment of certain sales and purchase contracts and rights of the Group, including all moneys and claims, arising out of these contracts.

Terms and debt repayment schedule as at 31 December 2007

	TOTAL	Within 1 year	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years
	USD million	USD million	USD million	USD million	USD million
Secured bank loans					
Variable					
USD - Libor + 1.5% and less	6,161	565	1,029	3,297	1,270
USD - Libor + 1.6 % - 2.5 %	291	62	62	134	33
USD - Libor + 2.6% and more	27	18	1	8	—
Fixed					
other - 7.0% and more	3	3	—	—	—
Unsecured bank loans					
Variable					
USD - Libor + 1.5% and less	794	389	91	314	—
USD - Libor + 1.6 % - 2.5 %	319	—	—	319	—
EUR - Euribor + 0.35% - 2.5%	49	11	10	24	4
EUR - Euribor + 0.6%	57	57	—	—	—
Fixed					
USD - 4.41%	4	1	1	2	—
USD - 6.85%	23	—	—	23	—
USD - 7.0% and more	597	597	—	—	—
EUR - 7.0% and more	65	65	—	—	—
RUR - 7.0% and more	21	21	—	—	—
	8,411	1,789	1,194	4,121	1,307

The secured bank loans were secured by pledges of shares of the following Group companies:

— 100% of the shares of Albaco;

— 100% of Khakas Aluminium Smelter;

— 100% of Tameko.

The secured bank loans were also secured by the following:

— Properties with a carrying amount of USD431 million;

— Inventories with a carrying amount of USD142 million;

— Assignment of certain sales and purchase contracts and rights of the Group, including all moneys and claims, arising out of these contracts.

At 31 December 2007 rights, including all moneys and claims, arising out of certain sales and purchase contracts between the Group's major trading subsidiaries, RTI Limited and RS International GmbH, and certain counterparties, were assigned to secure syndicated bank loans.

Terms and debt repayment schedule as at 31 December 2008

	TOTAL	Within 1 year
	USD million	USD million
Secured bank loans		
Variable		
USD - Libor + 1.5% and less	5,598	5,598
USD - Libor + 1.6 % - 2.5 %	329	329
USD - Libor + 2.6% and more	8	8
Fixed		
USD - 7.0% and more	4,640	4,640
Unsecured bank loans		
Variable		
USD - Libor + 1.5% and less	819	819
USD - Libor + 1.6 % - 2.5 %	250	250
USD - Libor + 2.6% and more	200	200
USD - Cost of funds + 1.7%	25	25
EUR - Euribor + 0.35% - 2.5%	40	40
EUR - Euribor + 0.7%	36	36
EUR - Euribor + 1.6%	29	29
EUR - Euribor + 2.0%	3	3
EUR - Euribor + 2.93%	4	4
Fixed		
USD - 4.41%	3	3
USD - 6.85%	23	23
USD - 7.0% and more	1,190	1,190
RUR - 7.0% and more	681	681
	13,878	13,878

The secured bank loans were secured by pledges of shares of the following Group companies:

— 25%+1 share of OJSC MMC Norilsk Nickel;

— 100% shares of Gershvin Investments Corp Limited;

— 25% of RUSAL Bratsk;

— 25% of RUSAL Krasnoyarsk;

— 100% of the shares of Albaco;

— 100% of Khakas Aluminium Smelter;

— 100% of Tameko;

— 100% of Noirieux.

The secured bank loans were also secured by properties with a carrying amount of USD739 million and the assignment of certain sales and purchase contracts and rights of the Group, including all moneys and claims, arising out of these contracts.

At 31 December 2008 rights, including all moneys and claims, arising out of certain sales and purchase contracts between the Group's major trading subsidiaries, RTI Limited and RS International GmbH, and certain counterparties, were assigned to secure syndicated bank loans.

Terms and debt repayment schedule as at 30 June 2009

	TOTAL	Within 1 year
	USD million	USD million
Secured bank loans		
Variable		
USD - Libor + 1.5% and less	5,410	5,410
USD - Libor + 1.6 % - 2.5 %	307	307
USD - Libor + 2.6% and more	9	9
Fixed		
USD - 7.0% and more	4,588	4,588
RUR - 7.0% and more	173	173
Unsecured bank loans		
Variable		
USD - Libor + 1.5% and less	759	759
USD - Libor + 1.6 % - 2.5 %	250	250
USD - Libor + 2.6% and more	200	200
USD - Cost of funds + 1.7	25	25
EUR - Euribor + 0.35% - 2.0%	39	39
EUR - Euribor + 0.7%	23	23
EUR - Euribor + 2.0%	13	13
EUR - Euribor + 2.93%	1	1
Fixed		
USD - 4.41%	3	3
USD - 6.85%	23	23
USD - 7.0% and more	1,193	1,193
EUR - 7.0% and more	196	196
RUR - 7.0% and more	478	478
	13,690	13,690

The secured bank loans are secured by pledges of shares of the following Group companies:

— 25%+1 share of OJSC MMC Norilsk Nickel;

— 100% shares of Gershvin Investments Corp Limited;

— 25% of RUSAL Bratsk;

— 25% of RUSAL Krasnoyarsk;

— 100% of the shares of Albaco;

— 100% of Khakas Aluminium Smelter;

— 100% of Tameko;

— 100% of Noirieux.

The secured bank loans are also secured by properties with a carrying amount of USD702 million and the assignment of certain sales and purchase contracts and rights of the Group, including all moneys and claims, arising out of these contracts.

At 30 June 2009 rights, including all moneys and claims, arising out of certain sales and purchase contracts between the Group's major trading subsidiaries, RTI Limited and RS International GmbH, and certain counterparties, are assigned to secure syndicated bank loans.

Available facilities

Bank facilities available but not yet utilised amount to USD331 million, USD72 million, USD458 million and nil at 31 December 2006, 31 December 2007, 31 December 2008 and 30 June 2009, respectively.

Debt maturities

Subsequent to the breach of a number of restrictive covenants at 31 December 2008, which resulted in defaults and cross-defaults on a substantial portion of the Group's credit portfolio the entire amount of its long-term loans and borrowings has been reclassified to current liabilities to reflect the ability of the lenders to demand immediate repayment.

On 6 March 2009 the Group and its lenders signed the "Standstill and waiver agreement" and "Waiver agreement" for the period of restructuring negotiations which has subsequently been extended until 11 December 2009 providing for the temporary waiver of testing of financial covenants on 31 December 2008, and, where relevant, on 31 March 2009 and 30 June 2009, waiver of default and/or potential default and subsequent cross-default (caused by potential non-compliance with the financial covenants and other defaults in accordance with the terms of the relevant facilities) as well as a temporary suspension of certain principal repayments. The "Standstill and waiver agreement" and "Waiver agreement" came into force on 11 March 2009 after the approval of more than 75% of the lenders.

On 12 August 2009 the Group has entered into a non-binding term sheet with the Coordinating Committee reflecting the key terms and conditions of the long-term restructuring of existing financial indebtedness. The term sheet is subject to (a) certain conditions precedent; (b) satisfactory legal documentation; and (c) approvals at the level of competent corporate authorities of the Group as well as credit committees of the relevant lenders.

In December 2009, the Group completed the restructuring negotiations with its lenders in order to establish financial stability and to put the necessary arrangements in place to allow the Group to meet its obligations when they fall due as part of ongoing operations. The restructuring arrangements contain a number of terms and conditions, including conditions subsequent (see note 38(b)). As part of the restructuring the Group entered into an override agreement with its international lenders implementing the long-term restructuring of the Group's debt to the international lenders which became effective on 7 December 2009 with all conditions precedent having been satisfied by that date and signed amendments to the bilateral loan agreements with its Russian and Kazakh lenders providing for long-term restructuring of these loans on similar terms, except in the case of the loan agreement with VEB, which was extended until 29 October 2010 (refer to note 2(d) and note 38(b)).

The Company

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Non-current liabilities				
Secured bank loans	—	5,065	—	—
Unsecured bank loans	—	249	—	—
	—	5,314	—	—
Current liabilities				
Current portion of secured bank loans	—	407	—	—
Current portion of unsecured bank loans	—	150	—	—
Secured bank loans	—	—	9,663	9,545
Unsecured bank loans	—	—	949	889
Unsecured loans from related parties	—	540	1	1
	—	1,097	10,613	10,435

Terms and debt repayment schedule as at 31 December 2007

	TOTAL	Within 1 year	More than 1 year but less than 2 years	More than 2 year but less than 5 years	More than 5 years
	USD million	USD million	USD million	USD million	USD million
Secured bank loans					
USD - from Libor + 1.5% and less	5,455	390	1,253	2,963	849
USD - from Libor + 2.6% and more	17	17	—	—	—
Unsecured bank loans					
USD - from Libor + 1.5% and less	399	150	82	167	—
Unsecured loans from related parties					
USD - from 0% - 5%	540	540	—	—	—
	6,411	1,097	1,335	3,130	849

The secured bank loans were also secured by the guarantees of the subsidiaries.

Terms and debt repayment schedule as at 31 December 2008

	TOTAL	Within 1 year
	USD million	USD million
Secured bank loans		
USD - fixed at 8.49%	4,500	4,500
USD - from Libor + 1.5% and less	5,064	5,064
USD - from Libor + 1.6% to 2.5%	99	99
Unsecured bank loans		
USD - from Libor + 1.5% and less	724	724
USD - from Libor + 1.6% to 2.5%	225	225
Unsecured loans from related parties		
Interest free	1	1
	10,613	10,613

The secured bank loans were secured by pledges of shares of the following Group companies:

— 25%+1 share of OJSC MMC Norilsk Nickel;

— 100% shares of Gershvin Investments Corp Limited;

— 25% of RUSAL Bratsk;

— 25% of RUSAL Krasnoyarsk.

Terms and debt repayment schedule as at 30 June 2009

	TOTAL	Within 1 year
	USD million	USD million
Secured bank loans		
USD - fixed at 8.49%	4,500	4,500
USD - from Libor + 1.5% and less	4,946	4,946
USD - from Libor + 1.6% to 2.5%	99	99
Unsecured bank loans		
USD - from Libor + 1.5% and less	664	664
USD - from Libor + 1.6% to 2.5%	225	225
Unsecured loans from related parties		
Interest free	1	1
	10,435	10,435

The secured bank loans are secured by pledges of shares of the following Group companies:

— 25%+1 share of OJSC MMC Norilsk Nickel;

— 100% shares of Gershvin Investments Corp Limited;

— 25% of RUSAL Bratsk;

— 25% of RUSAL Krasnoyarsk.

29 Bonds outstanding

In September 2005, Russian Aluminium Finance issued 6,000,000 non-convertible, three year RUR denominated bonds (at par value of RUR1,000 each) with semi-annual coupon payments of 7.2% per annum, with a maturity date in September 2008. On issue these amounted to USD211 million.

The bonds were traded on the Moscow Interbank Currency Exchange ("MICEX"). The closing market price registered was RUR991.0 per bond at 31 December 2007.

On 22 September 2008, the Group bought back 6,000,000 bonds from the investor. The buyback price equalled RUR1,000 for each bond.

30 Provisions

	Pension liabilities	Site restoration	Provisions for legal claims	Tax provisions	Total
	USD million	USD million	USD million	USD million	USD million
Balance at 1 January 2006	57	—	—	50	107
Acquired in a business combination	5	28	—	29	62
Provisions made during the year	19	30	23	—	72
Actuarial gains	(4)	—	—	—	(4)
Provisions utilised during the year	(4)	—	—	—	(4)
Balance at 31 December 2006	73	58	23	79	233
Balance at 1 January 2007	73	58	23	79	233
Acquired in a business combination	98	153	14	77	342
Provisions made during the year	37	70	—	45	152
Actuarial gains	(13)	—	—	—	(13)
Provisions utilised during the year	(15)	(9)	(23)	(124)	(171)
Foreign currency translation	4	4	—	—	8
Balance at 31 December 2007	184	276	14	77	551
Balance at 1 January 2008	184	276	14	77	551
Provisions made during the year	16	—	50	1	67
Actuarial losses	25	—	—	—	25
Provisions utilised during the year	(23)	(6)	—	(15)	(44)
Foreign currency translation	(18)	(19)	—	—	(37)
Balance at 31 December 2008	184	251	64	63	562
Balance at 1 January 2009	184	251	64	63	562
(Reversal of provisions)/provisions made during the period	(5)	33	34	16	78
Actuarial gains	(27)	—	—	—	(27)
Provisions utilised during the period	(10)	(7)	(4)	(16)	(37)
Changes charged to comprehensive income	6	—	—	—	6
Foreign currency translation	(3)	(4)	—	—	(7)
Balance at 30 June 2009	145	273	94	63	575
Non-current	**127**	**247**	**14**	**—**	**388**
Current	**18**	**26**	**80**	**63**	**187**
	145	**273**	**94**	**63**	**575**

(a) Pension liabilities

Group subsidiaries in the Russian Federation and Ukraine

The Group voluntarily offers a number of pension and employee benefit programs to employees at its Russian production facilities, including:

- Occupational pension programs under which retirees are entitled to a whole-life regular (old age or disability) pension from the Group. Future pension levels for some of the programs are independent of salary levels and are either fixed monetary amounts or are dependent on past service of an employee;
- Regular whole-life pensions to its veterans of World War II;
- Long-term and post-employment benefits to its employees including death-in-service, lump sum upon retirement, material support for pensioners and death-in-pension benefits.

Due to legal requirements, the Ukrainian subsidiaries are responsible for partial financing of the State hardship pensions for those of its employees who worked, or still work, under severe and hazardous labour conditions (hardship early retirement pensions). These pensions are paid until the recipient reaches the age of entitlement to the State old age pension (55 years for female and 60 years for male employees). In Ukraine, the Group also voluntarily provides long-term and post-employment benefits to its employees including death-in-service, lump sum benefits upon retirement and death-in-pension benefits.

All the above pension and employee benefit programs are of a defined benefit nature. The Group finances these programs on an unfunded pay-as-you-go basis.

The number of employees eligible for the plans as at 31 December 2006, 2007, 2008 and 30 June 2009 was 76,994, 76,892, 69,189 and 58,002, respectively. The number of pensioners as at 31 December 2006, 2007, 2008 and 30 June 2009 was 38,259, 31,968, 32,995 and 32,138, respectively.

Group subsidiaries outside the Russian Federation and Ukraine

In Jamaica, the Group provided employees with a defined benefit pension plan and post-retirement medical benefits. At 31 December 2007 and 2008, there were 1,793 and 1,687 active employees and 1,084 and 1,095 (deferred) pensioners, respectively.

During the first half of 2009, the Group temporarily closed its Alpart operations and discharged its employees until further notice. Effective 1 June 2009, the Group stopped making contributions to the pension Trust of Alpart. The pension Trust is currently being wound-up and management does not expect to have to make up any deficit or receive any surplus as a result of the winding-up based on the actuarial estimates at this time. In the winding-up, it is highly unlikely that Alpart will have to make up any deficit. For accounting purposes, both assets and liabilities have been set to equal to zero as per the valuation date. Any surplus distribution to the employer will be recognised if and when information on the size of such surplus allocation is known. At Windalco no major changes have taken place and the company continues to provide its employees with a defined benefit pension plan and post-retirement medical benefits.

In Ireland, the Group offers employees a final pay pension plan, with a pension equal to 1/60th of pensionable salary, adjusted for social security and shift earnings, for each year of service. Apart from that the Group offers long-term and post-employment benefits to its employees including death-in-service, lump sum upon retirement and death-in-pension benefits. The plans in Ireland and Jamaica are funded plans.

In Sweden, the Group provides defined benefit lifelong and temporary pension benefits. The lifelong benefits are dependent on the past service and average salary level of the employee, with an accrual rate that depends on the salary bracket the employee is in. The liability relates only to benefits accrued before 1 January 2004. These plans are unfunded.

In several other subsidiaries, the Group provides lump sum benefits upon retirement which are financed on an unfunded pay-as-you-go basis.

The following tables summarise the components of the benefit expense recognised in the consolidated income statements and the amounts recognised in the consolidated balance sheets and in the statements of comprehensive income in relation to the plans. The amounts recognised in the consolidated income statements are as follows:

	Year ended 31 December			Six months ended 30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Current service cost	4	15	18	6
Amortisation of past service cost	3	6	3	(15)
Interest cost	6	24	32	15
Actuarial expected return on plan assets	—	(15)	(24)	(9)
Net expense/(income) recognised in the income statement	13	30	29	(3)

The reconciliations of the present value of the defined benefit obligation to the liabilities recognised in the consolidated balance sheets are as follows:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Present value of defined benefit obligations	93	459	362	299
Fair value of plan assets	—	(275)	(191)	(161)
Present value of obligations	93	184	171	138
Unrecognised past service cost	(20)	(22)	(12)	(6)
Assets not recognised	—	22	25	13
Net liability in the balance sheet	73	184	184	145

Changes in the present value of the net liability are as follows:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Net liability at beginning of year/period	57	73	184	184
Acquisitions	5	98	—	—
Other changes charged directly to the equity	—	—	—	6
Net expense recognised in the income statement	13	30	29	(3)
Contributions paid into the plan by the employers	(4)	(15)	(23)	(10)
Actuarial (gains)/losses charged to comprehensive income	(4)	(23)	22	(15)
Currency exchange losses/(gains) charged to income statement	6	7	(13)	(2)
Foreign currency translation	—	4	(18)	(3)
Changes in assets not recognised charged directly to equity	—	10	3	(12)
Net liability at end of year/period	73	184	184	145

The reconciliation of the present value of the defined benefit obligation to the liabilities recognised in the consolidated balance sheet is as follows:

	At 31 December			At 30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Present value of defined benefit obligations at beginning of year	79	93	459	362
Service cost	4	15	18	6
Interest cost	6	24	32	15
Actuarial gains	(4)	(26)	(63)	(12)
Currency exchange losses/(gains)	6	17	(41)	(11)
Past service cost	1	6	(7)	(21)
Contributions by employees	—	2	5	2
Benefits paid	(4)	(15)	(23)	(11)
Acquisitions	5	339	—	—
Translation difference	—	4	(18)	(3)
Other changes charged directly to the equity	—	—	—	(28)
Present value of defined benefit obligations at end of year	93	459	362	299

Movement in fair value of plan assets:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Fair value of plan assets at beginning of year/period	—	—	275	191
Actuarial expected return on plan assets	—	15	24	9
Contributions paid into the plans by the employers	4	15	23	10
Contributions paid into the plans by the employees	—	2	5	2
Benefits paid by the plan	(4)	(15)	(23)	(11)
Acquisitions	—	251	—	
Other changes charged directly to the equity	—	—	—	(34)
Actuarial (losses)/gains	—	(3)	(85)	3
Currency exchange gains/(losses)	—	10	(28)	(9)
Present value of defined benefit obligations at end of year/period	—	275	191	161

Actuarial gain and losses recognised in the statement of comprehensive income:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Cumulative amount at beginning of year/period	4	8	21	(4)
Recognised during the year/period	4	13	(25)	21
Cumulative amount at end of year/period	8	21	(4)	17

The principal assumptions used in determining the pension obligation for the Group's plans are shown below:

	31 December			30 June
	2006	2007	2008	2009
	% per annum	% per annum	% per annum	% per annum
Discount rate *(weighted average)*	*7.5*	*7.5*	*9.3*	*10.3*
Expected return on plan assets *(weighted average)*	—	*9.0*	*10.1*	*10.3*
Future salary increases *(weighted average)*	*9.2*	*7.5*	*7.4*	*8.1*
Future pension increases *(weighted average)*	*2.4*	*2.0*	*2.4*	*3.8*
Medical claims growth *(weighted average)*	—	*12.0*	*15.0*	*18.0*
Staff turnover *(weighted average)*	—	*3.0*	*3.0*	*3.0*

Prior to the acquisition of SUAL and Glencore in 2007, the Group did not have any plan assets.

At 31 December 2007 the fair value of plan assets comprised investments in different asset categories as follows:

Asset class	USD million	%
Equity	179	65
Fixed income	70	25
Real estate	13	5
Other	13	5
Total plan assets	275	100

At 31 December 2007 the effects of an increase of one percentage point and a decrease of one percentage point in the assumed medical cost trend rates are as follows:

	USD million	
Item of which the effect is measured	Increased by 1%	Decreased by 1%
The aggregate of the current service cost and interest cost components of net periodic post-employment medical cost	—	—
The accumulated post-employment benefit obligation for medical costs	4	(4)

At 31 December 2008 the fair value of plan assets comprised investments in different asset categories as follows:

Asset class	USD million	%
Equity	81	42
Fixed income	69	36
Real estate	13	7
Cash equivalents	19	10
Other	9	5
Total plan assets	191	100

At 31 December 2008 the effects of an increase of one percentage point and a decrease of one percentage point in the assumed medical cost trend rates are as follows:

	USD million	
Item of which the effect is measured	Increased by 1%	Decreased by 1%
The aggregate of the current service cost and interest cost components of net periodic post-employment medical cost	1	(1)
The accumulated post-employment benefit obligation for medical costs	3	(3)

At 30 June 2009 the fair value of plan assets comprised investments in different asset categories as follows:

Asset class	USD million	%
Equity	69	43
Fixed income	56	35
Real estate	9	5
Cash equivalents	25	16
Other	2	1
Total plan assets	161	100

At 30 June 2009 the effects of an increase of one percentage point and a decrease of one percentage point in the assumed medical cost trend rates are as follows:

	USD million	
Item of which the effect is measured	Increased by 1%	Decreased by 1%
The aggregate of the current service cost and interest cost components of net periodic post-employment medical cost	1	—
The accumulated post-employment benefit obligation for medical costs	3	(2)

The Group expects USD18 million to be paid to the defined benefit retirement plans during the annual period beginning on 1 July 2009.

(b) Site restoration

The Group provides for site restoration obligations when there is a specific legal or constructive obligation for mine reclamation, landfill closure (primarily comprising red mud basin disposal sites) or specific lease restoration requirements. The Group does not record any obligations with respect to decommissioning of its refining or smelting facilities and restoration and rehabilitation of the surrounding areas unless there is a specific plan to discontinue operations at a facility. This is because any significant costs in connection with decommissioning of refining or smelting facilities and restoration and rehabilitation of the surrounding areas would be incurred no earlier than when the facility is closed and the facilities are currently expected to operate over a term in excess of 50-100 years due to the perpetual nature of the refineries and smelters and continuous maintenance and upgrade programs resulting in the fair values of any such liabilities being negligible.

The site restoration provision recorded in this Financial Information relates primarily to mine reclamation and red mud basin disposal sites at alumina refineries and is estimated by discounting the risk-adjusted expected expenditure to its present value based on the following key assumptions:

	31 December			30 June
	2006	2007	2008	2009
Timing of cash outflows	2007: USD9 million, 2008: USD2 million, 2009-2014: USD15 million, 2015-2026: USD10 million, 2027-2056: USD29 million	2008: USD11 million, 2009: USD44 million, 2010-2016: USD118 million, 2017-2027: USD68 million, 2028-2095: USD732 million	2009: USD33 million, 2010-2016: USD132 million, 2017-2027: USD69 million, 2028-2095: USD707 million	2009: USD27 million, 2010-2016: USD144 million, 2017-2027: USD73 million, 2028-2095: USD717 million
Risk free discount rate before adjusting for inflation.	3.348%	3.080%	6.700%	3.080%

At each balance sheet date the directors have assessed the provisions for site restoration and environmental matters and concluded that the provisions and disclosures are adequate.

(c) Provisions for legal claims

In 2006, a provision of USD23 million was established in relation to the settlement with a third party relating to termination of joint operations. In February 2007, the Group signed an agreement with this party to acquire its 50% interest in Hamer Investment Limited and settled all outstanding claims relating to this case.

In 2007, provisions increased by USD14 million representing a fair value estimate of contingent liabilities acquired with SUAL in connection with claims against one of the Group companies to repay certain loans, related interest and other charges of USD81 million in exchange for accepting certain assets the fair value of which may differ substantially from the amount of the loans and related interest and other charges.

At 30 June 2009, several suppliers of the Group have filed claims contesting breaches of contract terms and non-payment of existing obligations. Management reviewed the circumstances and estimated that amount of probable outflow related to these claims should not exceed USD94 million (31 December 2008: USD64 million). The amount of claims, where management assesses outflow as possible approximates USD124 million (31 December 2008: USD137 million). In addition, several suppliers of the Group obtained orders in the U.S. Federal Court to freeze the movement of funds passing to or from the Group's major trader, RTI Limited, through New York banks in support of arbitration which commenced against the Group. At the date of this report the orders outstanding amounted to USD10 million (31 December 2008: USD53 million).

At each balance sheet date the directors have assessed the provisions for litigation and claims and concluded that the provisions and disclosures are adequate.

(d) Tax provisions

In 2006 provisions increased by USD29 million on the acquisition of Eurallumina.

In 2007, the tax provisions increased by USD77 million due to the acquisition of SUAL. The majority of this amount relates to one potential unasserted claim, which has been provided for in full.

During the year ended 31 December 2008 and six months ended 30 June 2009, certain claims from tax authorities in the amount of USD15 million and USD16 million were successfully defended by the Group, resulting in the release of the related provision during the year/period.

At each balance sheet date the directors have assessed the provisions for taxation and concluded that the provisions and disclosures are adequate.

31 Trade and other payables

The Group

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Accounts payable to third parties	**262**	**567**	**798**	**666**
Accounts payable to related parties, including:	**51**	**175**	**201**	**170**
Related parties — companies capable of exerting significant influence	*—*	*113*	*87*	*62*
Related parties — companies under common control	*47*	*48*	*113*	*108*
Related parties — associates	*4*	*14*	*1*	*—*
Advances received	**133**	**278**	**156**	**48**
Advances received from related parties, including:	**—**	**264**	**157**	**176**
Related parties — companies capable of exerting significant influence	*—*	*160*	*55*	*121*
Related parties — companies under common control	*—*	*102*	*98*	*53*
Related parties — associates	*—*	*2*	*4*	*2*
Other payables and accrued liabilities	**95**	**199**	**251**	**244**
Other payable and accrued liabilities related parties, including:	**—**	**3**	**16**	**4**
Related parties — companies capable of exerting significant influence	*—*	*3*	*—*	*—*
Related parties — associates	*—*	*—*	*16*	*4*
Other taxes payable	**17**	**121**	**129**	**106**
Non-trade payables to third parties	**7**	**4**	**3**	**10**
	565	**1,611**	**1,711**	**1,424**

Included in trade and other payables are trade payables with the following ageing analysis as of the balance sheet dates.

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Due within twelve months or on demand	313	742	999	836

The Company

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Interest payable	—	12	75	72
Trade and other payables to related parties	—	89	115	186
	—	101	190	258

32 Financial risk management and fair values

(a) *Fair values*

Management believes that, except as set out in the paragraph below, the fair values of financial assets and liabilities approximate their carrying amounts.

As set out in note 35 the Group has loans and amounts due from/to related parties. It is not practical to estimate the fair value of the amounts due from/to the related parties due to the nature of these instruments.

The methods used to estimate the fair values of financial instruments are as follows:

Trade and other receivables, Cash and cash equivalents, Current loans and borrowings and Trade and other payables: the carrying amounts approximate to fair value because of the short maturity period of the instruments.

Other non-current liabilities: the fair values of other non-current liabilities are based on the present value of the anticipated cash flows and is approximate to their carrying values.

Derivatives: The Group sells products to various third parties at prices that are influenced by changes in London Metal Exchange aluminium prices.

From time to time the Group enters into forward sales and purchase contracts for a portion of its anticipated primary aluminium sales and purchases to reduce the risk of fluctuating prices on these sales. During the years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2008 and 2009 the Group recognised a gain of nil, nil, USD29 million, nil and USD4 million, respectively in respect of such forward sales and purchase contracts.

The Group also uses forwards and swaps to mitigate its exposure to changes in foreign exchange rates. During the years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2008 and 2009 the Group recognised a net gain of USD37 million, USD20 million, loss of USD6 million and USD13 million and nil respectively on settlement of these contracts.

The fair value of derivative contracts outstanding at 31 December 2006, 2007, 2008 and 30 June 2009 was a net asset of USD33 million, USD40 million, USD6 million and USD17 million, respectively.

The Group does not believe its derivative activities pose material credit or market risk to its operations, financial condition or liquidity.

(b) Financial risk management objectives and policies

The Group's principal financial instruments comprise bank loans, overdrafts and trade payables. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various financial assets such as trade receivables and cash and short-term deposits, which arise directly from its operations.

The main risks arising from the Group's financial instruments are cash flow interest rate risk, liquidity risk, foreign currency risk and credit risk. Management reviews and agrees policies for managing each of these risks which are summarised below.

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Board has established a risk management group within its Department of Internal Control, which is responsible for developing and monitoring the Group's risk management policies. The Department reports regularly to the Board of Directors on its activities.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group's Audit Committee is assisted in its oversight role by the Group's Internal Audit function. The Group's Internal Audit function undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

(c) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising returns.

The Group does not apply hedge accounting in order to manage volatility in profit or loss.

(i) Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates (refer to note 28). The Group's policy is to manage its interest cost by monitoring changes in interest rates with respect to its borrowings.

The following table details the interest rate profile of the Group's and the Company's borrowings at the balance sheet dates.

The Group

	31 December 2006		31 December 2007		31 December 2008		30 June 2009	
	Effective interest rate %	USD million	Effective interest rate %	USD million	Effective interest rate %	USD million	Effective interest rate %	USD million
Fixed rate loans and borrowings								
Loans and borrowings	2%-9.50%	655	4.41%-12.50%	712	4.41%-15.5%	6,537	2.17%-15.5%	6,679
Bond outstanding	7.20%	228	7.20%	222	—	—	—	—
Deferred consideration	—	—	—	—	5%-10%	2,700	5%-10%	2,700
		883		934		9,237		9,379
Variable rate loans and borrowings								
Loans and borrowings	3.76%-9.74%	3,569	4.87%-10.82%	7,699	3.12%-9.06%	7,341	1.92%-7.37%	7,011
		3,569		7,699		7,341		7,011
		4,452		**8,633**		**16,578**		**16,390**

The Company

	31 December 2006		31 December 2007		31 December 2008		30 June 2009	
	Effective interest rate %	USD million	Effective interest rate %	USD million	Effective interest rate %	USD million	Effective interest rate %	USD million
Fixed rate loans and borrowings								
Loans and borrowings	—	—	0%	540	0%-8.49%	4,501	0%-8.49%	4,501
Deferred consideration	—	—	—	—	5%-10%	2,700	5%-10%	2,700
	—	—		540		7,201		7,201
Variable rate borrowings								
Bank loans	—	—	5,92%-9.72%	5,871	3.61%-4.91%	6,112	1.92%-3.22%	5,934
		—		5,871		6,112		5,934
		—		**6,411**		**13,313**		**13,135**

The following table demonstrates the sensitivity to cashflow interest rate risk arising from floating rate non-derivative instruments held by the Group at the balance sheet date in respect of a reasonably possible change in interest rates, with all other variables held constant. The impact on the Group's (loss)/profit before taxation and equity and retained profits/accumulated losses is estimated as an annualised input on interest expense or income of such a change in interest rates. The analysis is performed on the same basis for the same basis for all years/periods.

	Increase/decrease in basis points	Effect on profit/(loss) before taxation and equity for the year/period
		USD million
As at 30 June 2009		
Basis percentage points	+5	(6)
Basis percentage points	-5	6
As at 31 December 2008		
Basis percentage points	+45	(33)
Basis percentage points	-45	33
As at 31 December 2007		
Basis percentage points	+35	(29)
Basis percentage points	-35	29
As at 31 December 2006		
Basis percentage points	+25	(14)
Basis percentage points	-25	14

(ii) Foreign currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Group entities, primarily USD, but also the Russian Rouble, Ukrainian Hryvna (UAH) and Euros. The currencies in which these transactions primarily are denominated are RUR, USD and Euros.

Borrowings are primarily denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily USD, but also RUR and Euros. This provides an economic hedge. In addition, the Group enters into foreign currency swaps to mitigate the foreign currency risk where necessary.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

The Group's exposure at the balance sheet date to foreign currency risk arising from recognised gains and liabilities denominated in a currency other than the functional currency of the entity to which they relate is set out in the table below. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are ignored.

At 31 December	USD-denominated vs. RUR functional currency			RUR-denominated vs. USD functional currency			EUR-denominated vs. USD functional currency			Denominated in other currencies vs. USD functional currency		
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million
Non-current assets	—	—	—	136	10	9	—	—	—	—	—	—
Trade and other receivables	—	80	—	223	540	477	9	46	93	39	48	100
Cash and cash equivalents	—	15	35	62	20	173	1	8	7	5	11	4
Loans and borrowings	—	(344)	(807)	—	—	(542)	(63)	(65)	(36)	—	—	—
Provisions	—	—	—	(138)	(175)	(129)	—	(42)	(91)	(10)	(26)	(22)
Non-current liabilities	—	(8)	(5)	(5)	(8)	(7)	—	—	—	—	—	—
Bonds outstanding	—	—	—	(336)	(245)	—	—	—	—	—	—	—
Income taxation	—	—	—	(86)	(11)	(12)	—	(8)	(30)	(30)	(24)	(1)
Trade and other payables	—	(2)	—	(121)	(249)	(391)	(7)	(61)	(87)	(33)	(49)	(39)
Net exposure arising from recognised assets and liabilities	**—**	**(259)**	**(777)**	**(265)**	**(118)**	**(422)**	**(60)**	**(122)**	**(144)**	**(29)**	**(40)**	**42**

At 30 June	USD-denominated vs. RUR functional currency		RUR-denominated vs. USD functional currency		EUR-denominated vs. USD functional currency		Denominated in other currencies vs. USD functional currency	
	2008	2009	2008	2009	2008	2009	2008	2009
	USD million	USD million	USD million	USD million	USD million	USD million	USD million	USD million
	(unaudited)		(unaudited)		(unaudited)		(unaudited)	
Non-current assets	—	—	11	33	—	—	—	—
Trade and other receivables	3	—	634	440	68	95	35	69
Cash and cash equivalents	14	33	35	73	5	12	14	6
Loans and borrowings	(380)	(808)	—	(492)	(22)	(219)	—	—
Provisions	—	—	(72)	(132)	(61)	(58)	(50)	(42)
Non-current liabilities	—	(4)	—	(4)	—	—	—	—
Bonds outstanding	—	—	(256)	—	—	—	—	—
Income taxation	—	—	(138)	(2)	(13)	(34)	(5)	(1)
Trade and other payables	(3)	(6)	(192)	(380)	(79)	(72)	(50)	(45)
Net exposure arising from recognised assets and liabilities	**(366)**	**(785)**	**22**	**(464)**	**(102)**	**(276)**	**(56)**	**(13)**

Foreign currency sensitivity analysis-increase/(decrease) in profit/(loss) before taxation

The following tables indicate the instantaneous change in the Group's profit/(loss) after taxation (and retained profits/(accumulated losses)) that could arise if foreign exchange rates to which the Group has significant exposure at the balance sheet date had changed at that date, assuming all other risk variables remained constant.

	Year ended 31 December					
	Increase/ (decrease) in exchange rates	2006	Increase/ (decrease) in exchange rates	2007	Increase/ (decrease) in exchange rates	2008
		USD million		USD million		USD million
USD vs RUR	5%	(13)	5%	7	(8%)	(29)
USD vs EUR	5%	(3)	5%	(6)	5%	(7)
USD vs other currencies	5%	(1)	5%	(2)	(5%)	(2)
Effect on profit/(loss) before taxation		**(17)**		**(1)**		**(38)**

	Six months ended 30 June			
	Increase/ (decrease) in exchange rates	2008	Increase/ (decrease) in exchange rates	2009
		USD million (unaudited)		USD million
USD vs RUR	(8%)	(31)	(7%)	(23)
USD vs EUR	5%	(5)	5%	(14)
USD vs other currencies	(5%)	3	(5%)	1
Effect on profit/(loss) before taxation		**(33)**		**(36)**

Results of the analysis as presented in the above tables represent an aggregation of the instantaneous effects on the Group entities' profit/(loss) after taxation measured in the respective functional currencies, translated into USD at the exchange rate ruling at the balance sheet date for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the balance sheet date. The analysis excludes differences that would result from the translation of other financial statements of foreign operations into the Group's presentation currency. The analysis is performed on the same basis for all years/periods.

(d) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group policy is to maintain sufficient cash and cash equivalents or have available funding through an adequate amount of committed credit facilities to meet its operating and financial commitments. Following significant financial difficulties resulting from a number of factors described in note 2(d) the Group has restructured its outstanding debt to restore its liquidity profile and secure ongoing operations (see notes 2(d), 28 and 38(b)).

The following tables show the remaining contractual maturities at the balance sheet date of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cashflows (including interest payment computed using contractual rates, or if floating, based on rates current at the balance sheet date) and the earliest the Group can be required to pay, without taking into consideration the changes to the repayment terms as a result of the debt restructuring in December 2009 as further described in note 2(d) and note 38(b).

The Group

	31 December 2006 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to third parties	451	—	—	—	451	451
Trade and other payables to related parties	58	—	—	—	58	58
Loans and borrowings	1,320	570	2,637	602	5,129	4,263
Bonds outstanding	108	228	—	—	336	336
	1,937	**798**	**2,637**	**602**	**5,974**	**5,108**
Financial guarantees issued:						
Maximum amount guaranteed	75	—	—	—	75	—

	31 December 2007 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to third parties	1,124	—	—	—	1,124	1,124
Trade and other payables to related parties	340	—	—	—	340	340
Loans and borrowings	2,234	1,535	4,622	1,400	9,791	8,437
Bonds outstanding	245	—	—	—	245	245
	3,943	**1,535**	**4,622**	**1,400**	**11,500**	**10,146**
Financial guarantees issued:						
Maximum amount guaranteed	260	—	—	—	260	—

	31 December 2008 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to third parties	1,115	—	—	—	1,115	1,115
Trade and other payables to related parties	374	—	—	—	374	374
Loans and borrowings	13,971	—	—	—	13,971	13,971
Deferred consideration	2,782	—	—	—	2,782	2,782
	18,242	**—**	**—**	**—**	**18,242**	**18,242**
Financial guarantees issued:						
Maximum amount guaranteed	260	—	—	—	260	—

	30 June 2009 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to third parties	887	—	—	—	887	887
Trade and other payables to related parties	350	—	—	—	350	350
Loans and borrowings	13,771	—	—	—	13,771	13,771
Deferred consideration	2,867	—	—	—	2,867	2,867
	17,875	**—**	**—**	**—**	**17,875**	**17,875**
Financial guarantees issued:						
Maximum amount guaranteed	260	—	—	—	260	—

The Company

	31 December 2007 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to related parties	89	—	—	—	89	89
Loans and borrowings, including interest payable	1,430	1,619	3,522	890	7,461	6,423
	1,519	**1,619**	**3,522**	**890**	**7,550**	**6,512**

	31 December 2008 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to related parties	115	—	—	—	115	115
Loans and borrowings, including interest payable	10,709	—	—	—	10,709	10,688
Deferred consideration, including interest payable	2,782	—	—	—	2,782	2,782
	13,606	**—**	**—**	**—**	**13,606**	**13,585**

	30 June 2009 Contractual undiscounted cash outflow					
	Within 1 year or on demand	More than 1 year but less than 2 years	More than 2 years but less than 5 years	More than 5 years	TOTAL	Balance sheet carrying amount
	USD million	USD million	USD million	USD million	USD million	USD million
Trade and other payables to related parties	186	—	—	—	186	186
Loans and borrowings, including interest payable	10,525	—	—	—	10,525	10,507
Deferred consideration, including interest payable	2,867	—	—	—	2,867	2,867
	13,578	**—**	**—**	**—**	**13,578**	**13,560**

(e) Credit risk

The Group trades only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. The majority of the Group's third party trade receivables represent balances with the world leading international corporations operating in the metals industry. In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. Goods are normally sold subject to retention of title clauses, so that in the event of non-payment the Group may have a secured claim. The Group does not require collateral in respect of trade and other receivables. The details of impairment of trade and other receivables are disclosed in note 25. The extent of the Group's credit exposure is represented by the aggregate balance of financial assets and financial guarantees given. Information on financial guarantees is disclosed in note 33(f).

At 31 December 2006, 2007, 2008 and 30 June 2009, the Group has certain concentration of credit risk as 0.9%, 2.8%, 1.7% and 8.5% of the total trade and other receivables were due from the Group's largest customer and 13.5%, 23.7%, 9.9% and 9.7% of the total trade and other receivables were due from the Group's five largest customers respectively.

With respect to credit risk arising from guarantees the Group's policy is to provide financial guarantees only to wholly-owned subsidiaries and associates. The details of the guarantees outstanding are disclosed in note 33(f).

There are no significant concentrations of credit risk within the Group.

(f) Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the return on capital, which the Group defines as net operating income divided by total shareholders' equity, excluding non-redeemable preference shares and non-controlling interests. The Board of Directors also monitors the level of dividends to ordinary shareholders.

The Board seeks to maintain a balance between higher returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position.

There were no changes in the Group's approach to capital management during the year.

The Company and its subsidiaries were subject to externally imposed capital requirements in all of the years and periods presented within this report. Please refer to notes 2(d) and 38(b).

33 Commitments

(a) Capital commitments

In March 2000, the Group acquired a 30% interest in the Nikolaev Alumina Plant in an auction. In accordance with the original agreement with the State Property Fund of Ukraine the Group was obliged to construct a primary aluminium plant with the production capacity at a level of 100,000 metric tonnes of primary aluminium. In August 2004, the Group re-negotiated the terms of the agreement with the State Property Fund of Ukraine. In accordance with the revised agreement the Group is obliged to increase the production capacity of Nikolaev Alumina Plant up to 1,600,000 metric tonnes per year. The revised agreement nullifies the requirement stipulated in the original agreement to construct a primary aluminium plant. The amount of the capital commitment cannot be estimated reliably.

In May 2006, the Group signed a Co-operation agreement with OJSC RusHydro and RAO UES. Under this Co-operation agreement OJSC RusHydro and the Group jointly committed to finance the construction and future operating of BoGES and an aluminium plant, the planned main customer of the hydropower station. The parties established two joint companies with 50:50 ownership, into which the Group is committed to invest USD2,303 million by the end of 2012. As at 30 June 2009, the outstanding commitment of the Group for the construction of the aluminum plant was approximately USD1,277 million to be committed by the end of 2011 and the outstanding commitment for the hydropower station was USD448 million to be committed by the end of 2012.

At the end of 2008 due to economic downturn, the parties have postponed the completion date of aluminium plant from the end of 2011 to the end of 2014.

The Group has entered into contracts that result in contractual obligations primarily relating to various construction and capital repair works. The commitments at 31 December 2006, 2007 and 2008 and 30 June 2009 approximated nil, USD905 million, USD690 million and USD615 million respectively. These commitments are due over a number of years.

(b) Purchase commitments

Commitments with third parties for purchases of alumina, bauxite, other raw materials and industrial services in 2009-2016 under the long-term supply agreements are estimated to range from USD4,137 million to USD4,483 million at 30 June 2009 (31 December 2008: USD3,684 million to USD4,408 million; 31 December 2007: USD5,759 million to USD6,646 million; 31 December 2006: USD6,351 million to USD8,641 million) depending on the actual purchase volumes and applicable prices.

Commitments with related parties for purchases of alumina, bauxite and other raw materials in 2009-2010 under supply agreements are estimated from USD86 million to USD95 million at 30 June 2009 (31 December 2008: nil; 31 December 2007: USD17 million; 31 December 2006: nil). These commitments will be settled at market prices on the date of delivery. Commitments with third parties for purchases of transportation services in 2009-2011 under the long-term agreements are estimated to range from USD185 million to USD205 million at 30 June 2009. Commitments with related parties for purchases of transportation services in 2009-2010 under the long-term agreements are estimated to be USD22 million at 30 June 2009.

(c) Sales commitments

Commitments with third parties for sales of alumina, bauxite and other raw materials in 2009-2013 are estimated to range from USD1,225 million to USD1,297 million at 30 June 2009 (31 December 2008: USD2,266 million to USD2,311 million; 31 December 2007: USD2,031 million to USD2,106 million; 31 December 2006: USD291 million to USD314 million) and will be settled at market prices on the date of delivery.

Commitments with related parties for sales of alumina, bauxite and other raw materials in 2009-2010 are estimated to range from USD373 million to USD387 million at 30 June 2009 (31 December 2008: USD150 million; 31 December 2007: USD908 million to USD936 million; 31 December 2006: nil). Commitments with related parties for sales of primary aluminium in 2009-2016 are estimated to range from USD4,386 million to USD5,361 million at 30 June 2009 (31 December 2008: USD4,374 million to USD5,347 million; 31 December 2007: USD7,901 million to USD9,935 million; 31 December 2006: USD6,702 million to USD8,468 million). Commitments with third parties for sales of primary aluminium in 2009-2016 are estimated to range from USD1,708 million to USD4,152 million at 30 June 2009 (31 December 2008: USD2,328 million to USD5,820 million; 31 December 2007: USD4,250 million to USD9,891 million; 31 December 2006: nil). These commitments will be settled at market prices on the date of delivery.

(d) Operating lease commitments

Non-cancellable operating lease rentals are payable as follows:

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Less than one year	12	12	8	12
Between one and five years	37	29	24	23
	49	41	32	35

(e) Social commitments

The Group contributes to the maintenance and upkeep of the local infrastructure and the welfare of its employees, including contributions toward the development and maintenance of housing, hospitals, transport services, recreation and other social needs of the regions of the Russian Federation where the Group's production entities are located. The funding of such assistance is periodically determined by management and is appropriately capitalised or expensed as incurred.

(f) Guarantees

The Group is a guarantor of indebtedness of several non-Group controlling shareholder related entities. At 31 December 2006, 2007 and 2008 and 30 June 2009, the Group, either directly or indirectly, has guaranteed promissory notes payable of USD40 million, USD54 million, USD42 million and USD39 million respectively.

In addition, at 31 December 2006, 2007 and 2008 and 30 June 2009, the Group guaranteed indebtedness of the joint business between RUSAL and OJSC RusHydro related to the Boguchansk project (refer to note 20) in an amount of USD260 million. In addition, at 31 December 2006 the Group guaranteed indebtedness of a joint venture between RUSAL and SUAL related to Sual Komi BV in amount of USD75 million. No amount has been accrued in this Financial Information for the Group's obligation under these guarantees as the projected economic outflows from such guarantees are considered to be immaterial.

34 Contingencies

(a) Taxation

Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activities of the Group may be challenged by the relevant local, regional and federal authorities. Notably recent developments in the Russian environment suggest that the authorities in this country are becoming more active in seeking to enforce, through the Russian court system, interpretations of the tax legislation, in particular in relation to the use of certain commercial trading structures, which may be selective for particular tax payers and different to the authorities' previous interpretations or practices. Different and selective interpretations of tax regulations by various government authorities and inconsistent enforcement create further uncertainties in the taxation environment in the Russian Federation.

Tax declarations, together with related documentation, are subject to review and investigation by a number of authorities, each of which may impose fines, penalties and interest charges. Fiscal periods remain open to review by the authorities for three calendar years preceding the year of review (one year in the case of customs). Under certain circumstances reviews may cover longer periods. In addition, in some instances, new tax regulations effectively have been given retroactive effect. Additional taxes, penalties and interest which may be material to the financial position of the taxpayers may be assessed in the Russian Federation as a result of such reviews.

In addition to the amounts of income tax the Group has provided (refer to note 30), there are certain tax positions taken by the Group where it is reasonably possible (though less than 50% likely) that additional tax may be payable upon examination by the tax authorities or in connection with ongoing disputes with tax authorities. The Group's best estimate of the aggregate maximum of additional amounts that it is reasonably possible may become payable if these tax positions were not sustained at 31 December 2006, 2007 and 2008 and 30 June 2009 is USD83 million, USD349 million, USD588 million and USD516 million respectively.

The Group's major trading companies are incorporated in low tax jurisdictions outside Russia and a significant portion of the Group's profit is realised by these companies. Management believes that these trading companies are not subject to taxes outside their countries of incorporation and that the commercial terms of transactions between them and other Group companies are acceptable to the relevant tax authorities. This Financial Information has been prepared on this basis. However, as these companies are involved in a significant level of cross border activities, there is a risk that Russian or other tax authorities may challenge the treatment of cross-border activities and assess additional tax charges. It is not possible to quantify the financial exposure resulting from this risk.

Estimating additional tax which may become payable is inherently imprecise. It is, therefore, possible that the amount ultimately payable may exceed the Group's best estimate of the maximum reasonably possible liability; however, the Group considers that the likelihood that this will be the case is remote.

(b) Environmental contingencies

The Group and its predecessor entities have operated in the Russian Federation, Ukraine, Jamaica, Guyana, Republic of Guinea and the European Union for many years and certain environmental problems have developed. Governmental authorities are continually considering environmental regulations and their enforcement and the Group periodically evaluates its obligations related thereto. As obligations are determined, they are recognised immediately. The outcome of environmental liabilities under proposed or any future legislation, or as a result of stricter enforcement of existing legislation, cannot reasonably be estimated. Under current levels of enforcement of existing legislation, management believes there are no possible liabilities, which will have a material adverse effect on the financial position or the operating results of the Group. However, the Group anticipates undertaking significant capital projects to improve its future environmental performance and to bring it into full compliance with current legislation.

(c) Legal contingencies

The Group's business activities expose it to a variety of lawsuits and claims which are monitored, assessed and contested on the ongoing basis. Where management believes that a lawsuit or another claim would result in the outflow of the economic benefits for the Group, a best estimate of such outflow is included in provisions in the Financial Information (see note 30(c)).

In May 2009, the Government of the Republic of Guinea filed a claim against one of the Group's subsidiaries for USD1,000 million contesting the terms of privatisation of the Group's subsidiaries in Guinea. Management believes that the claim has no merit and the risk of any cash outflow in connection with this claim is low and, therefore, no provision has been recorded in this regard in the Financial Information.

During the six months ended 30 June 2009 several suppliers of the Group obtained orders in the U.S. Federal Court to freeze the movement of funds passing to or from the Group's major trader, RTI Limited, through New York banks in support of arbitration which was commenced against the Group. At the time of issuance of this Financial Information the orders outstanding amount to USD10 million (31 December 2008: USD53 million, 31 December 2007: nil, 31 December 2006: nil).

On 24 November 2006 a claim was issued on behalf of Mr. Michael Cherney ("Mr. Cherney") against Mr. Oleg Deripaska ("Mr. Deripaska"), the controlling shareholder of En+ Group Limited. Neither the Company nor any of its subsidiaries is a party to this dispute which is entirely between two individuals, Mr. Cherney and Mr. Deripaska. The Company has not had access to non-public information about the case and is not privy to the litigation strategy of either party or the prospects of settlement. The claim relates to the alleged breach or repudiation by Mr. Deripaska of certain alleged contractual commitments to sell for Mr. Cherney's benefit 20% of Russian Aluminium ("RA"), an entity that the claim does not formally identify, but which may be Rusal Limited, now a wholly-owned direct subsidiary of the Company.

Proceedings with respect to the merits of the claim have not yet commenced. At present, there is considerable uncertainty as to the possible scope and the potential outcomes in the case and how, if at all, the Company and/or its subsidiaries and/or its or their respective assets might be affected by any decision against Mr. Deripaska. However since neither the Company nor any of its subsidiaries or investees, nor any direct shareholders in the Company, is currently a party in this case and Mr. Deripaska has informed the Company that he strongly denies and will vigorously resist Mr. Cherney's claim, the Company believes that the risk of outflow of any significant economic benefits or any significant adverse impact on the Group's financial position or results of its operations as a result of this claim is low.

(d) Risks and concentrations

A description of the Group's major products and its principal markets, as well as exposure to foreign currency risks are provided in note 1 "Background" and note 3 "Significant accounting policies". The price at which the Group can sell its products is one of the primary drivers of the Group's revenue. The Group's prices are largely determined by prices set in the international market. The Group's future profitability and overall performance is strongly affected by the price of primary aluminium that is set in the international market.

(e) Insurance

The insurance industry in the Russian Federation is in a developing stage and many forms of insurance protection common in other parts of the world are not yet generally available. The Group does not have full coverage for its plant facilities, business interruption or third party liability in respect of property or environmental damage arising from accidents on Group properties or relating to Group operations. Until the Group obtains adequate insurance coverage, there is a risk that the loss or destruction of certain assets could have a material adverse effect on the Group's operations and financial position.

35 Related party transactions

The Group's parent company is En+ Group Limited which holds 56.76% of the Company's shares with SUAL Partners Limited, Onexim Holdings Limited and Amokenga Holdings Limited holding 18.92%, 14.00% and 10.32% of the Company's shares, respectively.

(a) Transactions with management and close family members

Management remuneration

Key management received the following remuneration, which is included in personnel costs (refer to note 11(a)):

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Salaries and bonuses	28	42	50	38	7
Contributions to State pension fund	1	1	1	1	—
	29	43	51	39	7

(b) Transactions with associates

Sales to associates are disclosed in note 7, trade receivables from associates are disclosed in note 25 and trade payables to associates are disclosed in note 31.

(c) Transactions with other related parties

The Group transacts with other related parties, the majority of which are entities under common control with the Group or under the control of SUAL Partners Limited or its controlling shareholders or Glencore International AG or entities under its control or Onexim Holdings Limited or its controlling shareholders.

Sales to related parties for the year are disclosed in note 7, trade receivables from related parties are disclosed in note 25, cash and cash equivalents are disclosed in note 26, trade and other payables to related parties are disclosed in note 31, commitments to/by related parties are disclosed in note 33 and other transactions with shareholders are disclosed in note 27.

The Group

Purchases of raw materials and services from related parties and interest income and expense are recurring and for the year were as follows:

	Year ended 31 December			Six months ended 30 June	
	2006	2007	2008	2008	2009
	USD million	USD million	USD million	USD million (unaudited)	USD million
Purchases of raw materials — companies under common control	103	611	160	108	28
Purchases of alumina, bauxite and other raw materials — companies capable of exerting significant influence	—	572	1,009	459	104
Purchases of raw materials — associates	44	31	96	95	—
Energy costs — companies under common control	77	229	373	139	147
Energy costs — companies capable of exerting significant influence	—	238	184	108	14
Other costs — companies under common control	—	1	—	—	—
Other costs — companies capable of exerting significant influence	—	1	4	103	—
Other costs — associates	39	105	126	60	58
	263	**1,788**	**1,952**	**1,072**	**351**

The Company

	31 December			30 June
	2006	2007	2008	2009
	USD million	USD million	USD million	USD million
Investments in subsidiaries	—	9,651	13,533	13,506
Loans to group companies	—	3,351	2,957	3,001
Loans and borrowings from related parties	—	540	2,701	2,701
Trade and other payables to related parties	—	89	115	186

Loans given to Group companies are unsecured, current or payable on demand and bear interest at rates ranging from 0% to Libor + 0.9% to 4.5% per annum.

(d) Pricing policies

Prices for transactions with related parties are determined on a case by case basis but are not necessarily at arm's length.

The Group has entered into three categories of related-party transactions: (i) those entered into on an arm's length basis (such as purchases of electricity), (ii) those entered into on non-arm's length terms but as part of a wider deal resulting from arm's length negotiations with unrelated third parties, and (iii) transactions unique to the Group and the counterparty.

36 Particulars of subsidiaries

As at 30 June 2009, the Company has direct and indirect interests in the following subsidiaries, which principally affected the results, assets and liabilities of the Group:

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities	Auditor	Year of audit
Compagnie Des Bauxites De Kindia S.A.	Guinea	29 November 2000	2,000 shares of GNF 25,000 each	100.0%	Bauxite mining	Societe D'AUDIT International Et DE CONSEIL KPMG France	2006 2008 2007
Guinea Investing Company Limited, Ltd.	British Virgin Islands	16 July 1999	600 shares of USD 1 each	100.0%	Bauxite mining and alumina	—	—
OJSC RUSAL Achinsk	Russian Federation	20 April 1994	4,188,531 shares of RUR 1 each	100.0%	Alumina	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
RUSAL Mykolaev Ltd	Ukraine	16 September 2004	1,332,226 shares of UAH 720 each	100.0%	Alumina	ZAO KPMG Ukraine	2006 2007
OJSC RUSAL Boxitogorsk Alumina	Russian Federation	27 October 1992	1,012,350 shares of RUR 1 each	100.0%	Alumina	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
Eurallumina SpA	Italy	21 March 2002	10,000,000 shares of Euro 1.55 each	100.0%	Alumina	PricewaterhouseCoopers KPMG Spa	2006 2007 2008
OJSC RUSAL Bratsk	Russian Federation	26 November 1992	5,505,305 shares of RUR 0.2 each	100.0%	Smelting	ZAO BDO Unicon ZAO KPMG	2006 2007 2008

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities	Auditor	Year of audit
OJSC RUSAL Krasnoyarsk	Russian Federation	16 November 1992	85,478,536 shares of RUR 20 each	100.0%	Smelting	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
OJSC RUSAL Novokuznetsk	Russian Federation	26 June 1996	53,997,170 shares of RUR 0.1 each	100.0%	Smelting	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
OJSC RUSAL Sayanogorsk	Russian Federation	29 July 1999	59,902,661,099 shares of RUR 0.068 each	100.0%	Smelting	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
Khakas Aluminium Smelter Ltd	Russian Federation	23 July 2003	charter fund of RUR10,077,594,515.07	100.0%	Smelting	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
CJSC Alucom-Taishet	Russian Federation	18 September 2000	8,804 shares of RUR 15,000 each	100.0%	Smelting	ZAO BDO Unicon ZAO KPMG	2006 2007
RUSAL Resal Ltd	Russian Federation	15 November 1994	charter fund of RUR27,951,217.29	100.0%	Processing	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
OJSC RUSAL SAYANAL	Russian Federation	29 December 2001	59,902,661,099 shares of RUR 0.006 each	100.0%	Foil	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
CJSC RUSAL ARMENAL	Armenia	17 May 2000	3,140,700 shares of AMD 1,000 each	100.0%	Foil	KPMG Armenia CJSC	2006 2007 2008
RUS-Engineering Ltd	Russian Federation	18 August 2005	charter fund of RUR2,026,200,136.37	100.0%	Repairs and maintenance	ZAO BDO Unicon ZAO KPMG	2006 2007 2008

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities	Auditor	Year of audit
OJSC Russian Aluminium	Russian Federation	25 December 2000	23,124,000,000 shares of RUR 1 each	100.0%	Holding company	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
Investment and management Ltd	Russian Federation	6 December 2002	charter fund of RUR881,939,909.75	100.0%	Management company	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
Rusal Global Management B.V.	Russian Federation	8 March 2001	charter fund of RUR50,000	100.0%	Management company	KPMG Netherlands	2007 2008
OJSC United Company RUSAL Trading House	Russian Federation	15 March 2000	163,660 shares of RUR 100 each	100.0%	Trading	ZAO BDO Unicon ZAO KPMG	2006 2007 2008
Rusal America Corp.	USA	29 March 1999	1,000 shares of USD 0.01 each	100.0%	Trading	KPMG LLP	2006 2007
RS International GmbH	Switzerland	22 May 2007	1 share with nominal value of CHF 20,000	100.0%	Trading	—	—
Rusal Marketing GmbH	Switzerland	22 May 2007	Capital quota of CHF2,000,000	100.0%	Trading	—	—
RTI Limited	Jersey	27 October 2006	2 shares of USD 1 each	100.0%	Trading	ZAO KPMG	2006 2007 2008
Alumina & Bauxite Company Limited	British Virgin Islands	3 March 2004	50,000 shares of USD 1 each	100.0%	Trading	ZAO KPMG	2006 2007 2008

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities	Auditor	Year of audit
CJSC Komi Aluminii	Russian Federation	13 February 2003	1,703,000,000 shares of RUR 1 each	100.0%	Alumina	Ernst & Young ZAO KPMG	2006 2007 2008
OJSC Bauxite-Timana	Russian Federation	29 December 1992	44,500,000 shares of RUR 10 each	80.0%	Bauxite mining	Ernst & Young ZAO KPMG	2006 2007 2008
OJSC Severo-Uralsky Bauxite Mine	Russian Federation	24 October 1996	2,386,254 shares of RUR 275.85 each	100.0%	Bauxite mining	Ernst & Young ZAO KPMG	2006 2007 2008
OJSC SUAL	Russian Federation	26 September 1996	2,542,941,932 shares of RUR 1 each	100.0%	Primary aluminum and alumina production	Ernst & Young ZAO KPMG	2006 2007 2008
OJSC Zaporozhye Aluminum Combine ("ZALK")	Ukraine	30 September 1994	622,729,120 shares of RUR 0.25 each	98.0%	Primary aluminum and alumina production	LLC Audit Company "Kapital" ZAO KPMG Ukraine ZAO BDO Unicon	2006 2007 2008
SUAL-PM LLC	Russian Federation	20 October 1998	charter fund of RUR56,300,959	100.0%	Aluminum powders production	OOO "FBK" ZAO KPMG	2006 2007 2008
CJSC Kremniy	Russian Federation	3 August 1998	320,644 shares of RUR 1,000 each	100.0%	Silicon production	OOO "FBK" ZAO KPMG	2006 2007 2008
SUAL-Kremniy-Ural LLC	Russian Federation	1 March 1999	charter fund of RUR 8,763,098	100.0%	Silicon production	Ernst & Young ZAO KPMG	2006 2007 2008

Name	Place of incorporation and operation	Date of incorporation	Particulars of issued and paid up capital	Attributable equity interest	Principal activities	Auditor	Year of audit
Aluminium Silicon Marketing GmbH	Switzerland	20 November 2000	1 share of CHF2,000,000	100.0%	Trading	—	—
Emergofin BV	The Netherlands	28 February 2000	10,000 shares of Euro 100 each	100.0%	International management	—	—
UC RUSAL Alumina Jamaica Limited (a)	Jamaica	26 April 2001	1,000,000 shares of USD 1 each	100.0%	Alumina	Deloitte & Touche KPMG	2006 2007
UC RUSAL Alumina Jamaica II Limited (b)	Jamaica	16 May 2004	200 shares of USD 1 each	100.0%	Alumina	Deloitte & Touche KPMG	2006 2007
Kubikenborg Aluminium AB	Sweden	26 January 1934	25,000 shares of SEK 1,000 each	100.0%	Smelting	Deloitte & Touche KPMG	2006 2007 2008
Aughinish Alumina Ltd	Ireland	22 September 1977	1,000 shares of Euro 2 each	100.0%	Alumina	Deloitte & Touche KPMG	2006 2007 2008

Trading entities are engaged in the sale of products to and from the production entities.

(a) owns a 93% interest in the Windalco jointly owned mine and refinery.

(b) owns a 65% interest in the Alpart jointly owned mine and refinery.

37 Immediate and ultimate controlling party

At 30 June 2009, the directors consider the immediate parent of the Group to be En+ Group Limited, which is incorporated in Jersey with its registered office at Whiteley Chambers, Don Street, St. Helier, Jersey JE4 9WG. B-Finance Limited, the ultimate parent undertaking of the Group, is incorporated in the British Virgin Islands and is ultimately controlled by a single individual, Mr. Oleg Deripaska. None of the entities produces financial statements available for public use.

38 Events subsequent to the balance sheet date

(a) Share capital and capitalisation issue

On 1 December 2009, the authorised share capital was increased from 11,628 to 13,500 ordinary shares of USD1.00 each and on 7 December 2009, 742 new ordinary shares were allotted to Onexim.

On 24 December 2009, the entire authorised and issued share capital of the Company was subdivided by the division of the nominal share capital of each ordinary share from USD1.00 each to USD0.01 each thereby increasing the number of authorised ordinary shares from 13,500 to 1,350,000 and the number of issued ordinary shares from 12,370 to 1,237,000.

Pursuant to the written resolutions of the Company's shareholders on 26 December 2009, the authorised share capital of the Company will increase from USD13,500, comprising 1,350,000 ordinary shares of USD0.01 each, to USD200,000,000, comprising 20,000,000,000 ordinary shares of USD0.01 each, in conjunction with the Global Offering.

Immediately following the capitalisation issue but excluding the shares to be issued in conjunction with the Global Offering, the number of issued ordinary shares will be 13,500,000,000 shares.

(b) Debt restructuring

In December 2009, the Group completed restructuring negotiations with its lenders in order to establish financial stability and to put the necessary arrangements in place to allow the Group to meet its obligations when they fall due as part of ongoing operations. The restructuring arrangements contain a number of terms and conditions, including conditions subsequent (see below). As part of the debt restructuring, the Group entered into an international override agreement with its international lenders implementing the long-term restructuring of the Group's debt to the international lenders which became effective on 7 December 2009 with all conditions precedent having been satisfied by that date and signed amendments to the bilateral loan agreements with its Russian and Kazakh lenders providing for long-term restructuring of these loans on similar terms, except in the case of the loan agreement with VEB, which was extended until 29 October 2010.

In addition, on 1 December 2009 the Group entered into an amendment agreement in relation to a stock purchase agreement between the Group, Onexim and certain other parties relating to the acquisition of shares in Norilsk Nickel, in order to restructure the outstanding deferred consideration in the amount of USD2,700 million plus accrued interest. In accordance with the amendment agreement, on the date of the effectiveness of the international override agreement part of the Group's obligations were converted into ordinary shares of the Company representing 6% of the Company's share capital post conversion. In addition, USD880 million plus interest will be settled on the terms similar to those agreed under the international override agreement and the accrued interest of USD226 million and a restructuring fee of USD49 million will be paid in cash. As part of this restructuring the original Option Deed was also further amended on the same date to extend the period for completing an initial public offering from 15 November 2009 to 31 December 2013.

The Group's main purpose in designing the debt restructuring was to match its principal repayment and interest payment obligations to its cash generating capacity in an appropriate way. The debt restructuring seeks to do this by: (1) deferring the maturity dates of the Group's principal repayment obligations (and, in the case of Onexim, converting a substantial liability into equity); (2) providing for earlier repayments of principal only out of excess cash flow and the proceeds of asset disposals and equity and subordinated and other debt fund raisings; and (3) providing for the capitalisation of significant portions of the Group's interest payment obligations while its ratio of total net debt to Covenant EBITDA (as defined in the override agreement) is high.

The debt restructuring has the following principal consequences for the Group:

- it extends the maturity of the restructured debt to December 2013, except for the debt to VEB which is extended to 29 October 2010;
- it provides for interest (consisting of cash and payment-in-kind components) to be payable generally on a floating base rate plus a variable margin that is dependent upon leverage;
- it contains an obligation to use excess cash flow and net proceeds raised from asset disposals, equity and subordinated and other debt fund raisings to repay outstanding indebtedness (and to sell shares in Norilsk Nickel in certain circumstances to repay the loan to VEB);
- it significantly limits the Group's ability to incur additional indebtedness;
- it provides for the granting of additional security interests over assets of the Group; and
- it restricts dividends and capital expenditure.

The details of the principal restructuring terms are set out below:

The international and Russian and Kazakh override agreements impose certain obligations on the Group during the override period (four years from override date as defined in the international override agreement) and harmonises the pricing and amortisation schedule of existing facilities. The international override agreement contains standard financial covenants, including the maintenance of specified ratios, such as free cashflow to net finance charges, total net debt to Covenant EBITDA and total net debt to equity (as defined in the international override agreement), tested on a quarterly basis, and a minimum cash balance at USD100 million at the end of each calendar month. The Company paid an upfront fee to the restructuring lenders, including 0.5% of the lenders' exposure in cash and nominal strike warrants ("fee warrants") entitling the restructuring lenders to 1% of the Company's fully diluted share capital as at the date of effectiveness of the international override agreement.

In addition, the Group will be allowed to incur capital expenditure for maintenance within the limits as specified in the international override agreement and will be prohibited from incurring certain capital expenditure for development.

Margin

During the override period, the restructured debt bears interest at the currently applicable base rate (either LIBOR or Euribor depending on the denomination of the debt), plus a margin that varies depending on the ratio of total net debt to Covenant EBITDA (as defined in the international override agreement), and includes cash and payment-in-kind ("PIK") components, as follows:

Ratio of total net debt to Covenant EBITDA	Total margin	Cash pay margin	PIK margin
More than 15	7.00% p.a.	1.75% p.a.	5.25% p.a.
7.5 to 15	5.50% p.a.	1.75% p.a.	3.75% p.a.
4.0 to 7.5	4.50% p.a.	2.25% p.a.	2.25% p.a.
3.0 to 4.0	4.00% p.a.	3.00% p.a.	1.00% p.a.
Less than 3.0	3.50% p.a.	3.50% p.a.	N/A

Until the first interest period commencing after receipt of audited consolidated financial statements of the Group for the year ending 31 December 2009 the applicable total margin is set at 7.00% per annum, including a 1.75% per annum cash pay margin and a 5.25% per annum PIK margin. If a material event of default (breach of conditions subsequent, payment default or failure to meet event of default cumulative amount targets (as defined in the international override agreement)) has occurred, the applicable PIK margin will increase by 2% per annum, but so that the total margin does not exceed 7%.

Repayment

No fixed amortisation schedule applies during the override period, with all debt outstanding becoming due at the end of the override period as referred to above. Following the override period, subject to certain conditions being met, the existing international lenders have agreed to provide new debt facilities on certain agreed terms. The Company has the option to refinance any indebtedness outstanding as at the end of the override period out of any other sources.

However, the net proceeds raised from asset disposals and equity, subordinated and other debt fund raisings (including the proceeds of the Global Offering) and excess cashflow (subject to the Group being allowed to retain a USD400 million cash buffer) must be applied to repay the Group's outstanding indebtedness on a pro rata basis.

Disposal and Equity Injection Undertakings, Debt Repayment Targets

The Company is obliged to dispose of assets and/or raise equity or subordinated debt by the end of the override period sufficient to generate net proceeds of at least USD2.4 billion. Compliance with this obligation is tested only once, at the end of the override period. The Company is also obliged to ensure that debt of the Group (other than debt from VEB and Onexim) is repaid during the override period in the following amounts:

Test dates	Target cumulative amount	Event of default cumulative amount	Percentage of share capital (a)
	USD millions		%
31 December 2010	1,400	750	0.75
30 September 2011	3,000	2,000	0.75
30 September 2012	4,000	3,000	1.25
End of override period	5,000	4,000	1.50

Note (a): percentage of share capital of the Company for which equity compensation warrants shall be issued is calculated on the relevant issue date without taking into account any warrants then in issue.

If the target cumulative amounts (as defined in the international override agreement) are not met and/or on the third and fourth test dates certain leverage ratios are not met, the Company will be obliged to issue zero strike warrants ("equity compensation warrants") to the international lenders representing equity in specified percentages. The issuance of such warrants would have an immediate dilutive effect on shareholders. Failure to meet the event of default cumulative amount targets will result in an event of default.

In certain circumstances, the Group may be obliged to dispose of a number of shares in Norilsk Nickel sufficient to enable it to repay amounts outstanding under the USD4,500 million loan dated 30 October 2008 between the Company and VEB, as described below:

- The Company's obligation to sell will be triggered if, (i) during the period starting on the first date of the international override period and ending three months prior to the end of the override period, (a) the market value of the Company's 25% plus one share stake in Norilsk Nickel (the "NN Stake") exceeds the Trigger Value (as defined below) for 15 consecutive business days; or (b) the Company receives an offer from a third party in respect of a number of shares in Norilsk Nickel sufficient to enable the Company to repay the debt owned to VEB with an implied value of at least the Trigger Value for the entire NN Stake; or (ii) the Company fails to meet an event of default cumulative amount target.

- The sale obligation is suspended until 30 November 2010. If, prior to that date, the Group repays indebtedness outstanding to its international lenders in an amount at least equal to USD1.4 billion using cashflow, proceeds from any new equity raising (including proceeds of the Global Offering), proceeds from any disposal of any shares in Norilsk Nickel (at the Company's sole discretion) and proceeds from any disposal of any non-core assets (meaning assets not involved in the Group's primary business of aluminium or alumina production and any assets of the former SUAL group other than Irkutsk aluminium smelter assets), the sale obligation will be further suspended until 31 March 2012.

- The sale obligation will no longer be suspended if a material event of default occurs under the international override agreement, i.e., a payment default, a default under the debt reduction covenant or failure to meet any conditions subsequent to the international override agreement.

- Whether or not the obligation to sell is still suspended, if, prior to 31 March 2012, the Group repays indebtedness outstanding to its international lenders in an amount at least equal to USD3 billion using cashflow, proceeds from any new equity raising (including proceeds of the Global Offering), proceeds from any disposal of any shares in Norilsk Nickel (at the Company's sole discretion) and proceeds from any disposal of any non-core assets (meaning assets not involved in the Group's primary business of aluminium or alumina production and any assets of the former SUAL group other than Irkutsk aluminium smelter assets), the sale obligation will cease to apply.

- "Trigger Value" means USD7.5 billion plus the aggregate amount of principal (including capitalised interest) which has been repaid to the Group's international lenders prior to commencement of the sale process as a result of any new equity raisings (including proceeds of the Global Offering), operation of the cashflow sweep mechanism and disposal of any non-core assets (including any shares in Norilsk Nickel). The question whether or not the sale obligation has been triggered at any time during any suspension period will be determined by reference to the Trigger Value as at the end of the suspension period.

- If the obligation to sell is triggered as described in the first bullet above, the Company will have up to 12 months following the date when the obligation was triggered, but no less than six months following the end of the suspension period to sell the NN Stake ("first mandatory sale period"). If the suspension period has terminated following an occurrence of a material event of default, the first mandatory sale period will be reduced to three months after the later of (a) the date when the obligation to sell is triggered in accordance with the first bullet above and (b) the end of the suspension period.

- During the first mandatory sale period, a prescribed auction process will be arranged by the mandate banks. There will be no obligation to sell the shares in Norilsk Nickel during the first mandatory sale period if the Company is unable to realise net proceeds at least equal to the Trigger Value (or its pro rata share if less than the entire NN Stake is to be sold).

- If the obligation to sell is triggered as described in the first bullet above or if the sale does not occur during the first mandatory sale period and the sale obligation continues to apply, a second mandatory sale period of three months will commence, during which the price may be any amount resulting in net proceeds sufficient to repay the debt to VEB. During the second mandatory sale period a prescribed auction process will be arranged by the mandate banks. A sale during the second mandatory sale period could result in a material loss for the Group.

- The Company has the option, at any time after the obligation to sell is triggered, of avoiding a sale of the NN Stake by (i) raising equity or subordinated debt sufficient to repay the debt to VEB in full or (ii) repaying the international debt in an amount (the "Required Amount") necessary to ensure that the outstanding amount under the international facilities is reduced (x) to no more than 50% of the amount outstanding as at the start of the override period or (y) if less than the Required Amount, by USD4 billion. In addition, the Company may avoid the obligation to sell the NN Stake to the winner of the auction by selling it instead to a third party on arm's length terms.

To secure its ability to extend the maturity of the VEB loan, should VEB not agree to extend it beyond 29 October 2010, the Group has obtained an irrevocable and unconditional letter from Sberbank which allows the Group to request Sberbank to assume the rights, claims and obligations under the VEB loan, by notifying Sberbank in writing during the period from 1 August to 1 September of each year from 2010 to 2013, inclusive. Following such assumption, the maturity of the existing VEB loan will be extended to 7 December 2013 from the original repayment date. Commission of 2.00% of the outstanding principal amount and any other

outstanding as of the date of the assignment will be payable to Sberbank by the Group as follows: a) USD22.5 million by 31 December 2009, b) ¼ (one quarter) of the commission annually by 31 December of the years 2010, 2011 and 2012, provided that no assignment occurred in such year or any previous year and c) the amount of the commission to be reduced by amounts paid in a) and b) once the assignment has occured. The Company has also entered into an unconditional and irrevocable deed with its current shareholders, pursuant to which the current shareholders guarantee to Sberbank to pay on demand the commission when it falls due should the payment be inconsistent with the obligations of the Group under the international override agreement.

Additional Security

In addition to the security provided under its existing loan facilities, the Group has provided or agreed to provide additional security to the international lenders over the following:

- 25% of the shares in the Bratsk and Krasnoyarsk aluminium smelters plus, on a secondary ranking basis, one share in each of them (following the release of security over debt to VEB, security over one share shall be provided on a primary ranking basis);

- 39% less one share in each of the Novokuznetsk aluminium smelters, SUAL and Achinsk Alumina Refinery and 27.15% in Sayanogorsk aluminium smelter, provided that the percentage of shares subject to pledge in each of those entities will be reduced to 25% plus one share once the Group repays indebtedness outstanding to its international lenders in an amount at least equal to USD1.4 billion using cashflow, proceeds from any new equity raising (including proceeds of the Global Offering) and proceeds from disposal of non-core assets (including shares in Norilsk Nickel);

- receivables under certain offtake, export and tolling contracts and certain intra-group loans subject to certain exceptions;

- 100% of the shares or interest in certain non-Russian operating companies or their holding companies;

- security over fixed assets of the Russian aluminium smelters and Achinsk Alumina Refinery split between international lenders and Russian and Kazakh lenders according to pre-agreed percentages, where the international lenders' share in the aluminium smelters' assets does not exceed 10% of the assets of the relevant entity and fixed assets of Bratsk and Krasnoyarsk aluminium smelters are subject to security in favour of the international lenders only; and

- security over aluminium owned by the Russian aluminium smelters and Group trading companies.

Following the repayment of loan to VEB, the Company will be obliged to provide security over any shares in Norilsk Nickel that the Group then continues to hold in favour of the international lenders (the Company is also obliged to provide security over certain assets it controls following the unwinding of the derivative financial instrument relating to the shares in Norilsk Nickel). In addition, as a condition to the restructuring of the guarantee of the BEMO project loan, the Company has provided security over shares in its intermediary holding companies controlling the Group's interest in the Boguchansk project and has agreed to provide, subject to RusHydro's consent, security over its interest in the BEMO project (including at the operating companies' level).

Dividends

The debt restructuring agreements restrict the Group's ability to pay dividends. In particular, dividends may not be paid until the Group's ratio of net debt to EBITDA is no more than 3 to 1 and its debt (excluding debt owed to VEB and Onexim) has been repaid by at least USD5 billion. Further, there should be no outstanding default under the international override agreement and the Group should be able to demonstrate that it has sufficient cash to pay the proposed dividends. If and when dividends become payable, they are limited to no more than 50% of the Group's annual net profit (excluding earnings, but including dividends, of Norilsk Nickel) in any one year.

Warrants

Warrants will be automatically converted into the Company's shares for no more than their nominal value on the date of the Global Offering. International lenders may require the Company to settle the fee warrants (issued on the first day of the override period) in cash in lieu of shares at a price per share equal to the offering price less commissions, fees and expenses relating to the Global Offering. Otherwise, shares into which warrants are converted following the Global Offering will be subject to a lock-up of 180 days following the date of completion of the Global Offering (or such shorter lock-up period as may apply to the Company's shareholders). International lenders holding fee warrants representing 1% of the Company's share capital have exercised their cash settlement option.

Equity compensation warrants that may be issued by the Company during the override period will be convertible into the Company's ordinary shares either at any further public offering of the Company's shares, upon a change of control or at the end of the override period. Shares for which warrants are exercised may be sold by the relevant lenders subject to the Company's right of first refusal.

Conditions Subsequent

The override agreement also contains a number of certain conditions subsequent, which include the following requirements:

- RTI Limited will need to be recapitalised through certain corporate procedures by 12 February 2010;

- Certain members of the Group will need to accede to the finance documents as guarantors by no later than 31 January 2010;

- The Company shall ensure that a BEMO technical report by an independent advisor (confirming the BEMO project schedule, levels of capital expenditure required to commission the BEMO hydropower station project and for the BEMO hydropower station project to reach first and final stage full capacity and including an updated technical and commercial review of BEMO) is delivered no later than the date falling 60 days after the override date;

- The Company shall ensure that additional securities (which included certain receivables, shares in certain subsidiaries of the Group and fixed assets) are provided within the period stipulated in the international override agreement. In addition, the Company shall deliver a valuation report for fixed assets of the Group which are proposed to be subject to security. The Company should also ensure certain necessary procedures are carried out for the completion of the security granting process;

- No later than 15 December 2009, a draft, and no later than 15 January 2010, a final BEMO valuation report shall be delivered confirming that, as of the override date, on the assumption that commissioning and final completion of the BEMO hydropower station project is achieved, the net present value of the Group's interest in the BEMO project is at least USD260,000,000 (after taking into account such capital expenditure as is expected to be required to complete commissioning and final completion);
- The Company shall provide certain information, including:
  - no later than three months after the override date, any further information required by any finance party in order to enable it to comply with any "know your client" or other money laundering checks;
  - no later than 14 January 2010, a copy of each agreement referred to in the related party contract summary as defined in the international override agreement;
- The Company shall ensure that the amendments and waivers with respect to a project finance facility raised by Alumina and Bauxite Company Limited set out in a waiver letter granted before the override date are effected no later than the date falling two weeks after the date of the international override agreement. At the date of this Financial Information the Company has obtained a consent from the lender in respect of the amendments and waivers referred to above and is currently in process of completing relevant legal documentation;
- By no later than 14 January 2010, each Russian bank shall provide a letter confirming their soft commitment with respect to the refinancing period. At the date of this Financial Information the Company has obtained the letters referred to above from the Russian lenders in the agreed form; and
- Procedures and undertakings by the Company to provide various reports, certificates and other supporting documentation to the lenders during a certain set period after the override date.

Failure to comply with any of the conditions subsequent would result in an event of default. The deadlines for satisfaction of the various conditions subsequent fall between approximately 30 days and approximately 180 days after the date of effectiveness of the international override agreement as defined in the international override agreement.

Events of Default

The events of default include non-payment and compliance with financial covenants, repayment targets and conditions subsequent. In addition the events of default include customary conditions such as government intervention, insolvency/insolvency proceedings, the agreement/compliance with the agreement becoming unlawful, change of business, change of control, misrepresentation, amendments of charter, cross-default and material adverse change. The events of default also include situation when there is an adverse outcomes in litigation involving any member of the Group, except certain currently pending litigation or alleged claims, in excess of USD50 million in aggregate for that member of the Group.

The occurrence of an event of default may lead to acceleration and realisation by the lenders of the security provided, if the required majority of lenders so elects.

39 Accounting estimates and judgements

The Group has identified the following critical accounting policies under which significant judgements, estimates and assumptions are made and where actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods.

Property, plant and equipment − recoverable amount

In accordance with the Group's accounting policy, each asset or cash generating unit is evaluated every reporting period to determine whether there are any indications of impairment. If any such indication exists, a formal estimate of recoverable amount is performed and an impairment loss recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an asset or cash generating group of assets is measured at the higher of fair value less costs to sell and value in use.

Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties and is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal.

Value in use is also generally determined as the present value of the estimated future cash flows, but only those expected to arise from the continued use of the asset in its present form and its eventual disposal. Present values are determined using a risk-adjusted pre-tax discount rate appropriate to the risks inherent in the asset. Future cash flow estimates are based on expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors), reserves (see 'Bauxite reserve estimates' below), operating costs, restoration and rehabilitation costs and future capital expenditure. This policy requires management to make these estimates and assumptions which are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all of the carrying value of the assets may be impaired and the impairment would be charged against the income statement.

Inventories − net realisable value

The Group recognises write-down of inventories based on an assessment of the net realisable value of the inventories. A write-down is applied to the inventories where events or changes in circumstances indicate that the net realisable value is less than cost. The determination of net realisable value requires the use of judgement and estimates. Where the expectation is different from the original estimates, such difference will impact carrying value of the inventories and write-down of inventories charged to the income statement in the periods in which such estimate has been changed.

Goodwill − recoverable amount

In accordance with the Group's accounting policy, goodwill is allocated to the Group's Aluminium segment as it represents the lowest level within the Group at which the goodwill is monitored for internal management purposes and is tested for impairment annually by preparing a formal estimate of the recoverable amount. The recoverable amount is estimated as the value in use of the Aluminium segment.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to goodwill.

Investments in associates and jointly controlled entities — recoverable amount

In accordance with the Group's accounting policy, each investment in an associate or jointly controlled entity is evaluated every reporting period to determine whether there are any indications of impairment after application of the equity method of accounting. If any such

indication exists, a formal estimate of recoverable amount is performed and an impairment loss recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an investment in an associate or jointly controlled entity is measured at the higher of fair value less costs to sell and value in use.

Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment apply to investments in associates or jointly controlled entities. In addition to the considerations described above the Group may also assess the estimated future cash flows expected to arise from dividends to be received from the investment, if such information is available and considered reliable.

Legal proceedings

In the normal course of business the Group may be involved in legal proceedings. Where management considers that it is more likely than not that proceedings will result in the Group compensating third parties a provision is recognised for the best estimate of the amount expected to be paid. Where management considers that it is more likely than not that proceedings will not result in the Group compensating third parties or where, in rare circumstances, it is not considered possible to provide a sufficiently reliable estimate of the amount expected to be paid, no provision is made for any potential liability under the litigation but the circumstances and uncertainties involved are disclosed as contingent liabilities. The assessment of the likely outcome of legal proceedings and the amount of any potential liability involves significant judgement. As law and regulations in many of the countries in which the Group operates are continuing to evolve, particularly in the areas of taxation, sub-soil rights and protection of the environment, uncertainties regarding litigation and regulation are greater than those typically found in countries with more developed legal and regulatory frameworks.

Provision for restoration and rehabilitation

The Group's accounting policies require the recognition of provisions for the restoration and rehabilitation of each site when a legal or constructive obligation exists to dismantle the assets and restore the site. The provision recognised represents management's best estimate of the present value of the future costs required. Significant estimates and assumptions are made in determining the amount of restoration and rehabilitation provisions. Those estimates and assumptions deal with uncertainties such as: changes to the relevant legal and regulatory framework; the magnitude of possible contamination and the timing, extent and costs of required restoration and rehabilitation activity. These uncertainties may result in future actual expenditure differing from the amounts currently provided.

The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs for operating sites are recognised in the balance sheet by adjusting both the restoration and rehabilitation asset and provision. Such changes give rise to a change in future depreciation and interest charges. For closed sites, changes to estimated costs are recognised immediately in the income statement.

Taxation

The Group's accounting policy for taxation requires management's judgement in assessing whether deferred tax assets and certain deferred tax liabilities are recognised on the balance sheet. Deferred tax assets, including those arising from carried forward tax losses, capital losses and temporary differences, are recognised only where it is considered more likely than not that they will be recovered, which is dependent on the generation of sufficient future taxable profits. Deferred tax liabilities arising from temporary differences in investments, caused principally by retained earnings held in foreign tax jurisdictions, are recognised unless repatriation of retained earnings can be controlled and is not expected to occur in the foreseeable future.

Assumptions about the generation of future taxable profits and repatriation of retained earnings depend on management's estimates of future cash flows. These depend on estimates of future production and sales volumes, commodity prices, reserves, operating costs, restoration and rehabilitation costs, capital expenditure, dividends and other capital management transactions. Assumptions are also required about the application of income tax legislation. These estimates and assumptions are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of deferred tax assets and deferred tax liabilities recognised on the balance sheet and the amount of other tax losses and temporary differences not yet recognised. In such circumstances, some or all of the carrying amount of recognised deferred tax assets and liabilities may require adjustment, resulting in a corresponding credit or charge to the income statement.

The Group generally provides for current tax based on positions taken (or expected to be taken) in its tax returns. Where it is more likely than not that upon examination by the tax authorities of the positions taken by the Group additional tax will be payable, the Group provides for its best estimate of the amount expected to be paid (including any interest and/or penalties) as part of the tax charge.

Bauxite reserve estimates

Reserves are estimates of the amount of product that can be economically and legally extracted from the Group's properties. In order to calculate reserves, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates.

The Group determines ore reserves under the Australasian Code for Reporting of Mineral Resources and Ore Reserves September 1999, known as the JORC Code. The JORC Code requires the use of reasonable investment assumptions to calculate reserves.

Estimating the quantity and/or grade of reserves requires the size, shape and depth of ore bodies or fields to be determined by analysing geological data such as drilling samples. This process may require complex and difficult geological judgements and calculations to interpret the data.

Since economic assumptions used to estimate reserves change from period to period, and since additional geological data is generated during the course of operations, estimates of reserves may change from period to period.

Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- Asset carrying values may be affected due to changes in estimated future cash flows.
- Depletion charged in the income statement may change where such charges are determined by the units of production basis, or where the useful economic lives of assets change.
- Decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities.

Exploration and evaluation expenditure

The Group's accounting policy for exploration and evaluation expenditure results in certain items of expenditure being capitalised for an area of interest where it is considered likely to be recoverable by future exploitation or sale or where the activities have not reached a stage which permits a reasonable assessment of the existence of reserves. This policy requires management to make certain estimates and assumptions as to future events and circumstances, in particular whether an economically viable extraction operation can be established. Any such estimates and assumptions may change as new information becomes available. If, after having capitalised the expenditure under the policy, a judgement is made that recovery of the expenditure is unlikely, the relevant capitalised amount will be written off to the income statement.

Development expenditure

Development activities commence after project sanctioning by the appropriate level of management. Judgement is applied by management in determining when a project has reached a stage at which economically recoverable reserves exist such that development may be sanctioned. In exercising this judgement, management is required to make certain estimates and assumptions similar to those described above for capitalised exploration and evaluation expenditure. Any such estimates and assumptions may change as new information becomes available. If, after having commenced the development activity, a judgement is made that a development asset is impaired, the appropriate amount will be written off to the income statement.

Defined benefit pension and other post retirement schemes

For defined benefit pension schemes, the cost of benefits charged to the income statement includes current and past service costs, interest costs on defined benefit obligations and the effect of any curtailments or settlements, net of expected returns on plan assets. An asset or liability is consequently recognised in the balance sheet based on the present value of defined obligations, less any unrecognised past service costs and the fair value of plan assets.

The accounting policy requires management to make judgements as to the nature of benefits provided by each scheme and thereby determine the classification of each scheme. For defined benefit pension schemes, management is required to make annual estimates and assumptions about future returns on classes of scheme assets, future remuneration changes, employee attrition rates, administration costs, changes in benefits, inflation rates, exchange rates, life expectancy and expected remaining periods of service of employees. In making these estimates and assumptions, management considers advice provided by external advisers, such as actuaries. Where actual experience differs to these estimates, actuarial gains and losses are recognised directly in the statement of comprehensive income.

Fair values of identifiable net assets of acquired companies

The Group's policy is to engage an independent appraiser to assist in determining fair values of identifiable net assets of acquired companies for all significant business combinations.

A variety of valuation techniques is applied to appraise the acquired net assets depending on the nature of the assets acquired and available market information. The details of methods used and assumptions made to determine fair values of property, plant and equipment are disclosed in note 17, intangibles assets – in note 18, provisions – in note 30 and financial investments – in note 21. Other assets and liabilities acquired including provisions are evaluated in accordance with the Group's applicable accounting policies disclosed in note 3.

Going concern

As disclosed in note 2(d), the Group was in breach of a number of covenants relating to its debt agreements at 31 December 2008 and subsequently suspended servicing certain loans and borrowings. On 7 December 2009, the Group completed the restructuring negotiation with its lenders. The Directors believe that the restructuring terms will allow the Group to successfully continue its operations and repay its debts as and when they fall due. Accordingly, the Financial Information has been prepared on a going concern basis.

However, the validity of the going concern assumption is premised on future events, the outcome of which is inherently uncertain, being dependent on the Group's ability to generate cash inflows from future operations. If the repayment of the whole of the Group's indebtedness is accelerated, for example, because a relevant member of the Group is unable to comply with or satisfy any of the terms or conditions of, or triggers any event of default under, the debt restructuring or other debt obligations, or if the Company should be unable to extend or refinance or repay the VEB loan as and when it falls due, the Group may cease to continue as a going concern. The Financial Information does not include any adjustments relating to the recoverability and classification of recorded asset amounts or to amounts and classification of liabilities that may be necessary if the Group were unable to continue as a going concern.

40 Possible impact of amendments, new standards and interpretations issued but not yet effective for the Relevant Period

Up to the date of approval of this Financial Information, the IASB has issued the following amendments, new standards and interpretations which are not yet effective in respect of the financial periods included in the Relevant Period, and which have not been adopted in this Financial Information.

The Group is in the process of making an assessment of what the impact of these amendments, new standards and new interpretations is expected to be in the period of initial application but is not yet in a position to state whether these amendments, new standards and interpretations would have a significant impact on the Group's results of operations and financial position.

	Effective for accounting periods beginning on or after
IFRS 3 (Revised), *Business combinations*	1 July 2009
Amendments to IAS 27, *Consolidated and separate financial statements*	1 July 2009
Amendments to IAS 39, *Financial instruments: Recognition and measurement - Eligible hedged items*	1 July 2009
IFRIC 17, *Distributions of non-cash assets to owners*	1 July 2009
Improvements to IFRSs 2009	1 July 2009 or 1 January 2010

D Subsequent Financial Statements

No audited financial statements have been prepared by the Group, the Company or any of the companies comprising the Group in respect of any period subsequent to 30 June 2009.

Yours faithfully

ZAO KPMG
Member of The Chamber of Auditors of Russia
Russia

Yours faithfully

KPMG
Certified Public Accountants
Hong Kong

The following audited financial information regarding MMC Norilsk Nickel for the year ended 31 December 2008 and unaudited financial information for MMC Norilsk Nickel for the six months ended 30 June 2009 has been reproduced from publicly available information published by MMC Norilsk Nickel. The Group believes that the sources of this information are appropriate sources for such information and has taken reasonable care in extracting and reproducing such information. The Group has no reason to believe that such information is false, inaccurate or misleading or that any fact has been omitted that would render such information false, inaccurate or misleading. The information has not been independently verified by the Group, the Joint Sponsors, the Joint Bookrunners, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy. In addition, neither Norilsk Nickel nor its auditors have been involved in the preparation of this prospectus and Norilsk Nickel has not consented to the inclusion of such financial statements.

Deloitte

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REPORT ON THE REVIEW OF INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

To the Shareholders and Board of Directors of Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel":

Introduction

We have reviewed the accompanying interim condensed consolidated financial statements of Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel" and its subsidiaries (the "Group"), which comprise the interim condensed consolidated statement of financial position as at 30 June 2009 and the related interim condensed consolidated statements of income, comprehensive income, changes in equity and cash flow statement for the six months then ended, and a summary of significant accounting policies and other explanatory notes. Management is responsible for the preparation and presentation of these interim condensed consolidated financial statements in accordance with International Accounting Standard 34 *Interim Financial Reporting* ("IAS 34"). Our responsibility is to express a conclusion on these interim condensed consolidated financial statements based on our review.

Scope of review

We conducted our review in accordance with International Standard on Review Engagements 2410 *Review of Interim Financial Information Performed by Independent Auditor of the Entity*. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing, and consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying interim condensed consolidated financial statements are not prepared, in all material respects, in accordance with IAS 34.

Deloitte & Touche

Moscow, Russia
19 October 2009

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MINING AND METALLURGICAL COMPANY NORILSK NICKEL

INTERIM CONDENSED CONSOLIDATED INCOME STATEMENT
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

	Notes	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Revenue			
Metal sales	7.1	3,289	7,210
Other sales	7.2	789	1,101
Total revenue		**4,078**	**8,311**
Cost of metal sales	8.1	(2,004)	(2,677)
Cost of other sales	8.2	(737)	(1,063)
Gross profit		**1,337**	**4,571**
Selling and distribution expenses	9	(55)	(320)
General and administrative expenses	10	(273)	(492)
Impairment of non-financial assets		(10)	(169)
Loss on derivatives classified as held for trading		(7)	(10)
Other net operating expenses	11	(29)	(225)
Operating profit		**963**	**3,355**
Finance costs		(98)	(224)
Income from investments, net		66	414
Foreign exchange (loss)/gain, net		(304)	96
Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition		4	–
Share of (losses)/profits of associates		(15)	28
Profit before tax		**616**	**3,669**
Income tax expense			
Current income tax expense		(185)	(1,008)
Deferred tax benefit		8	21
Total income tax expense		**(177)**	**(987)**
Profit for the period		**439**	**2,682**
Attributable to:			
Shareholders of the parent company		419	2,689
Minority interest		20	(7)
		439	**2,682**
EARNINGS PER SHARE			
Weighted average number of ordinary shares in issue during the period	16	174,362,861	188,916,863
Basic and diluted earnings per share attributable to shareholders of the parent company (US Dollars per share)		2.4	14.2

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

INTERIM CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Profit for the period	**439**	**2,682**
Other comprehensive (loss)/income		
Effect of translation to presentation currency and translation of foreign operations	(466)	740
Increase/(decrease) in fair value of available-for-sale investments and gain on cash flow hedge	271	(226)
Realised gain on disposal of available-for-sale investments and cash flow hedge	(6)	(115)
Other comprehensive (loss)/income for the period, net of tax	**(201)**	**399**
Total comprehensive income for the period, net of tax	**238**	**3,081**
Attributable to:		
Shareholders of the parent company	283	2,982
Minority interest	(45)	99
	238	**3,081**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

INTERIM CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AT 30 JUNE 2009
US Dollars million

	Notes	30 June 2009	31 December 2008
ASSETS			
Non-current assets			
Property, plant and equipment	13	10,286	10,737
Goodwill		1,160	1,235
Intangible assets		205	209
Investments in associates		820	889
Other financial assets	14	795	523
Other taxes receivable		221	79
Deferred tax assets		50	30
		13,537	**13,702**
Current assets			
Inventories		1,846	1,959
Trade and other receivables		833	569
Advances paid and prepaid expenses		135	118
Other financial assets	14	992	1,316
Income tax receivable		429	566
Other taxes receivable		388	521
Cash and cash equivalents	15	2,323	1,995
		6,946	**7,044**
Assets classified as held for sale	12	45	13
		6,991	**7,057**
TOTAL ASSETS		**20,528**	**20,759**
EQUITY AND LIABILITIES			
Capital and reserves			
Share capital	16	8	8
Share premium		1,390	1,390
Treasury shares	16	(2,715)	(2,615)
Other reserves	17	(1,188)	(1,052)
Retained earnings		13,419	13,000
Equity attributable to shareholders of the parent company		**10,914**	**10,731**
Minority interest		1,009	1,054
		11,923	**11,785**
Non-current liabilities			
Loans and borrowings	18	3,209	5,568
Obligations under finance leases		38	41
Employee benefit obligations		18	16
Environmental obligations		583	564
Deferred tax liabilities		697	659
		4,545	**6,848**
Current liabilities			
Loans and borrowings	18	2,914	872
Obligations under finance leases		15	13
Employee benefit obligations		296	393
Trade and other payables		571	601
Advances received		27	39
Income tax payable		11	22
Other taxes payable		164	171
Derivative financial instruments		62	15
		4,060	**2,126**
TOTAL LIABILITIES		**8,605**	**8,974**
TOTAL EQUITY AND LIABILITIES		**20,528**	**20,759**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

INTERIM CONDENSED CONSOLIDATED CASH FLOW STATEMENT
FOR THE SIX MONTHS ENDED 30 JUNE 2009

US Dollars million

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
OPERATING ACTIVITIES		
Profit before tax	**616**	**3,669**
Adjustments for:		
Depreciation and impairment of property, plant and equipment	408	804
Loss on disposal of property, plant and equipment	5	11
Amortisation and impairment of intangible assets	26	18
Impairment of assets classified as held for sale	6	–
Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	(4)	–
Share of post-acquisition losses/(profit) and impairment of investments in associates	15	(28)
Gain on disposal of available-for-sale investments	(4)	(144)
Gain on disposal of associates	(2)	–
Impairment of other financial assets	(2)	14
Change in provision for onerous contracts	(5)	150
Loss on derivatives classified as held for trading	7	10
Finance costs	98	224
Interest income	(59)	(296)
Foreign exchange loss/(gain), net	304	(96)
Dividend income	–	(6)
Other	(2)	–
	1,407	**4,330**
Movements in working capital:		
Inventories	(7)	(128)
Trade and other receivables	(193)	29
Advances paid and prepaid expenses	(44)	(49)
Other tax receivables	(41)	(41)
Employee benefit obligations	(65)	(29)
Trade and other payables	51	(6)
Advances received	(8)	22
Other taxes payable	6	29
Cash generated from operations	**1,106**	**4,157**
Interest paid	(76)	(200)
Income tax paid	(98)	(1,400)
Net cash generated from operating activities	**932**	**2,557**
INVESTING ACTIVITIES		
Acquisition of subsidiaries, net of cash acquired and increase of ownership in subsidiaries	–	(335)
Proceeds from disposal of subsidiaries	1	47
Acquisition and advances paid for acquisition of associates	(42)	(51)
Proceeds from disposal of associates	26	–
Purchase of property, plant and equipment	(470)	(1,207)
Proceeds from disposal of property, plant and equipment	16	17
Purchase of intangible assets	(6)	(20)
Purchase of other financial assets	(21)	(81)
Net change in deposits placed	360	1,495
Proceeds from sale of other financial assets	83	440
Net cash (used in)/generated from investing activities	**(53)**	**305**
FINANCING ACTIVITIES		
Proceeds from borrowings	45	2,543
Repayments of borrowings	(373)	(3,699)
Buy back of issued shares, including income tax paid on transfer of treasury shares from Company to its subsidiaries in the amount of USD 74 million	(100)	–
Dividends paid by the Company	–	(803)
Net cash used in financing activities	**(428)**	**(1,959)**
Net increase in cash and cash equivalents	**451**	**903**
Cash and cash equivalents at beginning of the period	**1,995**	**4,008**
Effect of translation to presentation currency	(123)	27
Cash and cash equivalents at end of the period	**2,323**	**4,938**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE SIX MONTHS ENDED 30 JUNE 2009

US Dollars million

	Attributable to shareholders of the parent company							
	Share capital	Share premium	Treasury shares	Other reserves	Retained earnings	Total	Minority interest	Total
Balance at 1 January 2008	**8**	**1,390**	**–**	**3,765**	**14,340**	**19,503**	**2,318**	**21,821**
Profit for the period	–	–	–	–	2,689	**2,689**	(7)	**2,682**
Other comprehensive income	–	–	–	281	12	**293**	106	**399**
Total comprehensive income	**–**	**–**	**–**	**281**	**2,701**	**2,982**	**99**	**3,081**
Dividends	–	–	–	–	(902)	**(902)**	(5)	**(907)**
Issuance of convertible notes	–	–	–	19	–	**19**	17	**36**
Decrease in minority interest due to increase of ownership in subsidiaries	–	–	–	–	–	**–**	(255)	**(255)**
Balance at 30 June 2008	**8**	**1,390**	**–**	**4,065**	**16,139**	**21,602**	**2,174**	**23,776**
Balance at 1 January 2009	**8**	**1,390**	**(2,615)**	**(1,052)**	**13,000**	**10,731**	**1,054**	**11,785**
Profit for the period	–	–	–	–	419	**419**	20	**439**
Other comprehensive loss	–	–	–	(136)	–	**(136)**	(65)	**(201)**
Total comprehensive (loss)/income	**–**	**–**	**–**	**(136)**	**419**	**283**	**(45)**	**238**
Buy back of issued shares (refer to note 16)	–	–	(26)	–	–	**(26)**	–	**(26)**
Income tax paid on transfer of treasury shares from Company to its subsidiaries (refer to note 16)	–	–	(74)	–	–	**(74)**	–	**(74)**
Increase in minority interest due to decrease of ownership in subsidiaries	–	–	–	–	–	**–**	2	**2**
Decrease in minority interest due to increase of ownership in subsidiaries	–	–	–	–	–	**–**	(2)	**(2)**
Balance at 30 June 2009	**8**	**1,390**	**(2,715)**	**(1,188)**	**13,419**	**10,914**	**1,009**	**11,923**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

1. GENERAL INFORMATION

Organisation and principal business activities

Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel" (the "Company" or "MMC Norilsk Nickel") was incorporated in the Russian Federation on 4 July 1997. The principal activities of the Company and its subsidiaries (the "Group") are exploration, extraction, refining and sale of base and precious metals.

Major production facilities of the Group are located in Taimyr and Kola Peninsulas of the Russian Federation, Australia, Botswana, Finland, South African Republic and in the United States of America. The registered office of the Company is located in Russian Federation, Krasnoyarsk region, Dudinka, postal address: 2, Gvardeyskaya square, Norilsk, Russian Federation.

Foreign currency exchange rates

Exchange rates used in the preparation of the interim condensed consolidated financial statements were as follows:

	30 June 2009	30 June 2008	31 December 2008
Russian Rouble/US Dollar			
Period-end rates	31.29	23.46	29.38
Average for the period ended	33.07	23.94	24.86
Botswana Pula/US Dollar			
Period-end rates	6.71	6.56	7.52
Average for the period ended	7.41	6.42	6.82
Australia Dollar/US Dollar			
Period-end rates	1.24	1.04	1.44
Average for the period ended	1.40	1.08	1.20

2. BASIS OF PREPARATION

The interim condensed consolidated financial statements for the six months ended 30 June 2009 have been prepared in accordance with International Accounting Standard 34 *Interim Financial Reporting* ("IAS 34").

The interim condensed consolidated financial statements do not include all the information and disclosures required in the annual consolidated financial statements and should be read in conjunction with the Group's annual consolidated financial statements for the year ended 31 December 2008, which have been prepared in accordance with International Financial Reporting Standards ("IFRS").

3. SIGNIFICANT ACCOUNTING POLICIES

The accounting policies adopted in the preparation of these interim condensed consolidated financial statements are consistent with those applied in the preparation of the Group's annual consolidated financial statements for the year ended 31 December 2008, except for:

Adoption of new and revised standards and interpretations

In the preparation of these interim condensed consolidated financial statements the Group has adopted all new International Financial Reporting Standards and Interpretations issued by International Financial Reporting Committee ("IFRIC") that are mandatory for adoption in annual periods beginnings on or after 1 January 2009.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

The principal changes arising from adoption of these Standards and Interpretations are as follows:

IFRS 7 *Financial Instruments: Disclosures* (revised and effective 1 January 2009)

This amended Standard requires additional disclosure about fair value measurement and liquidity risk. Fair value measurements are to be disclosed by source of inputs using a three level hierarchy for each class of financial instrument. In addition, a reconciliation between the beginning and ending balance for Level 3 fair value measurements is now required, as well significant transfers between Level 1 and Level 2 fair value measurements. The amendments also clarify the requirements for liquidity risk disclosures. Since the majority of Group's financial assets are allocated to Level 1 and there were no significant transfers between classes during six months ended 30 June 2009, management decided not to present such information in these interim condensed consolidated financial statements. Liquidity risk disclosures are not significantly impacted by these amendments.

IFRS 8 *Operating Segments* (effective 1 January 2009)

This Standard requires disclosure of financial information about Group's operating segments based on management reporting system and replaces the requirements to determine primary (business) and secondary (geographical) reporting segments of the Group. Adoption of this Standard did not have any effect of the financial position or performance of the Group since operating segments determined in accordance with IFRS 8 *Operating Segments* are the same as the business segments previously reported under IAS 14 *Segment Reporting*. Additional information and disclosure about each operating segment is presented in note 6.

IAS 1 *Presentation of Financial Statements* (revised and effective 1 January 2009)

This revised Standard separates owner and non-owner changes in statement of changes in equity. Based on revised Standard the statement of changes in equity includes only details of transactions with owner, with non-owner changes in equity presented as a single line item. In addition, the Standard introduces the statement of comprehensive income and other terminology changes. All information presented in these interim condensed consolidated financial statements is amended, accordingly.

Adoption of revisions and amendments to the following Standards and Interpretations detailed below did not have any impact on the accounting policies, financial position or performance of the Group:

- IFRS 1 *First-time Adoption of International Financial Reporting Standards;*
- IFRS 2 *Share-based Payments;*
- IAS 16 *Property, Plant and Equipment;*
- IAS 19 *Employee Benefits;*
- IAS 20 *Accounting for Government Grants and Disclosures of Government Assistance;*
- IAS 23 *Borrowing Costs;*
- IAS 27 *Consolidated and Separate Financial Statements;*
- IAS 28 *Investments in Associates;*
- IAS 29 *Financial Reporting in Hyperinflationary Economies;*
- IAS 31 *Interest in Joint Ventures;*
- IAS 32 *Financial Instruments: Presentation;*
- IAS 34 *Interim Financial Reporting;*
- IAS 36 *Impairment of Assets;*
- IAS 38 *Intangible Assets;*
- IAS 39 *Financial Instruments: Recognition and Measurement;*
- IAS 40 *Investment Property;*
- IAS 41 *Agriculture;*
- IFRIC 15 *Agreements for the Construction of Real Estate; and*
- IFRIC 16 *Hedges of a Net Investment in a Foreign Operation.*

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF UNCERTAINTY ESTIMATION

The critical accounting judgments, estimates and assumptions made by management of the Group and applied in these interim condensed consolidated financial statements for the six months ended 30 June 2009 are consistent with those applied in the preparation of annual consolidated financial statements of the Group for the year ended 31 December 2008, except for assessment of effective income tax rate used in determination of income tax expense in these interim condensed consolidated financial statements.

Effective income tax rate

Income tax in the interim condensed consolidated financial statements for the six months ended 30 June 2009 is calculated based on the best estimate of income tax rate that would be applicable to the Group's expected annual earnings. The estimated effective income tax rate used for the six months ended 30 June 2009 is 28.7% (for the six months ended 30 June 2008: 26.9%).

5. RECLASSIFICATIONS

Certain comparative information, presented in the Group's interim condensed consolidated financial statements for the six months ended 30 June 2008 and for the year ended 31 December 2008, has been reclassified. Reclassifications were based upon management's decision to enhance disclosure of the Group's financial position and results of operations through separate or combined presentation of certain types of income and expenses, and assets and liabilities on the face of the interim condensed consolidated income statement and interim condensed consolidated statement of financial position.

	After reclassifications	Before reclassifications	Difference
INCOME STATEMENT			
Impairment of non-financial assets	(169)	–	(169)
Loss on derivatives classified as held for trading	(10)	3	(13)
Other net operating expenses	(225)	(407)	182
			–
STATEMENT OF FINANCIAL POSITION			
Non-current assets			
Investments in associates	889	951	(62)
Total non-current assets			**(62)**
Current assets			
Income tax receivables	566	568	(2)
Total current assets			**(2)**
Non-current liabilities			
Employee benefit obligations	16	11	5
Share appreciation rights	–	5	(5)
Deferred tax liabilities	659	723	(64)
Total non-current liabilities			**(64)**
Current liabilities			
Employee benefit obligations	393	386	7
Share appreciation rights	–	7	(7)
Trade and other payables	601	596	5
Dividends payable	–	5	(5)
Total current liabilities			–

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

6. SEGMENTAL INFORMATION

At 30 June 2009, upon adoption of IFRS 8 *Operating segments* the Group's reportable operating segments determined under new standard are the same as the business segments previously reported under IAS 14 *Segment Reporting*. The Group's operating segments are as follows:

- Mining and Metallurgy;
- Energy and Utilities; and
- Other.

The segment *Other* mainly includes entities engaged in research activities, maintenance and repair services. Results of operations of OJSC "Enisey River Shipping Company", OJSC "Arkhangelsk Sea Commercial Port", LLC "Alykel", CJSC "Taimyrskaya Toplivnaya Kompanya" and Transportation Divisions of MMC Norilsk Nickel, which previously were presented as *Transportation and Logistics* business segment, were combined for the presentation of segmental information under new standard with *Other* operations due to their insignificance.

The comparative information for the six months ended 30 June 2008 and for the year ended 31 December 2008 was restated for these changes in these interim condensed consolidated financial statements.

The following tables present revenue, operating profit/(loss) and profit/(loss) for the period and other segmental information regarding the Group's operating segments for the six months ended 30 June 2009 and 2008, respectively.

Six months ended 30 June 2009	**Mining and Metallurgy**	**Energy and Utilities**	**Other**	**Eliminations**	**Total**
Revenue from external customers	3,316	619	143	–	**4,078**
Inter-segment revenue	2	210	448	(660)	**–**
Total revenue	**3,318**	**829**	**591**	**(660)**	**4,078**
Operating profit/(loss)	1,008	66	(111)	–	**963**
Share of losses of associates	(6)	(9)	–	–	**(15)**
Profit/(loss) before income tax	636	104	(124)	–	**616**
Income tax expense	(168)	(8)	(1)	–	**(177)**
Profit/(loss) for the period	**468**	**96**	**(125)**	**–**	**439**
Other segmental information					
Capital expenditures	385	50	40	–	**475**
Depreciation and amortisation	309	87	39	–	**435**
Impairment of non-financial assets	(4)	–	14	–	**10**
Six months ended 30 June 2008					
Revenue from external customers	7,257	857	197	–	**8,311**
Inter-segment revenue	4	252	475	(731)	**–**
Total revenue	**7,261**	**1,109**	**672**	**(731)**	**8,311**
Operating profit/(loss)	3,382	76	(103)	–	**3,355**
Share of profits/(losses) of associates	39	(11)	–	–	**28**
Profit/(loss) before income tax	3,591	185	(107)	–	**3,669**
Income tax expense	(918)	(34)	(35)	–	**(987)**
Profit/(loss) for the period	**2,673**	**151**	**(142)**	**–**	**2,682**
Other segmental information					
Capital expenditures	1,010	130	74	–	**1,214**
Depreciation and amortisation	527	108	23	–	**658**
Impairment of non-financial assets	155	–	14	–	**169**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

6. SEGMENTAL INFORMATION (CONTINUED)

The following tables present assets and liabilities of the Group operating segments at 30 June 2009 and 31 December 2008, respectively.

30 June 2009	Mining and Metallurgy	Energy and Utilities	Other	Eliminations	Total
Investments in associates	293	527	–	–	**820**
Segment assets	11,731	5,903	2,074	–	**19,708**
Inter-segment assets and elimination	2,649	206	1,223	(4,078)	**–**
Total segment assets	**14,673**	**6,636**	**3,297**	**(4,078)**	**20,528**
Segment liabilities	7,958	405	242	–	**8,605**
Inter-segment liabilities and elimination	1,404	21	2,653	(4,078)	**–**
Total segment liabilities	**9,362**	**426**	**2,895**	**(4,078)**	**8,605**
31 December 2008					
Investments in associates	211	678	–	–	**889**
Segment assets	11,606	6,213	2,051	–	**19,870**
Inter-segment assets and elimination	2,544	69	204	(2,817)	**–**
Total segment assets	**14,361**	**6,960**	**2,255**	**(2,817)**	**20,759**
Segment liabilities	8,296	460	218	–	**8,974**
Inter-segment liabilities and elimination	270	138	2,409	(2,817)	**–**
Total segment liabilities	**8,566**	**598**	**2,627**	**(2,817)**	**8,974**

Other segmental information

Intra-segment sales of electricity, heat energy and telecommunication services were made at prices established by the Federal Utility Committee and Federal Tariff Service, the regulatory authorities responsible for establishing and monitoring prices of the Russian utility and telecommunication markets respectively.

Intra-segment sales of construction, transportation, repair and other services were made at prices equivalent to budgeted cost of services, generally determined based on Russian accounting standards, plus a margin varying from 1% to 25%.

Intra-segment loans were given at rates varying from 6.4% to 10.4% for RUR-denominated loans and from 4.6% to 7.2% for USD-denominated loans.

7. REVENUE

7.1. METAL SALES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Nickel	1,647	3,922
Copper	793	1,588
Platinum	415	837
Palladium	373	796
Gold	61	67
Total	**3,289**	**7,210**

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7. REVENUE (CONTINUED)

7.2. OTHER SALES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Energy and utilities	619	857
Other	170	244
Total	**789**	**1,101**

8. COST OF SALES

8.1. COST OF METAL SALES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Cash operating costs		
Labour	569	919
Consumables and spares	483	600
Expenses on acquisition of refined metal, PGM scrap and other semi-products	280	623
Outsourced third party services	254	511
Utilities	83	100
Transportation	77	120
Tax on mining and pollution levies	74	105
Sundry costs	47	53
Less: sales of by-products	(154)	(774)
	1,713	**2,257**
Amortisation and depreciation	344	542
Increase in metal inventories	(53)	(122)
Total	**2,004**	**2,677**

8.2. COST OF OTHER SALES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Consumables and spares	293	456
Labour	163	199
Utilities	126	183
Amortisation and depreciation	69	97
Outsourced third party services	43	63
Taxes other than income tax	18	27
Transportation	16	24
Other	9	14
Total	**737**	**1,063**

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9. SELLING AND DISTRIBUTION EXPENSES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Export custom duties	24	262
Transportation	13	19
Labour	8	20
Other	10	19
Total	**55**	**320**

The Government of the Russian Federation has changed customs tariffs on certain metal exports. The new tariffs are effective from 29 January 2009. As a result, the following export custom tariffs are applicable to certain of the Group's products:

- 2009 – nil (2008: 5%) of the relevant custom value for unalloyed nickel;
- 2009 – nil (2008: 10%) of the relevant custom value for copper cathode and cathode sections; and
- 2009 – 10% (2008: 10%) of the relevant custom value for refined copper and untreated copper alloy.

10. GENERAL AND ADMINISTRATIVE EXPENSES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Labour	119	239
Taxes other than mining and income taxes and pollution levies	45	52
Third party services	39	115
Amortisation and depreciation	17	14
Transportation	8	12
Other	45	60
Total	**273**	**492**

11. OTHER NET OPERATING EXPENSES

	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Donations and maintenance of social sphere	27	38
Change in allowance for doubtful debts	14	11
Loss on disposal of property, plant and equipment	5	11
Change in provision for tax penalties	–	11
Change in provision for onerous contracts	(5)	150
Change in provision for reimbursable value added tax	(6)	1
Other	(6)	3
Total	**29**	**225**

12. ASSETS CLASSIFIED AS HELD FOR SALE

On 28 May 2009, the Board of directors of OJSC "Third Generation Company of the Wholesale Electricity Market" ("OGK-3"), a subsidiary of the Group, made a decision to sell a 35% stake in Plug Power Incorporated ("Plug Power").

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

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12. ASSETS CLASSIFIED AS HELD FOR SALE (CONTINUED)

At 30 June 2009, the Group's investment in Plug Power in the amount of USD 38 million was classified as an asset held for sale and presented separately in the interim condensed consolidated statement of financial position. The cumulative translation reserve of USD 10 million attributable to Plug Power is recognised as part of other comprehensive income of the Group.

At 30 June 2009, construction-in-progress in the amount of USD 7 million (31 December 2008: USD 13 million) attributable to Activox Refinery Project was classified as assets held for sale and presented separately in the interim condensed consolidated statement of financial position.

13. PROPERTY, PLANT AND EQUIPMENT

	Mining assets	Non-mining assets	Capital construction-in-progress	Total
Cost				
At 31 December 2008	**8,428**	**8,126**	**1,517**	**18,071**
Additions	167	–	302	**469**
Transfers	–	360	(360)	**–**
Disposals	(15)	(50)	(2)	**(67)**
Effect of translation to presentation currency	325	(381)	(63)	**(119)**
At 30 June 2009	**8,905**	**8,055**	**1,394**	**18,354**
Accumulated depreciation and impairment				
At 31 December 2008 as previously reported	**(4,516)**	**(2,713)**	**(105)**	**(7,334)**
Reclassifications	86	(90)	4	**–**
At 1 January 2009 after reclassifications	**(4,430)**	**(2,803)**	**(101)**	**(7,334)**
Charge for the period	(143)	(266)	–	**(409)**
Eliminated on disposals	11	35	1	**47**
Impairment	4	–	(8)	**(4)**
Effect of translation to presentation currency	(440)	69	3	**(368)**
At 30 June 2009	**(4,998)**	**(2,965)**	**(105)**	**(8,068)**
Carrying value				
At 31 December 2008	**3,912**	**5,413**	**1,412**	**10,737**
At 30 June 2009	**3,907**	**5,090**	**1,289**	**10,286**

14. OTHER FINANCIAL ASSETS

	30 June 2009	31 December 2008
Non-current		
Available-for-sale investments in securities	591	312
Bank deposits	111	115
Loans issued and other receivables	70	73
Held to maturity investments	23	23
Total non-current	**795**	**523**
Current		
Bank deposits	969	1,273
Available-for-sale investments in securities	22	19
Loans issued and other receivables	1	24
Total current	**992**	**1,316**

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15. CASH AND CASH EQUIVALENTS

		30 June 2009	31 December 2008
Current accounts	- foreign currencies	1,930	1,251
	- RUR	186	281
Bank deposits	- RUR	88	12
	- foreign currencies	58	413
Restricted cash		38	36
Other cash and cash equivalents		23	2
Total		**2,323**	**1,995**

16. SHARE CAPITAL

Authorised, issued and fully paid share capital

	Number of shares	Outstanding balance
Ordinary shares at par value of RUR 1 each	190,627,747	8
Total	**190,627,747**	**8**

Treasury shares

	Number of shares	Outstanding balance
At 31 December 2008	**16,034,449**	**2,615**
January 2009: acquisition of shares	254,855	26
May 2009: income tax paid on transfer of treasury shares from Company to its subsidiaries	–	74
At 30 June 2009	**16,289,304**	**2,715**

Earnings per share

Earnings per share were calculated by dividing net profit attributable to shareholders of the Company for the six months ended 30 June 2009 and 2008 by weighted average number of ordinary shares in issue during the respective periods. During the six months ended 30 June 2009, the weighted average number of ordinary shares in issue was 174,362,861 shares (for the six months ended 30 June 2008: 188,916,863 shares).

Dividends declared and paid

On 30 June 2008, the Company declared final dividends in respect of the year ended 31 December 2007 in the amount of RUR 112 (USD 4.77) per share. The total amount payable was USD 902 million, net of USD 8 million due to Group subsidiaries. The dividends were paid to shareholders on 29 August 2008.

No dividends were declared for the six months ended 30 June 2009.

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17. OTHER RESERVES

	Option premium on convertible notes	Investments revaluation reserve	Hedging reserve	Revaluation surplus	Translation reserve	Total
Balance at 1 January 2008	**–**	**1,264**	**(31)**	**43**	**2,489**	**3,765**
Decrease in fair value of available-for-sale investments and gain on cash flow hedge	–	(229)	3	–	–	**(226)**
Effect of translation to presentation currency and translation of foreign operations	–	–	–	–	636	**636**
Realised gain on disposal of available-for-sale investments and cash flow hedge	–	(119)	2	–	(3)	**(120)**
Other reserves disposed of on disposal of subsidiaries	–	–	–	–	(9)	**(9)**
Total comprehensive (loss)/income	**–**	**(348)**	**5**	**–**	**624**	**281**
Issuance of convertible notes	19	–	–	–	–	**19**
Balance at 30 June 2008	**19**	**916**	**(26)**	**43**	**3,113**	**4,065**
Balance at 1 January 2009	**19**	**(16)**	**(23)**	**43**	**(1,075)**	**(1,052)**
Increase in fair value of available-for-sale investments and gain on cash flow hedge	–	267	4	–	–	**271**
Effect of translation to presentation currency and translation of foreign operations	–	–	–	–	(401)	**(401)**
Realised gain on disposal of available-for-sale investments	–	(6)	–	–	–	**(6)**
Total comprehensive income/(loss)	**–**	**261**	**4**	**–**	**(401)**	**(136)**
Balance at 30 June 2009	**19**	**245**	**(19)**	**43**	**(1,476)**	**(1,188)**

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18. LOANS AND BORROWINGS

		30 June 2009	31 December 2008
Long-term borrowings			
Syndicated bank loans	(i)	2,779	5,096
Other loans and borrowings	(ii)	316	363
Corporate bonds and notes	(iii)	114	109
Total long-term borrowings		**3,209**	**5,568**
Short-term borrowings and short-term portion of long-term debt			
Syndicated bank loans	(i)	2,355	329
Corporate bonds and notes	(iii)	492	500
Other loans and borrowings	(ii)	67	43
Total short-term borrowings and short-term portion of long-term debt		**2,914**	**872**

(i) ***Syndicated bank loans*** – USD-denominated bank loans with maturity dates varying from June 2010 to June 2012. All loans were arranged at floating rates varying from LIBOR + 0.43% to LIBOR + 1.00%.

(ii) ***Other loans and borrowings*** – major part of other loans and borrowings are USD-denominated with maturity varying from December 2013 to January 2019. Other loans and borrowings are arranged at floating rates varying from LIBOR + 0.60% to LIBOR + 2.75%.

(iii) ***Corporate bonds and notes*** – USD-denominated and due in September 2009, July 2020 and March 2028. All bonds and notes are fixed rates varying from 6.40% to 8.57%.

19. RELATED PARTIES TRANSACTIONS AND OUTSTANDING BALANCES

Related parties are considered to include shareholders, affiliates and entities under common ownership and control of the Group's major shareholders and key management personnel. The Company and its subsidiaries, in the ordinary course of their business, enter into various sale, purchase and service transactions with related parties. Transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in these interim condensed consolidated financial statements. Details of transactions between the Group and other related parties are disclosed below.

Transactions with related parties

	Sale of goods and services		Purchase of goods and services	
	For the six months ended 30 June 2009	For the six months ended 30 June 2008	For the six months ended 30 June 2009	For the six months ended 30 June 2008
Entities under common ownership and control of the Group's major shareholders	11	–	37	25
Associates of the Group	2	8	56	41
Total	**13**	**8**	**93**	**66**

During the six months ended 30 June 2009, the Group provided loans to associates in the amount of USD nil (for the six months ended 30 June 2008: USD 4 million).

Interest income received by the Group from entities under common ownership and control of the Group's major shareholders amounted to USD nil and from associates of the Group amounted to USD 1 million for the six months ended 30 June 2009 (for the six months ended 30 June 2008: USD 12 million and USD 2 million, respectively).

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US Dollars million

19. RELATED PARTIES TRANSACTIONS AND OUTSTANDING BALANCES (CONTINUED)

Outstanding balances with related parties

	Accounts receivable, investments and cash		Accounts payable, loans and borrowings received	
	30 June 2009	31 December 2008	30 June 2009	31 December 2008
Entities under common ownership and control of the Group's major shareholders	15	23	5	9
Associates of the Group	45	22	10	21
Total	**60**	**45**	**15**	**30**

At 30 June 2009, the Group recognised impairment provision for loans provided to related parties of the Group in the amount of USD 140 million (31 December 2008: USD 140 million) and for accounts receivable from related parties of the Group in the amount of USD 5 million (31 December 2008: USD 4 million).
All outstanding balances are expected to be settled in cash.

Terms and conditions of transactions with related parties

Sales to and purchase from related parties of electricity, heat energy and natural gas supply were made at prices established by the Federal Utility Committee and Federal Tariff Service, the regulatory authorities responsible for establishing and monitoring prices on the utility and telecommunication markets in the Russian Federation.

Sales of construction, transportation, repair and other services were made at prices calculated at budgeted cost of services, generally determined based on Russian accounting standards, plus a margin varying from 1% to 25%.

Loans were provided to related parties at rates varying from 6.5% to 10.4% for RUR-denominated loans (31 December 2008: 6.5%) and from 5.6% to 6.1% for USD-denominated loans (31 December 2008: from 5.6% to 6.1%).

20. COMMITMENTS AND CONTINGENCIES

Capital commitments

At 30 June 2009, contracted capital commitments amounted to USD 780 million.

Operating lease

The land in the Russian Federation on which the Group's production facilities are located is owned by the state. The Group leases land through operating lease agreements, which expire in various years through 2033. According to the terms of lease agreements rent fees are revised annually by reference to an order issued by the relevant local authorities. The Group entities have a renewal option at the end of lease period and an option to buy land at any time, at a price established by the local authorities.

During the six months ended 30 June 2009, the Group entered into three aircraft lease agreements. The respective lease agreements have an average life of six-years with renewal option at the end of the term. There are no restrictions placed upon the lessee by entering into these agreements.

Future minimum lease payments due under non-cancelable operating lease agreements at 30 June 2009 were as follows:

Due within one year	26
From one to five years	72
Thereafter	42
Total	**140**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2009
US Dollars million

20. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Litigation

At 30 June 2009, unresolved tax litigations amounted to approximately USD 38 million. Management believes that the risk of an unfavorable outcome of the litigation is possible.

In 2007 Federal Service for Supervision of Natural Resource Usage of the Russian Federation ("Federal Service") required the Group to compensate for damage of water resources in the amount of USD 225 million. In 2008 Federal Service has filed a lawsuit against the Group in the amount of USD 139 million. Management believes that the risk of an unfavorable outcome of the litigation is possible.

Taxation contingencies in the Russian Federation

The Russian Federation currently has a number of laws related to various taxes imposed by both federal and regional governmental authorities. Applicable taxes include VAT, corporate income tax, UST, together with others. Tax declarations, together with other legal compliance areas (for example, customs and currency control matters), are subject to review and investigation by a number of authorities, which are enabled by law to impose severe fines, penalties and interest charges. Generally, tax declarations remain open and subject to inspection for a period of three years following the tax year.

While management believes that it has adequately provided for tax liabilities based on its interpretation of current and previous legislation, the risk remains that tax authorities in the Russian Federation could take differing positions with regard to interpretive issues. This uncertainty may expose the Group to additional taxation, fines and penalties.

With regards to matters where practice concerning payment of taxes is unclear, management estimate possible tax exposure at 30 June 2009 to be USD 178 million (31 December 2008: USD 234 million).

21. EVENTS SUBSEQUENT TO THE BALANCE SHEET DATE

Guaranteed notes

During July and August 2009 guaranteed notes in the amount of USD 11 million were bought back by the Group for a cash consideration of USD 11 million. On 30 September 2009, principal of USD 481 million and a coupon of USD 18 million were paid to the guaranteed notes holders.

Deloitte

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INDEPENDENT AUDITORS' REPORT

To shareholders and Board of Directors of Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel":

We have audited the accompanying consolidated financial statements of Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel" and its subsidiaries (the "Group"), which comprise the consolidated balance sheet at 31 December 2008, and the consolidated statements of income, cash flows and changes in equity for the year then ended, and a summary of significant accounting policies and other explanatory notes.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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Opinion

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Group at 31 December 2008, and the results of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards.

Deloitte & Touche

Moscow, Russia
21 May 2009

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED INCOME STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2008
US Dollars million

	Notes	Year ended 31/12/2008	Year ended 31/12/2007
Revenue			
Metal sales	8	11,799	15,909
Other sales	9	2,181	1,210
Total revenue		**13,980**	**17,119**
Cost of metal sales	10	(5,504)	(4,719)
Cost of other sales	16	(2,122)	(1,163)
Gross profit		**6,354**	**11,237**
Selling and distribution expenses	17	(524)	(730)
General and administrative expenses	18	(1,071)	(894)
Impairment of non-financial assets	19	(4,728)	(1,879)
Income on derivatives classified as held for trading	44	44	78
Other net operating expenses	20	(274)	(375)
Operating (loss)/profit		**(199)**	**7,437**
Finance costs	21	(397)	(307)
Income from investments, net	22	274	217
Foreign exchange (loss)/gain, net	23	(397)	146
Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	6	718	166
Share of (losses)/profit of associates	28	(272)	76
(Loss)/profit before tax		**(273)**	**7,735**
Income tax expense	24	(282)	(2,459)
(Loss)/profit for the year		**(555)**	**5,276**
Attributable to:			
Shareholders of the parent company		(449)	5,327
Minority interest		(106)	(51)
		(555)	**5,276**
(LOSS)/EARNINGS PER SHARE			
Weighted average number of ordinary shares in issue during the year		186,106,151	182,362,986
Basic and diluted (loss)/earnings per share attributable to shareholders of the parent company (US Dollars)		(2.4)	29.2

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED BALANCE SHEET
AT 31 DECEMBER 2008
US Dollars million

	Notes	31/12/2008	31/12/2007
ASSETS			
Non-current assets			
Property, plant and equipment	25	10,737	14,981
Goodwill	26	1,235	3,360
Intangible assets	27	209	849
Investments in associates	28	951	879
Other financial assets	29	523	2,982
Other taxes receivable	30	79	38
Deferred tax assets	24	30	89
Pension plans assets	40	—	8
		13,764	**23,186**
Current assets			
Inventories	31	1,959	2,108
Trade and other receivables	32	569	949
Advances paid and prepaid expenses	33	118	183
Other financial assets	29	1,316	4,473
Income tax receivable		568	144
Other taxes receivable	30	521	585
Cash and cash equivalents	34	1,995	4,008
		7,046	**12,450**
Assets classified as held for sale	35	13	60
		7,059	**12,510**
TOTAL ASSETS		**20,823**	**35,696**
EQUITY AND LIABILITIES			
Capital and reserves			
Share capital	36	8	8
Share premium		1,390	1,390
Treasury shares	36	(2,615)	—
Other reserves	37	(1,052)	3,765
Retained earnings		13,000	14,340
Equity attributable to shareholders of the parent company		**10,731**	**19,503**
Minority interest		1,054	2,318
		11,785	**21,821**
Non-current liabilities			
Long-term borrowings	38	5,568	4,101
Obligations under finance leases	39	41	2
Employee benefit obligations	40	11	11
Share appreciation rights	41	5	—
Environmental obligations	42	564	583
Derivative financial instruments	44	—	3
Deferred tax liabilities	24	723	2,741
		6,912	**7,441**
Current liabilities			
Short-term borrowings	38	872	3,971
Obligations under finance leases	39	13	2
Current portion of employee benefit obligations	40	386	378
Share appreciation rights	41	7	—
Trade and other payables	43	596	586
Advances received		39	41
Income tax payable		22	422
Other taxes payable	30	171	197
Derivative financial instruments	44	15	24
Dividends payable		5	804
		2,126	**6,425**
Liabilities associated with assets classified as held for sale	35	—	9
		2,126	**6,434**
TOTAL EQUITY AND LIABILITIES		**20,823**	**35,696**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED CASH FLOW STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2008
US Dollars million

	Year ended 31/12/2008	Year ended 31/12/2007
Operating activities		
(Loss)/profit for the year	**(555)**	**5,276**
Adjustments for:		
Income tax expense	282	2,459
Depreciation and impairment of property, plant and equipment	3,931	1,700
Loss on disposal of property, plant and equipment	26	25
Impairment of goodwill	1,571	1,079
Amortisation and impairment of intangible assets	529	37
Share of post-acquisition losses/(profit) and impairment of investments in associates	272	(4)
Gain on disposal of available-for-sale investments	(118)	—
Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	(718)	(238)
Loss on disposal of subsidiaries	3	18
Gain on disposal of associates	(8)	(6)
Impairment of other financial assets	367	39
Change in provision for onerous contracts	51	—
Income on derivatives classified as held for trading	(44)	(78)
Finance costs	397	307
Interest income	(511)	(247)
Foreign exchange loss/(gain), net	397	(146)
Dividend income	(11)	(25)
Other	(6)	(9)
	5,855	**10,187**
Movements in working capital:		
Inventories	(236)	(166)
Trade and other receivables	620	209
Advances paid and prepaid expenses	42	51
Other taxes receivable	(89)	61
Employee benefit obligations, pension plan assets and share appreciation rights	104	6
Trade and other payables	(82)	(133)
Advances received	5	11
Other taxes payable	6	36
Cash generated from operations	**6,225**	**10,262**
Interest paid	(346)	(256)
Income tax paid	(2,337)	(2,672)
Net cash generated from operating activities	**3,542**	**7,334**
Investing activities		
Acquisition of subsidiaries, net of cash acquired, and increase of ownership in subsidiaries	(371)	(5,824)
Proceeds from disposal of subsidiaries	47	—
Acquisition and establishment of associates	(674)	(3,326)
Proceeds from disposal of associates	8	7
Purchase of property, plant and equipment	(2,360)	(1,140)
Proceeds from sale of property, plant and equipment	88	88
Purchase of intangible assets	(63)	(46)
Purchase of other financial assets	(340)	(1,616)
Net change in deposits placed	2,201	(1,283)
Proceeds from sale of other financial assets	1,922	362
Dividends received	1	25
Net cash generated from/(used in) investing activities	**459**	**(12,753)**
Financing activities		
Proceeds from borrowings	3,723	10,183
Repayments of borrowings	(5,240)	(3,915)
Acquisition of special purpose entities	—	(70)
Buy back of issued shares	(2,615)	—
Proceeds from issuance of ordinary shares from treasury stock, net of direct expenses and attributable income tax	—	1,855
Dividends paid by the Company	(1,670)	(849)
Dividends paid by the Group's subsidiaries to minority shareholders	(2)	(27)
Net cash (used in)/generated from financing activities	**(5,804)**	**7,177**
Net (decrease)/increase in cash and cash equivalents	**(1,803)**	**1,758**
Cash and cash equivalents at beginning of the year	**4,008**	**2,178**
Effect of translation to presentation currency	(210)	80
Cash and cash equivalents of disposal group	—	(8)
Cash and cash equivalents at end of the year	**1,995**	**4,008**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2008

US Dollars million

		Equity attributable to shareholders of the parent company							
	Notes	Share capital	Share premium	Treasury shares	Other reserves	Retained earnings	Total	Minority interest	Total
Balance at 31 December 2006		**8**	**611**	**(999)**	**2,562**	**10,635**	**12,817**	**319**	**13,136**
Increase in fair value of available-for-sale investments		–	–	–	465	–	**465**	–	**465**
Effect of change in classification of available-for-sale investments to investments in associates due to increase of ownership		–	–	–	(183)	–	**(183)**	–	**(183)**
Loss on cash flow hedge		–	–	–	(16)	–	**(16)**	4	**(12)**
Translation of foreign operations		–	–	–	(206)	–	**(206)**	–	**(206)**
Effect of translation to presentation currency		–	–	–	1,201	–	**1,201**	79	**1,280**
Net income recognised directly in equity		–	–	–	**1,261**	–	**1,261**	**83**	**1,344**
Profit for the year		–	–	–	–	5,327	**5,327**	(51)	**5,276**
Impairment of available-for-sale investments		–	–	–	24	–	**24**	–	**24**
Other reserves disposed of on disposal of subsidiaries		–	–	–	(5)	5	–	–	–
Total recognised income and expense		–	–	–	**1,280**	**5,332**	**6,612**	**32**	**6,644**
Dividends	45	–	–	–	–	(1,634)	**(1,634)**	–	**(1,634)**
Issuance of ordinary shares from treasury stock, net of direct expenses and attributable income tax		–	779	999	(77)	77	**1,778**	–	**1,778**
Acquisition of special purpose entities		–	–	–	–	(70)	**(70)**	–	**(70)**
Net decrease in minority interest due to increase of the Group's share in subsidiaries	6	–	–	–	–	–	–	(1,112)	**(1,112)**
Minority interest in subsidiaries acquired during the year	6	–	–	–	–	–	–	3,079	**3,079**
Balance at 31 December 2007		**8**	**1,390**	**–**	**3,765**	**14,340**	**19,503**	**2,318**	**21,821**
Decrease in fair value of available-for-sale investments		–	–	–	(1,499)	–	**(1,499)**	(1)	**(1,500)**
Impact of change in income tax rate in the Russian Federation		–	–	–	(6)	–	**(6)**	–	**(6)**
Gain on cash flow hedge		–	–	–	6	–	**6**	–	**6**
Translation of foreign operations		–	–	–	(204)	–	**(204)**	–	**(204)**
Effect of translation to presentation currency		–	–	–	(3,260)	–	**(3,260)**	(164)	**(3,424)**
Net loss recognised directly in equity		–	–	–	**(4,963)**	–	**(4,963)**	**(165)**	**(5,128)**
Loss for the year		–	–	–	–	(449)	**(449)**	(106)	**(555)**
Realised loss on disposal of cash flow hedge		–	–	–	2	–	**2**	2	**4**
Realised gain on disposal of available-for-sale investments		–	–	–	(104)	2	**(102)**	–	**(102)**
Impairment of available-for-sale investments		–	–	–	232	–	**232**	–	**232**
Impact of change in income tax rate in the Russian Federation		–	–	–	6	–	**6**	–	**6**
Other reserves disposed of on disposal of subsidiaries		–	–	–	(9)	9	–	–	–
Total recognised income and expense		–	–	–	**(4,836)**	**(438)**	**(5,274)**	**(269)**	**(5,543)**
Dividends	45	–	–	–	–	(902)	**(902)**	(5)	**(907)**
Buy back of issued shares		–	–	(2,615)	–	–	**(2,615)**	–	**(2,615)**
Issuance of convertible notes		–	–	–	19	–	**19**	17	**36**
Net decrease in minority interest due to increase of the Group's share in subsidiaries	6	–	–	–	–	–	–	(1,007)	**(1,007)**
Balance at 31 December 2008		**8**	**1,390**	**(2,615)**	**(1,052)**	**13,000**	**10,731**	**1,054**	**11,785**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2008

1. GENERAL INFORMATION

Organisation

Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel" (the "Company" or "MMC Norilsk Nickel") was incorporated in the Russian Federation on 4 July 1997. The principal activities of the Company and its subsidiaries (the "Group") are exploration, extraction, refining and sale of base and precious metals. Further details regarding the nature of the business and structure of the Group are presented in note 53.

Major production facilities of the Group are located in Taimyr and Kola Peninsulas of the Russian Federation, Australia, Botswana, Finland, South African Republic and the United States of America. The registered office of the Company is located in Russian Federation, Krasnoyarsk region, Dudinka, postal address: 2, Gvardeyskaya square, Norilsk, Russian Federation.

Shareholding structure of the Company at 31 December 2008 and 2007 was as follows:

	31/12/2008		31/12/2007	
Shareholders	Number of outstanding shares	% held	Number of outstanding shares	% held
CJSC "ING Bank (Eurasia)" (nominee)	55,918,435	32.03%	82,644,397	43.75%
State corporation "Vnesheconombank" (nominee)	47,656,938	27.30%	–	–
Non-for-Profit Partnership "National Depository Centre"	32,557,422	18.65%	13,843,424	7.33%
OJSC "VTB Bank" (nominee)	15,729,610	9.01%	16,152,948	8.55%
OJSC AKB "Rosbank" (nominee)	–	–	31,999,525	16.94%
CJSC "Depository Clearing Company"	–	–	26,612,447	14.09%
Other, less than 5%	22,730,893	13.01%	17,664,122	9.34%
Total	**174,593,298**	**100.00%**	**188,916,863**	**100.00%**

2. BASIS OF PRESENTATION

Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS").

The entities of the Group maintain their accounting records in accordance with the laws, accounting and reporting regulations of the jurisdictions in which they are incorporated and registered. Accounting principles in certain jurisdictions may differ substantially from those generally accepted under IFRS. Financial statements of such entities have been adjusted to ensure that the consolidated financial statements are presented in accordance with IFRS.

Basis of presentation

The consolidated financial statements of the Group are prepared on the historical cost basis, except for:

- mark-to-market valuation of by-products, in accordance with IAS 2 *Inventories*;
- fair value valuation of liabilities for cash-settled share appreciation rights, in accordance with IFRS 2 *Share Based Payments*; and
- mark-to-market valuation of certain classes of financial instruments, in accordance with IAS 39 *Financial Instruments: Recognition and Measurement.*

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2008

Standards and interpretations effective in the current year

In the current year, the Group has adopted all new and revised International Financial Reporting Standards and interpretations issued by International Financial Reporting Interpretation Committee ("IFRIC") that are mandatory for adoption in the annual periods beginning on or after 1 January 2008. Adoption of these standards and interpretations resulted in amendments to certain accounting policies.

IFRIC 14 *IAS 19 The Limits on a Defined Benefit Assets, Minimum Funding Requirements and their Interactions*

This interpretation provides guidance on how to assess the limit on the amount of surplus in a defined benefit scheme that can be recognised as an asset under IAS 19 *Employee Benefit*. The majority of the Group's benefit schemes have been in deficit and for the remained portion the pension plan assets are insignificant. Accordingly the adoption of this interpretation had no impact on the consolidated financial statements of the Group. However the Group has amended its accounting policy.

Other IFRIC Interpretations

The following interpretations issued by IFRIC were effective for the current period: IFRIC 11 *IFRS 2 Group and Treasury Share Transactions* and IFRIC 12 *Service Concession Arrangements*. The adoption of these interpretations has not led to any changes in the Group's accounting policies or disclosures provided in the consolidated financial statements.

Standards and interpretations in issue but not yet effective

At the date of authorisation of these consolidated financial statements, the following Standards and Interpretations were in issue but not yet effective:

Standards and Interpretations	Effective for annual periods beginning on or after
IAS 1 *Presentation of Financial Statements (amended)*	1 January 2009
IAS 16 *Property, Plant and Equipment (amended)*	1 January 2009
IAS 19 *Employee Benefits (amended)*	1 January 2009
IAS 20 *Government Grants and Disclosure of Government Assistance (amendment)*	1 January 2009
IAS 23 *Borrowing Costs (amended)*	1 January 2009
IAS 27 *Consolidated and Separate Financial Statements (amended)*	1 January 2009
(revised due to revision of IFRS 3)	1 July 2009
IAS 28 *Investments in Associates (amended)*	1 January 2009
(revised due to revision of IFRS 3)	1 July 2009
IAS 29 *Financial Reporting in Hyperinflationary Economies (amended)*	1 January 2009
IAS 31 *Investments in Joint Ventures (amended)*	1 January 2009
(revised due to revision of IFRS 3)	1 July 2009
IAS 32 *Financial Instruments: Presentation (amended)*	1 January 2009
IAS 36 *Impairment of Assets (amended)*	1 January 2009
IAS 38 *Intangible Assets (amended)*	1 January 2009
IAS 39 *Financial Instruments: Recognition and Measurement (amended)*	1 January 2009
IAS 40 *Investment Property (amended)*	1 January 2009
IAS 41 *Agriculture (amended)*	1 January 2009
IFRS 1 *First-time Adoption of International Financial Reporting Standards (amended)*	1 January 2009
IFRS 2 *Share-based Payment (amended)*	1 January 2009
IFRS 3 *Business Combinations (revised on applying the acquisition method)*	1 July 2009
IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations (amended)*	1 July 2009
IFRS 7 *Financial Instruments: Disclosures (amended)*	1 January 2009
IFRS 8 *Operating segments*	1 January 2009
IFRIC 13 *Customer Loyalty Programmes*	1 July 2008
IFRIC 15 *Agreements for the Construction of Real Estate*	1 January 2009
IFRIC 16 *Hedges of a Net Investment in a Foreign Operation*	1 October 2008
IFRIC 17 *Distribution of Non-cash Assets to Owners*	1 July 2009
IFRIC 18 *Transfers of Assets from Customers*	1 July 2009

The management of the Group anticipates that all of the above standards and interpretations will be adopted in the Group's consolidated financial statements for the respective periods. The impact of adoption of those standards and interpretations on the consolidated financial statements of future periods is currently being assessed by management.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2008

3. SIGNIFICANT ACCOUNTING POLICIES

Basis of consolidation

Subsidiaries

The consolidated financial statements incorporate financial statements of the Company and its subsidiaries, from the date that control effectively commenced until the date that control effectively ceased. Control is achieved where the Company has power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

Minority interest in the net assets (excluding goodwill) of consolidated subsidiaries is identified separately from the Group's equity therein. Minority interest includes interest at the date of the original business combination and minority's share of changes in net assets since the date of the combination. Losses applicable to minority in excess of minority's interest in the subsidiary's net assets are allocated against the interest of the Group except to the extent that a minority has a binding obligation and is able to make an additional investment to cover the losses.

All intra-group balances, transactions and any unrealised profits or losses arising from intra-group transactions are eliminated in full on consolidation.

Associates

An associate is an entity over which the Group exercises significant influence, but not control, through participation in financing and operating policy decisions, in which it normally owns between 20% and 50% of the voting equity. Associates are equity accounted for from the date significant influence commenced until the date that significant influence effectively ceased.

Investments in associates are carried at cost, including goodwill, as adjusted for the Group's share of post-acquisition changes in associate's retained earnings and other movements in reserves. The carrying value of investments in associates is reviewed on a regular basis and if any impairment in value has occurred, it is written down in the period in which these circumstances are identified. The results of associates are equity accounted for based on their most recent financial statements.

Losses of associates are recorded in the consolidated financial statements until the investment in such associates is written down to nil value. Thereafter losses are only accounted for to the extent that the Group is committed to provide financial support to such associates.

Profits and losses resulting from transactions with associates are eliminated to the extent of the Group's interest in the relevant associates.

Special purpose entities

Special purpose entities ("SPEs") are those undertakings that are created to satisfy specific business needs of the Group and the Group has the right to the majority of benefits of SPE, or is exposed to risks associated with the activities of SPE. SPEs are consolidated in the same manner as subsidiaries.

Accounting for acquisition

Where an investment in a subsidiary or an associate is made, any excess of the purchase consideration over the fair value of the identifiable assets, including mineral rights, liabilities and contingent liabilities at the date of acquisition is recognised as goodwill. Goodwill in respect of subsidiaries is disclosed separately and goodwill relating to associates is included in the carrying value of the investment in associates. Goodwill is reviewed for impairment at least annually. If impairment has occurred, it is recognised in the consolidated income statement during the period in which the circumstances are identified and is not subsequently reversed.

Where an investment in a subsidiary or an associate is made, any excess of the Group's share in the fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost is recognised in the consolidated income statement immediately.

Where an acquisition is achieved in stages, goodwill is calculated separately for each exchange transaction, based on the cost of each exchange transaction, and the appropriate share of the acquirer's net assets based on net fair values at the time of each exchange transaction. When control is achieved, the acquired net assets are stated at net fair value at the date of acquisition and any adjustment to fair values related to previously held interests is a revaluation, which is accounted for as an adjustment directly in equity.

On acquisition of additional shares of subsidiaries from minority shareholders, any excess of consideration paid over the acquired interest in the carrying value of net assets at the date of increase in ownership is recognised as a goodwill; and any excess of the Group's share in the carrying value of subsidiary net assets over cost of acquisition is recognised in the consolidated income statement.

Impairment of goodwill

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the business combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated as follows: first to reduce the carrying amount of any goodwill allocated to this unit, and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when sale is highly probable within one year from the date of classification and the asset or disposal group is available for immediate sale in its present condition and management has committed to the sale.

Non-current assets and disposal groups classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

Discontinued operations

Discontinued operations are disclosed when a component of the Group either has been disposed of during the reporting period, or is classified as held for sale at the balance sheet date. This condition is regarded as met only when the disposal is highly probable within one year from the date of classification.

Comparative information related to the discontinued operations is amended in the consolidated income statement for the prior period.

Assets and liabilities of a disposal group are presented in the balance sheet separately from other assets and liabilities. Comparative information related to discontinued operations is not amended in the consolidated balance sheet for the prior period.

Functional and presentation currency

The individual financial statements of each Group entity are presented in its functional currency.

The Russian Rouble ("RUR") is the functional currency of the Company and all foreign subsidiaries of the Group, except for the following subsidiaries operating with a significant degree of autonomy:

Subsidiary	Functional currency
Stillwater Mining Company	US Dollar
Norilsk Nickel Harjavalta Oy	US Dollar
Norilsk Nickel Finland Oy	US Dollar
MPI Nickel Limited	Australian Dollar
Norilsk Nickel Cawse Proprietary Limited	Australian Dollar
Tati Nickel Mining Company Proprietary Limited	Botswana Pula

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2008

The presentation currency of the consolidated financial statements of the Group is US Dollar ("USD"). Using USD as a presentation currency is common practice for global mining companies. In addition, USD is a more relevant presentation currency for international users of the consolidated financial statements of the Group.

The translation into presentation currency is made as follows:

- all assets and liabilities, both monetary and non-monetary, are translated at closing exchange rates at the dates of each balance sheet presented;
- income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during the period, in which case exchange rates at the date of transactions are used;
- all equity items are translated at the historical exchange rates;
- all resulting exchange differences are recognised as a separate component in equity; and
- in the consolidated statement of cash flows, cash balances at beginning and end of each period presented are translated at exchange rates at the respective dates. All cash flows are translated at the average exchange rates for the periods presented. Resulting exchange differences are presented as effect of translation to presentation currency.

Foreign currency transactions

Transactions in currencies other than the entity's functional currency (foreign currencies) are recorded at the exchange rates prevailing at the date of transactions. At each balance sheet date monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates prevailing at the balance sheet date. Non-monetary items carried at historical cost are translated at the exchange rate prevailing at the date of transaction. Non-monetary items carried at fair value are translated at the exchange rate prevailing at the date on which the most recent fair value was determined. Exchange differences arising from changes in exchange rates are recognised in the consolidated income statement.

Exchange rates used in the preparation of the consolidated financial statements were as follows:

	2008	2007
Russian Rouble/US Dollar		
31 December	29.38	24.55
Average for the year ended 31 December	24.86	25.58
Botswana Pula/US Dollar		
31 December	7.52	6.14
Average for the year ended 31 December	6.82	6.11
Australian Dollar/US Dollar		
31 December	1.44	1.14
Average for the year ended 31 December	1.20	1.19

Revenue recognition

Metal sales revenue

Revenue from metal sales is recognised when the significant risks and rewards of ownership are transferred to the buyer and represents invoiced value of all joint products shipped to customers, net of value added tax. Revenues from sale of by-products are netted-off against production costs.

Revenue from contracts that are entered into and continue to meet the Group's expected sale requirements designated for that purpose at their inception, and are expected to be settled by physical delivery, are recognised in the consolidated financial statements as and when they are delivered.

Sales of certain metals are provisionally priced so that price is not settled until a predetermined future date based on the market price at that time. Revenue from these transactions is initially recognised at the current market price. Provisionally priced metal sales are marked to market at each reporting date using the forward price for the period equivalent to that outlined in the contract. This mark to market adjustment is recorded in revenue.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2008

Other revenue

Revenue from sale of goods, other than metals, is recognised when significant risks and rewards of ownership are transferred to the buyer in accordance with the shipping terms specified in the sales agreements.

Revenue from service contracts are recognised when the services are rendered and the outcome can be reliably measured.

The Group provides the following principal types of services:

- supply of electricity and heat energy; and
- transportation services.

Dividends and interest income

Dividends from investments are recognised when the Group's right to receive payment has been established.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

Leases

Leases under which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Assets subject to finance leases are capitalised as property, plant and equipment at the lower of fair value or present value of future minimum lease payments at the date of acquisition, with the related lease obligation recognised at the same value. Assets held under finance leases are depreciated over their estimated economic useful lives or over the term of the lease, if shorter. If there is reasonable certainty that the lessee will obtain ownership at the end of the lease term, the period of expected use is useful life of the asset.

Finance lease payments are allocated using the effective interest rate method, between the lease finance cost, which is included in finance costs, and the capital repayment, which reduces the related lease obligation to the lessor.

Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are expensed in the period in which they are incurred.

Finance costs

Finance costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time when the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in the consolidated income statement in the period in which they are incurred.

Government grants

Government grants are recognised when there is reasonable assurance that the grant will be received and all conditions and requirements attaching to the grant will be met.

Government grants related to assets are deducted from the cost of these assets in arriving at their carrying value.

Employee benefits

Remuneration to employees in respect of services rendered during a reporting period is recognised as an expense in that period.

Defined contribution plans

The Group contributes to the following major defined contribution plans:

- Pension Fund of the Russian Federation;
- Corporate pension option program;
- Shared accumulated pension plan; and
- Stillwater Mining Company savings plan.

The only obligation of the Group with respect to these and other defined contribution plans is to make specified contributions in the period in which they arise. These contributions are recognised in the consolidated income statement when employees have rendered services entitling them to the contribution.

Defined benefit plans

The Group operates a number of funded defined benefit plans for its employees. At management's discretion and within the established annual budgets, the Group admits employees, who have met certain criteria, into one of the following retirement benefit plans:

- *Lifelong professional pension plan,* whereby a retired employee receives a monthly allowance equal to 200% of the Russian Federation state pension for the rest of his/her life; or
- *Joint corporate pension plan,* whereby a retired employee receives a monthly allowance equal to 1/150th of the total Starting and Counter capital for the rest of his/her life. Starting capital is determined on an individual basis taking into account seniority, salary level, etc. Counter capital consists of a contribution funded by the Group amounted to 3% of salaries paid to an employee during the period of participation in the plan.

The Group's liability recognised in the consolidated balance sheet in respect of defined benefit plans represent present value of the defined benefit obligation at the balance sheet date less fair value of the plans assets and adjustments for unrecognised actuarial gains or losses and past service costs. The defined benefit obligation is calculated using the projected unit credit method.

Actuarial gains and losses are recognised as income or expense when the cumulative unrecognised actuarial gains or losses for each individual plan exceed 10% of the higher of defined benefit obligation and the fair value of plans assets. The excess of cumulative actuarial gains or losses over 10% of the higher of defined benefit obligation and fair value of plans assets is recognised over the expected average remaining working lives of the employees participating in the plans.

Past service cost is recognised immediately in the consolidated income statement to the extent that the benefits have been vested; the remaining portion is amortised on the straight-line basis over the period until the benefit becomes vested.

Plan assets are not available to the creditors of the Group, nor can they be distributed at the Group's discretion. Fair value of plan assets is generally based on market price information and in case of quoted financial securities from publicly available sources of financial information. The amount of plan assets recognised in the consolidated financial statements is restricted to the sum of any past service costs not yet recognised and the present value of any economic benefits available to the Group in the form of refund from the plan or reductions in the future contributions to the plan.

Share appreciation rights

The cost of cash-settled share appreciation rights is measured initially at fair value at the grant date using the Monte Carlo valuation model and accrued as expense. The fair value of these rights is determined taking into account any market and non-market based vesting conditions attached to the awards. The liability is subsequently remeasured at each reporting date and at settlement date to reflect the amount of anticipated or current awards expected to be vested by management. Any changes in the fair value of the liability are recognised in the consolidated income statement.

Income tax expense

Income tax expense represents the sum of the tax currently payable and deferred tax.

Income tax is recognised as an expense or income in the consolidated income statement, except when it relates to items recognised directly in equity, in which case the tax is also recognised directly in equity, or where they arise from the initial accounting for a business combination.

In case of a business combination, tax effect is taken into account in calculating goodwill or determining the excess of the acquirer's interest in net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities over cost of the business combination.

Current tax

Current tax is based on taxable profit for the year. Taxable profit differs from profit for the year as reported in the consolidated income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax

Deferred tax is recognised on differences between carrying amounts of assets and liabilities in the consolidated balance sheet and the corresponding tax bases used in computation of the taxable profit, and are accounted for using the balance sheet liability method. Deferred tax liabilities are recognised for all taxable temporary differences, and deferred tax assets are recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such assets and liabilities are not recognised if temporary difference arises from goodwill or from initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither taxable profit nor accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Property, plant and equipment

Mineral rights, mineral resources and ore reserves

Mineral rights, mineral resources and ore reserves are recorded as assets when acquired as part of a business combination and are then amortised over the life of mine, which is based on estimated proven and probable ore reserves. Estimated proven and probable ore reserves reflect the economically recoverable quantities which can be legally recovered in the future from known mineral deposits and are determined by independent professional appraisers.

Mining assets

Mining assets are recorded at cost less accumulated amortisation and impairment losses. Mining assets include cost of acquiring and developing mining properties, pre-production expenditure, mine infrastructure, mining and exploration licenses and present value of future decommissioning costs.

Amortisation of mining assets is charged from the date on which a new mine reaches commercial production quantities and is included in the cost of production. Mining assets are amortised on a straight-line basis over the lesser of their economic useful lives or the life of mine, varying from 2 to 49 years.

Mine development costs

Mine development costs are capitalised and transferred to mining property, plant and equipment when a new mine reaches commercial production quantities.

Capitalised mine development costs comprise expenditures directly related to:

- acquiring mining and exploration licenses;
- developing new mining operations;
- defining further mineralisation in existing ore bodies; and
- expanding capacity of a mine.

Mine development costs include interest capitalised during the construction period, when financed by borrowings.

Non-mining assets

Non-mining assets include metallurgical processing plants, buildings, infrastructure, machinery and equipment and other non-mining assets. Non-mining assets are stated at cost less accumulated depreciation and impairment losses.

Plant and equipment that process extracted ore are located near mining operations and amortised on a straight-line basis over the lesser of their economic useful lives or the life of mine. Other non-mining assets are amortised on a straight-line basis over their economic useful lives.

Depreciation is calculated over the following economic useful lives:

• plant, buildings and infrastructure	10 – 50 years
• machinery and equipment	4 – 11 years
• other non-mining assets	5 – 10 years

Capital construction-in-progress

Capital construction-in-progress comprises costs directly related to construction of buildings, processing plant, infrastructure, machinery and equipment. Cost also includes finance charges capitalised during construction period where such costs are financed by borrowings. Depreciation of these assets commences when the assets are put into production.

Intangible assets, excluding goodwill

Intangible assets are recorded at cost less accumulated amortisation and impairment losses. Intangible assets mainly include patents and licenses, long-term favourable contracts and software.

Amortisation is charged on a straight-line basis over the following economic useful lives of these assets:

• Activox technology patent	indefinite useful life
• patents and licenses, except for Activox technology	2 – 10 years
• long-term favourable contracts	7 years
• software	2 – 10 years

Impairment of tangible and intangible assets, excluding goodwill

At each balance sheet date, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less cost to sell and value-in-use. In assessing value-in-use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset, for which the estimates of the future cash flows have not been adjusted. If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement immediately.

Where an impairment loss subsequently reversed, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the original carrying amount that would have been determined had no impairment loss been recognised in prior periods. A reversal of an impairment loss is recognised in the consolidated income statement immediately.

Research and exploration expenditure

Research and exploration expenditure, including geophysical, topographical, geological and similar types of expenditure, is expensed in the period in which it is incurred, unless it is deemed that such expenditure will lead to an economically viable capital project. In this case the expenditure is capitalised and amortised over the life of mine, when a mine reaches commercial production quantities.

Research and exploration expenditure written-off before development and construction starts is not subsequently capitalised, even if a commercial discovery subsequently occurs.

Inventories

Refined metals

Joint products, i.e. nickel, copper, palladium, platinum and gold, are measured at the lower of net cost of production or net realisable value. The net cost of production of joint products is determined as total production cost less net revenue from sales of by-products and valuation of by-product inventories on hand, allocated to each joint product in the ratio of their contribution to relative sales value, divided by the saleable mine output of each joint product.

Production costs include on-mine and concentrating costs, smelting costs, treatment and refining costs, other cash costs and amortisation and depreciation of operating assets.

By-products, i.e. cobalt, ruthenium, rhodium, iridium, silver and other minor metals, are measured at net realisable value, through a mark-to-market valuation.

Work-in-process

Work-in-process is valued at net cost of production based on the percentage of completion method.

Stores and materials

Stores and materials consist of consumable stores and are valued at the weighted average cost less allowance for obsolete and slow-moving items.

Financial assets

Financial assets are recognised when the Group has become a party to the contractual arrangement of the instrument and are initially measured at fair value, plus transaction costs, except for those financial assets classified as at fair value through profit or loss, which are initially measured at fair value.

Financial assets are classified into the following specified categories:

- financial assets at fair value through profit or loss;
- held-to-maturity investments;
- available-for-sale financial assets; and
- loans and receivables.

The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including transaction costs and other premiums or discounts) through the expected life of the financial asset, or, where appropriate, a shorter period.

Income is recognised on an effective interest basis for debt securities other that those financial assets designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss where the financial asset is either held for trading or it is designated as at fair value through profit or loss.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near future; or
- it is a part of an identified portfolio of financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

Financial assets at fair value through profit or loss are stated at fair value, with any resultant gain or loss recognised in the consolidated income statement. The net gain or loss recognised in the consolidated income statement incorporates any dividend or interest earned on the financial asset.

Held-to-maturity investments

Promissory notes and debentures with fixed or determinable payments and fixed maturity dates that the Group has the positive intent and ability to hold to maturity other than loans and receivables are classified as held-to-maturity investments. Held-to-maturity investments are recorded at amortised cost using the effective interest method less any allowance for impairment.

Amortisation of discount or premium on the acquisition of a held-to-maturity investment is recognised in interest income over the term of the investment. Held-to-maturity investments are included in non-current assets, unless they mature within twelve months of the balance sheet date.

Available-for-sale financial assets

Available-for-sale financial assets mainly include investments in listed and unlisted shares.

Listed shares held by the Group that are traded in an active market are stated at their market value. Gains and losses arising from changes in fair value are recognised directly in equity in the investments revaluation reserve with the exception of impairment losses, interest calculated using the effective interest method and foreign exchange gains and losses on monetary assets, which are recognised directly in the consolidated income statement. Where an investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognised in the investment revaluation reserve is included in the consolidated income statement for the period.

Investments in unlisted shares that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are recorded at management's estimate of fair value.

Loans and receivables

Trade receivables, loans, and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as loans and receivables. Loans and receivables are measured at amortised cost using the effective interest method, less any impairment. Interest income is recognised by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

Impairment of financial assets

Financial assets, other than those at fair value through profit or loss, are assessed for indicators of impairment at each balance sheet date. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been impacted.

For unlisted shares classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For certain categories of financial assets, such as trade receivables, assets that are assessed not to be impaired individually are subsequently assessed for impairment on a collective basis.

Objective evidence of impairment for a portfolio of receivables could include the Group's past experience of collecting payments, an increase in the number of delayed payments as well as observable changes in economic conditions that correlate with defaults on receivables.

For financial assets carried at amortised cost, the amount of the impairment is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance for impairment. When a trade receivable is considered uncollectible, it is written off against the allowance. Subsequent recoveries of amounts previously written off are credited against the allowance. Changes in the allowance are recognised in the consolidated income statement.

With the exception of available-for-sale equity instruments, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through the consolidated income statement to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

When a decline in fair value of an available-for-sale investment has been recognised directly in equity and there is objective evidence that investment is impaired, the cumulative loss that had been recognised directly in equity is removed from equity and recognised in the consolidated income statement even though the investment has not been derecognised. Impairment losses previously recognised through consolidated income statement are not reversed. Any increase in fair value subsequent to an impairment loss is recognised directly in equity.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire; or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

Financial liabilities

Financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs and subsequently measured at amortised cost using the effective interest method.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or where appropriate, a shorter period.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire.

Derivative financial instruments

The Group uses derivative financial instruments to manage its exposure to the risk of changes in metal prices. Derivative financial instruments are initially measured at fair value on the contract date, and are remeasured to fair value at subsequent reporting dates. The resulting gain or loss is recognised in the consolidated income statement immediately unless the derivative is designated as a cash flow hedge.

The effective portion of changes in the fair value of derivative financial instruments that are designated as cash flow hedges is recognised directly in equity. The ineffective portion of cash flow hedges is recognised in the consolidated income statement. Amounts deferred in equity are recycled in the consolidated income statement in the periods when the hedged item is recognised in the consolidated income statement. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset or liability.

Hedge accounting is discontinued when the Group revokes the hedging relationship, the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting. Any cumulative gain or loss deferred in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the consolidated income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was deferred in equity is recognised immediately in the consolidated income statement.

Compound financial instruments

The component parts of compound financial instruments issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. At the date of issue, the fair value of the liability component is estimated using the market interest rate for a similar non-convertible instrument. This amount is recorded on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date. The equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently remeasured.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, cash deposits and highly liquid investments with original maturities of three months or less, which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

Provisions

Provisions are recognised when the Group has a legal or constructive obligations as a result of a past event for which it is probable that an outflow of economic benefits will be required to settle the obligations, and the amount of the obligations can be reliably estimated.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Environmental obligations

Environmental obligations include decommissioning and land restoration costs.

Future decommissioning costs, discounted to net present value, are capitalised and the corresponding decommissioning obligations are raised as soon as the constructive obligation to incur such costs arises and the future decommissioning cost can be reliably estimated. Decommissioning assets are depleted over the life of mine. The unwinding of the decommissioning obligations is included in the consolidated income statement as finance costs. Decommissioning obligations are periodically reviewed in light of current laws and regulations, and adjustments are made as necessary.

Provision for land restoration, representing the cost of restoring land damage after the commencement of commercial production, is estimated at net present value of the expenditures expected to settle the obligation. Change in provision and unwinding of discount on land restoration are recognised in the consolidated income statement and included in the cost of production.

Ongoing rehabilitation costs are expensed when incurred.

Segmental information

The Group's primary segment reporting format is business segments. A business segment is a group of assets and operations engaged in providing products or services that are subject to risks and returns that are different to those of other business segments. The Group's primary business segments are:

- mining and metallurgy;
- energy and utilities;
- transport and logistics; and
- other.

The business segment "other" mainly includes entities engaged in research activities, maintenance and repair services and other.

The Group's secondary segment reporting format is geographic segments which are based on the geographic location of the Group's operations. The Group mainly operates in:

- Russian Federation;
- Europe;
- North America;
- Africa;
- Australia; and
- Asia.

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4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCE OF ESTIMATION UNCERTAINTY

Preparation of the consolidated financial statements in accordance with IFRS requires the Group's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. The determination of estimates requires judgments which are based on historical experience, current and expected economic conditions, and all other available information. Actual results could differ from those estimates.

The most significant areas requiring the use of management estimates and assumptions relate to:

- useful economic lives of property, plant and equipment;
- impairment of assets, excluding goodwill;
- impairment of goodwill;
- allowances;
- environmental obligations;
- defined benefit plans;
- share appreciation rights;
- income taxes; and
- contingencies.

Useful economic lives of property, plant and equipment

The Group's mining assets, classified within property, plant and equipment, are amortised on a straight-line basis over the lesser of their economic useful lives or the life of mine. When determining the life of a mine, assumptions that were valid at the time of estimation, may change when new information becomes available.

The factors that could affect the estimation of the life of mine include the following:

- changes in proven and probable ore reserves;
- the grade of mineral reserves varying significantly from time to time;
- differences between actual commodity prices and commodity price assumptions used in the estimation and classification of ore reserves;
- unforeseen operational issues at mine sites; and
- changes in capital, operating, mining, processing and reclamation costs, discount rates and foreign exchange rates could possibly adversely affect the economic viability of ore reserves.

Any of these changes could affect prospective amortisation of mining assets and their carrying value. Useful economic lives of non-mining property, plant and equipment is reviewed by management periodically. The review is based on the current condition of the assets and the estimated period during which they will continue to bring economic benefit to the Group.

Impairment of assets, excluding goodwill

The Group reviews the carrying amounts of its tangible and intangible assets excluding goodwill to determine whether there is any indication that those assets are impaired. In making the assessment for impairment, assets that do not generate independent cash flows are allocated to an appropriate cash-generating unit. Management necessarily applies its judgment in allocating assets that do not generate independent cash flows to appropriate cash-generating units, and also in estimating the timing and value of the underlying cash flows within the value-in-use calculation. Subsequent changes to the cash-generating unit allocation or to the timing of cash flows could impact the carrying value of the respective assets.

Impairment of goodwill

Assessment whether goodwill is impaired requires an estimation of value-in-use of the cash-generating unit to which goodwill is allocated. The value-in-use calculations require management to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount to calculate present value. Details of impairment loss calculation related to mining and non-mining business units of the Group are presented in note 19.

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Allowances

The Group creates allowance for doubtful debts to account for estimated losses resulting from the inability of customers to make the required payments. At 31 December 2008, the allowance for doubtful debts amounted to USD 35 million (2007: USD 52 million). When evaluating the adequacy of an allowance for doubtful debts, management bases its estimate on current overall economic conditions, ageing of the accounts receivable balances, historical write-off experience, customer creditworthiness and changes in payment terms. Changes in the economy, industry or specific customer conditions may require adjustments to the allowance for doubtful debts recorded in the consolidated financial statements.

The Group also creates an allowance for obsolete and slow-moving raw materials and spare parts. At 31 December 2008, the allowance for obsolete and slow-moving items amounted to USD 38 million (2007: USD 25 million). In addition, certain finished goods of the Group are carried at net realisable value. Estimates of net realisable value of inventories are based on the most reliable evidence available at the time the estimates are made. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the balance sheet date to the extent that such events confirm conditions existing at the end of the period.

Environmental obligations

The Group's mining and exploration activities are subject to various environmental laws and regulations. The Group estimates environmental obligations based on management's understanding of the current legal requirements in the various jurisdictions in which it operates, terms of the license agreements and internally generated engineering estimates. Provision is made, based on net present values, for decommissioning and land restoration costs as soon as the obligation arises. Actual costs incurred in future periods could differ materially from the amounts provided. Additionally, future changes to environmental laws and regulations, life of mine estimates and discount rates could affect the carrying amount of this provision.

Defined benefit plans

The most significant assumptions used in estimation of defined benefit plans are the expected rate of return on plan assets, the discount rate, future salary increases, state pensions growth rate and mortality assumptions.

The overall expected rate of return on pension plans assets is calculated based on the expected long-term investment returns for each category of assets.

The present value of the benefits is determined by discounting the estimated future cash outflows using interest rates of high-quality government bonds that have terms to maturity approximating to the terms of the related pension obligations.

Estimation of future salary levels takes into account projected levels of inflation and seniority of personnel.

Share appreciation rights

The most significant assumptions used in estimation of the cost of share appreciation rights are expected prices of the Company's share, HSBC index, risk-free interest rate and expected volume of nickel production by Norilsk Nickel International facilities.

Expected volatility is based on the historical volatility of return on the Company's share and HSBC index.

The risk-free rates used in the valuation model are in line with the US Treasury bonds yield curve at the valuation date.

Expected volume of nickel production is based on 2008-2010 business plan of the Group and management expectations of meeting targeted volumes.

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Income taxes

The Group is subject to income taxes in numerous jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes due to the complexity of legislation. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Deferred tax assets are reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the deferred tax asset to be utilised. The estimation of that probability includes judgments based on the expected performance.

Various factors are considered to assess the probability of the future utilisation of deferred tax assets, including past operating results, operational plans, expiration of tax losses carried forward, and tax planning strategies. If actual results differ from these estimates or if these estimates must be adjusted in future periods, the financial position, results of operations and cash flows may be negatively affected.

Contingencies

By their nature, contingencies will only be resolved when one or more future events occur or fail to occur. The assessment of such contingencies inherently involves the exercise of significant judgment and estimates of the outcome of future events.

5. RECLASSIFICATIONS

Certain comparative information presented in the consolidated financial statements for the year ended 31 December 2007 has been reclassified. Reclassifications were based upon management's decision to enhance disclosure of the Group's financial position and results of operations through separate presentation of certain types of income and expenses, and assets and liabilities on the face of the consolidated income statement and consolidated balance sheet.

The effect of the reclassifications is summarised below:

	After reclassifications	Before reclassifications	Difference
CONSOLIDATED INCOME STATEMENT			
Impairment of non-financial assets	(1,879)	—	(1,879)
Impairment of goodwill	—	(1,079)	1,079
Income on derivatives classified as held for trading	78	72	6
Other net operating expenses	(375)	(1,175)	800
Net income from investments	217	223	(6)
			—
CONSOLIDATED BALANCE SHEET			
Non-current liabilities			
Long-term borrowings	4,101	4,103	(2)
Obligations under finance leases	2	—	2
			—
Current liabilities			
Short-term borrowings	3,971	3,973	(2)
Obligations under finance leases	2	—	2
			—

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6. BUSINESS COMBINATIONS

Acquisition of controlling interest in subsidiaries

Subsidiaries acquired	Principal activity	Date of acquisition	Ownership, %	Cost of acquisition
For the year ended 31/12/2008				
Malga Limited	Investment holding	8 September 2008	100.0	19
				19
For the year ended 31/12/2007				
OMG Harjavalta Nickel Oy and OMG Cawse Proprietary Limited	Mining and metallurgy	1 March 2007	100.0	356
LionOre Mining International Limited	Mining and metallurgy	28 June 2007	90.7	5,252
OJSC "Third Generation Company of the Wholesale Electricity Market"	Electricity production and distribution	7 August 2007	54.1	612
LLC "Geokomp"	Drilling services	28 August 2007	100.0	1
LLC "Pervaya Milya"	Telecommunication	16 November 2007	75.0	2
LLC "Direktsiya Proekta Metally Zabaikalya"	Construction	27 December 2007	100.0	—
				6,223

Acquisitions of controlling interest in subsidiaries during 2008

Malga Limited

On 8 September 2008, the Group acquired 100% of the issued shares of Malga Limited ("Malga") for a cash consideration of USD 19 million. Malga is an investment holding company, owning 100% interest in LLC "SGM".

The initial accounting for acquisition of Malga has been made using provisional values at 8 September 2008, as follows:

	Provisional value
ASSETS	
Property, plant and equipment	24
Trade and other receivables	1
	25
LIABILITIES	
Borrowings	2
Deferred tax liabilities	4
	6
Group's share of net assets acquired	**19**
Net cash outflow arising on acquisition	
Consideration paid in cash	(19)
Net cash outflow on acquisition	**(19)**

At the date of acquisition, Malga did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets and liabilities in accordance with IFRS immediately before the acquisition, and this information is not presented in the Group's consolidated financial statements.

Malga contributed USD nil of revenue, loss before tax and loss from the date of acquisition to 31 December 2008.

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6. BUSINESS COMBINATIONS (CONTINUED)

Increase of ownership in subsidiaries during 2008

OJSC "Arkhangelsk Sea Commercial Port"

On 19 March 2008, the Group acquired an additional 19.7% interest in OJSC "Arkhangelsk Sea Commercial Port" ("ASCP") for a cash consideration of USD 3 million, increasing its ownership in ASCP to 72.8%. The carrying value of ASCP net assets at the date of increase of ownership was USD 11 million. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest of USD 3 million.

OJSC "Third Generation Company of the Wholesale Electricity market"

During the period from 15 January to 14 February 2008, OJSC "Third Generation Company of the Wholesale Electricity Market" ("OGK-3"), a subsidiary of the Group, acquired 2,010 million of its own shares for a cash consideration of USD 332 million. As a result of this transaction, the effective ownership of the Group in OGK-3 increased to 68.0%. The carrying value of the OGK-3 net assets at the dates of increase of ownership varied from USD 4,704 million to USD 5,092 million. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest of USD 252 million and an increase in goodwill in the amount of USD 80 million.

On 1 July 2008, as a part of reorganisation of RAO "United Electricity System of the Russian Federation" ("RAO "UES"), the Group received as predecessor owner of investments in RAO "UES" an additional 6,692 million shares of OGK-3. As a result of completion of RAO "UES" restructuring, the Group's effective ownership in OGK-3 increased to 82.7%. The carrying value of OGK-3 net assets at the date of increase of ownership amounted to USD 5,013 million. Accordingly, the Group recognised decrease in net assets attributable to minority interest in the amount of USD 735 million. Excess of the Group's share in the carrying value of net assets attributable to minority interest and appropriate allocated cost of investment in shares of OGK-3 in the amount of USD 718 million was recognised in the consolidated income statement.

OJSC "RAO Norilsk Nickel"

On 11 July 2008, the Group filed a mandatory minority shareholders squeeze out offer of USD 17 million for 1.1% interest in OJSC "RAO Norilsk Nickel" ("RAO NN"), a 98.9% subsidiary of the Group. On 10 October 2008, the Group acquired 1.1% interest in RAO NN for a cash consideration of USD 17 million. The carrying value of RAO NN net assets at the date of mandatory squeeze out offer was USD 1,545 million. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest of USD 17 million.

Acquisition of controlling interest in subsidiaries during 2007

OMG Harjavalta Nickel Oy and OMG Cawse Proprietary Limited

On 1 March 2007, the Group acquired 100% of the ordinary shares of OMG Harjavalta Nickel Oy ("OMG Harjavalta"), a company engaged in nickel refining operations in Finland, and OMG Cawse Proprietary Limited ("OMG Cawse"), a company engaged in nickel mining and processing operations in Australia, for a total consideration of USD 356 million.

At the date of acquisition the fair value of identifiable assets and liabilities of OMG Harjavalta and OMG Cawse was as follows:

	Fair value
ASSETS	
Property, plant and equipment	235
Intangible assets	1
Inventories	230
Trade and other receivables	194
Advances paid and prepaid expenses	51
Other financial assets	40
Cash and cash equivalents	7
	758

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6. BUSINESS COMBINATIONS (CONTINUED)

	Fair value
LIABILITIES	
Employee benefit obligations	5
Environmental obligations	4
Deferred tax liabilities	63
Trade and other payables	128
Income tax payable	36
Other taxes payable	9
	245
Group's share of net assets acquired	**513**
Less: Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	(157)
Total cost of acquisition	**356**
Consideration per agreement	(348)
Direct transaction costs	(8)
Net cash outflow arising on acquisition	
Consideration and direct transaction costs paid in cash	(356)
Cash and cash equivalents acquired	7
Net cash outflow on acquisition	**(349)**

At the date of acquisition, OMG Harjavalta and OMG Cawse did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets and liabilities in accordance with IFRS immediately before the acquisition, and this information is not presented in the Group's consolidated financial statements.

OMG Harjavalta and OMG Cawse contributed USD 924 million of revenue, USD 221 million of profit before tax and USD 175 million of profit from the date of acquisition to 31 December 2007.

LionOre Mining International Limited

On 28 June 2007, the Group acquired 90.7% of the voting shares of LionOre Mining International Limited ("LionOre"), an international nickel producer with operations in Australia and Botswana, for a cash consideration of USD 5,252 million.

At the date of acquisition the fair value of identifiable assets and liabilities of LionOre was as follows:

	Fair value
ASSETS	
Property, plant and equipment	4,490
Intangible assets	706
Investments in associates	580
Deferred tax asset	167
Inventories	178
Trade and other receivables	252
Advances paid and prepaid expenses	3
Other financial assets	38
Cash and cash equivalents	438
	6,852
LIABILITIES	
Borrowings	833
Employee benefit obligations	10
Environmental obligations	91
Derivative financial instruments	80
Deferred tax liabilities	1,512
Trade and other payables	144
Income tax payable	61
	2,731

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6. BUSINESS COMBINATIONS (CONTINUED)

	Fair value
Net assets at the date of acquisition	**4,121**
Less: Net assets attributable to minority shareholders	(870)
Add: Decrease in minority interest due to increase of interest in the subsidiary	239
Group's share of net assets acquired	**3,490**
Add: Goodwill arising on acquisition	2,001
Less: Revaluation surplus representing the change in fair value of MPI net assets from the date of initial acquisition by the Group of 20% interest in MPI (refer to note 28) to the date when control was obtained	(43)
Less: Pre-acquisition investment in MPI (refer to note 28)	(196)
Total cost of acquisition	**5,252**
Consideration per public offer	(5,230)
Direct transaction costs	(22)
Net cash outflow arising on acquisition	
Consideration and direct transaction costs paid in cash	(5,252)
Cash and cash equivalents acquired	438
Net cash outflow on acquisition	**(4,814)**

At the date of acquisition, LionOre did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets and liabilities in accordance with IFRS immediately before the acquisition, and this information was not presented in the Group's consolidated financial statements.

LionOre contributed USD 407 million of revenue, USD 907 million of loss before tax and USD 877 million of loss from the date of acquisition to 31 December 2007.

Goodwill that arose on the acquisition of LionOre was primarily attributable to the expected business synergy.

OJSC "Third Generation Company of the Wholesale Electricity Market"

During July-August 2007, the Group acquired an additional 7.2% interest in OGK-3, a company engaged in generation and sale of electricity and heat energy in Central, North-West, Siberia and Urals regions of the Russian Federation, for a cash consideration of USD 612 million, increasing its ownership in the company to 54.1%. Prior to this transaction, investment in OGK-3 was classified as an investment in associate (refer to note 28).

At the date of acquisition the fair value of identifiable assets and liabilities of OGK-3 was as follows:

	Fair value
ASSETS	
Property, plant and equipment	2,111
Intangible assets	2
Inventories	86
Trade and other receivables	121
Advances paid and prepaid expenses	24
Other financial assets	1,684
Cash and cash equivalents	1,424
	5,452
LIABILITIES	
Borrowings	141
Employee benefit obligations	21
Deferred tax liabilities	376
Trade and other payables	83
Advances received	6
Income tax payable	7
Other taxes payable	7
	641

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6. BUSINESS COMBINATIONS (CONTINUED)

	Fair value
Net assets at the date of acquisition	**4,811**
Less: Net assets attributable to minority shareholders	(2,209)
Group's share of net assets acquired	**2,602**
Add: Goodwill arising on acquisition	1,646
Less: Pre-acquisition investment in OGK-3 (refer to note 28)	(3,636)
Total cost of acquisition	**612**
Consideration per public offer	(611)
Direct transaction costs	(1)
Net cash outflow arising on acquisition	
Consideration and direct transaction costs paid in cash	(612)
Cash and cash equivalents acquired	1,424
Net cash inflow on acquisition	**812**

Acquisition of controlling interest in OGK-3 was achieved in stages. Cost of acquisition and fair value of OGK-3's identifiable assets, liabilities and contingent liabilities and goodwill that arose at each stage are presented in the table below:

Date of transaction	Ownership	Fair value of net assets	Cost of acquisition	Goodwill
26 December 2006	14.60%	1,545	400	174
23 March 2007	0.26%	1,571	21	17
26 March 2007	32.04%	4,682	3,119	1,157
7 August 2007	7.20%	4,811	612	266
Effect of translation to presentation currency	n/a	n/a	84	32
Total	**54.10%**	**n/a**	**4,236**	**1,646**

At the date of acquisition of controlling interest by the Group, OGK-3 did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets, liabilities and contingent liabilities in accordance with IFRS immediately before the acquisition, and this information was not presented in these consolidated financial statements.

OGK-3 contributed USD 626 million of revenue, USD 68 million of profit before tax and USD 49 million of profit from the date of acquisition of controlling interest to 31 December 2007.

The goodwill that arose on the acquisition related to the premium paid for control over OGK-3.

Increase of ownership in subsidiaries during 2007

LionOre Mining International Limited

In July-August 2007, the Group acquired an additional 9.3% interest in LionOre for a cash consideration of USD 543 million through a number of transactions with minority shareholders, increasing its ownership in this company to 100%. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority shareholders of USD 334 million, and goodwill of USD 209 million.

In July-August 2007, the holders of LionOre convertible notes exercised their right to convert notes into 23.5 million common shares. All these shares were acquired by the Group for a cash consideration of USD 613 million. In the consolidated financial statements for the year ended 31 December 2007 acquisition of additional shares was accounted for as a settlement of borrowings acquired on the initial acquisition of controlling interest in LionOre.

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6. BUSINESS COMBINATIONS (CONTINUED)

In August 2007, in accordance with the terms of stock option and share compensation plan LionOre issued additional 1.7 million shares and granted them to key employees and directors. In August 2007, the Group acquired all those shares for a cash consideration of USD 45 million. In the consolidated financial statements for the year ended 31 December 2007 acquisition of additional shares was accounted for as a settlement of stock option liabilities acquired on the initial acquisition of controlling interest in LionOre.

OJSC "Third Generation Company of the Wholesale Electricity Market"

In August-September 2007, the Group acquired an additional 8,676 million shares of OGK-3 for a cash consideration of USD 929 million, increasing its ownership to 65.2%. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest in the amount of USD 529 million and increase in goodwill in the amount of USD 400 million.

OJSC "Norilsko-Taimyrskaya Energeticheskaya Kompaniya"

On 7 May 2007, the Group acquired an additional 49% interest in OJSC "Norilsko-Taimyrskaya Energeticheskaya Kompaniya" ("NTEK") for a cash consideration of USD 1 million, increasing its ownership in the company to 100%. The carrying value of NTEK net assets at the date of increase of ownership was USD 20 million. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest of USD 10 million. Excess of the Group's share in fair value of net assets acquired over consideration paid in the amount of USD 9 million was recognised in the consolidated income statement.

7. SEGMENTAL INFORMATION

Business segments – primary reporting format

At and for the year ended 31 December 2008	Mining and metallurgy	Energy and utilities	Transport and logistics	Other	Eliminations	Total
Third party transactions	11,886	1,694	315	85	–	**13,980**
Intra-segment transactions	5	465	395	733	(1,598)	–
Total revenue	**11,891**	**2,159**	**710**	**818**	**(1,598)**	**13,980**
Operating profit/(loss)	96	(127)	(28)	(140)	–	**(199)**
Share of losses of associates	(145)	(127)	–	–	–	**(272)**
(Loss)/profit before income tax	(321)	227	(42)	(137)	–	**(273)**
Income tax expense						**(282)**
Loss for the year						**(555)**
Assets and liabilities						
Investments in associates	273	678	–	–	–	**951**
Segment assets	11,040	6,202	1,648	384	–	**19,274**
Intra-segment assets and eliminations	2,544	69	79	135	(2,827)	–
Total segment assets	**13,857**	**6,949**	**1,727**	**519**	**(2,827)**	**20,225**
Segment liabilities	7,904	187	76	126	–	**8,293**
Intra-segment liabilities and eliminations	270	138	2,240	179	(2,827)	–
Total segment liabilities	**8,174**	**325**	**2,316**	**305**	**(2,827)**	**8,293**
Other segment information						
Capital expenditures	1,314	413	433	366	–	**2,526**
Amortisation and depreciation	997	233	32	49	–	**1,311**
Impairment of non-financial assets	4,542	163	16	7	–	**4,728**
Other non-cash expenses	378	264	26	4	–	**672**

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7. SEGMENTAL INFORMATION (CONTINUED)

At and for the year ended 31 December 2007	Mining and metallurgy	Energy and utilities	Transport and logistics	Other	Eliminations	Total
Third party transactions	15,959	789	298	73	—	**17,119**
Intra-segment transactions	5	348	269	574	(1,196)	—
Total revenue	**15,964**	**1,137**	**567**	**647**	**(1,196)**	**17,119**
Operating profit/(loss)	8,291	(736)	(17)	(101)	—	**7,437**
Share of profits of associates	43	33	—	—	—	**76**
Profit/(loss) before income tax	8,470	(610)	(23)	(102)	—	**7,735**
Income tax expense						**(2,459)**
Profit for the year						**5,276**
Assets and liabilities						
Investments in associates	575	304	—	—	—	**879**
Segment assets	22,902	10,145	1,092	445	—	**34,584**
Intra-segment assets and eliminations	1,753	27	9	118	(1,907)	—
Total segment assets	**25,230**	**10,476**	**1,101**	**563**	**(1,907)**	**35,463**
Segment liabilities	10,341	161	93	117	—	**10,712**
Intra-segment liabilities and eliminations	143	158	1,448	158	(1,907)	—
Total segment liabilities	**10,484**	**319**	**1,541**	**275**	**(1,907)**	**10,712**
Other segment information						
Capital expenditures	774	84	21	330	—	**1,209**
Amortisation and depreciation	768	129	22	36	—	**955**
Impairment of non-financial assets	1,086	754	24	15	—	**1,879**
Other non-cash expenses	18	—	4	12	—	**34**

Geographical segments – secondary reporting format

	Segment assets		Segment liabilities		Capital expenditures	
	31/12/2008	31/12/2007	31/12/2008	31/12/2007	Year ended 31/12/2008	Year ended 31/12/2007
Russian Federation	17,224	24,330	8,027	8,605	1,983	914
Europe	2,333	3,572	1,066	2,299	60	11
North America	806	945	323	851	10	24
Africa	799	3,783	154	158	356	192
Australia	639	4,487	302	455	117	68
Asia	23	56	20	54	—	—
	21,824	**37,173**	**9,892**	**12,422**	**2,526**	**1,209**
Eliminations	(1,599)	(1,710)	(1,599)	(1,710)	—	—
Total	**20,225**	**35,463**	**8,293**	**10,712**	**2,526**	**1,209**

Other segmental information

Metal sales by geographical location of the Group's customers are presented in the note 8. Other sales of the Group were made primarily on the territory of the Russian Federation.

Intra-segment sales of electricity, heat energy and telecommunication services were made at the prices established by the Federal Utility Committee and Federal Tariff Service, government regulators responsible for establishing and monitoring prices of the Russian utility and telecommunication markets respectively.

Intra-segment sales of construction, transportation, repair and other services were made at prices equivalent to budgeted cost of services, generally determined based on Russian accounting standards, plus a margin varying from 1% to 25%.

Intra-segment loans were given at rates varying from 6.4% to 6.5% for RUR-denominated loans and 4.6% for USD-denominated loans.

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8. METAL SALES

Year ended 31/12/2008	Total	Nickel	Copper	Palladium	Platinum	Gold
By origin						
Russian Federation	**9,801**	4,952	2,691	1,020	1,024	114
United States of America	**647**	9	3	240	387	8
Europe	**588**	411	165	12	—	—
Australia	**440**	436	4	—	—	—
Africa	**323**	273	30	10	9	1
	11,799	**6,081**	**2,893**	**1,282**	**1,420**	**123**
By destination						
Europe	**5,989**	3,821	1,602	254	302	10
North America	**2,204**	784	22	703	635	60
Asia	**1,999**	1,224	231	287	257	—
Russian Federation	**1,444**	94	1,033	38	226	53
Australia	**152**	148	4	—	—	—
South America	**6**	6	—	—	—	—
Africa	**5**	4	1	—	—	—
	11,799	**6,081**	**2,893**	**1,282**	**1,420**	**123**
Year ended 31/12/2007						
By origin						
Russian Federation	**14,054**	8,956	2,894	1,093	1,004	107
Europe	**820**	777	30	13	—	—
United States of America	**509**	20	3	215	264	7
Australia	**387**	353	1	—	—	33
Africa	**139**	110	20	4	4	1
	15,909	**10,216**	**2,948**	**1,325**	**1,272**	**148**
By destination						
Europe	**9,968**	6,956	2,209	463	327	13
Asia	**2,248**	1,736	3	256	253	—
North America	**2,237**	1,079	20	552	527	59
Russian Federation	**1,327**	351	714	54	165	43
Australia	**108**	74	1	—	—	33
South America	**13**	13	—	—	—	—
Africa	**8**	7	1	—	—	—
	15,909	**10,216**	**2,948**	**1,325**	**1,272**	**148**

9. OTHER SALES

	Year ended 31/12/2008	Year ended 31/12/2007
Energy and utilities	1,694	789
Transport and logistics	315	298
Other	172	123
Total	**2,181**	**1,210**

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10. COST OF METAL SALES

	Year ended 31/12/2008	Year ended 31/12/2007
Cash operating costs		
On-mine and concentrating costs (refer to note 11)	2,478	2,031
Smelting costs (refer to note 12)	1,361	1,143
Treatment and refining costs (refer to note 13)	1,084	1,168
Other costs (refer to note 14)	611	594
Sales of by-products	(1,124)	(1,119)
Total cash operating costs	**4,410**	**3,817**
Amortisation and depreciation of operating assets (refer to note 15)	1,069	824
Decrease in metal inventories	25	78
Total	**5,504**	**4,719**

11. ON-MINE AND CONCENTRATING COSTS

	Year ended 31/12/2008	Year ended 31/12/2007
Labour	1,002	962
Consumables and spares	743	564
Outsourced mining services	225	45
Repairs and maintenance	147	135
Transportation	91	59
Utilities	69	70
Rent expenses	55	51
Insurance	47	48
Tailing pile maintenance and relocation	46	38
Sundry	53	59
Total (refer to note 10)	**2,478**	**2,031**

12. SMELTING COSTS

	Year ended 31/12/2008	Year ended 31/12/2007
Platinum group scrap metals purchased	416	310
Labour	381	348
Consumables and spares	323	271
Repairs and maintenance	51	53
Insurance	48	69
Utilities	38	30
External tolling	30	26
Purchase of nickel concentrate	27	—
Transportation	21	18
Rent expenses	7	7
Sundry	19	11
Total (refer to note 10)	**1,361**	**1,143**

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13. TREATMENT AND REFINING COSTS

	Year ended 31/12/2008	Year ended 31/12/2007
Purchase of nickel concentrate	305	478
Labour	255	240
Consumables and spares	206	164
Tolling fees	122	147
Utilities	78	56
Transportation	40	14
Repairs and maintenance	37	32
Insurance	14	20
Rent expenses	2	3
Sundry	25	14
Total (refer to note 10)	**1,084**	**1,168**

14. OTHER COSTS

	Year ended 31/12/2008	Year ended 31/12/2007
Tax on mining and pollution levies	191	150
Cost of refined metals purchased from third parties	176	128
Transportation	124	179
Exploration expenses	101	113
Other	19	24
Total (refer to note 10)	**611**	**594**

15. AMORTISATION AND DEPRECIATION OF OPERATING ASSETS

	Year ended 31/12/2008	Year ended 31/12/2007
Mining and concentrating	849	606
Smelting	139	147
Treatment and refining	57	57
Other	24	14
Total (refer to note 10)	**1,069**	**824**

16. COST OF OTHER SALES

	Year ended 31/12/2008	Year ended 31/12/2007
Consumables and spares	900	504
Labour	404	226
Utilities	383	195
Amortisation and depreciation	180	81
Repair and maintenance	88	58
Transportation	61	24
Taxes	51	29
Outsourced third party services	25	1
Rent expenses	18	14
Insurance	4	4
Other	8	27
Total	**2,122**	**1,163**

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17. SELLING AND DISTRIBUTION EXPENSES

	Year ended 31/12/2008	Year ended 31/12/2007
Export customs duties	427	644
Transportation expenses	42	31
Labour	25	24
Commission paid	15	16
Insurance	8	6
Other	7	9
Total	**524**	**730**

18. GENERAL AND ADMINISTRATIVE EXPENSES

	Year ended 31/12/2008	Year ended 31/12/2007
Labour	574	435
Taxes other than mining and income taxes and pollution levies	115	90
Consulting and other professional services	64	48
Advertising	57	102
Legal and audit services	33	23
Depreciation	29	32
Transportation expenses	21	21
External research costs	19	18
Repairs and maintenance	19	18
Insurance	16	12
Other	124	95
Total	**1,071**	**894**

19. IMPAIRMENT OF NON-FINANCIAL ASSETS

	Year ended 31/12/2008	Year ended 31/12/2007
Impairment of property, plant and equipment (refer to note 25)	2,666	800
Impairment of goodwill (refer to note 26)	1,571	1,079
Impairment of intangible assets (refer to note 27)	491	—
Total	**4,728**	**1,879**

Impairment test at 31 December 2008

At 31 December 2008, the Group conducted annual impairment review of property, plant and equipment, goodwill and intangible assets.

OGK-3

For the purpose of impairment test management of the Group measured value-in-use of OGK-3 assets based on the discounted cash flows expected to be generated by the individual cash-generating units, which are individual power generating facilities.

Cash flows were projected up to the year 2028 (expected remaining weighted average useful life of property, plant and equipment) based on the following assumptions.

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19. IMPAIRMENT OF NON-FINANCIAL ASSETS (CONTINUED)

Prices for electricity. Management of the Group forecasted regulated tariffs and non-regulated (market) prices for electricity. Forecast of regulated tariffs was made using the 2009 prices approved by the Federal Tariff Service ("FTS") adjusted for inflation. Expected increase of market prices for electricity was based on the principle of fixed margin using fuel price forecasts. Heat tariff price forecast was based upon the announced government policy on indexation utilities tariff.

Proportion of regulated and market sales varied from 25% (during the year 2009) to 95% (from the year 2011 and later) and was in line with the proportion of competitive and regulated energy markets in accordance with the government Decree No. 205. Output forecasts were based on historical level of annual load factor.

Natural gas price forecast assumed equal margins for domestic and export sales of natural gas in accordance with the decisions of the FTS. The long-term price forecasts for natural gas covered 7 years, were based on the management's experience of the natural gas market and were within the range of external market forecasts. Thereafter management's estimates of tariffs increases were in line with expected inflation.

Inflation indices were consistent with external sources of information and varied from 4% to 11% per annum.

Discount rate reflects management's assessment of the risks specific to the utility business in the Russian Federation. Pre-tax rate varied from 17.7% to 19.8%.

Management of the Group identified that value-in-use of several individual power generating facilities is lower than the carrying value of their property, plant and equipment. Accordingly, an impairment loss of USD 157 million was recognised by the Group in respect of property, plant and equipment attributable to OGK-3 at 31 December 2008.

No impairment was recognised with regard to goodwill which was not allocated to any individual power generating facilities.

Norilsk Nickel International

Value-in-use of Norilsk Nickel International ("NNI") assets consisted of the production assets of Harjavalta Nickel Oy, Cawse Proprietary Limited and LionOre Mining International Limited, was measured based on discounted cash flows expected to be generated by separate cash-generating units, being individual mines, smelting and refining operations. Cash flows were projected up to expected closure dates of mining and metallurgy operations and were based on the following assumptions.

Commodity price forecasts for nickel, copper and other metals were based on management's experience of the specific commodities markets and were within the range of external market forecasts.

Economically recoverable reserves and resources were primarily based on external mining engineers reports available at the date of impairment test or nearest date when appropriate evaluation work was undertaken.

Inflation indices and foreign currency trends were in general consistent with external sources of information.

Inflation, %		
Botswana	4.99	– 10.50
Australia	2.45	– 3.42
Exchange rates		
Botswana Pula/US Dollar	7.75	7.90
Australian Dollar/US Dollar	1.53	1.54

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19. IMPAIRMENT OF NON-FINANCIAL ASSETS (CONTINUED)

Discount rates reflect management's assessment of the risks specific to each production unit. These rates were based on the weighted average cost of capital specific to each cash-generating unit.

Discount rates, %	
Botswana	10.50
Australia	9.50

As a result of the impairment test at 31 December 2008 property, plant and equipment and goodwill of Norilsk Nickel International were impaired in the amount of USD 2,481 million and USD 1,571 million, respectively (refer to note 25 and 26).

At 31 December 2008, included in intangible assets was the right to use a unique refining technology registered under the trade mark Activox with carrying value of USD 84 million, after recognition of impairment loss of USD 490 million (refer to note 27).

Other

Additional impairment loss in respect of property, plant and equipment in the amount of USD 28 million was attributable to greater than expected wear and tear and suspended construction projects.

Impairment test at 31 December 2007

At 31 December 2007, the Group conducted annual impairment review of goodwill, property, plant and equipment and intangible assets.

OGK-3

Recoverable amount of goodwill attributable to OGK-3 was determined based on the market value of OGK-3 shares at 31 December 2007 less cost to sell. As a result of the test, an impairment loss in respect of goodwill in the amount of USD 754 million was recognised (refer to note 26).

LionOre

For the purpose of impairment loss assessment management of the Group measured value-in-use of LionOre Group and its subsidiaries based on cash flows expected to be generated by cash-generating units, being the individual mines, smelting and refining operations.

Cash flows were projected up to expected closure date of mining and metallurgy operations and were based on the assumptions presented below.

Commodity price forecasts for nickel, copper and other metals represented management's estimates based on their experience on the specific commodities markets as at the date of the impairment test, and were within the range of external market forecasts but were slightly higher than the calculated market average prevailing at the time.

Economically recoverable reserves and resources were primarily based on external mining engineers reports available on the date of impairment test or nearest date when appropriate evaluation work was undertaken.

Inflation indices and foreign currency trends were in general consistent with external sources of information and are presented as follows:

Inflation, %	
Botswana	4.00 – 8.10
Australia	3.50 – 4.40
Expected exchange rates	
Botswana Pula/US Dollar	6.17 10.34
Australian Dollar/US Dollar	1.14 – 1.28

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19. IMPAIRMENT OF NON-FINANCIAL ASSETS (CONTINUED)

Discount rates reflected management's assessment of the risks specific to each production unit. These rates were based on the weighted average cost of capital specific to each cash-generating unit and presented as follows:

Discount rates, %	
Botswana	10.40
Australia	6.87

Impairment test in respect of goodwill attributable to LionOre was based on the assumptions used in the valuation of identifiable assets, liabilities and contingent liabilities of LionOre and its subsidiaries performed by independent qualified appraiser at 28 June 2007, the date of the acquisition.

Subsequent to acquisition of LionOre, an extensive feasibility review of the Activox Refinery Project at Tati Nickel, a subsidiary of LionOre, was conducted by management of the Group and an independent third party. The review highlighted a substantial project cost escalation from the feasibility study conducted by the previous owners. The major contributing factors to the substantial cost escalation were:

- an increase in construction and equipment cost worldwide; and
- project management cost worldwide.

In addition, short-term energy capacity constraints being experienced in Southern Africa region have been assessed as a risk that would have adversely affected the commissioning time to production and the overall economics of the Activox Refinery Project.

Based on these facts and circumstances management of the Group made a decision to postpone the project indefinitely. As a result, at 31 December 2007 mineral rights presented within mining assets and goodwill recognised on acquisition of LionOre were impaired in the amounts of USD 765 million and USD 325 million, respectively (refer to note 25 and 26).

LLC "Norilsk-Telecom"

On 2 November 2007, management of the Group made a decision to dispose of LLC "Norilsk-Telecom" ("Norilsk-Telecom") and its subsidiaries. Accordingly, in the accompanying consolidated financial statements associated assets and liabilities of Norilsk-Telecom were presented as held for sale (refer to note 35). The difference between the carrying value of Norilsk-Telecom's net assets at 31 December 2007 and the expected proceeds from disposal in the amount of USD 15 million was recognised as an impairment of property, plant and equipment.

Other

At 31 December 2007 the Group recognised additional impairment loss of USD 20 million in respect of property, plant and equipment attributable to the greater than expected wear and tear and suspended construction projects.

20. OTHER NET OPERATING EXPENSES

	Year ended 31/12/2008	**Year ended 31/12/2007**
Donations and maintenance of social sphere facilities	108	158
Change in provision for value added tax recoverable	83	149
Change in provision for onerous contracts	51	—
Change in allowance for doubtful debts	42	(8)
Loss on disposal of property, plant and equipment	26	25
Loss on disposal of investments in subsidiaries	3	18
Change in provision for tax penalties	(52)	29
Other	13	4
Total	**274**	**375**

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21. FINANCE COSTS

	Year ended 31/12/2008	Year ended 31/12/2007
Interest expense on borrowings	352	280
Unwinding of discount on environmental obligations (refer to note 42)	33	23
Interest on obligations under finance leases	9	3
Interest on convertible notes	3	1
Total	**397**	**307**

22. INCOME FROM INVESTMENTS, NET

	Year ended 31/12/2008	Year ended 31/12/2007
Income/(loss) from available-for-sale investments		
Realised gain on disposal of available-for-sale investments	118	—
Interest income on available-for-sale investments	46	7
Dividend income on available-for-sale investments	—	5
Impairment of available-for-sale investments	(269)	(24)
Income/(loss) from held-to-maturity investments		
Interest income on promissory notes receivable	6	9
Impairment of promissory notes	(7)	—
Income/(loss) from loans given and long-term accounts receivable		
Interest income on bank deposits	450	222
Interest income on loans given and long-term accounts receivable	9	9
Impairment of loans advanced	(91)	(18)
Income on disposal of investments in associates	8	6
Other	4	1
Total	**274**	**217**

23. FOREIGN EXCHANGE (LOSS)/GAIN, NET

	Year ended 31/12/2008	Year ended 31/12/2007
Foreign exchange gain/(loss) on operating activities, net	648	(96)
Revaluation of bank deposits and other financial assets, net	100	(82)
Revaluation of borrowings, net	(1,145)	324
Total	**(397)**	**146**

24. INCOME TAX EXPENSE

	Year ended 31/12/2008	Year ended 31/12/2007
Current income tax		
Current income tax charge on profit for the year	1,428	2,630
Adjustments in respect of current income tax of previous years	(5)	(8)
Total current income tax expense	**1,423**	**2,622**
Deferred income tax		
Origination and reversal of temporary differences	(1,084)	(187)
Impact of change in income tax rate in the Russian Federation	(139)	—
Unused tax losses and tax offsets not recognised as deferred tax assets	68	24
Recycled from equity to income	14	—
Total deferred tax benefit	**(1,141)**	**(163)**
Total	**282**	**2,459**

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24. INCOME TAX EXPENSE (CONTINUED)

A reconciliation of statutory income tax, calculated at the rate effective in the Russian Federation, the location of major production assets of the Group, to the amount of actual income tax expense recorded in the consolidated income statement is as follows:

	Year ended 31/12/2008	Year ended 31/12/2007
(Loss)/profit before tax	**(273)**	**7,735**
Income tax at statutory rate of 24%	(66)	1,856
Impact of change in income tax rate in the Russian Federation	(139)	—
Effect of different tax rates of subsidiaries operating in other jurisdictions	(1)	14
Tax effect of permanent differences	115	286
Tax effect of impairment of goodwill	278	259
Tax effect of impairment of investments in associates	75	—
Tax effect of excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	(172)	(40)
Tax effect of change in provisions for tax penalties and recoverable amount of value added tax	7	43
Deferred tax asset not recognised on impairment of financial assets	91	4
Adjustments in respect of current income tax of previous years	(5)	(8)
Taxable losses of subsidiaries not carried forward	31	21
Effect of unused tax losses and tax offsets not recognised as deferred tax assets	68	24
Total	**282**	**2,459**

During the year ended 31 December 2008, as a result of a change in income tax rate in the Russian Federation from 24% to 20% that was substantially enacted on 26 November 2008 and effective from 1 January 2009, deferred tax balances of the Company and all Group's subsidiaries operating on the territory of the Russian Federation were remeasured.

The corporate income tax rates in other countries where the Group has a taxable presence vary from 0% to 39%.

Deferred income tax

	31/12/2008	31/12/2007
Balance at beginning of the year	**2,652**	**881**
Benefit recognised during the year	(1,002)	(163)
Impact of change in income tax rate in the Russian Federation	(139)	—
Revaluation of available-for-sale investments	(398)	149
Recycled from equity on disposal of investments classified as available-for-sale	(14)	—
Effect of change in classification of available-for-sale investments to investments in associates due to increase of ownership	—	(73)
Acquisition of subsidiaries (refer to note 6)	4	1,784
Disposal of subsidiaries (refer to note 46)	—	(14)
Hedging reserve	—	(7)
Effect of translation to presentation currency	(410)	95
Balance at end of the year	**693**	**2,652**

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24. INCOME TAX EXPENSE (CONTINUED)

The tax effect of temporary differences that give rise to deferred taxation is presented below:

	31/12/2008	31/12/2007
Property, plant and equipment	769	2,039
Intangible assets	24	223
Accrued operating expenses	(95)	(111)
Valuation of receivables	(34)	(9)
Unrealised profit on intra-group transactions	(2)	(43)
Inventory valuation	24	11
Valuation of investments	8	536
Income tax loss carried forward	(97)	(99)
Provision for tax losses and tax offsets recognised as deferred tax assets	172	137
Other	(76)	(32)
Total	**693**	**2,652**

Certain deferred tax assets and liabilities have been offset in accordance with the Group's accounting policy. Deferred tax balances (after offset) presented in the consolidated balance sheet were as follows:

	31/12/2008	31/12/2007
Deferred tax liabilities	723	2,741
Deferred tax assets	(30)	(89)
Net deferred tax liabilities	**693**	**2,652**

At 31 December 2008, the unutilised tax losses of the North American operations, which were available for offset against future taxable income earned in the United States of America in the amount of USD 357 million (2007: USD 339 million), were not recognised as a deferred tax asset.

The Group did not recognise a deferred tax liability in respect of taxable temporary differences associated with investments in subsidiaries of USD 294 million (2007: USD 1,317 million), because management believes that it is in a position to control the timing of reversal of such differences and has no intention to reverse them in the foreseeable future.

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25. PROPERTY, PLANT AND EQUIPMENT

		Non-mining assets				
	Mining assets	Buildings, structures and utilities	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
Cost						
Balance at 31 December 2006	**4,175**	**3,206**	**2,343**	**161**	**904**	**10,789**
Additions	530	—	—	—	633	**1,163**
Transfers	—	91	352	35	(478)	—
Decommissioning asset raised (refer to note 42)	83	6	—	—	—	**89**
Acquired on acquisition of subsidiaries (refer to note 6)	4,221	853	1,494	53	215	**6,836**
Disposed of on disposal of subsidiaries (refer to note 46)	—	(81)	(2)	—	(1)	**(84)**
Disposals	(49)	(32)	(106)	(6)	(34)	**(227)**
Reclassified as held for sale (refer to note 35)	—	(14)	(50)	—	(5)	**(69)**
Effect of translation to presentation currency	426	236	211	5	57	**935**
Balance at 31 December 2007	**9,386**	**4,265**	**4,242**	**248**	**1,291**	**19,432**
Additions	828	—	—	—	1,635	**2,463**
Transfers	—	155	844	37	(1,036)	—
Decommissioning asset raised (refer to note 42)	50	1	—	—	—	**51**
Acquired on acquisition of subsidiaries (refer to note 6)	—	24	—	—	—	**24**
Disposed of on disposal of subsidiaries	—	—	(8)	—	—	**(8)**
Disposals	(80)	(37)	(49)	(3)	(35)	**(204)**
Reclassified as held for sale (refer to note 35)	—	—	—	—	(41)	**(41)**
Effect of translation to presentation currency	(1,756)	(705)	(836)	(52)	(297)	**(3,646)**
Balance at 31 December 2008	**8,428**	**3,703**	**4,193**	**230**	**1,517**	**18,071**
Accumulated amortisation, depreciation and impairment						
Balance at 31 December 2006	**(933)**	**(883)**	**(783)**	**(34)**	**(81)**	**(2,714)**
Charge for the year	(394)	(201)	(299)	(24)	—	**(918)**
Disposed of on disposal of subsidiaries (refer to note 46)	—	10	1	—	—	**11**
Eliminated on disposals	33	14	39	2	26	**114**
Impairment loss (refer to note 19)	(765)	(10)	(17)	—	(8)	**(800)**
Reclassified as held for sale (refer to note 35)	—	4	30	—	—	**34**
Effect of translation to presentation currency	(63)	(44)	(57)	(2)	(12)	**(178)**
Balance at 31 December 2007	**(2,122)**	**(1,110)**	**(1,086)**	**(58)**	**(75)**	**(4,451)**
Charge for the year	(572)	(230)	(439)	(32)	—	**(1,273)**
Disposed of on disposal of subsidiaries	—	—	3	—	—	**3**
Eliminated on disposals	25	20	29	2	14	**90**
Impairment loss (refer to note 19)	(2,265)	(81)	(198)	(41)	(81)	**(2,666)**
Reclassified as held for sale (refer to note 35)	—	—	—	—	28	**28**
Effect of translation to presentation currency	418	215	272	21	9	**935**
Balance at 31 December 2008	**(4,516)**	**(1,186)**	**(1,419)**	**(108)**	**(105)**	**(7,334)**
Carrying value						
31 December 2007	**7,264**	**3,155**	**3,156**	**190**	**1,216**	**14,981**
31 December 2008	**3,912**	**2,517**	**2,774**	**122**	**1,412**	**10,737**

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26. GOODWILL

	31/12/2008	31/12/2007
Cost		
Balance at beginning of the year	**4,439**	**25**
Acquired on acquisition of subsidiaries (refer to note 6)	80	4,256
Effect of translation to presentation currency	(824)	158
Balance at end of the year	**3,695**	**4,439**
Accumulated impairment		
Balance at beginning of the year	**(1,079)**	**–**
Impairment loss (refer to note 19)	(1,571)	(1,079)
Effect of translation to presentation currency	190	–
Balance at end of the year	**(2,460)**	**(1,079)**
Carrying value		
Balance at beginning of the year	**3,360**	**25**
Balance at end of the year	**1,235**	**3,360**

Allocation of goodwill to separate cash-generating units

For the purpose of the annual impairment test the carrying value of goodwill was allocated to the following segments and smallest individual cash-generating units within respective segments:

	31/12/2008	31/12/2007
Mining and metallurgy segment		
LionOre – Botswana operations	1,362	1,691
LionOre – Australia operations	468	596
Total allocated to mining and metallurgy segment	**1,830**	**2,287**
Energy and utilities segment		
OGK-3	1,843	2,125
Taimyrenergo	9	11
Total allocated to energy and utilities segment	**1,852**	**2,136**
Total allocated to transport and logistics segment	**13**	**16**
Total	**3,695**	**4,439**

At 31 December 2008 management reviewed carrying value of goodwill for impairment. As a result, impairment loss in the amount of USD 1,571 million (2007: USD 1,079 million) was recognised (refer to note 19).

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27. INTANGIBLE ASSETS

	Patents and licences	Long-term favourable contracts	Software	Other	Total
Cost					
Balance at 31 December 2006	**7**	**103**	**46**	**16**	**172**
Acquired on acquisition of subsidiaries (refer to note 6)	706	—	2	1	**709**
Additions	2	—	21	23	**46**
Reclassified as held for sale	—	—	(2)	—	**(2)**
Disposals	—	—	(2)	(1)	**(3)**
Effect of translation to presentation currency	22	—	4	3	**29**
Balance at 31 December 2007	**737**	**103**	**69**	**42**	**951**
Additions	5	—	35	23	**63**
Disposals	—	—	(2)	(10)	**(12)**
Effect of translation to presentation currency	(157)	—	(17)	(9)	**(183)**
Balance at 31 December 2008	**585**	**103**	**85**	**46**	**819**
Accumulated amortisation and impairment					
Balance at 31 December 2006	**(6)**	**(44)**	**(9)**	**(6)**	**(65)**
Charge for the year	(2)	(14)	(13)	(8)	**(37)**
Eliminated on disposals	—	—	2	—	**2**
Effect of translation to presentation currency	—	—	(1)	(1)	**(2)**
Balance at 31 December 2007	**(8)**	**(58)**	**(21)**	**(15)**	**(102)**
Charge for the year	(3)	(12)	(13)	(10)	**(38)**
Impairment loss (refer to note 19)	(490)	—	(1)	—	**(491)**
Eliminated on disposals	—	—	2	9	**11**
Effect of translation to presentation currency	3	—	6	1	**10**
Balance at 31 December 2008	**(498)**	**(70)**	**(27)**	**(15)**	**(610)**
Carrying value					
31 December 2007	**729**	**45**	**48**	**27**	**849**
31 December 2008	**87**	**33**	**58**	**31**	**209**

Included in patents and licenses acquired in 2007 is the right to use a unique refining technology registered under the trade mark Activox, owned by LionOre, a subsidiary of the Group. Fair value of the right was determined by an independent professional appraiser on 28 June 2007, the date of the acquisition of LionOre business, and amounted to USD 706 million. Activox is regarded as having an indefinite useful life because, based on an analysis of all the relevant factors, there is no foreseeable limit to the period during which this asset is expected to generate net cash flows. This right is not amortised and reviewed for impairment annually. At 31 December 2008 management reviewed the carrying value of Activox for impairment. As a result, impairment loss in the amount of USD 490 million was recognised (refer to note 19) and carrying value of the right at 31 December 2008 amounted to USD 84 million.

Intangible assets included long-term favourable sales contracts that are amortised over their terms of 7 years.

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28. INVESTMENTS IN ASSOCIATES

	31/12/2008	31/12/2007
Balance at beginning of the year	**879**	**208**
Acquired during the year	660	3,298
Contribution into equity of the associate during the year	14	—
Share of post-acquisition profits	11	5
Established during the year	—	28
Acquired on acquisition of subsidiaries (refer to note 6)	—	580
Disposed of during the year	—	(1)
Reclassified from investments available-for-sale due to increase of ownership	—	427
Reclassified to investments available-for-sale due to decrease of ownership	(69)	(3)
Reclassified to investment in subsidiaries due to increase of ownership	—	(3,832)
Excess of the Group's share in the fair value of associates' identifiable assets, liabilities and contingent liabilities over the cost of acquisition	—	72
Dividends received	(11)	(20)
Impairment loss	(283)	(1)
Effect of translation to presentation currency	(250)	118
Balance at end of the year	**951**	**879**

Details of the Group's associates were as follows:

Name of associate		Market value	Carrying value of investment	Total assets	Total liabilities	Revenue	Profit/ (loss)
31/12/2008							
RUSIA Petroleum	(i)	n/a	511	2,541	497	—	(7)
Nkomati Nickel Mine	(ii)	n/a	273	599	53	102	60
Plug Power Incorporated	(iii)	46	46	215	83	—	—
Smart Hydrogen Incorporated	(iii)	n/a	43	86	—	—	(7)
OJSC "TGK-14"	(iv)	41	29	169	64	223	(25)
OJSC "KTK"	(ix)	n/a	25	50	—	—	3
OJSC "Norilskgazprom"		n/a	24	118	40	159	6
			951	**3,778**	**737**	**484**	**30**
31/12/2007							
Nkomati Nickel Mine	(vii)	n/a	575	1,190	40	58	(11)
Smart Hydrogen Incorporated	(iii)	n/a	111	222	—	—	—
OJSC "TGK-14"	(viii)	74	58	279	73	193	(6)
OJSC "Krasnoyarskenergo"	(v)	170	40	215	60	269	31
OJSC "Norilskgazprom"		n/a	33	148	39	135	6
OJSC "KTK"	(ix)	n/a	28	57	—	—	—
OJSC "Kolenergo"	(vi)	30	17	94	29	104	4
Other		n/a	17	66	3	353	(3)
			879	**2,271**	**244**	**1,112**	**21**

Movements during the year ended 31 December 2008

(i) ***RUSIA Petroleum.*** On 20 October 2008, OGK-3, a subsidiary of the Group, acquired 25% of RUSIA Petroleum for a cash consideration of USD 576 million.

At 31 December 2008 management reviewed the carrying value of the Group's investment in RUSIA Petroleum for impairment. As a result, no impairment loss was identified.

(ii) ***Nkomati Nickel Mine.*** During October-December 2008, the Group made contributions into equity of Nkomati Nickel Mine in the amount of USD 14 million according to the terms of the partnership agreement between the joint venture parties.

At 31 December 2008 management reviewed the carrying value of the Group's investment in Nkomati Nickel Mine for impairment. As a result, an impairment loss in the amount of USD 174 million was recognised.

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28. INVESTMENTS IN ASSOCIATES (CONTINUED)

(iii) ***Smart Hydrogen Incorporated and Plug Power Incorporated.*** Smart Hydrogen Incorporated is a joint venture formed in April 2006 by the Group and Interros Holding Company, a related party. The Group owns 50% of the joint venture. In June 2006, through this entity the principal investors acquired a 35% stake in Plug Power Incorporated, a US designer of environmentally clean and reliable energy products. At 20 December 2008, Smart Hydrogen Incorporated disposed of its 35% ownership in Plug Power Incorporated to OGK-3, a subsidiary of the Group, for a cash consideration of USD 33 million (refer to note 47).

At 31 December 2008 and 2007 management reviewed the carrying value of the Group's investment in Smart Hydrogen Incorporated. No impairment loss was identified (2007: USD 1 million).

At 31 December 2008 management reviewed the carrying value of the Group's investment in Plug Power Incorporated for impairment. As a result, impairment loss in the amount of USD 51 million was recognised.

(iv) ***TGK-14.*** On 11 July 2008, the Group acquired 160,602 million additionally issued ordinary shares of OJSC "Territorial Generation Company No. 14" ("TGK-14") for a cash consideration of USD 51 million. After completion of this transaction the Group's ownership in TGK-14 did not change.

As a part of reorganisation of RAO "UES", the Group obtained 228 million ordinary shares of TGK-14 during July-October 2008. As a result of these transactions, the Group became the owner of 0.07% shares of TGK-14.

At 31 December 2008 management reviewed the carrying value of the Group's investment in TGK-14 for impairment. As a result, impairment loss in the amount of USD 53 million (2007: USD nil) was recognised.

(v) ***Krasnoyarskenergo.*** On 31 March 2008, as a part of reorganisation of RAO "UES", the Group's investments in OJSC "Krasnoyarskenergo" and OJSC "Tyvaenergoholding" were exchanged for 7,344 million shares of OJSC "MRSK Sibiri". At 31 December 2008 investment in OJSC "MRSK Sibiri" was classified as available-for-sale (refer to note 29).

(vi) ***Kolenergo.*** On 1 April 2008, as a part of reorganisation of RAO "UES", the Group's investment in OJSC "Kolenergo" was exchanged for 2,453 million shares of OJSC "MRSK Severo-Zapada". At 31 December 2008 investment in OJSC "MRSK Severo-Zapada" was classified as available-for-sale (refer to note 29).

Movements during the year ended 31 December 2007

(vii) ***Nkomati Nickel Mine.*** On 28 June 2007, as a part of acquisition of LionOre Mining International Limited (refer to note 6), the Group acquired 50% of share capital of Nkomati Nickel Mine, a South African mining company.

(viii) ***TGK-14.*** On 30 January 2007, the Group acquired 215,412 million ordinary shares or 27.8% of the issued share capital of TGK-14 for a cash consideration of USD 44 million. As a result of this transaction, the Group recognised in the consolidated income statement the excess of its share in fair value of TGK-14 net assets over the cost of the investment in the amount of USD 12 million. In August 2007, TGK-14 increased its share capital through the issuance of additional ordinary shares; as a result, the Group's share in this company decreased to 27.7%.

(ix) ***OJSC "KTK".*** OJSC "KTK" is a joint venture established in December 2007 for the purpose of power production. The Group contributed USD 28 million and became the owner of 50% of the issued share capital of this company.

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28. INVESTMENTS IN ASSOCIATES (CONTINUED)

(x) ***TGK-1.*** In May 2007, as a part of reorganisation of RAO "UES", the Group's investment in OJSC "Murmanskaya TEC" was exchanged for 6,743 million shares of TGK-1. At 31 December 2007 investment in TGK-1 was classified as available-for-sale (refer to note 29).

(xi) ***MPI.*** On 1 March 2007, as a part of acquisition of nickel business of OM Group Incorporated, the Group acquired 20% of share capital of MPI Nickel Proprietary Limited for a cash consideration of USD 135 million. As a result of this transaction, the Group recognised in the consolidated income statement the excess of its share in the fair value of MPI Nickel Proprietary Limited net assets over the cost of the investment in the amount of USD 60 million.

On 28 June 2007, an additional 80% of share capital of MPI Nickel Proprietary Limited was acquired by the Group through the acquisition of LionOre (refer to note 6).

(xii) ***OGK-3.*** On 26 March 2007, the Group acquired 17,836 million ordinary shares of OGK-3 for a cash consideration of USD 3,119 million. After completion of this transaction, the Group became the owner of 46.9% of OGK-3.

During July-August 2007, the Group acquired an additional 7.2% of interest in OGK-3 for a cash consideration of USD 612 million, increasing its ownership to 54.1% (refer to note 6). After completion of this transaction OGK-3 was consolidated.

29. OTHER FINANCIAL ASSETS

	31/12/2008	31/12/2007
Non-current		
Available-for-sale investments, at fair value		
Listed securities	311	2,418
Unlisted securities	1	5
Held-to-maturity investments, at amortised cost		
Promissory notes receivable	23	12
Loans and receivables, at amortised cost		
Bank deposits	115	521
Loans given	51	19
Accounts receivable	22	7
Total non-current	**523**	**2,982**
Current		
Available-for-sale investments, at fair value		
Listed securities	19	117
Promissory notes receivable	—	618
Held-to-maturity investments, at amortised cost		
Promissory notes receivable	—	775
Loans and receivables, at amortised cost		
Bank deposits	1,273	2,832
Loans given	24	131
Total current	**1,316**	**4,473**

Bank deposits

At 31 December 2008, short-term bank deposits in the amount of USD 1,273 million (2007: USD 2,832 million) included notice deposits of USD 525 million (2007: USD 1,610 million). The Group may withdraw cash from these deposits after bank notification. Notification period generally varies from 6 to 30 days.

Interest rates on long-term deposits held in banks varied from 6.1% to 6.3% (2007: 6.1% to 6.3%) per annum.

Interest rates on short-term deposits held in banks vary from 9.0% to 10.5% (2007: 7.0% to 8.6%) per annum.

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29. OTHER FINANCIAL ASSETS (CONTINUED)

Listed and unlisted securities available-for-sale consisted of shares of the following companies:

	31/12/2008	31/12/2007
OJSC "RusHydro"	107	–
OJSC "FSK UES"	69	–
OJSC "Holding MRSK"	36	–
OJSC "TGK-1"	25	281
Talvivaara Mining Company Limited	21	73
U.S. Federal Agency notes	18	25
OJSC "MRSK Sibiri"	18	–
OJSC "INTER RAO UES"	13	–
Breakaway Resources Limited	6	23
OJSC "MRSK Severo-Zapada"	4	–
OJSC "RAO Energeticheskie systemy Vostoka"	3	–
OJSC "TGK-5"	3	18
Canadian Royalties Incorporated	2	21
RAO "UES of Russia"	–	1,883
OJSC "OGK-5"	–	107
OJSC "Polyus Gold"	–	89
OJSC "TGK-2"	–	2
Other	6	18
Total	**331**	**2,540**

Available-for-sale investments in listed securities

OGK-5 and TGK-5. In September 2007, OJSC "Fifth Generation Company of the Wholesale Electricity Market" ("OGK-5") and OJSC "Territorial Generation Company № 5" ("TGK-5") were spun-off from RAO "UES" as a part of its reorganisation. In accordance with the restructuring plan all shareholders of RAO "UES" received ordinary shares of OGK-5 and TGK-5 in proportion to their ownership RAO "UES". As a result of the spin-off, the Group received 607 million ordinary shares of OGK-5 and 20,043 million ordinary shares of TGK-5.

On 8 February 2008, the Group sold its entire shareholding of 607 million ordinary shares in OGK-5 for USD 109 million.

Polyus Gold. At 31 December 2007, current listed securities available-for-sale included an investment in OJSC "Polyus Gold" of USD 89 million. The classification was based on the decision of Board of Directors to sell this investment. On 1 April 2008, the Group sold its stake in OJSC "Polyus Gold" for a cash consideration of USD 99 million.

RAO "UES" and other investments in utility companies. In July – October 2008, as a part of reorganisation of RAO "UES", the Group received minority stakes in a number of generating companies of the wholesales electricity market ("OGKs"), territorial generation companies ("TGKs"), interregional distribution grid companies ("MRSKs"), federal grid company ("FSK") and other assets.

Held-to-maturity investments

At 31 December 2007, promissory notes receivable included notes issued by OJSC "Rosbank" in the amount of USD 774 million due on 8 May 2008. The effective interest rate attributable to these promissory notes was 8.5% per annum. These notes were redeemed at the maturity date.

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29. OTHER FINANCIAL ASSETS (CONTINUED)

Loans given

On 30 May 2006, the Group provided a loan to a related party (refer to note 47) amounting to USD 70 million and bearing interest at LIBOR + 0.75% per annum. At 31 December 2008, the loan was secured by 67% of shares of Edgar Eclipse Incorporated, a company holding a 99% interest in a property development business.

On 11 July 2008, the Group provided an additional loan to the same related party (refer to note 47) in the amount of USD 70 million and bearing interest at LIBOR + 2.5% per annum. The loan is secured by 28.85% of shares of Edgar Eclipse Incorporated. On 4 July 2008, a related party issued a guarantee in favour of the Group, which covers two of the loan agreements. On 11 February 2009, loan agreements terms were renegotiated; as a result the pledge and guarantee were cancelled and maturity dates were prolonged up to December 2012. Due to uncertainty regarding the recoverability of these loans they were fully impaired at 31 December 2008.

On 30 July 2008, the Group provided a loan to OJSC "Norilskgazprom", an associate of the Group, in the amount of USD 39 million at interest rate of 6.5 % per annum and with a maturity date at 30 July 2009. At 31 December 2008 the carrying value of the loan amounted to USD 21 million.

At 31 December 2007, short-term loans given included a loan to OJSC "Norilskgazprom" in the amount of USD 20 million at interest rate of 6.4% per annum. The loan was repaid in full on 31 July 2008.

On 1 October 2008, the Group provided a long-term loan to Mirabella Mineracao Do Brasil Ltda., in the amount of USD 50 million at a floating interest rate of LIBOR + 3.5% per annum (effective rate 4.96%). The loan is to be repaid in equal monthly instalments from 30 September 2010 to 31 December 2012.

At 31 December 2007 promissory notes receivables comprised notes issued by OJSC "Sberbank" in the amount of USD 618 million. On 12 November 2008, these notes were fully repaid. The effective interest rate attributable to these promissory notes was 8.75% per annum.

At 31 December 2008, short-term loans given include loans to several exploration companies, related parties of the Group, in the amount of USD 11 million (2007: USD 53 million) at interest rates varying from 6.5% to 8.5% per annum, due in 2009. Taking into account that majority of these operations are frozen or substantially decreased their activities, the Group recognised an impairment loss in the amount of USD 11 million (2007: USD nil) at 31 December 2008.

Accounts receivable

During 2008, the Group renegotiated the terms of receivables in the amount of USD 44 million for utility sales. Under the new terms they are repayable on a monthly basis by equal instalments till 2016. At 31 December 2008, a portion of these receivables in the amount of USD 19 million repayable after 2009 was classified as other non-current financial assets.

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30. OTHER TAXES

	31/12/2008	31/12/2007
Taxes receivable		
Value added tax recoverable	566	585
Customs duties	67	65
Other taxes	6	8
	639	**658**
Less: Allowance for value added tax recoverable	(39)	(35)
Total	**600**	**623**
Less: Non-current portion	(79)	(38)
Current taxes receivable	**521**	**585**
Taxes payable		
Value added tax	64	28
Property tax	29	31
Provision for tax fines and penalties	17	76
Tax on mining	14	17
Unified social tax	13	15
Other	34	30
Total	**171**	**197**

31. INVENTORIES

	31/12/2008	31/12/2007
Refined metals		
at net production cost	432	483
at net realisable value	27	19
By-products at net realisable value	91	190
Work-in-process		
at net production cost	396	339
at net realisable value	64	117
Total metal inventories	**1,010**	**1,148**
Stores and materials at cost	987	985
Less: Allowance for obsolete and slow-moving items	(38)	(25)
Net stores and materials	**949**	**960**
Total inventories	**1,959**	**2,108**

32. TRADE AND OTHER RECEIVABLES

	31/12/2008	31/12/2007
Trade receivables for metal sales	313	713
Other receivables	291	288
	604	**1,001**
Less: Allowance for doubtful debts	(35)	(52)
Total	**569**	**949**

In 2008 and 2007 the average credit period on metal sales varied from 0 to 30 days. Trade receivables are generally non-interest bearing. The Group has fully provided for all receivables which were due in excess of 180 days based on historical experience that such receivables are generally not recoverable. Trade receivables that are past due for less than 180 days are generally not provided for.

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32. TRADE AND OTHER RECEIVABLES (CONTINUED)

The payment terms for Tati Nickel Mining Company Pty Limited (Botswana) are set out in the related ore and concentrate purchase agreements, which stipulate that payments are due within 150 days for base metals, and varies from 240 to 300 days for precious metals. However for certain agreements, provisional amounts of 70% for nickel and 90% for other metals are receivable within 60 days.

The average credit period on sales of electricity and other products and services for the year ended 31 December 2008 was 16 days (2007: 25 days). No interest was charged on these receivables. The Group has provided fully for all other receivables over 365 days based on historical experience that such receivables are generally not recoverable. Provision in respect of receivables that were less than 365 days old is determined based on past default experience.

The Group did not hold any collateral for accounts receivable balances.

Included in the Group's other receivables at 31 December 2008 were debtors with a carrying value of USD 66 million (2007: USD 76 million) that were past due but not impaired. Management of the Group believes that these amounts are recoverable in full.

Ageing of other receivables past due but not impaired was as follows:

	31/12/2008	31/12/2007
Less than 180 days	55	36
180-365 days	11	35
More than 365 days	—	5
	66	**76**

Movement in the allowance for doubtful debts was as follows:

	31/12/2008	31/12/2007
Balance at beginning of the year	**52**	**71**
Change in allowance	51	(9)
Accounts receivable written-off	(48)	(16)
Reclassified to long-term accounts receivable	(13)	—
Effect of translation to presentation currency	(7)	6
Balance at end of the year	**35**	**52**

Included in allowance for doubtful debts is a specific allowance against other receivables of USD 21 million (2007: USD 16 million) from entities placed into bankruptcy. The allowance represents the difference between the carrying amount of these receivables and the present value of the expected proceeds on liquidation. The Group did not hold collateral in respect of these balances.

33. ADVANCES PAID AND PREPAID EXPENSES

	31/12/2008	31/12/2007
Advances paid	91	151
Prepaid insurance	27	32
Total	**118**	**183**

At 31 December 2008, advances paid were presented net of impairment of USD 7 million (2007: USD 7 million). During the year ended 31 December 2008, an impairment loss of USD 4 million (2007: USD 1 million) was recognised.

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34. CASH AND CASH EQUIVALENTS

		31/12/2008	31/12/2007
Current accounts	- foreign currencies	1,251	384
	- RUR	281	320
Bank deposits	- foreign currencies	413	3,087
	- RUR	12	209
Restricted cash		36	6
Other cash and cash equivalents		2	2
Total		**1,995**	**4,008**

Restricted cash consists of cash equivalents that were held as collateral for outstanding letters of credit.

35. ASSETS CLASSIFIED AS HELD FOR SALE

At 31 December 2008, construction-in-progress in the amount of USD 13 million attributable to Activox Refinery Project was classified as asset held for sale and presented separately in the consolidated balance sheet (refer to note 25).

On 2 November 2007, management of the Group made a decision to dispose of LLC "Norilsk-Telecom" and its subsidiaries ("Norilsk-Telecom"). The principal activity of Norilsk-Telecom was to provide telecommunication services in the Krasnoyarsk region.

Assets and liabilities attributable to Norilsk-Telecom were classified as a disposal group held for sale and presented separately in the consolidated balance sheet. The Group's share in Norilsk-Telecom was sold in May 2008 for a cash consideration of USD 53 million (refer to note 46). The difference between the carrying value of assets and liabilities and the expected proceeds from disposal of USD 15 million was recognised as impairment of property, plant and equipment.

The major classes of assets and liabilities classified as held for sale at 31 December 2007 were as follows:

	31/12/2007
Property, plant and equipment (refer to note 25)	35
Trade and other receivables	11
Cash and cash equivalents	8
Inventory	2
Other assets	4
Total assets held for sale	**60**
Trade and other payables	4
Employee benefit obligations	2
Other liabilities	3
Total liabilities associated with assets held for sale	**9**
Net assets held for sale	**51**

Management of the Group determined that the sale of Norilsk-Telecom does not constitute a discontinued operation.

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36. SHARE CAPITAL

Authorised, issued and fully paid share capital

	31/12/2008		31/12/2007	
	Number of shares	Outstanding balance	Number of shares	Outstanding balance
Ordinary shares at par value of RUR 1 each	190,627,747	8	190,627,747	8
Total	**190,627,747**	**8**	**190,627,747**	**8**

Treasury shares

	31/12/2008		31/12/2007	
	Number of shares	Outstanding balance	Number of shares	Outstanding balance
Balance at beginning of the year	**1,710,884**	**–**	**9,209,834**	**(999)**
16 November 2007: re-issuance of shares	–	–	(7,498,950)	999
September 2008: acquisition of shares	6,613,286	889	–	–
October - December 2008: acquisition of shares	7,710,279	1,726	–	–
Balance at end of the year	**16,034,449**	**2,615**	**1,710,884**	**–**

On 16 November 2007, 7,498,950 of the Company's shares were re-issued from treasury stock at USD 285 per share for a total consideration of USD 2,137 million. Direct expenses in the amount of USD 10 million and income tax associated with reissuance in the amount of USD 272 million were deducted from proceeds.

In September 2008, three subsidiaries of the Group – OJSC "Norilsky Kombinat", OJSC "Kolskaya Mining and Metallurgical Company" and OGK-3 transferred cash in the amount of USD 1,016 million under trust management agreements to OJSC AKB "Rosbank" and CJSC "Investment company "Troika-Dialog". At 31 December 2008, USD 889 million of this amount, including direct expenses associated with acquisitions, was used to acquire 6,613,286 shares of the Company. Accordingly, in the consolidated financial statements for the year ended 31 December 2008, these shares were presented as treasury stock.

Immediately after acquisition of the Company's shares, OJSC AKB "Rosbank" as a trustee signed a number of forward contracts to sell 5,936,311 shares on 18 September 2009 at a 10% mark-up on the cost of acquisition.

On 22 August 2008, the Group announced a voluntary buy-back of up to 7,947,000 of its issued ordinary shares. At 31 December 2008, the Company acquired 7,710,279 of its own shares for a cash consideration of USD 1,726 million.

At 13 January 2009, the Company acquired a further 94,855 ordinary shares for a cash consideration of USD 20 million (refer to note 52).

37. OTHER RESERVES

	Option premium on convertible notes	Investments revaluation reserve	Hedging reserve	Revaluation surplus	Translation reserve	Total
Balance at 31 December 2006	—	**997**	**(15)**	—	**1,580**	**2,562**
Increase in fair value of available-for-sale investments	—	465	—	—	—	**465**
Effect of change in classification of available-for-sale investments to investments in associates due to increase of ownership	—	(222)	—	43	(4)	**(183)**
Loss on cash flow hedge	—	—	(16)	—	—	**(16)**
Translation of foreign operations	—	—	—	—	(206)	**(206)**
Effect of translation to presentation currency	—	—	—	—	1,201	**1,201**
Net income recognised directly in equity	—	**243**	**(16)**	**43**	**991**	**1,261**
Impairment of available-for-sale investments	—	24	—	—	—	**24**
Other reserves disposed of on disposal of subsidiaries	—	—	—	—	(5)	**(5)**
Total recognised income and expense	—	**267**	**(16)**	**43**	**986**	**1,280**
Issuance of ordinary shares from treasury stock, net of direct expenses and attributable income tax	—	—	—	—	(77)	**(77)**
Balance at 31 December 2007	—	**1,264**	**(31)**	**43**	**2,489**	**3,765**
Decrease in fair value of available-for-sale investments	—	(1,410)	—	—	(89)	**(1,499)**
Impact of change in income tax rate in the Russian Federation	—	(6)	—	—	—	**(6)**
Gain on cash flow hedge	—	—	6	—	—	**6**
Translation of foreign operations	—	—	—	—	(204)	**(204)**
Effect of translation to presentation currency	—	—	—	—	(3,260)	**(3,260)**
Net loss recognised directly in equity	—	**(1,416)**	**6**	—	**(3,553)**	**(4,963)**
Realised loss on disposal of cash flow hedge	—	—	2	—	—	**2**
Realised gain on disposal of available-for-sale investments	—	(102)	—	—	(2)	**(104)**
Impairment of available-for-sale investments	—	232	—	—	—	**232**
Impact of change in income tax rate in the Russian Federation	—	6	—	—	—	**6**
Other reserves disposed of on disposal of subsidiaries	—	—	—	—	(9)	**(9)**
Total recognised income and expense	—	**(1,280)**	**8**	—	**(3,564)**	**(4,836)**
Issuance of convertible notes	19	—	—	—	—	**19**
Balance at 31 December 2008	**19**	**(16)**	**(23)**	**43**	**(1,075)**	**(1,052)**

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38. BORROWINGS

			31/12/2008		31/12/2007	
		Currency	Rate, %	Outstanding balance	Rate, %	Outstanding balance
Bank loans, including:						
Societe Generale, syndicated loan	(i)	USD	LIBOR+ 0.53-0.60	3,486	LIBOR+ 0.53-0.60	3,473
Calyon, syndicated loan	(ii)	USD	LIBOR+ 0.85-1.00	1,489	—	—
Societe Generale, syndicated loan	(iii)	USD	LIBOR+0.43	450	LIBOR+0.43	200
Deutsche Zentral-Genossenschaftsbank, syndicated loan	(iv)	USD	LIBOR+0.60	338	—	—
Sampo Bank	(v)	USD	LIBOR+0.45	50	—	—
BNP Paribas	(vi)	USD	—	—	LIBOR+ 0.30-0.40	2,497
Sberbank	(vii)	RUR	—	—	8.75	612
Toronto Dominion	(viii)	USD	—	—	LIBOR+2.50	95
ANZ Syndicate	(ix)	AUD	—	—	BBSY+ 0.61-1.01	66
Other		varies	varies	18	varies	21
Promissory notes	(x)	RUR	—	—	5.50	580
Guaranteed notes	(xi)	USD	7.125	500	7.125	499
Exempt Facility Reversal Bonds Series 2000	(xii)	USD	8.57	29	8.57	29
Convertible notes Stillwater Mining Company	(xiii)	USD	6.40	80	—	—
Total				**6,440**		**8,072**
Less: current portion due within twelve months and presented as short-term borrowings				**(872)**		**(3,971)**
Long-term borrowings				**5,568**		**4,101**

The maturity profile of the Group's borrowings was as follows:

Due within one month	13	8
Due from one to three months	—	597
Due from three to twelve months	859	3,366
Total short-term borrowings	**872**	**3,971**
Due in the second year	3,190	825
Due in the third year	1,219	2,247
Due in the fourth year	838	665
Due in the fifth year	34	333
Due thereafter	287	31
Total long-term borrowings	**5,568**	**4,101**
Total	**6,440**	**8,072**

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38. BORROWINGS (CONTINUED)

(i) ***Societe Generale*** – A USD 3,500 million syndicated loan, which includes two credit lines for USD 2,000 million and USD 1,500 million, arranged by Societe Generale and BNP Paribas. The credit line in the amount of USD 2,000 million is arranged for five years at floating rate of LIBOR + 0.53% (effective rate 1.00%, comparative 5.39%) per annum up to 29 June 2010 and LIBOR + 0.63% (effective rate 1.10%, comparative 5.49%) per annum thereafter and secured by assignment of rights for proceeds from metal supply agreements of Metal Trade Overseas S.A. and Norilsk Nickel Europe Limited, subsidiaries of the Group. The secured credit line in the amount of USD 2,000 million is to be repaid in equal quarterly instalments after a twenty four month grace period with the final instalment due on 29 June 2012. The credit line in the amount of USD 1,500 million is unsecured and arranged for three years at floating rate of LIBOR + 0.60% per annum (effective rate 1.07%, comparative 5.46%), and is due in full in June 2010. Interest is payable on a monthly basis at the rate varying based on the credit rating of the Company.

The Group is obliged to comply with a number of restrictive financial and other covenants, including maintaining certain financial ratios and restrictions on pledging and disposal of certain assets.

(ii) ***Calyon*** – A USD 1,500 million syndicated loan arranged by Calyon, the Bank of Tokyo-Mitsubishi UFJ Limited, Bayerische Hypo- und Vereinsbank AG, ING Wholesale Banking, Societe Generale, Sumitomo Mitsui Finance Dublin Limited, The Royal Bank of Scotland Plc and WestLB AG includes three credit lines of USD 750 million secured long-term loan, a USD 550 million secured revolving credit facility and a USD 200 million unsecured revolving facility. The credit lines of USD 750 million and USD 550 million were arranged for three years at floating rate of LIBOR + 0.85% (effective rate 1.32%) per annum and secured by assignment of rights for proceeds from metal supply agreements of Metal Trade Overseas S.A. and Norilsk Nickel Europe Limited, subsidiaries of the Group. The credit line in the amount of USD 200 million was arranged for three years at floating rate of LIBOR + 1% (effective rate 1.47%) per annum. These credit lines are to be repaid in six equal quarterly instalments after an eighteen month grace period with the final instalment due on 24 June 2011. Interest is payable on a monthly basis for the revolving credit facilities of USD 550 million and USD 200 million and on a quarterly basis for secured long-term loan of USD 750 million.

The Group is obliged to comply with a number of restrictive financial and other covenants, including maintaining certain financial ratios and restrictions on pledging and disposal of certain assets.

(iii) ***Societe Generale*** – A USD 450 million syndicated unsecured revolving credit facility arranged by Societe Generale, Barclays Capital and ING Wholesale Banking, with a floating rate of LIBOR + 0.43% (effective rate 0.90%, comparative 5.36%) per annum, is due in full on 12 March 2012. Interest is payable on a monthly basis.

The Group is obliged to comply with a number of restrictive financial and other covenants, including maintaining certain financial ratios and restrictions on pledging and disposal of certain assets.

(iv) ***Deutsche Zentral-Genossenschaftsbank*** – A USD 376 million term credit facility arranged by Deutsche Zentral-Genossenschaftsbank, ING Bank N.V., Bayerische Landesbank and Calyon Deutschland consisting of four tranches. At 31 December 2008, the Group obtained a ten-year loan of USD 355 million under this credit facility, at floating rate of LIBOR + 0.60% (effective rates vary from 1.43% to 2.49%) per annum. The loan was guaranteed by Euler Hermes Kreditversicherungs-AG, Hamburg, Germany. All tranches are to be repaid in twenty equal semi-annual instalments with the final instalments due on 31 July 2018, 13 November 2018, 11 December 2018 and 28 January 2019. Interest is payable semi-annually.

The Group is obliged to comply with a number of restrictive financial and other covenants, including maintaining certain financial ratios and restrictions on pledging and disposal of certain assets.

(v) ***Sampo Bank*** – A USD 50 million unsecured loan arranged by Sampo Bank at a floating rate of LIBOR + 0.45% per annum (effective rate 1.91%). The loan is to be repaid in twenty eight equal monthly instalments after a one year grace period with the final instalment due on 31 December 2012. Interest is payable quarterly.

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38. BORROWINGS (CONTINUED)

(vi) ***BNP Paribas*** – A USD 2,500 million unsecured loan consisted of two credit lines for USD 1,000 million and USD 1,500 million. The credit line in the amount of USD 1,000 million was arranged at floating rate of LIBOR + 0.30% per annum (effective rate 5.16%). Credit line in the amount of USD 1,500 million was arranged at LIBOR + 0.40% per annum (effective rates 5.26% and 5.64% for different tranches). The loan was repaid in full on 30 June 2008.

(vii) ***Sberbank*** – A USD 612 million unsecured loan, with a fixed rate of 8.75% per annum. The loan was repaid on 12 November 2008.

(viii) ***Toronto Dominion*** – A USD 250 million credit facility arranged by Stillwater Mining Company ("SWC"), a subsidiary of the Group, at floating rate of LIBOR + 2.50% per annum (effective rate 7.38%). The loan was repaid in full on 12 March 2008.

(ix) ***ANZ Syndicate*** – A USD 118 million credit facility arranged by LionOre Mining International Limited, a subsidiary of the Group, was secured by shares of subsidiaries of LionOre Group located in Australia and repayable in equal monthly instalments starting from March 2007, with the final instalment in December 2008. The loan was repaid in full at maturity date. The interest rate varied from the Bill Rate of the Reserve Bank of Australia ("BBSY") + 0.61% (effective rate 8.18%) to BBSY + 1.01% (effective rate 8.58%) per annum.

(x) ***Promissory notes*** – Promissory notes were issued by OJSC "MMC Norilsk Nickel" in September 2007 with an effective interest rate 5.50% per annum. The promissory notes were redeemed in full during the period from February to April 2008.

(xi) ***Guaranteed notes*** – On 30 September 2004, Norilsk Nickel Luxemburg S.A., a wholly owned subsidiary of the Group, issued USD 500 million 7.125% notes. The notes were issued at par with an interest payable semi-annually in arrears on 30 March and 30 September, and the principal due on 30 September 2009.

The notes are unconditionally and irrevocably guaranteed by OJSC "MMC Norilsk Nickel".

(xii) ***Exempt Facility Reversal Bonds Series 2000*** – A USD 29 million bond issued by Stillwater Mining Company, a subsidiary of the Group, on 6 July 2002, with an effective interest rate of 8.57% and due in full on 1 July 2020. Interest is payable semi-annually.

(xiii) ***Convertible Notes Stillwater Mining Company*** – On 12 March 2008, SWC issued 181,500 convertible notes, at USD 1,000 per note, out of which 80,000 notes were acquired by the Group.

Conversion may occur at any time between 12 March 2008 and 15 March 2028 at a premium of 32% to the price of SWC share at the date of issuance of convertible notes. If the notes are not converted, they can be redeemed during the period from 22 March 2013 to 15 March 2028 but not later than 15 March 2028 at USD 1,000 per note. Interest of 1.875% per annum is payable semi-annually in arrears on 15 March and 15 September until the settlement date.

The net proceeds received from the issue of the notes have been split between the liability element and an equity component, representing the residual attributable to the option to convert the liability into equity of the Group, as follows:

Proceeds from issue (net of debt issuance costs)	97
Liability component at date of issue	(78)
Equity component	**19**

The interest charged for the period is calculated by applying an effective interest rate of 6.4%. The liability component is measured at amortised cost.

The option premium on convertible notes represents equity component (conversion rights) on 101,500 (net of 80,000 held by the Group) 1.875% convertible notes issued during the period.

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39. OBLIGATIONS UNDER FINANCE LEASES

	Minimum lease payments		Present value of minimum lease payments	
	31/12/2008	31/12/2007	31/12/2008	31/12/2007
Due within one year	20	3	13	2
Due in the second year	17	2	11	2
Due in the third year	22	—	18	—
Due in the fourth year	13	—	12	—
	72	**5**	**54**	**4**
Less: Future finance charges	(18)	(1)	n/a	n/a
Present value of lease obligations	**54**	**4**	**54**	**4**
Less: Amount due for settlement within one year and shown under current liabilities			**(13)**	**(2)**
Amount due for settlement after one year			**41**	**2**

The Group leases production equipment and transport under a number of finance lease agreements. The average lease term is 3 years (2007: 4 years). For the year ended 31 December 2008 the weighted average effective interest rate was 16% (2007: 10%). Majority of the leases are on a fixed repayment basis and denominated in Botswana Pula. The Group's obligations under finance leases are secured by the lessors' title to the leased assets.

	31/12/2008	31/12/2007
Carrying value of leased production equipment	56	9

40. EMPLOYEE BENEFIT OBLIGATIONS

	31/12/2008	31/12/2007
Defined benefit pension plans assets	—	8
Total assets	**—**	**8**
Wages and salaries	193	206
Accrual for annual leave	174	164
Defined benefit obligations	10	6
Defined contribution obligations	9	11
Other	11	2
Total obligations	**397**	**389**
Less: Non-current obligations	**(11)**	**(11)**
Current obligations	**386**	**378**

Defined benefit plans liabilities/(assets)

	31/12/2008	31/12/2007
Present value of defined benefit obligations	224	240
Fair value of plans assets	(118)	(148)
Present value of unfunded obligations	**106**	**92**
Plan assets above limits	4	19
Unrecognised past service cost	(5)	(1)
Unrecognised actuarial losses	(95)	(112)
	10	**(2)**

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40. EMPLOYEE BENEFIT OBLIGATIONS (CONTINUED)

Net benefit expense recognised in the consolidated income statement

	Year ended 31/12/2008	Year ended 31/12/2007
Current service costs	2	2
Expected return on plans assets	(12)	(8)
Additional cost arising from new plan members	8	15
Net actuarial losses recognised during the year	31	22
Plan assets above limits recognised during the year	4	19
Gain arising from curtailment	—	(5)
Interest expense	16	10
Total	**49**	**55**
Actual losses/(returns) on plan assets	41	(7)

Movements in the fair value of plans assets were as follows:

	Lifelong professional pension plan	Joint corporate pension plan
Balance at 31 December 2006	—	**11**
Contributions from the employer	70	64
Expected return on plans assets	4	4
Actuarial gain	—	(2)
Benefits paid	(6)	(4)
Effect of translation to presentation currency	4	3
Balance at 31 December 2007	**72**	**76**
Contributions from the employer	19	14
Expected return on plans assets	6	6
Actuarial gain	(20)	(21)
Benefits paid	(9)	(1)
Effect of translation to presentation currency	(11)	(13)
Balance at 31 December 2008	**57**	**61**

Movements in the present value of the defined benefit obligations were as follows:

	Lifelong professional pension plan	Joint corporate pension plan	Other
Balance at 31 December 2006	**81**	**38**	—
Acquired on acquisition of subsidiaries	—	—	16
Benefits paid	(6)	(4)	—
Current service cost	—	16	1
Interest cost	6	3	1
Actuarial loss/(gain)	92	(7)	(2)
Gain on curtailment	—	—	(5)
Effect of translation to presentation currency	6	4	—
Balance at 31 December 2007	**179**	**50**	**11**
Benefits paid	(9)	(1)	(1)
Current service cost	—	8	2
Interest cost	11	4	1
Actuarial loss	6	6	3
Effect of translation to presentation currency	(30)	(13)	(3)
Balance at 31 December 2008	**157**	**54**	**13**

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40. EMPLOYEE BENEFIT OBLIGATIONS (CONTINUED)

Starting from 2006, all of the Group's pension plans are managed by a non-state Pension Fund "Norilsk Nickel". Contributions from the Group to this Fund during the year ended 31 December 2008, amounted to USD 67 million (2007: USD 201 million).

The major categories of pension plans assets and the expected rate of return at the balance sheet dates for each category were as follows:

	Expected return		Fair value of pension plans assets	
	31/12/2008	31/12/2007	31/12/2008	31/12/2007
Equity instruments	25.2%	9.8%	18	37
Bonds	10.4%	6.6%	75	76
Deposits	12.7%	6.6%	25	35
Weighted average expected return	**13.1%**	**7.4%**	**118**	**148**

The following tables summarise the present value of defined benefit obligations and fair value of the pension plans assets and experience adjustments for them for the current year and previous four annual periods:

	31/12/2008	31/12/2007	31/12/2006	31/12/2005	31/12/2004
Defined benefit obligations	224	240	119	104	70
Plans assets	(118)	(148)	(11)	—	—
Deficit	**106**	**92**	**108**	**104**	**70**
Experience adjustments on plans assets	(41)	(1)	—	—	—
Experience adjustments on plans liabilities	(41)	(70)	(6)	—	—

Key assumptions used in estimation of defined benefit obligations were as follows:

	Year ended 31/12/2008	Year ended 31/12/2007
Discount rate	9.1%	6.6%
Expected rate of return on plans assets	13.1%	7.4%
Pre-retirement increases to capital accounts	9.1%	6.6%
Future salary increases	12.9%	6.6%
Future pension increases	9.9%	9.2%
Average life expectancy of members from the date of retirement	17 years	17 years

Defined contribution plans

Amounts recognised in the consolidated income statement in respect of defined contribution plans were as follows:

	Year ended 31/12/2008	Year ended 31/12/2007
Pension Fund of the Russian Federation	207	199
Shared accumulated pension program	34	1
Stillwater Mining Company savings plan	6	5
Corporate pension option program	—	56
Other	7	13
Total	**254**	**274**

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41. SHARE APPRECIATION RIGHTS

OJSC "MMC Norilsk Nickel" long-term key management personnel compensation plan

On 7 April 2008, the Group granted Share Appreciation Rights ("SARs") to key management personnel of Russian entities of the Group that entitle them to a cash payment ("MMC NN incentive plan"). The amount of the cash payment is determined based on a number of vested "phantom" shares, increase in the share price of the Company and achievement of a targeted growth in total shareholders return in excess of the total growth in shareholders return of companies comprising HSBC index, between the grant date and vesting dates. The expected future dividends were incorporated in the option fair value determination by adding them back to the estimated weighted average price of the company at the corresponding point of time. The program is divided into three stages and is effective until 6 April 2011.

Norilsk Nickel International long-term employee incentive plan

On 1 January 2008, the Group granted SARs to key management personnel of foreign entities of the Group that entitle them to a cash payment ("NN International incentive plan"). The amount of the cash payment to eligible employees is determined based on number of vested "phantom" shares, volume-weighted share price of the Company for the calendar quarter preceding vesting date and achievement of targeted volumes of saleable nickel production, between grant date and vesting dates. In calculation of fair value of share appreciation rights for each of the vesting years, the present value of dividends assumed to be paid before the movement of vesting is subtracted from the value of the stock as at valuation date, which is a start value of the future share price development. The program is divided into three stages and is effective until 31 December 2010.

The compensation cost related to SARs and the corresponding liability, are set out in the table below:

	MMC NN incentive plan	NN International incentive plan
Expense arising from SARs granted for the year	24	4
Effect of changes in fair value of SARs	(1)	—
Forfeited during the year	(12)	(2)
Exercised during the year	—	(1)
Balance at end of the period	**11**	**1**

The significant assumptions used in the valuation model regarding amount of liabilities for cash-settled arrangements were as follows:

	MMC NN incentive plan	NN International incentive plan
Expected volatility of the Company share on MICEX	39.0%	39.0%
Expected volatility of the Company share on LSE	30.0%	n/a
Expected volatility of HSBC index	45.0%	n/a
Risk-free interest rate	0.7%	0.7%
Dividend yield on HSBC index	1.5%	n/a
Expected salable nickel production volumes for 2008 year, tonnes	n/a	89,186
Expected salable nickel production volumes for 2009 year, tonnes	n/a	83,173
Expected salable nickel production volumes for 2010 year, tonnes	n/a	83,153

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42. ENVIRONMENTAL OBLIGATIONS

	Decommis-sioning obligations	Provision for land restoration	Total
Balance at 31 December 2006	**318**	**4**	**322**
New obligations raised (refer to note 25)	3	—	**3**
Change in estimate (refer to note 25)	86	—	**86**
Acquired on acquisition of subsidiaries (refer to note 6)	89	6	**95**
Unwinding of discount on decommissioning obligations (refer to note 21)	22	1	**23**
Charge to income statement	27	3	**30**
Effect of translation to presentation currency	24	—	**24**
Balance at 31 December 2007	**569**	**14**	**583**
New obligations raised (refer to note 25)	35	—	**35**
Change in estimate (refer to note 25)	16	—	**16**
Unwinding of discount on decommissioning obligations (refer to note 21)	33	—	**33**
Charge to the income statement	—	(2)	**(2)**
Effect of translation to presentation currency	(99)	(2)	**(101)**
Balance at 31 December 2008	**554**	**10**	**564**

During 2008, the Group reassessed the amount of decommissioning obligations for its operations in the Russian Federation due to changes in inflation and discount rates, and the results of an independent audit of ore reserves affecting the expected mines closure dates. As a result, additional decommissioning obligations were raised, which was presented as change in estimate.

Key assumptions used in estimation of environmental obligations were as follows:

	31/12/2008	31/12/2007
Discount rates	5.0% 12.0%	6.0% 7.7%
Future expected increase of expenses	25.0%	25.0%
Expected closure date of mines	up to 2054	up to 2056

Present value of expected cost to be incurred for settlement of environmental obligations was as follows:

	31/12/2008	31/12/2007
Due from second to fifth year	209	148
Due from sixth to tenth year	19	72
Due from eleventh to fifteenth year	74	53
Due from sixteenth to twentieth year	183	156
Due thereafter	79	154
	564	**583**

43. TRADE AND OTHER PAYABLES

	31/12/2008	31/12/2007
Financial liabilities		
Trade payables	281	352
Insurance payable	4	22
Payables for acquisition of property, plant and equipment	78	44
Payables for treasury shares	47	—
Other creditors	135	168
Total financial liabilities	**545**	**586**
Non-financial liabilities		
Provision for onerous contracts	51	—
Total non-financial liabilities	**51**	**—**
Total	**596**	**586**

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43. TRADE AND OTHER PAYABLES (CONTINUED)

The maturity profile of the Group's financial liabilities was as follows:

	31/12/2008	31/12/2007
Due within one month	322	406
Due from one to three months	151	45
Due from three to twelve months	72	135
Total	**545**	**586**

44. DERIVATIVE FINANCIAL INSTRUMENTS

	31/12/2008	31/12/2007
Cash flow hedges		
Nickel future contracts	4	10
Platinum future contracts	–	6
Total eash flow hedges	**4**	**16**
At fair value through profit and loss		
Derivatives held for trading	11	11
Total at fair value through profit and loss	**11**	**11**
Less: current portion due within twelve months and presented under current liabilities	**(15)**	**(24)**
Long-term derivative financial liabilities	**–**	**3**

The maturity profile of the Group's derivative financial liabilities was as follows:

	31/12/2008	31/12/2007
Cash flow hedges		
Due within one month	1	2
Due from one to three months	1	7
Due from three to twelve months	2	7
Total	**4**	**16**
At fair value through profit and loss		
Due from one to three months	11	2
Due from three to twelve months	–	6
Due from one to five years	–	3
Total	**11**	**11**

Derivative financial liabilities designated as at fair value through profit and loss were as follows:

	31/12/2008	31/12/2007
Derivatives held for trading, at fair value	11	11
	11	**11**
Change in fair value due to change in market risk factors	–	72
Realised gain on derivatives held for trading	44	6
Income on derivatives classified as held for trading	**44**	**78**

Derivatives held for trading represent nickel futures that were entered into by Norilsk Nickel Harjavalta Oy and valued at 31 December 2008 at fair value of total portfolio of futures contracts. The portfolio consisted of contracts with expiration dates between January and March 2009.

At 31 December 2007, derivatives held for trading represented nickel and copper forward contracts entered into by Norilsk Nickel Africa after the approval of Activox Project in August 2006, valued at fair value and closed at the end of December 2008.

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45. DIVIDENDS

On 30 June 2008, the Company declared a final dividend in respect of the year ended 31 December 2007 in the amount of RUR 112 (USD 4.77) per share. The total amount of USD 902 million, recognised in the consolidated financial statements, net of USD 8 million due to Group subsidiaries, was paid to the shareholders on 29 August 2008.

On 21 December 2007, the Company declared an interim dividend in respect of the year ended 31 December 2007 in the amount of RUR 108 (USD 4.36) per share. The total amount of USD 792 million, recognised in the consolidated financial statements, net of USD 7 million due to Group subsidiaries, was paid to the shareholders on 7 February 2008.

On 28 June 2007, the Company declared a final dividend in respect of the year ended 31 December 2006 in the amount of RUR 120 (USD 4.64) per share. The total amount of USD 842 million, recognised in the consolidated financial statements, net of USD 8 million due to Group subsidiaries, was paid to the shareholders on 16 August 2007.

46. DISPOSAL OF SUBSIDIARIES

On 5 May 2008, the Group sold its interest in LLC "Norilsk-Telecom", a 100% subsidiary of the Group, for a cash consideration of USD 53 million. The carrying value of Norilsk Telecom net assets at the date of disposal amounted to USD 55 million.

On 24 March 2008, the Group sold its interest in Nor-Med Limited, a 75% subsidiary of the Group, for a cash consideration of USD 2 million. The carrying value of Nor-Med Limited net assets at the date of disposal amounted to USD 3 million.

On 25 May 2007, the Group sold its interest in Vimon Investments Limited BVI, a company which owned the entire share capital of CJSC "Kraus-M", a subsidiary of the Group, to a related party for a cash consideration of less than USD 1 million (refer to note 47). Under the terms of the sale agreement, intragroup debt of Vimon Investments Limited amounting to USD 41 million was assigned to the buyer. The carrying value of Vimon Investments Limited net assets at the date of disposal amounted to USD 18 million.

At the dates of disposal aggregated net assets of the subsidiaries disposed of were as follows:

	Year ended 31/12/2008	Year ended 31/12/2007
Property, plant and equipment	45	73
Intangible assets	1	–
Trade and other receivables	22	3
Inventories	3	–
Other taxes receivable	1	4
Cash and cash equivalents	8	–
Employee benefit obligations	(2)	–
Deferred tax liabilities	(3)	(14)
Borrowings	(6)	(48)
Trade and other payables	(11)	–
Group's share of assets disposed of	**58**	**18**
Loss on disposal	(3)	(18)
Proceeds from disposal of subsidiary	**55**	–
Less: Cash and cash equivalents disposed of	(8)	–
Net cash inflow from disposal of subsidiaries	**47**	–

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47. RELATED PARTIES

Related parties are considered to include shareholders, affiliates and entities under common ownership and control of the Group's major shareholders and key management personnel. The Company and its subsidiaries, in the ordinary course of their business, enter into various sale, purchase and service transactions with related parties. Transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below.

	Sale of goods and services		Purchase of goods and services	
Transactions with related parties	**Year ended 31/12/2008**	**Year ended 31/12/2007**	**Year ended 31/12/2008**	**Year ended 31/12/2007**
Entities under common ownership and control of the Group's major shareholders	64	200	92	102
Associates of the Group	21	15	124	255
Total	**85**	**215**	**216**	**357**

On 20 December 2008, OGK-3 purchased from the Smart Hydrogen Incorporated, an associate of the Group, 35% of Plug Power Incorporated for a cash consideration of USD 33 million (refer to note 28).

During the year ended 31 December 2008, the Group provided loans to entities under common ownership and control of the Group's major shareholders in the amount of USD 78 million and to associates of the Group in the amount of USD 46 million (2007: USD 51million and USD 21 million, respectively).

Interest income received by the Group from entities under common ownership and control of the Group's major shareholders amounted to USD 12 million and from associates of the Group amounted to USD 1 million for the year ended 31 December 2008 (2007: USD 25 million and USD 1 million, respectively).

In May 2007, the Group sold its investment in a subsidiary to entity under common ownership and control of the Group's major shareholders for a cash consideration of less than USD 1 million (refer to note 46).

	Investments and cash		Accounts receivable	
Outstanding balances with related parties	**31/12/2008**	**31/12/2007**	**31/12/2008**	**31/12/2007**
Entities under common ownership and control of the Group's major shareholders	–	1,488	23	29
Associates of the Group	21	20	1	3
Total	**21**	**1,508**	**24**	**32**

	Loans and borrowings received		Accounts payable	
Outstanding balances with related parties	**31/12/2008**	**31/12/2007**	**31/12/2008**	**31/12/2007**
Entities under common ownership and control of the Group's major shareholders	–	8	9	22
Associates of the Group	–	–	21	15
Total	**–**	**8**	**30**	**37**

All balances are expected to be settled in cash. At 31 December 2008, the Group recognised impairment provision for loans provided to the related parties of the Group in the amount of USD 140 million (2007: USD 70 million) (refer to note 29) and for accounts receivable from the related parties of the Group in the amount of USD 4 million (2007: USD 3 million).

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47. RELATED PARTIES (CONTINUED)

Terms and conditions of transactions with related parties

Sales to and purchases from related parties of electricity, heat energy and natural gas supply were made at prices established by the Federal Utility Committee and Federal Tariff Service, government regulators responsible for establishing and monitoring prices on the utility and telecommunication markets in the Russian Federation.

Sales of construction, transportation, repair and other services were made at prices calculated at budgeted cost, generally determined based on Russian accounting standards, of services plus a margin varied from 1% to 25%.

Loans were provided to related parties at the rate 6.5% for RUR-denominated loans (2007: from 6.4% to 8.0%) and from 5.6% to 6.1% for USD-denominated loans (2007: 6.1%).

Compensation of key management personnel

Remuneration of key management personnel of the Group was as follows:

	Year ended 31/12/2008	Year ended 31/12/2007
Salary and performance bonuses	57	39
Termination benefits	24	1
Share appreciation rights	4	–
Social security taxes	2	1
Total	**87**	**41**

48. COMMITMENTS

Capital commitments

At 31 December 2008, contractual capital commitments amounted to USD 890 million.

Operating leases

The land in the Russian Federation on which the Group's production facilities are located is owned by the state. The Group leases land through operating lease agreements, which expire in various years through 2033. According to the terms of lease agreements rent fees are revised annually by reference to an order issued by the relevant local authorities. The Group entities have a renewal option at the end of lease period and an option to buy land at any time, at a price established by the local authorities.

Future minimum lease payments due under non-cancellable operating lease agreements at 31 December 2008 were as follows:

Due within one year	12
From one to five years	21
After five years	28
Total	**61**

Intergovernmental agreement with Kingdom of Norway

In 2001, the governments of the Russian Federation and Kingdom of Norway signed an intergovernmental agreement in respect of provision of technical assistance in the reconstruction of metallurgical facilities of Pechenganickel Combine, a branch of OJSC "Kolskaya Mining and Metallurgical Company". Total investments in the reconstruction of metallurgical facilities were agreed to be USD 175 million, financed as follows:

Grants from Kingdom of Norway	42
Loan from Nordic Investment Bank	30
Contribution by the Group	103
Total	**175**

At 31 December 2008, total investment of the Group in reconstruction of metallurgical facilities of Pechenganickel Combine amounted to USD 18 million.

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48. COMMITMENTS (CONTINUED)

Long-term contract with Talvivaara

OMG Harjavalta, a subsidiary of the Group, has entered into a ten-year agreement with Talvivaaran Kaivososakeyhtiö Oy ("Talvivaara") to purchase total output of intermediate product containing nickel and cobalt at future prevailing market prices. During this period the Group is obliged to purchase at least 300,000 tons of nickel.

Long-term contracts with OM Group

In 2007, the Group entered into a five-year supply agreement with OM Group Incorporated to supply up to 2,500 metric tons (mt) per year of cobalt, up to 2,500 mt per year of cobalt contained in cobalt hydroxide concentrate and up to 1,500 mt per year of cobalt contained in cobalt sulphate solution, along with various nickel and copper based raw materials produced by Harjavalta Nickel Oy.

Social commitments

The Group contributes to mandatory and voluntary social programs and maintains social assets in the locations where it has its main operating facilities. The Group's social assets, as well as local social programs, benefit the community at large and are not normally restricted to the Group's employees. These contributions are recorded in the period in which they are incurred.

The Group's commitments will be funded from its own cash resources.

49. CONTINGENCIES

Litigation

At 31 December 2008, unresolved tax litigation amounted to approximately USD 18 million (2007: USD 55 million). Management believes that the risk of an unfavourable outcome of the litigation is possible.

In 2007 Federal Service for Supervision of Natural Resource Usage of the Russian Federation ("Federal Service") required the Group to compensate for the damage of water resources in the amount of USD 240 million. In 2008 Federal Service has filed a lawsuit against the Group in the amount of USD 148 million. Management of the Group estimates the risk of satisfying this claim as possible.

In addition, the Group had a number of claims and litigation relating to sales and purchases of goods and services. Management believes that none of these claims, individually or in aggregate, will have a material adverse impact on the Group.

Taxation contingencies in the Russian Federation

The taxation system in the Russian Federation is at the development stage, and is characterised by numerous taxes, frequent changes and inconsistent enforcement at federal, regional and local levels.

The government of the Russian Federation has commenced a revision of the Russian tax system and passed certain laws implementing tax reform. The new laws reduce the number of taxes and overall tax burden on businesses and simplify tax litigation. However, these new tax laws continue to rely heavily on the interpretation of local tax officials and fail to address many existing problems. Many issues associated with practical implication of new legislation are unclear and complicate the Group's tax planning and related business decisions.

In terms of Russian tax legislation, authorities have a period of up to three years to re-open tax declarations for further inspection. Changes in the tax system that may be applied retrospectively by authorities could affect the Group's previously submitted and assessed tax declarations.

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49. CONTINGENCIES (CONTINUED)

While management believes that it has adequately provided for tax liabilities based on its interpretation of current and previous legislation, the risk remains that tax authorities in the Russian Federation could take differing positions with regard to interpretive issues. This uncertainty may expose the Group to additional taxation, fines and penalties that could be significant.

With regards to matters where practice concerning payment of taxes is unclear, management estimate possible tax exposure at 31 December 2008 to be USD 234 million (2007: USD 146 million).

Environmental matters

The Group is subject to extensive federal, state and local environmental controls and regulations in the countries in which it operates. The Group's operations involve the discharge of materials and contaminants into the environment and the disturbance of land that could potentially impact on flora and fauna, and give rise to other environmental concerns.

The Group's management believes that its mining and production technologies are in compliance with all current existing environmental legislation in the countries in which it operates. However, environmental laws and regulations continue to evolve. The Group is unable to predict the timing or extent to which those laws and regulations may change. Such change, if it occurs, may require that the Group modernise technology to meet more stringent standards.

The Group is obliged in terms of various laws, mining licenses and 'use of mineral rights' agreements to decommission mine facilities on cessation of its mining operations and to restore and rehabilitate the environment. Management of the Group regularly reassesses environmental obligations related to its operations. Estimates are based on management's understanding of current legal requirements and the terms of license agreements. Should the requirements of applicable environmental legislation change or be clarified, the Group may incur additional environmental obligations.

Russian Federation risk

As an emerging market, the Russian Federation does not possess a fully developed business and regulatory infrastructure including stable banking and judicial systems, which would generally exist in a more mature market economy. The economy of the Russian Federation is characterised by a currency that is not freely convertible outside of the country, currency controls, low liquidity levels for debt and equity markets, and continuing inflation. As a result, operations in the Russian Federation involve risks that are not typically associated with those in more developed markets. Stability and success of Russian economy and the Group's business mainly depends on the effectiveness of economic measures undertaken by the government as well as the development of legal and political systems.

Recent volatility in global and Russian financial markets

In recent months a number of major economies around the world have experienced volatile capital and credit markets. A number of major global financial institutions have either been placed into bankruptcy, taken over by other financial institutions and/or supported by government funding. As a consequence of the recent market turmoil in capital and credit markets both globally and in Russia, notwithstanding any potential economic stabilisation measures that may be put into place by the Russian Government, there exists as at the date these consolidated financial statements are authorised for issue economic uncertainties surrounding the continual availability, and cost of credit both for the Group and its counterparties, the potential for economic uncertainties to continue in the foreseeable future and, as a consequence, the potential that certain assets may be not be recovered at their carrying amount in the ordinary course of business. In addition, in development of certain of the Group's critical estimates and areas of critical judgment, management uses projected cash flows. These projected cash flows are dependent on various assumptions including historical experience and growth rates. As a result of the volatility in the global and Russian financial markets, management's estimates may change and result in a significant impact on the Group.

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50. FINANCIAL RISK MANAGEMENT

Capital risk management

The Group manages its capital structure in order to safeguard the Group's ability to continue as a going concern and to maximise the return to shareholders through the optimisation of debt and equity balance.

The capital structure of the Group consists of debt, which includes long- and short-term borrowings, cash and cash equivalents and equity attributable to shareholders of the parent company, comprising issued capital, other reserves and retained earnings.

Management of the Group regularly reviews its gearing ratio, calculated as the proportion of net debt to equity to ensure that it is in line with the Group's investment grade, international peers and current rating level requirements.

The Group is subject to external capital requirements imposed by banks on certain loans, such as gearing ratio of not exceeding 75%. During 2008 the Group complied with external capital requirements.

Financial risk factors and risk management structure

In the normal course of its operations, the Group is exposed to a variety of financial risks: market risk (including interest rate, currency and equity investments price risk), credit risk and liquidity risk. The Group has in place risk management structure and control procedures to facilitate the measurement, evaluation and control of these exposures and related risk management activities.

Risk management is carried out by a financial risk management department, which is part of treasury function. The Group has adopted and documented policies covering specific areas, such as market risk management system, credit risk management system, liquidity risk management system and use of derivative financial instruments.

Interest rate risk

Interest rate risk is the risk that changes in interest rates will adversely impact the financial results of the Group. The Group's interest rate risk arises from long- and short-term borrowings at floating rates.

The Group performs thorough analysis of its interest rate risk exposure regularly. Various scenarios are simulated. Based on these scenarios, the Group is able to calculate the financial impact of an interest rate shift of 4%. The table below details the Group's sensitivity to a 4% increase in those borrowings subject to a floating rate. The sensitivity analysis is prepared assuming that the amount of liabilities at floating rates outstanding at the balance sheet date was outstanding for the whole year.

	LIBOR-impact	
	Year ended 31/12/2008	Year ended 31/12/2007
Loss	233	251

Management believes that the Group's exposure to interest rate risk fluctuations does not require additional hedging activities.

Currency risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument denominated in foreign currency will fluctuate because of changes in exchange rates.

The major part of the Group's revenue and related trade accounts receivable is denominated in US dollars and therefore the Group is exposed primarily to USD currency risk. Foreign exchange risk arising from other currencies is assessed by management of the Group as immaterial.

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50. FINANCIAL RISK MANAGEMENT (CONTINUED)

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than functional currencies of the individual Group entities at 31 December 2008 and 2007 were as follows:

	Assets		Liabilities	
	31/12/2008	31/12/2007	31/12/2008	31/12/2007
USD	1,999	5,273	6,339	6,764
EURO	142	66	63	86
AUD	—	2	—	—
Other currencies	24	21	48	14
Total	**2,165**	**5,362**	**6,450**	**6,864**

Currency risk is monitored on a monthly basis utilising sensitivity analysis to asses if a risk for a potential loss is at an acceptable level. The Group calculates the financial impact of exchange rate fluctuations within 20% on profit for the year in respect of USD-denominated assets and liabilities. The following table presents the increase/(decrease) of the Group's profit before tax to a 20% strengthening of the functional currencies of the Group entities against USD.

	US Dollar - impact	
	31/12/2008	31/12/2007
USD/RUR	879	345
USD/BWP	(11)	(46)
USD/AUD	—	—

Management has assessed the Group's exposure to currency risk is at an acceptable level and thus no exchange rate hedges are used.

Equity investments price risk

The Group is also exposed to equity investments price risk arising from equity investments. Certain portion of the Group's investments is held for strategic rather than trading purposes. The sensitivity analysis below has been determined based on exposure to equity price risks at the reporting date.

If equity prices had been 15% higher:

- loss for the year ended 31 December 2008 would have been unaffected as the quoted investments are classified as available-for-sale (2007: USD nil);
- investment revaluation reserve within equity balance would increase by USD 50 million (2007: USD 380 million).

If equity prices had been 15% lower:

- loss for the year ended 31 December 2008 would increase by USD 8 million as a result of increase of impairment loss (2007: USD nil);
- investment revaluation reserve within equity balance would decrease by USD 42 million (2007: USD 380 million).

In 2008, the Group's sensitivity to equity investments price risk changed significantly compared to 2007 due to recent volatility in global and Russian financial markets and significant decrease of fair value of all available-for-sale investments.

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50. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. Credit risk arises from cash and cash equivalents, deposits with banks as well as credit exposures to customers, including outstanding uncollateralised trade and other receivables. The Group's exposure to credit risk is continuously monitored and controlled.

Prior to dealing with new counterparty, management assesses the credit worthiness of a potential customer or financial institution. Where the counterparty is rated by major independent credit-rating agencies, this rating is used to evaluate creditworthiness; otherwise it is evaluated using an analysis of the latest available financial statements of the counterparty.

Credit limits for the Group as a whole are not set up.

The balances of ten major counterparties are presented below:

	Outstanding balance	
	31/12/2008	31/12/2007
Bank A	1,286	3,438
Bank B	1,214	665
Bank C	180	642
Bank D	55	593
Bank E	70	550
Total	**2,805**	**5,888**
Company A	65	10
Company B	15	37
Company C	12	40
Company D	8	41
Company E	5	5
Total	**105**	**133**

The Group is not economically dependent on a limited number of customers because majority of its products are highly liquid and traded on the world commodity markets. Metal and other sales to the Group's customers are presented below:

	Year ended 31/12/2008			Year ended 31/12/2007		
	Number of customers	Turnover, USD million	%	Number of customers	Turnover, USD million	%
Largest customer	1	895	6	1	1,392	8
Next 9 largest customers	9	3,502	25	9	4,589	27
Total	**10**	**4,397**	**31**	**10**	**5,981**	**35**
Next 10 largest customers	10	1,774	13	10	1,986	12
Total	**20**	**6,171**	**44**	**20**	**7,967**	**47**
Remaining customers		7,809	56		9,152	53
Total		**13,980**	**100**		**17,119**	**100**

The Group had a concentration of cash and bank deposits with a related party commercial bank that at 31 December 2007 represented 9% of total cash and bank deposit balance. During the year ended 31 December 2008, this bank ceased to be a related party of the Group.

The Group believes that there is no other significant concentration of credit risk.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2008
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50. FINANCIAL RISK MANAGEMENT (CONTINUED)

The maximum exposure to credit risk for cash and cash equivalents, loans and trade and other receivables is as follows:

	31/12/2008	31/12/2007
Cash and cash equivalents	1,995	4,008
Loans, trade and other receivables	2,054	4,459

Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle all liabilities as they fall due.

The Group has a well-developed liquidity risk management structure to exercise control over its short-, medium- and long-term funding. The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities. Management continuously monitors rolling cash flow forecasts and performs analysis of maturity profiles of financial assets and liabilities, and undertakes detailed annual budgeting procedures.

Presented below is the maturity profile of the Group's borrowings (maturity profiles for other liabilities presented in notes 39, 43 and 44) based on contractual undiscounted payments, including interest:

31/12/2008	Total	Due within one month	Due from one to three months	Due from three to twelve months	Due in the second year	Due in the third year	Due in the fourth year	Due in the fifth year	Due there-after
Fixed rate bank loans and borrowings									
Principal	**627**	9	–	506	1	1	–	–	110
Interest	**84**	3	7	20	4	4	4	4	38
	711	**12**	**7**	**526**	**5**	**5**	**4**	**4**	**148**
Floating rate bank loans									
Principal	**5,813**	4	–	353	3,189	1,218	838	34	177
Interest	**167**	6	12	52	50	22	8	5	12
	5,980	**10**	**12**	**405**	**3,239**	**1,240**	**846**	**39**	**189**
Total	**6,691**	**22**	**19**	**931**	**3,244**	**1,245**	**850**	**43**	**337**
31/12/2007									
Fixed rate bank loans and borrowings									
Principal	**1,745**	8	376	824	504	2	–	–	31
Interest	**148**	10	19	65	29	2	2	2	19
	1,893	**18**	**395**	**889**	**533**	**4**	**2**	**2**	**50**
Floating rate bank loans									
Principal	**6,331**	–	222	2,543	323	2,245	665	333	–
Interest	**606**	29	57	183	190	113	32	2	–
	6,937	**29**	**279**	**2,726**	**513**	**2,358**	**697**	**335**	**–**
Total	**8,830**	**47**	**674**	**3,615**	**1,046**	**2,362**	**699**	**337**	**50**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

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50. FINANCIAL RISK MANAGEMENT (CONTINUED)

At 31 December 2008 and 2007, the Group had following financing facilities for the management of its day to day liquidity requirements:

	31/12/2008	31/12/2007
Committed credit lines		
Credit lines arranged by BNP Paribas (Suisse) S.A. and Societe Generale	3,500	6,000
Syndicated credit facility arranged by Calyon, Bank of Tokyo-Mitsubishi UFJ Ltd., Bayerische Hypo-und Vereinsbank AG (a member of UniCredit Group), ING Wholesale Banking, Societe Generale, Sumitomo Mitsui Banking Corporation, The Royal Bank of Scotland Plc	1,500	–
Syndicated revolving credit facility arranged by Barclays Capital, ING Bank N.V. and Societe Generale	450	450
Syndicated credit facility arranged by Bayerische Landesbank, Calion Deutschland, DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main and ING Bank N.V., Frankfurt Branch	376	–
OJSC "Gazprombank"	44	–
OJSC "Sberbank"	–	611
Syndicated revolving credit facility arranged by Societe Generale	–	400
Total committed credit lines	**5,870**	**7,461**
Uncommitted credit lines		
OJSC "Bank of Moscow"	300	–
CJSC "Commerzbank (Eurasia)"	200	40
CJSC "Calyon Rusbank"	150	65
CJSC "BNP Pariba"	125	75
CJSC "ING Bank (Eurasia)"	100	100
CJSC "Raiffeisenbank"	100	40
LLC "Deutsche Bank"	56	58
OJSC "Uralsib Bank"	50	50
CJSC "BSGV"	40	40
VTB Bank (France) SA	25	489
OJSC AKB "MBRR"	20	20
CJSC "West LB Vostok"	12	83
"Barclays Bank" PLC	5	–
CJSC "Drezdner Bank"	3	50
CJSC "Natexis Bank"	–	50
LLC "HSBC Bank (RR)"	–	40
OJSC "Eurofinance Mosnarbank"	–	38
CJSC "Citibank"	–	25
Total uncommitted credit lines	**1,186**	**1,263**
Bank overdraft facilities		
ING (Switzerland)	100	100
Rosbank (Russia)	85	102
BNP Paribas Suisse (Switzerland)	75	75
Credit Suisse (Switzerland)	75	75
Natexis (France)	75	75
Banque Cantonale Vaudoise (Switzerland)	50	50
UBS (Switzerland)	40	40
Sampo (Finland)	–	45
Total bank overdraft facilities	**500**	**562**
Total borrowing facilities	**7,556**	**9,286**
Less: Outstanding letters of credit	(530)	(587)
Less: Obtained bank loans related to the above facilities	(5,805)	(6,811)
Net facilities available at the end of the year	**1,221**	**1,888**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

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51. FAIR VALUE OF FINANCIAL INSTRUMENTS

Management believes that the carrying value of financial instruments such as cash (refer to note 34), short-term accounts receivables (refer to note 32) and payables (refer to note 43), short-term loans given (refer to note 29), derivative financial instruments (refer to note 44), short-term and long-term available-for-sale investments (refer to note 29), values of which were mainly determined with reference to quoted market prices, approximate their fair value.

Certain financial instruments such as held-to maturity financial assets, long-term accounts receivable and finance leases obligations were excluded from fair value analysis either due to their insignificance or due to the fact that assets were acquired or liabilities assumed close to the reporting dates and management believes that their carrying value either approximates their fair value or may not significantly differ from each other.

Presented below is information about loans and borrowings, whose carrying values differ significantly from their fair values.

	31/12/2008		31/12/2007	
	Carrying value	Fair value	Carrying value	Fair value
Loans and borrowings				
Fixed-rate guaranteed and convertible notes	609	539	528	543
Variable-rate loans and borrowings	5,831	5,635	6,352	6,352
Total	**6,440**	**6,174**	**6,880**	**6,895**

The fair value of financial assets and liabilities presented in table above is determined as follows:

- the fair value of fixed rate guaranteed and convertible notes was determined based on market quotations existing at the reporting dates; and
- the fair value of variable-rate loans and borrowings at 31 December 2008, was calculated based on the present value of future cash flow (principle and interest), discounted at the best management estimation of market rates, taking into consideration currency of the loan, expected maturity and risks attributable to the individual borrower exists at the reporting date. The discount rates ranged from 2.15% to 3.80% for USD-denominated loans and borrowings. The fair value of variable rates loans and borrowings at 31 December 2007 approximate their carrying value.

52. EVENTS SUBSEQUENT TO THE BALANCE SHEET DATE

Buy-back of the Company issued ordinary shares

At 13 January 2009, the Company acquired 94,855 of its shares for a cash consideration of USD 20 million (refer to note 36).

Change of export custom duties

The government of Russian Federation amended customs tariffs on certain metal exports, which are effective from 29 January 2009. As a result, the following export customs tariffs are applicable to certain Group's products:

- 2009 — 10% (2008: 10%) of the relevant customs value for refined copper and untreated copper alloy;
- 2009 — nil (2008: 10%) of the relevant customs value for copper cathode and cathode sections; and
- 2009 — nil (2008: 5%) of the relevant customs value for unalloyed nickel.

Had the new export custom duties been applicable during the year ended 31 December 2008, loss before tax for the year would have decreased by USD 313 million as a result of decrease of selling and distribution expenses.

Australian operations

On 16 February 2009, management of the Group made a decision to place on indefinite care and maintenance the Black Swan and Lake Johnson nickel operations in Australia.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2008

53. INVESTMENTS IN SIGNIFICANT SUBSIDIARIES AND ASSOCIATES

Subsidiaries by business segments	Country	Nature of business	Effective % held 31/12/2008	Effective % held 31/12/2007
Mining and metallurgy				
OJSC "RAO "Norilsk Nickel"[1]	Russian Federation	Investment holding	100.0	98.9
CJSC "NORMETIMPEX"	Russian Federation	Distribution	100.0	100.0
OJSC "Kolskaya Mining and Metallurgical Company"	Russian Federation	Mining	100.0	100.0
LLC "Institut Gypronickel"	Russian Federation	Science	100.0	100.0
OJSC "Norilsky Kombinat"[1]	Russian Federation	Rental of equipment	99.9	98.8
OJSC "Kombinat "Severonickel"[1]	Russian Federation	Rental of equipment	100.0	98.9
OJSC "Gornometallurgicheskiy Kombinat "Pechenganickel"[1]	Russian Federation	Rental of equipment	100.0	98.9
LLC "Norilskgeologiya"	Russian Federation	Geological works	100.0	100.0
LLC "GRK "Bystrinskoye"[1]	Russian Federation	Mining	99.9	98.8
Norilsk Nickel (Asia) Limited	China	Distribution	100.0	100.0
Norimet Limited	Great Britain	Investment holding	100.0	100.0
Norilsk Nickel Europe Limited	Great Britain	Distribution	100.0	100.0
Norilsk Nickel Finance Luxembourg S.A.	Luxembourg	Financing	100.0	100.0
Norilsk Nickel Holding S.A.	Switzerland	Investment holding	100.0	100.0
Metal Trade Overseas S.A.	Switzerland	Distribution	100.0	100.0
Stillwater Mining Company	United States of America	Mining	53.5	54.5
Norilsk Nickel USA	United States of America	Distribution	100.0	100.0
Norilsk Nickel (Cyprus) Limited	Cyprus	Investment holding	100.0	100.0
Norilsk Nickel Harjavalta Oy[2]	Finland	Metallurgy	100.0	100.0
Norilsk Nickel Finland Oy[2]	Finland	Investment holding	100.0	100.0
Norilsk Nickel Cawse Pty Limited[2]	Australia	Mining	100.0	100.0
MPI Nickel Limited[2]	Australia	Mining	100.0	100.0
Norilsk Nickel Australia Pty Limited[2]	Australia	Mining	100.0	100.0
Norilsk Process Technology Pty Limited[2]	Australia	Science	100.0	100.0
Tati Nickel Mining Company Pty Limited[2]	Botswana	Mining	85.0	85.0
Norilsk Nickel Africa Pty Limited[2]	Republic of South Africa	Mining	100.0	100.0
Energy and utility				
OJSC "Taimyrgaz"[1]	Russian Federation	Gas extraction	98.7	98.4
OJSC "Norilsko-Taimyrskaya Energeticheskaya Kompaniya"[3]	Russian Federation	Electricity production and distribution	100.0	100.0
OJSC "Taimyrenergo"[1]	Russian Federation	Rental of equipment	99.9	98.8
OJSC "OGK-3"[4]	Russian Federation	Electricity production and distribution	82.7[5]	65.2
Transport and logistics				
OJSC "Yenisey River Shipping Company"	Russian Federation	River shipping operations	43.9	43.9
OJSC "Arkhangelsk Sea Commercial Port"[6]	Russian Federation	Sea shipping operations	72.8	53.1
CJSC "Alykel"	Russian Federation	Airport	100.0	100.0
CJSC "Taimyrskaya Toplivnaya Kompaniya"	Russian Federation	Supplier of fuel	100.0	100.0
Other				
LLC "Norilsknickelremont"	Russian Federation	Repairs	100.0	100.0
LLC "UK "Zapolyarnaya stolitsa"	Russian Federation	Subcontractor in construction	100.0	100.0
LLC "Norilsk Telecom"[7]	Russian Federation	Telecommunications	—	100.0
LLC "Zapoliarnaya stroitelnaya companiya"	Russian Federation	Construction	100.0	100.0
LLC "Norilskyi obespechivaushyi complex"[1]	Russian Federation	Production of spare parts	99.9	98.8

[1] Increase of ownership in 2008 due to acquisition of shares in OJSC "RAO "Norilsk Nickel" (refer to note 6).
[2] Acquired in 2007 (refer to note 6).
[3] Increase of ownership in 2007 (refer to note 6).
[4] Acquired in 2007 with subsequent increase of ownership in 2008 (refer to note 6).
[5] The Group effective ownership in OGK-3 was calculated as follows:

- 60.7% of shares are held by the Company;
- 14.1% of shares are held by OJSC "Intergeneratsiya", a subsidiary of the Group;
- 4.5% of shares are transferred under repurchase agreements; and
- 3.4% of own shares acquired by OGK-3 in January-February 2008.

[6] Increase of ownership in 2008 (refer to note 6).
[7] Classified as asset held for sale at 31 December 2007 and disposed in 2008 (refer to note 35 and 46).

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2008

53. INVESTMENTS IN SIGNIFICANT SUBSIDIARIES AND ASSOCIATES (CONTINUED)

Associates by business segments	Country	Nature of business	Effective % held 31/12/2008	Effective % held 31/12/2007
Mining and metallurgy				
Nkomati Nickel Mine[1]	Republic of South Africa	Mining	50.0	50.0
Energy and utility				
Smart Hydrogen Inc.	British Virgin Islands	Holding company	50.0	50.0
Plug Power Inc.[2]	United States of America	Designer of energy products	28.8	17.3
RUSIA Petroleum[3]	Russian Federation	Gas extraction	20.7	—
OJSC "TGK-14"[4]	Russian Federation	Electricity production and distribution	27.8	27.7
OJSC "Krasnoyarskenergo"[5]	Russian Federation	Electricity production and distribution	—	25.7
OJSC "Norilskgazprom"	Russian Federation	Gas extraction	29.4	29.4
OJSC "Kolenergo"[5]	Russian Federation	Electricity production and distribution	—	24.9
OJSC "KTK"[6]	Russian Federation	Steam and hot water production	50.0	50.0

[1] Acquired in 2007 (refer to note 28).
[2] Smart Hydrogen Incorporated disposed of its 35% ownership in Plug Power Incorporated to the OGK-3 (refer to note 28).
[3] Acquired in 2008 (refer to note 28).
[4] Increase of ownership in 2008 (refer to note 28).
[5] Reorganaised to OJSC "MRSK Sibiri" and OJSC "MRSK Severo-Zapada" with decrease of Group's ownership (refer to note 28).
[6] Established in 2007 (refer to note 28).

Deloitte.

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INDEPENDENT AUDITORS' REPORT

To shareholders of Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel":

We have audited the accompanying consolidated financial statements of Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel" and its subsidiaries (the "Group"), which comprise the consolidated balance sheet as at 31 December 2007, and the consolidated statements of income, cash flows and changes in equity for the year then ended, and a summary of significant accounting policies and other explanatory notes.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of accompanying consolidated financial statements in accordance with International Financial Reporting Standards. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the Group's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Group as at 31 December 2007, and the results of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards.

Deloitte & Touche

Moscow, Russia
6 June 2008

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED INCOME STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2007
US Dollars million

	Notes	2007	2006
Revenue			
Metal sales	7	15,909	11,550
Other sales	8	1,210	373
Total revenue		**17,119**	**11,923**
Cost of metal sales	9	(4,719)	(3,158)
Cost of other sales	15	(1,163)	(345)
Gross profit		**11,237**	**8,420**
Selling and distribution expenses	16	(730)	(536)
General and administrative expenses	17	(894)	(554)
Impairment of goodwill	24	(1,079)	–
Change in fair value of derivative financial liabilities held for trading	40	72	–
Other net operating expenses	18	(1,175)	(267)
Operating profit		**7,431**	**7,063**
Finance costs	19	(307)	(79)
Income/(loss) from investments	20	223	(199)
Foreign exchange gain, net	21	146	25
Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	5	166	–
Share of profits/(losses) of associates	26	76	(33)
Profit before tax		**7,735**	**6,777**
Income tax	22	(2,459)	(1,805)
Profit for the year from continuing operations		**5,276**	**4,972**
Profit for the year from discontinued operation	48	–	993
Profit for the year		**5,276**	**5,965**
Attributable to:			
Shareholders of the parent company		5,327	5,989
Minority interest		(51)	(24)
		5,276	**5,965**
EARNINGS PER SHARE			
Weighted average number of ordinary shares in issue during the year	34	182,362,986	188,767,177
Basic and diluted earnings per share from continuing and discontinued operations attributable to shareholders of the parent company (US Dollars)		29.2	31.7
Basic and diluted earnings per share from continuing operations attributable to shareholders of the parent company (US Dollars)		29.2	26.5

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED BALANCE SHEET
AT 31 DECEMBER 2007
US Dollars million

	Notes	2007	2006
ASSETS			
Non-current assets			
Property, plant and equipment	23	14,981	8,075
Goodwill	24	3,360	25
Intangible assets	25	849	107
Investments in associates	26	879	208
Other financial assets	27	2,982	2,615
Other taxes receivable	28	38	44
Deferred tax assets	22	89	–
Pension plans assets	37	8	–
		23,186	**11,074**
Current assets			
Inventories	29	2,108	1,471
Trade and other receivables	30	949	697
Advances paid and prepaid expenses	31	183	153
Other financial assets	27	4,473	104
Income tax receivable		144	27
Other taxes receivable	28	585	575
Cash and cash equivalents	32	4,008	2,178
		12,450	**5,205**
Assets classified as held for sale	33	60	–
		12,510	**5,205**
TOTAL ASSETS		**35,696**	**16,279**
EQUITY AND LIABILITIES			
Capital and reserves			
Share capital	34	8	8
Share premium		1,390	611
Treasury shares	34	–	(999)
Other reserves	35	3,765	2,562
Retained earnings		14,340	10,635
Equity attributable to shareholders of the parent company		**19,503**	**12,817**
Minority interest		2,318	319
		21,821	**13,136**
Non-current liabilities			
Long-term borrowings	36	4,103	632
Employee benefit obligations	37	11	57
Environmental obligations	38	583	322
Derivative financial liabilities	40	3	–
Deferred tax liabilities	22	2,741	881
		7,441	**1,892**
Current liabilities			
Short-term borrowings	36	3,973	158
Current portion of employee benefit obligations	37	378	259
Trade and other payables	39	586	370
Advances received		41	51
Income tax payable		422	244
Other taxes payable	28	197	149
Derivative financial liabilities	40	24	15
Dividends payable		804	5
		6,425	**1,251**
Liabilities associated with assets classified as held for sale	33	9	–
		6,434	**1,251**
TOTAL EQUITY AND LIABILITIES		**35,696**	**16,279**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED CASH FLOW STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2007
US Dollars million

	2007	2006
Operating activities		
Profit for the year	**5,276**	**5,965**
Adjustments for:		
Income tax	2,459	1,817
Amortisation and depreciation	937	586
Finance costs	307	88
Impairment of property, plant and equipment	800	87
Loss on disposal of property, plant and equipment	25	21
Impairment of other financial assets	39	83
Impairment of goodwill	1,079	–
Share of post-acquisition profits and impairment of investments in associates	(4)	33
Loss/(gain) on disposal of subsidiaries	18	(6)
Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	(238)	–
Change in fair value of derivative financial liabilities held for trading	(72)	–
Interest income	(247)	(79)
Foreign exchange gain, net	(146)	(25)
Gain on disposal of available-for-sale investments	–	(733)
Gain on disposal of associates	(6)	(117)
Dividend income	(25)	(6)
Other	(9)	(5)
Operating profit before working capital changes	**10,193**	**7,709**
Increase in inventories	(166)	(73)
Decrease/(increase) in trade and other receivables	209	(265)
Decrease/(increase) in advances paid and prepaid expenses	51	(64)
Decrease in other taxes receivable	61	49
Increase in employee benefit obligations	6	15
(Decrease)/increase in trade and other payables	(133)	120
Increase/(decrease) in advances received	11	(38)
Increase/(decrease) in other taxes payable	36	(17)
Cash flows from operations	**10,268**	**7,436**
Interest paid	(256)	(63)
Income tax paid	(2,672)	(1,726)
Net cash generated from operating activities	**7,340**	**5,647**
Investing activities		
Acquisition of subsidiaries, net of cash acquired, and increase of ownership in subsidiaries	(5,824)	(269)
Purchase of property, plant and equipment	(1,140)	(743)
Purchase of intangible assets	(46)	(27)
Proceeds from sale of property, plant and equipment	88	46
Acquisition and establishment of associates	(3,326)	(151)
Proceeds from disposal of associates	7	156
Purchase of other financial assets	(3,575)	(865)
Proceeds from sale of other financial assets	1,032	2,225
Dividends received	25	6
Net cash (used in)/generated from investing activities	**(12,759)**	**378**
Financing activities		
Proceeds from borrowings	10,183	573
Repayments of borrowings	(3,915)	(1,066)
Proceeds from increase in share capital of a special purpose entity	–	28
Acquisition of special purpose entities	(70)	–
Buy back of issued shares	–	(999)
Proceeds from issuance of ordinary shares from treasury stock, net of direct expenses and attributable income tax	1,855	–
Cash distributed to shareholders on disposal of Polyus Group	–	(2,366)
Dividends paid by the Company	(849)	(1,079)
Dividends paid by the Group's subsidiaries to minority shareholders	(27)	–
Net cash generated from/(used in) financing activities	**7,177**	**(4,909)**
Net increase in cash and cash equivalents	**1,758**	**1,116**
Cash and cash equivalents at beginning of the year	**2,178**	**922**
Effect of translation to presentation currency	80	140
Cash and cash equivalents of disposal group	(8)	–
Cash and cash equivalents at end of the year	**4,008**	**2,178**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2007

US Dollars million

		Equity attributable to shareholders of the parent company							
	Notes	Share capital	Share premium	Treasury shares	Other reserves	Retained earnings	Total	Minority interest	Total
Balance at 31 December 2005		**9**	**695**	**(1,457)**	**1,438**	**10,378**	**11,063**	**334**	**11,397**
Increase in fair value of available-for-sale investments		—	—	—	920	—	**920**	—	**920**
Loss on cash flow hedge		—	—	—	(15)	—	**(15)**	(7)	**(22)**
Translation of foreign operations		—	—	—	(55)	—	**(55)**	—	**(55)**
Effect of translation to presentation currency		—	—	—	1,012	—	**1,012**	32	**1,044**
Net income recognised directly in equity		**9**	**695**	**(1,457)**	**3,300**	**10,378**	**12,925**	**359**	**13,284**
Profit for the year		—	—	—	—	5,989	**5,989**	(24)	**5,965**
Realised gain on disposal of available-for-sale investments		—	—	—	(620)	7	**(613)**	—	**(613)**
Total recognised income and expense		**9**	**695**	**(1,457)**	**2,680**	**16,374**	**18,301**	**335**	**18,636**
Dividends	41	—	—	—	—	(772)	**(772)**	—	**(772)**
Buy back of issued shares		—	—	(999)	—	—	**(999)**	—	**(999)**
Cancellation of treasury shares		(1)	(86)	1,457	(15)	(1,355)	—	—	—
Issuance of ordinary shares from treasury stock		—	2	—	—	—	**2**	(2)	—
Contribution to share capital of a special purpose entity		—	—	—	—	(17)	**(17)**	17	—
Net assets distributed to shareholders on disposal of Polyus Group	48	—	—	—	(103)	(3,595)	**(3,698)**	(31)	**(3,729)**
Balance at 31 December 2006		**8**	**611**	**(999)**	**2,562**	**10,635**	**12,817**	**319**	**13,136**
Increase in fair value of available-for-sale investments		—	—	—	465	—	**465**	—	**465**
Effect of change in classification of available-for-sale investments to investments in associates due to increase of ownership		—	—	—	(183)	—	**(183)**	—	**(183)**
Loss on cash flow hedge		—	—	—	(16)	—	**(16)**	4	**(12)**
Translation of foreign operations		—	—	—	(206)	—	**(206)**	—	**(206)**
Effect of translation to presentation currency		—	—	—	1,201	—	**1,201**	79	**1,280**
Net income recognised directly in equity		**8**	**611**	**(999)**	**3,823**	**10,635**	**14,078**	**402**	**14,480**
Profit for the year		—	—	—	—	5,327	**5,327**	(51)	**5,276**
Impairment of available-for-sale investments		—	—	—	24	—	**24**	—	**24**
Other reserves disposed of on disposal of subsidiaries		—	—	—	(5)	5	—	—	—
Total recognised income and expense		**8**	**611**	**(999)**	**3,842**	**15,967**	**19,429**	**351**	**19,780**
Dividends	41	—	—	—	—	(1,634)	**(1,634)**	—	**(1,634)**
Issuance of ordinary shares from treasury stock, net of direct expenses and attributable income tax		—	779	999	(77)	77	**1,778**	—	**1,778**
Acquisition of special purpose entities		—	—	—	—	(70)	**(70)**	—	**(70)**
Net decrease in minority interest due to increase of Group's share in subsidiaries	5	—	—	—	—	—	—	(1,112)	**(1,112)**
Minority interest in subsidiaries acquired during the year	5	—	—	—	—	—	—	3,079	**3,079**
Balance at 31 December 2007		**8**	**1,390**	**—**	**3,765**	**14,340**	**19,503**	**2,318**	**21,821**

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2007

1. GENERAL

Organisation

Open Joint Stock Company "Mining and Metallurgical Company Norilsk Nickel" (the "Company" or "MMC Norilsk Nickel") was incorporated in the Russian Federation on 4 July 1997. The principal activities of the Company and its subsidiaries (the "Group" or "Norilsk Nickel Group") are exploration, extraction, refining and sale of base and precious metals. Further details regarding the nature of the business and structure of the Group are presented in note 50.

Major production facilities of the Group are located in Taimyr and Kola Peninsulas of the Russian Federation, Australia, Botswana, Finland, South Africa and the United States of America. The registered office of the Company is located at 22, Voznesensky pereulok, Moscow, Russian Federation.

Shareholding structure of the Group as at 31 December 2007 and 2006 was the following:

	31 December 2007		31 December 2006	
Shareholders	**Number of shares**	**% held**	**Number of shares**	**% held**
CJSC "ING Bank (Eurasia)" (nominee)	82,644,397	43.75%	80,209,132	44.21%
OJSC AKB "Rosbank" (nominee)	31,999,525	16.94%	46,386,181	25.57%
CJSC "Depository Clearing Company"	26,612,447	14.09%	12,547,555	6.92%
OJSC "VTB Bank" (nominee)	16,152,948	8.55%	–	–
Non-for-Profit Partnership "National Depository Centre"	13,843,424	7.33%	10,713,585	5.91%
Dimosenco Holdings Co. Limited	–	–	6,920,313	3.81%
Pharanco Holdings Co. Limited	–	–	6,920,313	3.81%
Other, less than 5%	17,664,122	9.34%	17,720,834	9.77%
Total	**188,916,863**	**100.00%**	**181,417,913**	**100.00%**

Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS").

Basis of preparation

The entities of the Group maintain their accounting records in accordance with the laws, accounting and reporting regulations of the jurisdictions in which they are incorporated and registered. Accounting principles in certain jurisdictions may differ substantially from those generally accepted under IFRS. Financial statements of such entities have been adjusted to ensure that the consolidated financial statements are presented in accordance with IFRS.

The consolidated financial statements of the Group are prepared on the historical cost basis, except for:

- mark-to-market valuation of by-products, in accordance with IAS 2 *Inventories*; and
- mark-to-market valuation of certain classes of financial instruments, in accordance with IAS 39 *Financial Instruments: Recognition and Measurement.*

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2007

Standards and interpretations effective in the current year

In the current year, the Group has adopted all new and revised International Financial Reporting Standards and interpretations issued by International Financial Reporting Interpretation Committee ("IFRIC") that are mandatory for adoption in the annual periods beginning on or after 1 January 2007. Adoption of these standards and interpretations did not have any effect on the financial performance or position of the Group but gave rise to additional disclosures in the consolidated financial statements as follows:

IAS 1 *Presentation of Financial Statements (amendment)*

This amendment required the Group to provide new disclosures to enable users of the consolidated financial statements to evaluate the Group's principal policies and procedures for managing capital (refer to note 46).

IFRS 7 *Financial Instruments: Disclosures*

This standard introduced new disclosures that enable users of the consolidated financial statements to evaluate the significance of the Group's financial instruments and the nature and extent of risks arising from those financial instruments. Appropriate disclosures are presented through out the consolidated financial statements.

IFRIC *Interpretations*

The following interpretations issued by IFRIC were effective for the current period: IFRIC 7 *Applying the Restatement Approach under IAS 29*; IFRIC 8 *Scope of IFRS 2*; IFRIC 9 *Reassessment of Embedded Derivatives*; and IFRIC 10 *Interim Financial Reporting and Impairment*. The adoption of these interpretations has not led to any changes in the Group's accounting policies or disclosures provided in the consolidated financial statements.

Standards and interpretations in issue but not yet adopted

At the date of authorisation of these consolidated financial statements, the following Standards and Interpretations were in issue but not yet effective:

Standards and Interpretations	Effective for annual periods beginning on or after
IAS 1 *Presentation of Financial Statements (amendment)*	1 January 2009
IAS 23 *Borrowing Costs (amendment)*	1 January 2009
IAS 27 *Consolidated and Separate Financial Statements (amendment due to revision of IFRS 3)*	1 July 2009
IAS 28 *Investments in Associates (amendments due to revision of IFRS 3)*	1 July 2009
IAS 31 *Investments in Joint Ventures (amendments due to revision of IFRS 3)*	1 July 2009
IAS 32 *Financial Instruments: Presentation (amendment)*	1 January 2009
IAS 36 *Impairment of Assets (amendment)*	1 January 2009
IAS 38 *Intangible Assets (amendment)*	1 January 2009
IAS 39 *Financial Instruments: Recognition and Measurement (amendment)*	1 January 2009
IAS 40 *Investment Property (amendment)*	1 January 2009
IAS 41 *Agriculture (amendment)*	1 January 2009
IFRS 2 *Share-based Payment (amendment)*	1 January 2009
IFRS 3 *Business Combinations (revised on applying the acquisition method)*	1 July 2009
IFRS 8 *Operating Segments*	1 January 2009
IFRIC 11 *IFRS 2: Group and Treasury Share Transactions*	1 March 2007
IFRIC 12 *Service Concession Arrangements*	1 January 2008
IFRIC 13 *Customer Loyalty Programmes*	1 July 2008
IFRIC 14 *IAS 19: The Limit on a Benefit Asset, Minimum Funding Requirements and their Interaction*	1 January 2008

The management of the Group anticipates that all of the above standards and interpretations will be adopted in the Group's consolidated financial statements for the respective periods. The impact of adoption of those standards and interpretations on the consolidated financial statements of future periods is currently being assessed by management.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2007

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of consolidation

Subsidiaries

The consolidated financial statements incorporate financial statements of the Company and its subsidiaries, from the date that control effectively commenced until the date that control effectively ceased. Control is achieved where the Company has power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

Minority interest in the net assets (excluding goodwill) of consolidated subsidiaries is identified separately from the Group's equity therein. Minority interest includes interest at the date of the original business combination and minority's share of changes in net assets since the date of the combination. Losses applicable to minority in excess of minority's interest in the subsidiary's net assets are allocated against the interest of the Group except to the extent that a minority has a binding obligation and is able to make an additional investment to cover the losses.

All intra-group balances, transactions and any unrealised profits or losses arising from intra-group transactions are eliminated in full on consolidation.

Associates

An associate is an entity over which the Group exercises significant influence, but not control, through participation in financing and operating policy decisions, in which it normally owns between 20% and 50% of the voting equity. Associates are equity accounted for from the date significant influence commenced until the date that significant influence effectively ceased.

Investments in associates are carried at cost, including goodwill, as adjusted for the Group's the share of post-acquisition changes in associate's retained earnings and other movements in reserves. The carrying value of investments in associates is reviewed on a regular basis and if any impairment in value has occurred, it is written down in the period in which these circumstances are identified.

The results of associates are equity accounted for based on their most recent financial statements. Losses of associates are recorded in the consolidated financial statements until the investment in such associates is written down to nil value. Thereafter losses are only accounted for to the extent that the Group is committed to provide financial support to such associates.

Profits and losses resulting from transactions with associates are eliminated to the extent of the Group's interest in the relevant associates.

Special purpose entities

Special purpose entities ("SPEs") are those undertakings that are created to satisfy specific business needs of the Group and the Group has the right to the majority of the benefits of the SPE, or is exposed to risks associated with the activities of the SPE. SPEs are consolidated in the same manner as subsidiaries.

Accounting for acquisitions

Where an investment in a subsidiary or an associate is made, any excess of the purchase consideration over the fair value of the identifiable assets, including mineral rights, liabilities and contingent liabilities at the date of acquisition is recognised as goodwill. Goodwill in respect of subsidiaries is disclosed separately and goodwill relating to associates is included in the carrying value of the investment in associates. Goodwill is reviewed for impairment at least annually. If impairment has occurred, it is recognised in the consolidated income statement during the period in which the circumstances are identified and is not subsequently reversed.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2007

Where an investment in a subsidiary or an associate is made, any excess of the Group's share in the fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost is recognised in the consolidated income statement immediately.

Where an acquisition is achieved in stages, goodwill is calculated separately for each exchange transaction, based on the cost of each exchange transaction, and the appropriate share of the acquirer's net assets based on net fair values at the time of each exchange transaction. When control is achieved, the acquired net assets are stated at net fair value at the date of acquisition and any adjustment to fair values related to previously held interests is a revaluation, which is accounted for as an adjustment directly in equity.

On acquisition of additional shares of subsidiaries from minority shareholders, any excess of consideration paid over the acquired interest in the carrying value of net assets at the date of increase in ownership is recognised as a goodwill; and any excess of the Group's share in the carrying value of subsidiary net assets over cost of acquisition is recognised in the consolidated income statement.

Impairment of goodwill

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the business combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated as follows: first to reduce the carrying amount of any goodwill allocated to this unit, and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Functional and presentation currency

The individual financial statements of each Group entity are presented in its functional currency.

The Russian Rouble ("RUR") is the functional currency of the Company and all foreign subsidiaries of the Group, except for the following subsidiaries operating with a significant degree of autonomy:

Subsidiary	Functional currency
Stillwater Mining Company	US Dollar
Norilsk Nickel Harjavalta Oy	US Dollar
Norilsk Nickel Finland Oy	US Dollar
LionOre Mining International Limited and its subsidiaries	Australian Dollar and Botswana Pula
Norilsk Nickel Cawse Proprietary Limited	Australian Dollar

The presentation currency of the consolidated financial statements of the Group is US Dollar. Using USD as a presentation currency is common practice for global mining companies. In addition, USD is a more relevant presentation currency for international users of the consolidated financial statements of the Group.

The translation into presentation currency is made as follows:

- all assets and liabilities, both monetary and non-monetary, are translated at closing exchange rates at the dates of each balance sheet presented;
- all income and expenses in each income statement are translated at the average exchange rates for the periods presented;
- all resulting exchange differences are recognised as a separate component in equity; and
- in the consolidated statement of cash flows, cash balances at beginning and end of each period presented are translated at exchange rates at the respective dates. All cash flows are translated at the average exchange rates for the periods presented. Resulting exchange differences are presented as Effect of translation to presentation currency.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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Exchange rates used in preparation of the consolidated financial statements were as follows:

	2007	2006
Russian Rouble/US Dollar		
31 December	24.55	26.33
Average for the year	25.58	27.19
Botswana Pula/US Dollar		
31 December	6.14	n/a
Average for the year	6.11	n/a
Australian Dollar/US Dollar		
31 December	1.14	n/a
Average for the year	1.19	n/a

Foreign currency transactions

Transactions in currencies other than the entity's functional currency (foreign currencies) are recorded at the exchange rates prevailing at the date of the transactions. At each balance sheet date monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates prevailing at the balance sheet date. Non-monetary items carried at historical cost are translated at the exchange rate prevailing at the date of transaction. Non-monetary items carried at fair value are translated at the exchange rate prevailing at the date on which the most recent fair value was determined. Exchange differences arising from changes in exchange rates are recognised in the consolidated income statement.

Property, plant and equipment

Mineral rights, mineral resources and ore reserves

Mineral rights, mineral resources and ore reserves are recorded as assets when acquired as part of a business combination and are then amortised over the life of mine, which is based on estimated proven and probable ore reserves. Estimated proven and probable ore reserves reflect the economically recoverable quantities which can be legally recovered in the future from known mineral deposits and are determined by independent professional appraisers.

Mining assets

Mining assets are recorded at cost less accumulated amortisation and impairment losses. Mining assets include the cost of acquiring and developing mining properties, pre-production expenditure, mine infrastructure, mining and exploration licenses and the present value of future decommissioning costs.

Amortisation of mining assets is charged from the date on which a new mine reaches commercial production quantities and is included in the cost of production. Mining assets are amortised on straight-line basis over the lesser of their economic useful lives or the life of mine, varying from 2 to 49 years.

Mine development costs

Mine development costs are capitalised and transferred to mining property, plant and equipment when a new mine reaches commercial production quantities.

Capitalised mine development costs comprise expenditures directly related to:

- acquiring mining and exploration licenses;
- developing new mining operations;
- defining further mineralisation in existing ore bodies; and
- expanding the capacity of a mine.

Mine development costs include interest capitalised during the construction period, when financed by borrowings.

MINING AND METALLURGICAL COMPANY NORILSK NICKEL

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2007

Non-mining assets

Non-mining assets include metallurgical processing plants, buildings, infrastructure, machinery and equipment and other non-mining assets. Non-mining assets are stated at cost less accumulated depreciation and impairment losses. Plant and equipment that process extracted ore are located near mining operations and amortised on a straight-line basis over the lesser of their economic useful lives or the life of mine. Other non-mining assets are amortised on a straight-line basis over their economic useful lives.

Depreciation is calculated over the following economic useful lives:

• plant, buildings and infrastructure	10 – 50 years
• machinery and equipment	4 – 11 years
• other non-mining assets	5 – 10 years

Capital construction-in-progress

Capital construction-in-progress comprises costs directly related to construction of buildings, processing plant, infrastructure, machinery and equipment. Cost also includes finance charges capitalised during the construction periods where such costs are financed by borrowings. Depreciation of these assets commences when the assets are put into production.

Intangible assets, excluding goodwill

Intangible assets are recorded at cost less accumulated amortisation and impairment losses. Intangible assets mainly include patents and licenses, long-term favourable contracts and software. Amortisation is charged on a straight-line basis over the following economic useful lives of these assets:

• Activox technology patent	indefinite useful life
• patents and licenses, except for Activox technology	2 – 10 years
• long-term favourable contracts	7 years
• software	2 – 10 years

Impairment of tangible and intangible assets, excluding goodwill

At each balance sheet date, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

The recoverable amount is the higher of fair value less cost to sell and value-in-use. In assessing value-in-use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset, for which the estimates of the future cash flows have not been adjusted. If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement immediately.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the original carrying amount that would have been determined had no impairment loss been recognised in prior periods. A reversal of an impairment loss is recognised in the consolidated income statement immediately.

Research and exploration expenditure

Research and exploration expenditure, including geophysical, topographical, geological and similar types of expenditure, is expensed in the period in which it is incurred, unless it is deemed that such expenditure will lead to an economically viable capital project. In this case the expenditure is capitalised and amortised over the life of mine, when a mine reaches commercial production quantities.

Research and exploration expenditure written-off before development and construction starts is not subsequently capitalised, even if a commercial discovery subsequently occurs.

Inventories

Refined metals

Joint products, i.e. nickel, copper, palladium, platinum and gold, are measured at the lower of net cost of production or net realisable value. The net cost of production of joint products is determined as total production cost less net revenue from sales of by-products and valuation of by-product inventories on hand, allocated to each joint product in the ratio of their contribution to total amount of sales.

Production costs include on-mine and concentrating costs, smelting costs, treatment and refining costs, other cash costs and amortisation and depreciation of operating assets.

By-products, i.e. cobalt, ruthenium, rhodium, iridium, silver and other minor metals, are measured at net realisable value, through a mark-to-market valuation.

Work-in-process

Work-in-process is valued at net cost of production based on the percentage of completion method.

Stores and materials

Stores and materials consist of consumable stores and are valued at the weighted average cost less allowance for obsolete and slow-moving items.

Financial assets

Financial assets are recognised when the Group has become a party to the contractual arrangement of the instrument and are initially measured at fair value, plus transaction costs, except for those financial assets classified as at fair value through profit or loss, which are initially measured at fair value.

Financial assets are classified into the following specified categories:

- financial assets at fair value through profit or loss;
- held-to-maturity investments;
- available-for-sale financial assets; and
- loans and receivables.

The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including transaction costs and other premiums or discounts) through the expected life of the financial asset, or, where appropriate, a shorter period.

Income is recognised on an effective interest basis for debt securities other that those financial assets designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss where the financial asset is either held for trading or it is designated as at fair value through profit or loss.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near future; or
- it is a part of an identified portfolio of financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

Financial assets at fair value through profit or loss are stated at fair value, with any resultant gain or loss recognised in the consolidated income statement. The net gain or loss recognised in the consolidated income statement incorporates any dividend or interest earned on the financial asset.

Held-to-maturity investments

Promissory notes and debentures with fixed or determinable payments and fixed maturity dates that the Group has the positive intent and ability to hold to maturity other than loans and receivables are classified as held-to-maturity investments. Held-to-maturity investments are recorded at amortised cost using the effective interest method less any allowance for impairment.

Amortisation of discount or premium on the acquisition of a held-to-maturity investment is recognised in interest income over the term of the investment. Held-to-maturity investments are included in non-current assets, unless they mature within twelve months of the balance sheet date.

Available-for-sale financial assets

Available-for-sale financial assets mainly include investments in listed and unlisted shares.

Listed shares held by the Group that are traded in an active market are stated at their market value. Gains and losses arising from changes in fair value are recognised directly in equity in the investments revaluation reserve with the exception of impairment losses, interest calculated using the effective interest method and foreign exchange gains and losses on monetary assets, which are recognised directly in the consolidated income statement. Where the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognised in the investment revaluation reserve is included in the consolidated income statement for the period.

Dividends on available-for-sale equity instruments are recognised in the consolidated income statement when the Group's right to receive the dividends is established.

Investments in unlisted shares that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are recorded at management's estimate of fair value.

Loans and receivables

Trade receivables, loans, and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as loans and receivables. Loans and receivables are measured at amortised cost using the effective interest method, less any impairment. Interest income is recognised by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

Impairment of financial assets

Financial assets, other than those at fair value through profit or loss, are assessed for indicators of impairment at each balance sheet date. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been impacted.

For unlisted shares classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For certain categories of financial asset, such as trade receivables, assets that are assessed not to be impaired individually are subsequently assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include the Group's past experience of collecting payments, an increase in the number of delayed payments as well as observable changes in economic conditions that correlate with defaults on receivables.

For financial assets carried at amortised cost, the amount of the impairment is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance for impairment. When a trade receivable is considered uncollectible, it is written off against the allowance. Subsequent recoveries of amounts previously written off are credited against the allowance. Changes in the carrying amount of the allowance are recognised in the consolidated income statement.

With the exception of available-for-sale equity instruments, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through the consolidated income statement to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

When a decline in fair value of an available-for-sale investment has been recognised directly in equity and there is objective evidence that investment is impaired, the cumulative loss that had been recognised directly in equity is removed from equity and recognised in the consolidated income statement even though the investment has not been derecognised. Impairment losses previously recognised through consolidated income statement are not reversed. Any increase in fair value subsequent to an impairment loss is recognised directly in equity.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire; or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

Financial liabilities

Financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs and subsequently measured at amortised cost using the effective interest method.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire.

Derivative financial instruments

The Group uses derivative financial instruments to manage its exposure to the risk of changes in metal prices.

Derivative financial instruments are initially measured at fair value on the contract date, and are re-measured to fair value at subsequent reporting dates. The resulting gain or loss is recognised in the consolidated income statement immediately unless the derivative is designated as a cash flow hedge.

The effective portion of changes in the fair value of derivative financial instruments that are designated as cash flow hedges is recognised directly in equity. The ineffective portion of cash flow hedges is recognised in the consolidated income statement. Amounts deferred in equity are recycled in the consolidated income statement in the periods when the hedged item is recognised in the consolidated income statement. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset or liability.

Hedge accounting is discontinued when the Group revokes the hedging relationship, the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting. Any cumulative gain or loss deferred in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the consolidated income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was deferred in equity is recognised immediately in the consolidated income statement.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, cash deposits and highly liquid investments with maturities of three months or less, which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

Employee benefits

Remuneration to employees in respect of services rendered during a reporting period is recognised as an expense in that reporting period.

Defined contribution plans

The Group contributes to the following major defined contribution plans:

- Pension Fund of the Russian Federation;
- Corporate pension option program; and
- Stillwater Mining Company savings plan.

The only obligation of the Group with respect to these and other defined contribution plans is to make the specified contributions in the period in which they arise. These contributions are recognised in the consolidated income statement when employees have rendered services entitling them to the contribution.

Defined benefit plans

The Group operates a number of funded defined benefit plans for its employees. At management's discretion and within the established annual budgets, the Group admits employees, who have met certain criteria, into one of the following retirement benefit plans:

- *Lifelong professional pension plan,* whereby a retired employee receives a monthly allowance equal to 200% of the Russian Federation state pension for the rest of his/her life; or
- *Joint corporate pension plan,* whereby a retired employee receives a monthly allowance equal to 1/150th of the total Starting and Counter capital for the rest of his/her life. Starting capital is determined on an individual basis taking into account seniority, salary level, etc. Counter capital consists of a contribution funded by the Group amounted to 3% of salaries paid to an employee during the period of participation in the plan.

The Group's liability recognised in the consolidated balance sheet in respect of defined benefit plans represent the present value of the defined benefit obligation at the balance sheet date less the fair value of the plans assets, together with adjustments for unrecognised actuarial gains or losses and past service costs. The defined benefit obligation is calculated using the projected unit credit method.

Actuarial gains and losses are recognised as income or expense when the cumulative unrecognised actuarial gains or losses for each individual plan exceed 10% of the higher of defined benefit obligation and the fair value of plans assets. The excess of cumulative actuarial gains or losses over the 10% of the higher of defined benefit obligation and the fair value of plans assets are recognised over the expected average remaining working lives of the employees participating in the plans.

Past service cost is recognised immediately in the consolidated income statement to the extent that the benefits are already vested, and otherwise amortised on the straight-line basis over the average period until the benefit becomes vested.

Where the estimation results in a benefit to the Group asset recognised is limited to the net total of any unrecognised actuarial losses and past service costs and present value of any future refunds from the plan or reductions in the future contribution to the plans.

Income tax

Income tax expense represents the sum of the tax currently payable and deferred tax.

Income tax is recognised as an expense or income in the consolidated income statement, except when it relates to items recognised directly in equity, in which case the tax is also recognised directly in equity, or where they arise from the initial accounting for a business combination.

In the case of a business combination, the tax effect is taken into account in calculating goodwill or determining the excess of the acquirer's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities over cost of the business combination.

Current tax

Current tax is based on taxable profit for the year. Taxable profit differs from profit for the year as reported in the consolidated income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax

Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the consolidated balance sheet and the corresponding tax bases used in the computation of taxable profit, and are accounted for using the balance sheet liability method. Deferred tax liabilities are recognised for all taxable temporary differences, and deferred tax assets are recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Government grants

Government grants related to assets are deducted from the cost of these assets in arriving at their carrying value.

Revenue recognition

Metal sales revenue

Revenue from metal sales is recognised when the risks and rewards of ownership are transferred to the buyer and represents invoiced value of all joint products shipped to customers, net of value-added tax. Revenues from the sale of by-products are netted-off against production costs.

Revenue from contracts that are entered into and continue to meet the Group's expected sale requirements designated for that purpose at their inception, and are expected to be settled by physical delivery, are recognised in the consolidated financial statements as and when they are delivered.

Sales of certain metals are provisionally priced such that the price is not settled until a predetermined future date based on the market price at that time. Revenue on these sales is initially recognised at the current market price. Provisionally priced metal sales are marked to market at each reporting date using the forward price for the period equivalent to that outlined in the contract. This mark to market adjustment is recorded in revenue.

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Other revenue

Revenue from sale of goods, other than metals, is recognised when significant risks and rewards of ownership are transferred to the buyer in accordance with the shipping terms specified in the sales agreements.

Revenue from service contracts are recognised when the services are rendered and the outcome can be reliably measured.

The Group provides the following principal types of services:

- supply of electricity and heat energy; and
- transportation services.

Provisions

Provisions are recognised when the Group has a legal or constructive obligations as a result of a past event for which it is probable that an outflow of economic benefits will be required to settle the obligations, and the amount of the obligations can be reliably estimated.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Interest on borrowings

Interest on borrowings relating to major qualifying capital projects under construction is capitalised during the construction period in which they are incurred. Once a qualifying capital project has been fully commissioned, the associated interest is recorded in the consolidated income statement as and when incurred.

Interest relating to operating activities is expensed when incurred.

Leases

Leases under which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Assets subject to finance leases are capitalised as property, plant and equipment at the lower of fair value or present value of future minimum lease payments at the date of acquisition, with the related lease obligation recognised at the same value. Assets held under finance leases are depreciated over their estimated economic useful lives or over the term of the lease, if shorter. If there is reasonable certainty that the lessee will obtain ownership at the end of the lease term, the period of expected use is useful life of the asset.

Finance lease payments are allocated using the effective interest rate method, between the lease finance cost, which is included in finance costs, and the capital repayment, which reduces the related lease obligation to the lessor.

Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term.

Dividends

Dividends payable and related taxation thereon are recognised in the period in which they have been declared and become legally payable.

Accumulated profits legally distributable are based on the amounts available for distribution in accordance with the applicable legislation and as reflected in the statutory financial statements of the individual entities of the Group. These amounts may differ significantly from the amounts calculated on the basis of IFRS.

Environmental obligations

Environmental obligations include decommissioning and land restoration costs.

Future decommissioning costs, discounted to net present value, are capitalised and the corresponding decommissioning obligations raised as soon as the constructive obligation to incur such costs arises and the future decommissioning cost can be reliably estimated. Decommissioning assets are depleted over the life of mine. The unwinding of the decommissioning obligations is included in the consolidated income statement as finance costs. Decommissioning obligations are periodically reviewed in light of current laws and regulations, and adjustments made as necessary.

Provision for land restoration, representing the cost of restoring land damage after the commencement of commercial production, is estimated at net present value of the expenditures expected to settle the obligation. Change in provision and unwinding of discount on land restoration are recognised to the consolidated income statement and included in cost of production.

Ongoing rehabilitation costs are expensed when incurred.

Assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when sale is highly probable within one year from the date of classification and the asset or disposal group is available for immediate sale in its present condition and management has committed to the sale.

Non-current assets and disposal groups classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

Discontinued operations

Discontinued operations are disclosed when a component of the Group either has been disposed of during the reporting period, or is classified as held for sale at the balance sheet date. This condition is regarded as met only when the disposal is highly probable within one year from the date of classification.

Comparative information related to the discontinued operations is amended in the consolidated income statement for the prior period.

Assets and liabilities of a disposal group are presented in the balance sheet separately from other assets and liabilities. Comparative information related to discontinued operations is not amended in the consolidated balance sheet for the prior period.

Segmental information

The Group's primary segment reporting format is business segments. A business segment is a group of assets and operations engaged in providing products or services that are subject to risks and returns that are different to those of other business segments. The Group's primary business segments are:

- mining and metallurgy;
- energy and utilities;
- transport and logistics; and
- other.

The business segment "other" mainly includes entities engaged in research activities, maintenance and repair services and other.

The Group's secondary segment reporting format is geographic segments which are based on the geographic location of the Group's operations. The Group mainly operates in:

- Russian Federation;
- North America;
- Australia;
- Africa;
- Europe; and
- Asia.

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCE OF ESTIMATION UNCERTAINTY

Preparation of the consolidated financial statements in accordance with IFRS requires the Group's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. The determination of estimates requires judgments which are based on historical experience, current and expected economic conditions, and all other available information. Actual results could differ from those estimates.

The most significant areas requiring the use of management estimates and assumptions relate to:

- useful economic lives of property, plant and equipment;
- impairment of assets;
- impairment of goodwill;
- allowances for doubtful debts, obsolete and slow-moving raw materials and spare parts;
- environmental obligations;
- defined benefit plans; and
- tax matters.

Useful economic lives of property, plant and equipment

The Group's mining assets, classified within property, plant and equipment, are amortised on a straight-line basis over the lesser of their economic useful lives or the life of mine. When determining life of mine, assumptions that were valid at the time of estimation, may change when new information becomes available.

The factors that could affect the estimation of the life of mine include the following:

- changes in proven and probable ore reserves;
- the grade of mineral reserves varying significantly from time to time;
- differences between actual commodity prices and commodity price assumptions used in the estimation and classification of ore reserves;
- unforeseen operational issues at mine sites; and
- changes in capital, operating, mining, processing and reclamation costs, discount rates and foreign exchange rates could possibly adversely affect the economic viability of ore reserves.

Any of these changes could affect prospective amortisation of mining assets and their carrying value. Useful economic lives of non-mining property, plant and equipment is reviewed by management periodically. The review is based on the current condition of the assets and the estimated period during which they will continue to bring economic benefit to the Group.

Impairment of assets, excluding goodwill

The Group reviews the carrying amounts of its tangible and intangible assets excluding goodwill to determine whether there is any indication that those assets are impaired. In making the assessment for impairment, assets that do not generate independent cash flows are allocated to an appropriate cash-generating unit. Management necessarily applies its judgment in allocating assets that do not generate independent cash flows to appropriate cash-generating units, and also in estimating the timing and value of the underlying cash flows within the value-in-use calculation. Subsequent changes to the cash-generating unit allocation or to the timing of cash flows could impact the carrying value of the respective assets.

Impairment of goodwill

Assessment whether goodwill is impaired requires an estimation of value-in-use of the cash-generating unit to which goodwill is allocated. The value-in-use calculations require management to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount to calculate present value. Details of impairment loss calculations related to mining and non-mining business units of the Group is presented in note 24.

Allowances

The Group creates allowances for doubtful debts to account for estimated losses resulting from the inability of customers to make the required payments. As at 31 December 2007, the allowance for doubtful debts amounted to USD 52 million (2006: USD 71 million). When evaluating the adequacy of an allowance for doubtful debts, management bases its estimate on current overall economic conditions, ageing of the accounts receivable balances, historical write-off experience, customer creditworthiness and changes in payment terms. Changes in the economy, industry or specific customer conditions may require adjustments to the allowance for doubtful debts recorded in the consolidated financial statements.

The Group also creates an allowance for obsolete and slow-moving raw materials and spare parts. As at 31 December 2007, the allowance for obsolete and slow-moving items amounted to USD 25 million (2006: USD 30 million). In addition, certain finished goods of the Group are carried at net realisable value. Estimates of net realisable value of inventories are based on the most reliable evidence available at the time the estimates are made. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the balance sheet date to the extent that such events confirm conditions existing at the end of the period.

Environmental obligations

The Group's mining and exploration activities are subject to various environmental laws and regulations. The Group estimates environmental obligations based on management's understanding of the current legal requirements in the various jurisdictions in which it operates, terms of the license agreements and internally generated engineering estimates. Provision is made, based on net present values, for decommissioning and land restoration costs as soon as the obligation arises. Actual costs incurred in future periods could differ materially from the amounts provided. Additionally, future changes to environmental laws and regulations, life of mine estimates and discount rates could affect the carrying amount of this provision.

Defined benefit plans

The most significant assumptions used in estimation of defined benefit plans are the expected rate of return on plan assets, the discount rate, future salary increases, state pensions growth rate and mortality assumptions.

The overall expected rate of return on pension plans assets is calculated based on the expected long-term investment returns for each category of assets.

The present value of the benefits is determined by discounting the estimated future cash outflows using interest rates of high-quality government bonds that have terms to maturity approximating to the terms of the related pension obligations.

Estimation of future salary levels takes into account projected levels of inflation and seniority of personnel.

Income taxes

The Group is subject to income taxes in numerous jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes due to the complexity of legislation. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Deferred tax assets are reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the deferred tax asset to be utilised. The estimation of that probability includes judgments based on the expected performance. Various factors are considered to assess the probability of the future utilisation of deferred tax assets, including past operating results, operational plans, expiration of tax losses carried forward, and tax planning strategies. If actual results differ from these estimates or if these estimates must be adjusted in future periods, the financial position, results of operations and cash flows may be negatively affected.

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4. RECLASSIFICATIONS

Certain comparative information, presented in the consolidated financial statements for the year ended 31 December 2006, has been reclassified. Reclassifications were based upon management's decision to enhance disclosure of the Group's financial position and results of operations through separate presentation of certain types of income and expenses, and assets and liabilities on the face of the consolidated income statement and consolidated balance sheet.

The effect of the reclassifications is summarised below:

	After reclassifications	Before reclassifications	Difference
CONSOLIDATED INCOME STATEMENT			
Other sales	373	–	373
Cost of other sales	(345)	–	(345)
Selling and distribution expenses	(536)	–	(536)
General and administrative expenses	(554)	–	(554)
Selling, general and administrative expenses	–	(1,090)	1,090
Other net operating expenses	(267)	(278)	11
Loss from investments	(199)	(226)	27
Finance costs	(79)	(21)	(58)
Foreign exchange gain, net	25	–	25
Share of losses of associates	(33)	–	(33)
			–
CONSOLIDATED BALANCE SHEET			
Non-current assets			
Property, plant and equipment	8,075	8,134	(59)
Goodwill	25	–	25
Intangible assets	107	73	34
Other taxes receivable	44	–	44
Other non-current assets	–	44	(44)
			–
Current assets			
Trade and other receivables	697	745	(48)
Advances paid and prepaid expenses	153	–	153
Income tax receivable	27	–	27
Other taxes receivable	575	–	575
Other current assets	–	707	(707)
			–
Current liabilities			
Trade and other payables	370	421	(51)
Advances received	51	–	51
Income tax payable	244	–	244
Other taxes payable	149	393	(244)
			–
Capital and reserves			
Other reserves	2,562	–	2,562
Investments revaluation reserve	–	997	(997)
Hedging reserve	–	(15)	15
Translation reserve	–	1,580	(1,580)
			–

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5. BUSINESS COMBINATIONS

Acquisition of controlling interest in subsidiaries

Subsidiaries acquired	Principal activity	Date of acquisition	Ownership	Cost of acquisition
2007				
OMG Harjavalta Nickel Oy and OMG Cawse Proprietary Limited	Mining and metallurgy	1 March 2007	100.0%	356
LionOre Mining International Limited	Mining and metallurgy	28 June 2007	90.7%	5,252
OJSC "Third Generation Company of the Wholesale Electricity Market"	Electricity production and distribution	7 August 2007	54.1%	612
LLC "Geokomp"	Drilling services	28 August 2007	100.0%	1
LLC "Pervaya Milya"	Telecommunication	16 November 2007	75.0%	2
LLC "Direktsiya Proekta Metally Zabaikalya"	Construction	27 December 2007	100.0%	—
				6,223
2006				
LLC "Nortrans"	Transportation	15 June 2006	100.0%	1
LLC "Astron"	Telecommunication	21 July 2006	71.0%	1
LLC "Astron-S"	Telecommunication	21 July 2006	71.0%	1
OJSC "Taimyrenergo"	Rental of equipment	31 July 2006	100.0%	271
LLC "Zapolyarnyi Torgovyi Alians"	Retail	1 December 2006	100.0%	—
				274

Acquisitions in 2007

OMG Harjavalta Nickel Oy and OMG Cawse Proprietary Limited

On 1 March 2007, the Group acquired 100% of the ordinary shares of OMG Harjavalta Nickel Oy ("OMG Harjavalta"), a company engaged in nickel refining operations in Finland, and OMG Cawse Proprietary Limited ("OMG Cawse"), a company engaged in nickel mining and processing operations in Australia, for a total consideration of USD 356 million.

At the date of acquisition the fair value of identifiable assets and liabilities of OMG Harjavalta and OMG Cawse were as follows:

	Fair value
ASSETS	
Property, plant and equipment	235
Intangible assets	1
Inventories	230
Trade and other receivables	194
Advances paid and prepaid expenses	51
Other financial assets	40
Cash and cash equivalents	7
	758
LIABILITIES	
Employee benefit obligations	5
Environmental obligations	4
Deferred tax liabilities	63
Trade and other payables	128
Income tax payable	36
Other taxes payable	9
	245
Group's share of net assets acquired	**513**
Less: Excess of the Group's share in the fair value of net assets acquired over the cost of acquisition	(157)

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	Fair value
Total cost of acquisition	**356**
Consideration per agreement	(348)
Direct transaction costs	(8)
Net cash outflow arising on acquisition	
Consideration and direct transaction costs paid in cash	(356)
Cash and cash equivalents acquired	7
Net cash outflow on acquisition	**(349)**

At the date of acquisition, OMG Harjavalta and OMG Cawse did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets and liabilities in accordance with IFRS immediately before the acquisition, and this information is not presented in the Group's consolidated financial statements.

OMG Harjavalta and OMG Cawse contributed USD 924 million of revenue and USD 221 million of profit before tax from the date of acquisition to 31 December 2007.

LionOre Mining International Limited

On 28 June 2007, the Group acquired 90.7% of the voting shares of LionOre Mining International Limited ("LionOre"), an international nickel producer with operations in Australia and Botswana, for a cash consideration of USD 5,252 million.

At the date of acquisition the fair value of identifiable assets and liabilities of LionOre were as follows:

	Fair value
ASSETS	
Property, plant and equipment	4,490
Intangible assets	706
Investments in associates	580
Deferred tax asset	167
Inventories	178
Trade and other receivables	252
Advances paid and prepaid expenses	3
Other financial assets	38
Cash and cash equivalents	438
	6,852
LIABILITIES	
Borrowings	833
Employee benefit obligations	10
Environmental obligations	91
Derivative financial liabilities	80
Deferred tax liabilities	1,512
Trade and other payables	144
Income tax payable	61
	2,731
Net assets at the date of acquisition	**4,121**
Less: Net assets attributable to minority shareholders	(870)
Add: Decrease in minority interest due to increase of interest in the subsidiary	239
Group's share of net assets acquired	**3,490**
Add: Goodwill arising on acquisition	2,001
Less: Revaluation surplus representing change in fair value of MPI net assets from the date of initial acquisition by the Group of 20% interest in MPI (refer to note 26) to the date when control was obtained	(43)
Less: Pre-acquisition investment in MPI (refer to note 26)	(196)

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	Fair value
Total cost of acquisition	**5,252**
Consideration per public offer	(5,230)
Direct transaction costs	(22)
Net cash outflow arising on acquisition	
Consideration and direct transaction costs paid in cash	(5,252)
Cash and cash equivalents acquired	438
Net cash outflow on acquisition	**(4,814)**

At the date of acquisition, LionOre did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets and liabilities in accordance with IFRS immediately before the acquisition, and this information was not presented in the Group's consolidated financial statements.

In July-August 2007, the Group acquired an additional 9.3% interest in LionOre for a cash consideration of USD 543 million through a number of transactions with minority shareholders, increasing its ownership in this company to 100%. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority shareholders of USD 334 million, and a goodwill of USD 209 million.

In July-August 2007, the holders of LionOre convertible notes exercised their right to convert notes into 23.5 million common shares. All these shares were acquired by the Group for a cash consideration of USD 613 million. In the consolidated financial statements for the year ended 31 December 2007 acquisition of additional shares was accounted for as a settlement of borrowings acquired on the initial acquisition of controlling interest in LionOre.

In August 2007, in accordance with the terms of stock option and share compensation plan LionOre issued additional 1.7 million shares and granted them to key employees and directors. In August 2007, the Group acquired all those shares for a cash consideration of USD 45 million. In the consolidated financial statements for the year ended 31 December 2007 acquisition of additional shares was accounted for as a settlement of stock option liabilities acquired on the initial acquisition of controlling interest in LionOre.

LionOre contributed USD 407 million of revenue and USD 907 million of loss before tax from the date of acquisition to 31 December 2007.

Goodwill that arose on acquisition of LionOre was primarily attributable to the expected business synergy.

OJSC "Third Generation Company of the Wholesale Electricity Market"

During July-August 2007, the Group acquired an additional 7.2% interest in OJSC "Third Generation Company of the Wholesale Electricity Market" ("OGK-3"), a company engaged in generation and sale of electricity and heat energy in Central, North-West, Siberia and Urals regions of the Russian Federation, for a cash consideration of USD 612 million, increasing its ownership in the company to 54.1%. Prior to this transaction, investment in OGK-3 was classified as investment in associate (refer to note 26).

At the date of acquisition the fair value of identifiable assets and liabilities of OGK-3 were as follows:

	Fair value
ASSETS	
Property, plant and equipment	2,111
Intangible assets	2
Inventories	86
Trade and other receivables	121
Advances paid and prepaid expenses	24
Other financial assets	1,684
Cash and cash equivalents	1,424
	5,452

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LIABILITIES	
Borrowings	141
Employee benefit obligations	21
Deferred tax liabilities	376
Trade and other payables	83
Advances received	6
Income tax payable	7
Other taxes payable	7
	641
Net assets at the date of acquisition	**4,811**
Less: Net assets attributable to minority shareholders	(2,209)
Group's share of net assets acquired	**2,602**
Add: Goodwill arising on acquisition	1,646
Less: Pre-acquisition investment in OGK-3 (refer to note 26)	(3,636)
Total cost of acquisition	**612**
Consideration per public offer	(611)
Direct transaction costs	(1)
Net cash outflow arising on acquisition	
Consideration and direct transaction costs paid in cash	(612)
Cash and cash equivalents acquired	1,424
Net cash inflow on acquisition	**812**

Acquisition of controlling interest in OGK-3 was achieved in stages. Cost of acquisition and fair value of OGK-3's identifiable assets, liabilities and contingent liabilities and goodwill that arose at each stage are presented in the table below:

Date of transaction	Ownership	Fair value of net assets	Cost of acquisition	Goodwill
26 December 2006	14.60%	1,545	400	174
23 March 2007	0.26%	1,571	21	17
26 March 2007	32.04%	4,682	3,119	1,157
7 August 2007	7.20%	4,812	612	266
Effect of translation to presentation currency	n/a	n/a	84	32
Total	**54.10%**	**n/a**	**4,236**	**1,646**

At the date of acquisition of controlling interest by the Group, OGK-3 did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets, liabilities and contingent liabilities in accordance with IFRS immediately before the acquisition, and this information was not presented in these consolidated financial statements.

In August-September 2007, the Group acquired an additional 8,676 million shares of OGK-3 for a cash consideration of USD 929 million, increasing its ownership to 65.2%. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest in the amount of USD 529 million and increase in goodwill in the amount of USD 400 million.

OGK-3 contributed USD 626 million of revenue and USD 68 million of profit before tax from the date of acquisition of controlling interest to 31 December 2007.

The goodwill that arose on the acquisition related to the premium paid for control over OGK-3.

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OJSC "Norilsko-Taimyrskaya Energeticheskaya Kompaniya"

On 7 May 2007, the Group acquired an additional 49% interest in OJSC "Norilsko-Taimyrskaya Energeticheskaya Kompaniya" ("NTEK") for a cash consideration of USD 1 million, increasing its ownership in the company to 100%. The carrying value of NTEK net assets at the date of increase of ownership was USD 20 million. As a result of this transaction, the Group recognised a decrease in net assets attributable to minority interest of USD 10 million. Excess of the Group's share in fair value of net assets acquired over consideration paid in the amount of USD 9 million was recognised in the consolidated income statement.

Acquisitions in 2006

OJSC "Taimyrenergo"

On 31 July 2006, the Group acquired 100% of the ordinary shares of OJSC "Taimyrenergo" ("Taimyrenergo"), a company engaged in generation and distribution of electricity in the Norilsk production area, for a cash consideration of USD 271 million.

At the date of acquisition the fair value of identifiable assets and liabilities of Taimyrenergo were as follows:

	Fair value
ASSETS	
Property, plant and equipment	313
Inventories	2
Trade and other receivables	10
Cash and cash equivalents	4
	329
LIABILITIES	
Borrowings	5
Deferred tax liabilities	57
Trade and other payables	6
	68
Group's share of net assets acquired	**261**
Add: Goodwill arising on acquisition	10
Total cost of acquisition	**271**
Consideration per contract	(271)
Net cash outflow arising on acquisition	
Cash consideration	(271)
Cash and cash equivalents acquired	4
Net cash outflow on acquisition	**(267)**

At the date of acquisition Taimyrenergo did not prepare financial statements in accordance with IFRS. Thus it was not practicable to determine the carrying amounts of the acquired assets, liabilities and contingent liabilities in accordance with IFRS immediately before the acquisition, and this information was not presented in these consolidated financial statements.

Taimyrenergo contributed less than USD 1 million of revenue and USD 6 million of loss before tax from the date of acquisition to 31 December 2006.

The goodwill that arose on the acquisition was attributable to the expected synergy, control over cost escalation, independence from a monopoly utility supplier and access to a unique hydro-generating facilities located in Taimyr Peninsula.

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6. SEGMENTAL INFORMATION

Business segments – primary reporting format

2007	Mining and metallurgy	Energy and utilities	Transport and logistics	Other	Eliminations	Total
Third party transactions	15,959	789	298	73	–	**17,119**
Intra-segment transactions	5	348	269	574	(1,196)	–
Total revenue	**15,964**	**1,137**	**567**	**647**	**(1,196)**	**17,119**
Operating profit/(loss)	8,285	(736)	(17)	(101)	–	**7,431**
Share of profits of associates	43	33	–	–	–	**76**
Profit/(loss) before income tax	8,470	(610)	(23)	(102)	–	**7,735**
Income tax expense						**(2,459)**
Profit for the year						**5,276**
Assets and liabilities						
Investments in associates	575	304	–	–	–	**879**
Segment assets	22,907	10,145	1,092	440	–	**34,584**
Intra-segment assets and eliminations	1,753	27	9	118	(1,907)	–
Total segment assets	**25,235**	**10,476**	**1,101**	**558**	**(1,907)**	**35,463**
Segment liabilities	10,341	161	93	117	–	**10,712**
Intra-segment liabilities and eliminations	143	158	1,448	158	(1,907)	–
Total segment liabilities	**10,484**	**319**	**1,541**	**275**	**(1,907)**	**10,712**
Other segment information						
Capital expenditures	774	84	21	330	–	**1,209**
Amortisation and depreciation	768	129	22	36	–	**955**
Impairment of goodwill	325	754	–	–	–	**1,079**
Other non-cash expenses	779	–	28	27	–	**834**
2006						
Third party transactions	11,561	101	207	54	–	**11,923**
Intra-segment transactions	–	278	197	79	(554)	–
Total revenue	**11,561**	**379**	**404**	**133**	**(554)**	**11,923**
Operating profit/(loss)	7,131	21	(26)	(63)	–	**7,063**
Share of losses of associates	–	(33)	–	–	–	**(33)**
Profit/(loss) before income tax	6,783	94	(42)	(58)	–	**6,777**
Income tax expense						**(1,805)**
Profit for the year						**4,972**
Assets and liabilities						
Investments in associates	–	207	–	1	–	**208**
Segment assets	11,406	3,095	1,097	446	–	**16,044**
Intra-segment assets and eliminations	1,505	22	7	104	(1,638)	–
Total segment assets	**12,911**	**3,324**	**1,104**	**551**	**(1,638)**	**16,252**
Segment liabilities	1,757	72	67	122	–	**2,018**
Intra-segment liabilities and eliminations	128	468	850	192	(1,638)	–
Total segment liabilities	**1,885**	**540**	**917**	**314**	**(1,638)**	**2,018**
Other segment information						
Capital expenditures	636	44	51	65	–	**796**
Amortisation and depreciation	521	44	10	15	–	**590**
Other non-cash expenses	199	14	13	11	–	**237**

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Geographical segments – secondary reporting format

	Segment assets		Segment liabilities		Capital expenditures	
	2007	2006	2007	2006	2007	2006
Russian Federation	24,330	14,891	8,605	2,332	914	728
Australia	4,487	–	455	–	68	–
Africa	3,783	–	158	–	192	–
Europe	3,572	3,007	2,299	1,600	11	40
North America	945	754	851	487	24	28
Asia	56	94	54	93	–	–
	37,173	**18,746**	**12,422**	**4,512**	**1,209**	**796**
Eliminations	(1,710)	(2,494)	(1,710)	(2,494)	–	–
Total	**35,463**	**16,252**	**10,712**	**2,018**	**1,209**	**796**

Other segmental information

The financial information relating to discontinued operations is presented in note 48. Metal sales from continuing operations by geographical location of the Group's customers are presented in the note 7. Other sales of the Group were made primarily on the territory of the Russian Federation.

7. METAL SALES

2007	**Total**	**Nickel**	**Copper**	**Palladium**	**Platinum**	**Gold**
By origin						
Russian Federation	**14,054**	8,956	2,894	1,093	1,004	107
Europe	**820**	777	30	13	–	–
United States of America	**509**	20	3	215	264	7
Australia	**387**	353	1	–	–	33
Africa	**139**	110	20	4	4	1
	15,909	**10,216**	**2,948**	**1,325**	**1,272**	**148**
By destination						
Europe	**9,968**	6,956	2,209	463	327	13
Asia	**2,248**	1,736	3	256	253	–
North America	**2,237**	1,079	20	552	527	59
Russian Federation	**1,327**	351	714	54	165	43
Australia	**108**	74	1	–	–	33
South America	**13**	13	–	–	–	–
Africa	**8**	7	1	–	–	–
	15,909	**10,216**	**2,948**	**1,325**	**1,272**	**148**
2006						
By origin						
Russian Federation	**11,026**	6,212	2,838	1,033	850	93
United States of America	**524**	16	3	232	266	7
	11,550	**6,228**	**2,841**	**1,265**	**1,116**	**100**
By destination						
Europe	**6,846**	3,939	2,016	341	506	44
Asia	**1,903**	1,497	–	309	97	–
North America	**1,820**	690	84	613	412	21
Russian Federation	**981**	102	741	2	101	35
	11,550	**6,228**	**2,841**	**1,265**	**1,116**	**100**

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	2007	2006
8. OTHER SALES		
Energy and utilities	789	101
Transport and logistics	298	207
Other	123	65
Total	**1,210**	**373**
9. COST OF METAL SALES		
Cash operating costs		
On-mine and concentrating costs (refer to note 10)	2,031	1,454
Smelting costs (refer to note 11)	1,143	915
Treatment and refining costs (refer to note 12)	1,168	453
Other costs (refer to note 13)	594	388
Sales of by-products	(1,119)	(672)
Total cash operating costs	**3,817**	**2,538**
Amortisation and depreciation of operating assets (refer to note 14)	824	568
Decrease in metal inventories	78	52
Total	**4,719**	**3,158**
10. ON-MINE AND CONCENTRATING COSTS		
Labour	962	648
Consumables and spares	564	464
Repair and maintenance	135	109
Utilities	70	31
Transportation	59	35
Rent expenses	51	17
Insurance	48	51
Outsourced mining services	45	23
Tailing pile maintenance and relocation	38	35
Sundry on-mine and concentrating costs	59	41
Total (refer to note 9)	**2,031**	**1,454**
11. SMELTING COSTS		
Labour	348	245
Platinum group scrap metals purchased	310	268
Consumables and spares	271	223
Insurance	69	70
Repairs and maintenance	53	45
Utilities	30	28
External tolling	26	—
Transportation	18	13
Rent expenses	7	7
Sundry smelting costs	11	16
Total (refer to note 9)	**1,143**	**915**

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	2007	2006
12. TREATMENT AND REFINING COSTS		
Purchase of nickel concentrate	478	–
Labour	240	167
Consumables and spares	164	146
Tolling fees	147	77
Utilities	56	18
Repairs and maintenance	32	14
Insurance	20	17
Transportation	14	5
Rent expenses	3	3
Sundry treatment and refining costs	14	6
Total (refer to note 9)	**1,168**	**453**
13. OTHER COSTS		
Transportation	179	143
Tax on mining and pollution levies	150	127
Cost of refined metals purchased from third parties	128	28
Exploration expenses	113	49
Other	24	41
Total (refer to note 9)	**594**	**388**
14. AMORTISATION AND DEPRECIATION OF OPERATING ASSETS		
Mining and concentrating	606	338
Smelting	147	165
Treatment and refining	57	51
Other	14	14
Total (refer to note 9)	**824**	**568**
15. COST OF OTHER SALES		
Consumables and spares	504	150
Labour	226	100
Utilities	195	11
Amortisation and depreciation	81	11
Repair and maintenance	58	19
Taxes	29	3
Transportation	24	13
Rent expenses	14	16
Other	32	22
Total	**1,163**	**345**
16. SELLING AND DISTRIBUTION EXPENSES		
Export customs duties	644	484
Transportation expenses	31	13
Labour	24	14
Commission paid	16	12
Insurance	6	5
Other	9	8
Total	**730**	**536**

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17. GENERAL AND ADMINISTRATIVE EXPENSES

	2007	2006
Labour	435	226
Advertising	102	70
Taxes other than mining and income taxes and pollution levies	90	82
Consulting and other professional services	48	29
Depreciation	32	19
Legal and audit services	23	21
Transportation expenses	21	17
External research costs	18	20
Repairs and maintenance	18	12
Insurance	12	5
Other	95	53
Total	**894**	**554**

18. OTHER NET OPERATING EXPENSES

Impairment of property, plant and equipment (refer to note 23)	800	87
Donations and maintenance of social sphere facilities	158	146
Change in provision for value added tax recoverable	149	9
Change in provision for tax penalties	29	19
Loss on disposal of property, plant and equipment	25	21
Loss/(gain) on disposal of investments in subsidiaries	18	(6)
Change in allowance for doubtful debts	(8)	5
Other	4	(14)
Total	**1,175**	**267**

19. FINANCE COSTS

Interest expense on borrowings	284	60
Unwinding of discount on decommissioning obligations (refer to note 38)	23	19
Total	**307**	**79**

20. INCOME/(LOSS) FROM INVESTMENTS

Income/(loss) from available-for-sale investments		
Interest income on available-for-sale investments	7	–
Dividend income on available-for-sale investments	5	6
Loss on disposal of shares of Gold Fields Limited	–	(317)
Impairment of available-for-sale investments	(24)	–
Income/(loss) from held-to-maturity investments		
Interest income on promissory notes receivable	9	–
Income/(loss) from loans given and long-term accounts receivable		
Interest income on bank deposits	222	72
Interest income on loans given and long-term accounts receivable	9	2
Impairment of loans given	(18)	(83)
Income on disposal of investments in associates	6	117
Other	7	4
Total	**223**	**(199)**

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	2007	2006

21. FOREIGN EXCHANGE GAIN, NET

Foreign currency exchange gain on financing activities, net	324	58
Foreign currency exchange loss on investing activities, net	(82)	–
Foreign currency exchange loss on operating activities, net	(96)	(33)
Total	**146**	**25**

22. INCOME TAX

Current tax expense	2,622	1,893
Deferred tax benefit	(163)	(88)
Total	**2,459**	**1,805**

A reconciliation of statutory income tax, calculated at the rate effective in the Russian Federation, the location of the Head office and major production assets of the Group, to the amount of actual income tax expense recorded in the consolidated income statement is as follows:

Profit before tax from continuing operations	**7,735**	**6,777**
Profit before tax from discontinued operation (refer to note 48)	–	1,005
Profit before tax from continuing and discontinued operations	**7,735**	**7,782**
Income tax at statutory rate of 24%	1,856	1,868
Effect of different tax rates of subsidiaries operating in other jurisdictions	14	(291)
Tax effect of permanent differences	259	164
Tax effect of goodwill impairment	259	–
Tax effect of change in provisions for tax penalties and recoverable amount of value added tax	43	7
Deferred tax asset not recognised on impairment of financial assets	4	29
Taxable losses of subsidiaries not carried forward	–	2
Effect of unused tax losses and tax offsets not recognised as deferred tax assets	24	38
Income tax at effective rate of 32% (2006: 23%)	**2,459**	**1,817**
Less: Income tax attributable to discontinued operation (refer to note 48)	–	(12)
Income tax expense attributable to continuing operations	**2,459**	**1,805**

The corporate income tax rates in other countries where the Group has a taxable presence vary from 0% to 39%.

Deferred income tax

Balance at beginning of the year	**881**	**543**
Benefit recognised during the year	(163)	(88)
Revaluation of available-for-sale investments	149	304
Effect of change in classification of available for sale investments to investments in associates due to increase of ownership	(73)	–
Acquisition of subsidiaries (refer to note 5)	1,784	57
Disposal of subsidiaries (refer to note 42)	(14)	–
Hedging reserve	(7)	–
Effect of translation to presentation currency	95	65
Balance at end of the year	**2,652**	**881**

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The tax effects of temporary differences that give rise to deferred taxation are presented below:

	2007	2006
Property, plant and equipment	2,220	662
Intangible assets	141	(10)
Accrued operating expenses	(111)	(41)
Valuation of receivables	(9)	(2)
Unrealised profit on intra-group transactions	(43)	(86)
Inventory valuation	11	59
Valuation of investments	437	307
Income tax loss carried forward	(99)	(89)
Provision for tax losses and tax offsets recognised as deferred tax assets	137	100
Other	(32)	(19)
Total	**2,652**	**881**

Certain deferred tax assets and liabilities have been offset in accordance with the Group's accounting policy. The analysis of the deferred tax balances (after offset) as they are recorded in the consolidated balance sheet is presented below:

Deferred tax liabilities	2,741	881
Deferred tax assets	(89)	—
Net deferred tax liabilities	**2,652**	**881**

The unutilised tax losses of the North American operations at 31 December 2007, which were available for offset against future taxable income earned in the United States of America, in the amount of USD 339 million (2006: USD 297 million), have not been recognised as a deferred tax asset.

At 31 December 2007, the Group did not recognise a deferred tax liability in respect of taxable temporary differences associated with investments in subsidiaries of USD 1,317 million (2006: USD 2,531 million), because management believed that it was in a position to control the timing of reversal of such differences and has no intention to reverse them in the foreseeable future.

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23. PROPERTY, PLANT AND EQUIPMENT

		Non-mining assets				
	Mining assets	Buildings, structures and utilities	Machinery, equipment and transport	Other	Capital construction-in-progress	Total
Cost						
Balance at 31 December 2005	**3,639**	**2,582**	**1,866**	**147**	**751**	**8,985**
Additions	240	—	—	—	529	**769**
Transfers	—	199	248	7	(454)	—
Decommissioning asset raised (refer to note 38)	12	(3)	—	—	—	**9**
Acquired on acquisition of subsidiaries (refer to note 5)	—	200	107	—	8	**315**
Disposals	(27)	(22)	(61)	(2)	(2)	**(114)**
Effect of translation to presentation currency	311	250	183	9	72	**825**
Balance at 31 December 2006	**4,175**	**3,206**	**2,343**	**161**	**904**	**10,789**
Additions	530	—	—	—	633	**1,163**
Transfers	—	91	352	35	(478)	—
Decommissioning asset raised (refer to note 38)	83	6	—	—	—	**89**
Acquired on acquisition of subsidiaries (refer to note 5)	4,221	853	1,494	53	215	**6,836**
Disposed of on disposal of subsidiaries (refer to note 42)	—	(81)	(2)	—	(1)	**(84)**
Disposals	(49)	(32)	(106)	(6)	(34)	**(227)**
Reclassified as held for sale (refer to note 33)	—	(14)	(50)	—	(5)	**(69)**
Effect of translation to presentation currency	426	236	211	5	57	**935**
Balance at 31 December 2007	**9,386**	**4,265**	**4,242**	**248**	**1,291**	**19,432**
Accumulated amortisation, depreciation and impairment						
Balance at 31 December 2005	**(680)**	**(562)**	**(565)**	**(26)**	**(81)**	**(1,914)**
Charge for the year	(196)	(182)	(178)	(9)	—	**(565)**
Eliminated on disposals	14	5	27	2	—	**48**
Impairment loss (refer to note 18)	(2)	(85)	(7)	—	7	**(87)**
Effect of translation to presentation currency	(69)	(59)	(60)	(1)	(7)	**(196)**
Balance at 31 December 2006	**(933)**	**(883)**	**(783)**	**(34)**	**(81)**	**(2,714)**
Charge for the year	(394)	(201)	(299)	(24)	—	**(918)**
Disposed of on disposal of subsidiaries (refer to note 42)	—	10	1	—	—	**11**
Eliminated on disposals	33	14	39	2	26	**114**
Impairment loss (refer to note 18)	(765)	(10)	(17)	—	(8)	**(800)**
Reclassified as held for sale (refer to note 33)	—	4	30	—	—	**34**
Effect of translation to presentation currency	(63)	(44)	(57)	(2)	(12)	**(178)**
Balance at 31 December 2007	**(2,122)**	**(1,110)**	**(1,086)**	**(58)**	**(75)**	**(4,451)**
Carrying value						
31 December 2006	**3,242**	**2,323**	**1,560**	**127**	**823**	**8,075**
31 December 2007	**7,264**	**3,155**	**3,156**	**190**	**1,216**	**14,981**

Annual test for impairment

As at 31 December 2007, the Group conducted annual impairment review of property, plant and equipment.

LLC "Norilsk-Telecom"

On 2 November 2007, management of the Group made a decision to dispose of LLC "Norilsk-Telecom" ("Norilsk-Telecom") and its subsidiaries. Accordingly, in the accompanying consolidated financial statements associated assets and liabilities of Norilsk-Telecom were presented as held for sale (refer to note 33). The difference between the carrying value of Norilsk-Telecom's net assets as at 31 December 2007 and the expected proceeds from disposal in the amount of USD 15 million was recognised as an impairment of property, plant and equipment.

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Tati Nickel, a subsidiary of LionOre

Subsequent to acquisition of LionOre, an extensive feasibility review of the Activox Refinery Project at Tati Nickel, a subsidiary of LionOre, was conducted by management of the Group and an independent third party. The review highlighted a substantial project cost escalation from the feasibility study conducted by the previous owners. The major contributing factors to the substantial cost escalation were:

- an increase in construction and equipment cost worldwide, and
- project management cost worldwide.

In addition, short-term energy capacity constraints being experienced in Southern Africa have been assessed as a risk that would have adversely affected the commissioning time to production and the overall economic of the Activox Refinery Project.

Based on these facts and circumstances management of the Group made a decision to postpone the project indefinitely. As a result, as at 31 December 2007 mineral rights presented within mining assets and goodwill recognised on acquisition of LionOre were impaired in the amounts of USD 765 million and USD 325 million, respectively (refer to note 24).

Others

Additional impairment loss recognised in respect of property, plant and equipment in the amount of USD 20 million was attributable to the greater than anticipated wear and tear and certain frozen construction projects.

The impairment loss was recorded within other operating expenses in the consolidated income statement.

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	2007	2006
24. GOODWILL		
Cost		
Balance at beginning of the year	**25**	**14**
Acquired on acquisition of subsidiaries (refer to note 5)	4,256	10
Effect of translation to presentation currency	158	1
Balance at end of the year	**4,439**	**25**
Accumulated impairment losses		
Balance at beginning of the year	–	–
Impairment loss	(1,079)	–
Balance at end of the year	**(1,079)**	**–**
Carrying value		
31 December 2006	**25**	**14**
31 December 2007	**3,360**	**25**

Allocation of goodwill to separate cash-generating units

The carrying amount of goodwill, prior to recognition of impairment loss, was allocated to the following segments and smallest individual cash-generating units within respective segments:

Mining and metallurgy segment		
LionOre – Botswana operations	1,691	–
LionOre – Australia operations	596	–
Total allocated to mining and metallurgy segment	**2,287**	**–**
Energy and utilities segment		
OGK-3	2,125	–
Taimyrenergo	11	10
Total allocated to energy and utilities segment	**2,136**	**10**
Total allocated to transport and logistics segment	**16**	**15**
Total	**4,439**	**25**

Annual test for impairment

OGK-3

Recoverable amount of goodwill attributable to OGK-3 was determined based on the market value of OGK-3 shares as at 31 December 2007 less cost to sell. As a result of the test, an impairment loss of USD 754 million was recognised.

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LionOre

For the purpose of impairment loss assessment management of the Group measured value-in-use of LionOre Group and its subsidiaries based on cash flows expected to be generated by cash-generating units, being the individual mines, smelting and refining operations.

Cash flows were projected up to the expected closure date of mining and metallurgy operations and were based on the assumptions presented below.

The long-term commodity price forecasts for nickel, copper and other by-products, for purposes of performing the value-in-use calculations, is management's estimates based on their experience of the specific commodities markets as at the date of the impairment test, that are within the range of external market forecasts and is slightly higher than the calculated market average prevailing at the time, varying in accordance with the year in which the sale is expected to occur.

Economically recoverable reserves and resources were primarily based on the external mining engineers reports available on the date of impairment test or nearest date when appropriate evaluation work was undertaken.

Inflation expectations and foreign currency trends were in general consistent with the external sources of information and presented is as follows:

Inflation expectations, %	
Botswana	4.00 – 8.10
Australia	3.50 – 4.40
Expected exchange rates	
Botswana Pula/US Dollar	6.17 – 10.34
Australian Dollar/US Dollar	1.14 – 1.28

Discount rates reflect management's assessment of the risks specific to each production unit and are supported by reviews conducted by external valuation specialists. These rates are based on the weighted average cost of capital specific to each cash-generating unit and presented is as follows:

Discount rates, %	
Botswana	10.40
Australia	6.87

Goodwill impairment test for LionOre was undertaken at 31 December 2007 based on appropriate results and assumptions used in valuation of identifiable assets, liabilities and contingent liabilities of LionOre and it's subsidiaries performed as at 28 June 2007 by independent qualified appraiser. Due to facts and circumstances described in details in note 23, an impairment loss of USD 325 million was recognised by the Group in respect of goodwill attributable to Tati Nickel, a subsidiary of LionOre.

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25. INTANGIBLE ASSETS

	Patent and licences	Long-term favourable contracts	Software	Other	Total
Cost					
Balance at 31 December 2005	**6**	**103**	**25**	**8**	**142**
Additions	1	—	19	7	**27**
Disposals	—	—	(1)	—	**(1)**
Effect of translation to presentation currency	—	—	3	1	**4**
Balance at 31 December 2006	**7**	**103**	**46**	**16**	**172**
Acquired on acquisition of subsidiaries (refer to note 5)	706	—	2	1	**709**
Additions	2	—	21	23	**46**
Reclassified as held for sale	—	—	(2)	—	**(2)**
Disposals	—	—	(2)	(1)	**(3)**
Effect of translation to presentation currency	22	—	4	3	**29**
Balance at 31 December 2007	**737**	**103**	**69**	**42**	**951**
Accumulated amortisation and impairment					
Balance at 31 December 2005	**(2)**	**(30)**	**(3)**	**(4)**	**(39)**
Charge for the year	(4)	(14)	(6)	(1)	**(25)**
Effect of translation to presentation currency	—	—	—	(1)	**(1)**
Balance at 31 December 2006	**(6)**	**(44)**	**(9)**	**(6)**	**(65)**
Charge for the year	(2)	(14)	(13)	(8)	**(37)**
Eliminated on disposals	—	—	2	—	**2**
Effect of translation to presentation currency	—	—	(1)	(1)	**(2)**
Balance at 31 December 2007	**(8)**	**(58)**	**(21)**	**(15)**	**(102)**
Carrying value					
31 December 2006	**1**	**59**	**37**	**10**	**107**
31 December 2007	**729**	**45**	**48**	**27**	**849**

Included in patent and licenses acquired in 2007 is the right to use a unique refining technology registered under the trade mark Activox, owned by LionOre. Fair value of the right was determined by an independent professional appraiser and comprised USD 706 million. The right has an indefinite useful life and is not amortised.

Intangible assets included long-term favourable sales contracts that are amortised over their terms of 7 years.

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26. INVESTMENTS IN ASSOCIATES

	2007	2006
Balance at beginning of the year	**208**	**95**
Acquired during the year	3,298	151
Established during the year	28	—
Acquired on acquisition of subsidiaries (refer to note 5)	580	—
Disposed of during the year	(1)	(39)
Reclassified from investments available-for-sale due to increase of ownership	427	—
Reclassified to investments available-for-sale due to decrease of ownership	(3)	(35)
Reclassified to investment in subsidiaries due to increase of ownership	(3,832)	—
Share of post-acquisition profits	5	3
Excess of the Group's share in the fair value of associates' identifiable assets, liabilities and contingent liabilities over the cost of acquisition	72	—
Dividends received	(20)	—
Impairment	(1)	(36)
Reclassified from assets held for sale	—	56
Effect of translation to presentation currency	118	13
Balance at end of the year	**879**	**208**

Details of the Group's associates were as follows:

Name of associate		Market value	Carrying value of investment	Total assets	Total liabilities	Sales	Profit/ (loss)
2007							
Nkomati Nickel Mine	(i)	n/a	575	1,190	40	58	(11)
Smart Hydrogen Incorporated	(ii)	n/a	111	222	—	—	—
OJSC "TGK-14"	(iii)	74	58	279	73	193	(6)
OJSC "Krasnoyarskenergo"	(iv)	170	40	215	60	269	31
OJSC "Norilskgazprom"		n/a	33	148	39	135	6
OJSC "KTK"	(v)	n/a	28	57	—	—	—
OJSC "Kolenergo"		30	17	94	29	104	4
Other		n/a	17	66	3	353	(3)
			879	**2,271**	**244**	**1,112**	**21**
2006							
Smart Hydrogen Incorporated	(ii)	n/a	112	224	—	—	(76)
OJSC "Krasnoyarskenergo"	(iv)	164	30	143	31	225	6
OJSC "Norilskgazprom"		n/a	30	140	36	122	16
OJSC "Kolenergo"		51	15	85	27	100	—
Other		n/a	21	226	106	972	(20)
			208	**818**	**200**	**1,419**	**(74)**

(i) ***Nkomati Nickel Mine.*** On 28 June 2007, as a part of acquisition of LionOre Mining International Limited (refer to note 5), the Group acquired 50% of share capital of Nkomati Nickel Mine, a South African mining company.

(ii) ***Smart Hydrogen Incorporated.*** The Company is a joint venture formed in April 2006 by the Group and Interros Holding Company, a related party. The Group owns 50% of the joint venture. In June 2006, through this entity the principal investors acquired a 35% stake in Plug Power Incorporated, a US designer of environmentally clean and reliable energy products.

At 31 December 2007 and 2006 management reviewed the carrying value of the Group's investment in Smart Hydrogen Incorporated for impairment. As a result, impairment loss in the amount of USD 1 million (2006: USD 36 million) was recognised.

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(iii) ***TGK-14.*** On 30 January 2007, the Group acquired 215,412 million ordinary shares, or 27.8% of the issued share capital of OJSC "Territorial Generation Company № 14" ("TGK-14") for cash consideration of USD 44 million. As a result of this transaction, the Group recognised in the consolidated income statement the excess of the Group's share the fair value of TGK-14 intangible assets, liabilities and contingent liabilities over the cost of the investment in the amount of USD 12 million.

In August 2007, TGK-14 increased its share capital through the issuance of additional ordinary shares; as a result, the Group's share in this company decreased to 27.7%.

(iv) ***Krasnoyarskenergo.*** In October 2005 and March 2006, as a result of the reorganisation of OJSC "Krasnoyarskenergo" the Group became a shareholder in OJSC "Krasnoyarskaya Generatsiya" and OJSC "Krasnoyarskiye Magistralniye Seti". In November 2006, the Group sold its share in OJSC "Krasnoyarskaya Generatsiya" for a cash consideration of USD 156 million (refer to note 43).

(v) ***KTK.*** OJSC "KTK" is a joint venture established in December 2007 for the purpose of generating steam and hot water. The Group contributed USD 28 million into share capital and became the owner of 50% interest in this entity.

Other significant movements during the years ended 31 December 2007 and 2006

(vi) ***TGK-1.*** In November 2006, as a part of the reorganisation of RAO "UES of Russia" the Group's investments in OJSC "Kolskaya Generiruyuschaya Kompania" and OJSC "Apatitskaya TEC" were exchanged for 208,928 million shares of OJSC "Territorial Generation Company № 1" ("TGK-1").

In May 2007, the Group's investment in OJSC "Murmanskaya TEC" was exchanged for 6,743 million shares of TGK-1. At 31 December 2007 and 2006 investment in TGK-1 was classified as investment in listed securities available-for-sale (refer to note 27).

(vii) ***MPI.*** On 1 March 2007, as a part of acquisition of nickel business of OM Group Incorporated, the Group acquired 20% of share capital of MPI Nickel Proprietary Limited for a cash consideration of USD 135 million.

As a result of this transaction, the Group recognised in the consolidated income statement the excess of the Group's share in the fair value of MPI Nickel Proprietary Limited identifiable assets, liabilities and contingent liabilities over cost of the investment in the amount of USD 60 million.

On 28 June 2007, an additional 80% of share capital of MPI Nickel Proprietary Limited was acquired by the Group through acquisition of LionOre (refer to note 5).

(viii) ***OGK-3.*** On 26 March 2007, the Group acquired 17,836 million ordinary shares of OJSC "Third Generation Company of the Wholesale Electricity Market" ("OGK-3") (refer to note 5) for a cash consideration of USD 3,119 million. After completion of this transaction the Group became the owner of 46.9% of OGK-3.

During July-August 2007, the Group acquired an additional 7.2% of interest in OGK-3 for a cash consideration of USD 612 million, increasing its ownership to 54.1% (refer to note 5). After completion of this transaction investment in OGK-3 was consolidated as investment in subsidiary.

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	2007	2006
27. OTHER FINANCIAL ASSETS		
Non-current		
Available-for-sale investments, at fair value		
Listed securities	2,418	2,326
Unlisted securities	5	5
Held-to-maturity investments, at amortised cost		
Promissory notes receivable	12	3
Loans and receivables, at amortised cost		
Bank deposits	521	268
Loans given	19	5
Accounts receivable	7	8
Total non-current	**2,982**	**2,615**
Current		
Available-for-sale investments, at fair value		
Listed securities	117	35
Promissory notes receivable	618	–
Held-to-maturity investments, at amortised cost		
Promissory notes receivable	775	2
Loans and receivables, at amortised cost		
Bank deposits	2,832	–
Loans given	131	45
Financial assets, at fair value through profit or loss (FVTPL)		
Assets held under trust agreement	–	22
Total current	**4,473**	**104**

Listed and unlisted securities available-for-sale consisted of shares of the following companies:

RAO "UES of Russia"	1,883	1,580
OJSC "TGK-1" (refer to note 26)	281	79
OJSC "OGK-5"	107	–
OJSC "Polyus Gold"	89	95
Talvivaara Mining Company Limited	73	–
U.S. federal agency notes	25	22
Breakaway Resources Limited	23	–
Canadian Royalties Incorporated	21	–
OJSC "TGK-5"	18	–
OJSC "TGK-2"	2	–
OJSC "Samara Bearing Plant"	1	5
OJSC "OGK-3"	–	572
Other	17	13
Total	**2,540**	**2,366**

In September 2007, OJSC "Fifth Generation Company of the Wholesale Electricity Market" ("OGK-5") and OJSC "Territorial Generation Company № 5" ("TGK-5") were spun-off from RAO "UES of Russia" ("RAO UES") as a part of its reorganisation. In accordance with the restructuring plan all shareholders of RAO UES received ordinary shares of OGK-5 and TGK-5 in portion to their shareholding in RAO UES. As a result of the spin-off, the Group received 607 million ordinary shares of OGK-5 and 20,043 million ordinary shares of TGK-5.

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Interest rates on long-term deposits held in banks vary from 6.1% to 6.3% (2006: 6.1% to 7.4%) per annum.

Interest rates on short-term deposits held in banks vary from 7.0% to 8.6% per annum.

Long-term loans given included a loan to a related party (refer to note 43) amounted to USD 70 million and bearing interest at LIBOR + 0.75% per annum. The loan is secured by 67% of the shares of Edgar Eclipse Incorporated, a company holding a 99% interest in a property development business. As at 31 December 2007, it was not practicable to determine the fair value of this collateral. As a result, it has been fully impaired.

At 31 December 2007, short-term loans given included loans to several exploration companies, related parties to the Group, in the amount of USD 53 million (2006: USD 11 million) at interest rates varying from 6.4% to 6.5% per annum. During 2007 the Group renegotiated the terms of these loans. Under the new terms the loans are due in 2008. Management of the Group believes that the loans will be repaid in full during 2008, thus no impairment loss was recognised as at 31 December 2007.

At 31 December 2007, current listed securities available-for-sale mostly comprised an investment in OJSC "Polyus Gold" of USD 89 million. On 9 September 2007, the Board of Directors approved a decision to sell its investments in OJSC "Polyus Gold", and it was reclassified from non-current to current investments within listed securities available-for-sale.

Promissory notes receivable included notes issued by OJSC "Rosbank" in the amount of USD 774 million due on 8 May 2008. The effective interest rate attributable to these promissory notes is 8.5% per annum. Management held these promissory notes to maturity.

In addition, the Group held notes receivable issued by OJSC "Sberbank" in the amount of USD 618 million, due on 14 November 2009. The effective interest rate attributable to these promissory notes is 8.8% per annum. Management of the Group has an intention to settle these promissory notes in 2008, accordingly, they were presented as available-for-sale financial assets.

28. TAXES

	2007	2006
Taxes receivable		
Value added tax recoverable	585	592
Customs duties	65	55
Other taxes	8	10
	658	**657**
Less: Allowance for value added tax recoverable	(35)	(38)
Total	**623**	**619**
Less: Non-current portion	(38)	(44)
Current taxes receivable	**585**	**575**
Taxes payable		
Provision for tax fines and penalties	76	52
Property tax	31	25
Value added tax	28	29
Tax on mining	17	16
Unified social tax	15	12
Other	30	15
Total	**197**	**149**

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	2007	2006
29. INVENTORIES		
Refined metals		
Joint products at net production cost	502	361
By-products at net realisable value	190	135
Work-in-process at net production cost	456	273
Total metal inventories	**1,148**	**769**
Stores and materials at cost	985	732
Less: Allowance for obsolete and slow-moving items	(25)	(30)
Net stores and materials	**960**	**702**
Total inventories	**2,108**	**1,471**

30. TRADE AND OTHER RECEIVABLES		
Trade receivables for metal sales	713	573
Other receivables	288	195
	1,001	**768**
Less: Allowance for doubtful debts	(52)	(71)
Total	**949**	**697**

In 2007 the average credit period on metal sales was 0 - 30 days (2006: 0 - 30 days). Trade receivables are generally non-interest bearing. The Group has fully provided for all receivables which were due in excess of 180 days based on the historical experience that such receivables are generally not recoverable. Trade receivables that are past due for less than 180 days are generally not provided for. The payment terms for Tati (Botswana) are set out in the related ore and concentrate purchase agreements, which stipulates that payments are due within 150 days for base metals, and varies from 240 to 300 days for precious metals. However for certain agreements, 70% of payments for nickel and 90% payments for other metals are receivable within 60 days.

The average credit period on sales of electricity and other products and services for the year ended 31 December 2007 was 25 days (2006: 25 days). No interest was charged on these receivables. The Group has provided fully for all other receivables over 365 days based on the historical experience that other receivables that are past due beyond 365 days are generally not recoverable.

Provision in respect of receivables that were less then 365 days old was determined based on the past default experience.

The Group did not hold any collateral for accounts receivable balances.

Included in the Group's other receivables at 31 December 2007 were debtors with a carrying value of USD 76 million (2006: USD 57 million) that were past due but not impaired. Management of the Group believes that these amounts are recoverable in full.

Ageing of other receivables past due but not impaired was as follows:

	2007	2006
Less then 180 days	36	30
180-365 days	35	27
More than 365 days	5	–
	76	**57**

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	2007	2006
Movement in the allowance for doubtful debts was as follows:		
Balance at beginning of the year	**71**	**56**
Change in allowance	(9)	21
Account receivables written-off	(16)	(13)
Effect of translation to presentation currency	6	7
Balance at end of the year	**52**	**71**

Included in allowance for doubtful debts is a specific allowance against other receivables of USD 16 million (2006: USD 13 million) from entities placed into a bankruptcy. The allowance represents the difference between the carrying amount of these receivables and the present value of the expected proceeds on liquidation. The Group did not hold collateral in respect of these balances.

31. ADVANCES PAID AND PREPAID EXPENSES

Advances paid	151	56
Prepaid insurance	32	97
Total	**183**	**153**

At 31 December 2007, advances paid were presented net of impairment of USD 7 million (2006: USD 6 million). During the year ended 31 December 2007, an impairment loss of USD 1 million (2006: USD 2 million) was recognised.

32. CASH AND CASH EQUIVALENTS

Current accounts	- RUR	320	185
	- foreign currencies	384	263
Bank deposits	- RUR	209	15
	- foreign currencies	3,087	1,618
Restricted cash		6	5
Other cash and cash equivalents		2	92
Total		**4,008**	**2,178**

33. ASSETS CLASSIFIED AS HELD FOR SALE

On 2 November 2007, management of the Group made a decision to dispose of LLC "Norilsk-Telecom" and its subsidiaries ("Norilsk-Telecom"). The principal activity of Norilsk-Telecom was providing telecommunication services in the Krasnoyarsk region.

Assets and liabilities attributable to Norilsk-Telecom were classified as a disposal group held for sale and presented separately in the consolidated balance sheet. The Group's share in Norilsk-Telecom was sold in May 2008 for a cash consideration of USD 51 million (refer to note 49). The difference between the carrying value of assets and liabilities and the expected proceeds from disposal of USD 15 million was recognised as impairment loss of property, plant and equipment.

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The major classes of assets and liabilities classified as held for sale as at 31 December 2007 were as follows:

	2007
Property, plant and equipment (refer to note 23)	35
Trade and other receivables	11
Cash and cash equivalents	8
Inventory	2
Other assets	4
Total assets held for sale	**60**
Trade and other payables	4
Employee benefit obligations	2
Other liabilities	3
Total liabilities associated with assets held for sale	**9**
Net assets held for sale	**51**

34. SHARE CAPITAL

	2007	2006
Authorised, issued and fully paid share capital		
31 December 2007: 190,627,747 ordinary shares at par value of RUR 1 each	8	–
31 December 2006: 190,627,747 ordinary shares at par value of RUR 1 each	–	8
Total	**8**	**8**
Treasury shares		
31 December 2007: 1,710,884 ordinary shares	–	–
31 December 2006: 9,209,834 ordinary shares	–	(999)
Total	**–**	**(999)**
Number of ordinary shares in issue at end of the year	188,916,863	181,417,913
Weighted average number of ordinary shares in issue during the year	182,362,986	188,767,177

On 27 March 2006, 23,278,137 treasury shares were cancelled by the Company.

On 28 December 2006, 7,498,950 ordinary shares were bought back from shareholders at RUR 3,510 per share for a total consideration of USD 999 million.

On 16 November 2007, 7,498,950 of the Company's shares were reissued from treasury stock at USD 285 per share for a total consideration of USD 2,137 million. Direct expenses in the amount of USD 10 million and income tax associated with reissuance in the amount of USD 272 million were deducted from proceeds.

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35. OTHER RESERVES

	Investments revaluation reserve	Hedging reserve	Revaluation surplus	Translation reserve	Total
Balance at 31 December 2005	**690**	**–**	**–**	**748**	**1,438**
Increase in fair value of available-for-sale investments	920	–	–	–	**920**
Loss on cash flow hedge	–	(15)	–	–	**(15)**
Translation of foreign operations	–	–	–	(55)	**(55)**
Effect of translation to presentation currency	–	–	–	1,012	**1,012**
Net income recognised directly in equity	**1,610**	**(15)**	**–**	**1,705**	**3,300**
Realised gain on disposal of available-for-sale investments	(613)	–	–	(7)	**(620)**
Total recognised income and expense	**997**	**(15)**	**–**	**1,698**	**2,680**
Cancellation of treasury shares	–	–	–	(15)	**(15)**
Net assets distributed to shareholders on disposal of Polyus Group	–	–	–	(103)	**(103)**
Balance at 31 December 2006	**997**	**(15)**	**–**	**1,580**	**2,562**
Increase in fair value of available-for-sale investments	465	–	–	–	**465**
Effect of change in classification of available-for-sale investments to investments in associates due to increase of ownership	(222)	–	43	(4)	**(183)**
Loss on cash flow hedge	–	(16)	–	–	**(16)**
Translation of foreign operations	–	–	–	(206)	**(206)**
Effect of translation to presentation currency	–	–	–	1,201	**1,201**
Net income recognised directly in equity	**1,240**	**(31)**	**43**	**2,571**	**3,823**
Impairment of available-for-sale investments	24	–	–	–	**24**
Other reserves disposed of on disposal of subsidiaries	–	–	–	(5)	**(5)**
Total recognised income and expense	**1,264**	**(31)**	**43**	**2,566**	**3,842**
Issuance of ordinary shares from treasury stock, net of direct expenses and attributable income tax	–	–	–	(77)	**(77)**
Balance at 31 December 2007	**1,264**	**(31)**	**43**	**2,489**	**3,765**

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36. BORROWINGS

		Currency	2007 Rate,%	2007 Outstanding balance	2006 Rate, %	2006 Outstanding balance
Bank loans						
Societe Generale, syndicated loan	(i)	USD	LIBOR+ 0.53-0.63	3,473	–	–
BNP Paribas	(ii)	USD	LIBOR+ 0.30-0.40	2,497	–	–
Sberbank	(iii)	RUR	8.75	612	–	–
Societe Generale	(iv)	USD	LIBOR+0.43	200	–	–
Toronto Dominion	(v)	USD	LIBOR+2.5	95	LIBOR+3.25	96
ANZ Syndicate	(vi)	AUD	BBSY+ 0.61-1.01	66	–	–
Gazprombank	(vii)	USD	–	–	5.95	120
West LB Vostok	(viii)	USD	–	–	5.80	25
Other		vary	vary	25	vary	21
Promissory notes	(ix)	RUR	5.50	580	–	–
Guaranteed notes	(x)	USD	7.125	499	7.125	499
Exempt Facility Reversal Bonds Series 2000	(xi)	USD	8.57	29	8.57	29
Total				**8,076**		**790**
Less: current portion due within twelve months and presented under short-term borrowings				**(3,973)**		**(158)**
Long-term borrowings				**4,103**		**632**

The maturity profile of the Group's borrowings is as follows:

Due within one month	8	153
Due from one to three months	598	–
Due from three to twelve months	3,367	5
Total short-term borrowings	**3,973**	**158**
Due in the second year	827	4
Due in the third year	2,247	502
Due in the fourth year	665	93
Due in the fifth year	333	–
Due thereafter	31	33
Total long-term borrowings	**4,103**	**632**
Total	**8,076**	**790**

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(i) ***Societe Generale*** – The USD 3,500 million syndicated loan consists of two credit lines for USD 2,000 million and USD 1,500 million. The credit line in the amount of USD 2,000 million was arranged for five years at floating rate of LIBOR + 0.53% per annum (effective rate 5.39%) up to 29 June 2010 and LIBOR + 0.63% per annum (effective rate 5.49%) thereafter and secured by assignment of rights for proceeds from nickel and copper supply agreements of Metal Trade Overseas S.A. and Norilsk Nickel Europe Limited, subsidiaries of the Group. The secured credit line in the amount of USD 2,000 million is to be repaid in equal quarterly instalments with the final instalment due on 29 June 2012. The unsecured credit line in the amount of USD 1,500 million was arranged for three years at floating rate of LIBOR + 0.60% per annum (effective rate 5.46%), and is due in full in June 2010. Interest is payable on a monthly basis.

The Group is obliged to comply with a number of restrictive financial and other covenants, including maintaining certain financial ratios and credit ratings, and restrictions on pledging and disposal of certain assets.

(ii) ***BNP Paribas*** – The USD 2,500 million unsecured loan consists of two credit lines for USD 1,000 million and USD 1,500 million. A credit line in the amount of USD 1,000 was arranged at floating rate of LIBOR + 0.30% per annum (effective rate 5.16%), and is due in full in June 2008. The credit line in the amount of USD 1,500 million was arranged at floating rate of LIBOR + 0.40% per annum (effective rates 5.26% and 5.64% for different tranches), and is due in full in June 2008. Interest is payable on a monthly basis.

(iii) ***Sberbank*** – The USD 612 million unsecured loan, with a fixed rate of 8.75% per annum, is due in full in November 2008. Interest is payable on a monthly basis.

(iv) ***Societe Generale*** – The USD 200 million unsecured loan, with a floating rate of LIBOR + 0.43% per annum (effective rate 5.36%), is due in full in March 2008. Interest is payable on a monthly basis.

(v) ***Toronto Dominion*** – The USD 250 million credit facility arranged by Stillwater Mining Company, a subsidiary of the Group, at floating rate of LIBOR + 2.50% per annum (effective rate 7.38%). The loan is to be repaid in equal semi-annual instalments with the final instalment due on 30 July 2010. Substantially all the property and assets of Stillwater Mining Company were pledged as security for this credit facility. The loan agreement requires that 50% of the company's annual excess cash flow and any proceeds from asset sales and the issuance of debt or equity securities, subject to specified exceptions, be offered to repay this loan.

(vi) ***ANZ Syndicate*** – The USD 118 million credit facility arranged by LionOre Mining International Limited, a subsidiary of the Group, that is secured by shares of subsidiaries of LionOre Group located in Australia. The loan is to be repaid in equal monthly instalments starting from March 2007, with the final instalment repayable in December 2008. The interest rate varies from the Bill Rate of the Reserve Bank of Australia ("BBSY") + 0.61% (effective rate 8.18%) to BBSY + 1.01% (effective rate 8.58%) per annum.

(vii) ***Gazprombank*** – The USD 120 million unsecured loan, with a fixed rate of 5.95%, was fully repaid in January 2007.

(viii) ***West LB Vostok*** – The USD 25 million unsecured loan, with a fixed rate of 5.80%, was fully repaid in January 2007.

(ix) ***Promissory notes*** – Promissory notes were issued by OJSC "MMC Norilsk Nickel" in September 2007 with an effective interest rate of 5.50%, and which mature during February – April 2008. The par value of promissory notes amounted to USD 566 million.

(x) ***Guaranteed notes*** – On 30 September 2004, Norilsk Nickel Luxemburg S.A., a wholly owned special purpose subsidiary of the Group, issued USD 500 million 7.125% notes. The notes were issued at par value with an interest payable semi-annually in arrears on 30 March and 30 September, and the principal due on 30 September 2009. The notes are unconditionally and irrevocably guaranteed by OJSC "MMC Norilsk Nickel".

(xi) ***Exempt Facility Reversal Bonds Series 2000*** – The USD 29 million of bonds issued by Stillwater Mining Company, a subsidiary of the Group on 6 July 2002, with an effective interest rate of 8.57% and due in full on 1 July 2020. Interest is payable semi-annually.

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	2007	2006

37. EMPLOYEE BENEFIT OBLIGATIONS

The most recent actuarial valuations of plans assets and the present value of the defined benefit obligation were carried out at 31 December 2007.

Defined benefit pension plans assets	8	–
Total assets	**8**	**–**
Wages and salaries	206	92
Accrual for annual leave	164	143
Defined contribution obligations	11	–
Defined benefit obligations	6	63
Other	2	18
Total obligations	**389**	**316**
Less: current portion due within twelve months and presented under current liabilities	**(378)**	**(259)**
Long-term employee benefit obligations	**11**	**57**

Defined benefit plans

Present value of defined benefit obligations	240	119
Fair value of plans assets	(148)	(11)
Present value of unfunded obligations	**92**	**108**
Plan assets above limits	19	–
Unrecognised past service cost	(1)	–
Unrecognised actuarial losses	(112)	(45)
	(2)	**63**

Amounts recognised in the consolidated income statement were as follows:

Current service costs	2	2
Expected return on plans assets	(8)	–
Additional cost arising from new plan members	15	4
Net actuarial losses recognised during the year	22	2
Plan assets above limits recognised during the year	19	–
Gain arising from curtailment	(5)	–
Interest expense	10	7
Total	**55**	**15**

Movements in the present value of the defined benefit obligations were as follows:

	Lifelong professional pension plan	Joint corporate pension plan	Other
Balance at 31 December 2005	**66**	**35**	**–**
Benefits paid	(7)	(1)	–
Current service cost	2	4	–
Interest cost	5	2	–
Actuarial loss/(gain)	11	(5)	–
Effect of translation to presentation currency	4	3	–
Balance at 31 December 2006	**81**	**38**	**–**
Acquired on acquisition of subsidiaries	–	–	16
Benefits paid	(6)	(4)	–
Current service cost	–	16	1
Interest cost	6	3	1
Actuarial loss/(gain)	92	(7)	(2)
Gain on curtailment	–	–	(5)
Effect of translation to presentation currency	6	4	–
Balance at 31 December 2007	**179**	**50**	**11**

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Movements in the fair value of plans assets were as follows:

	Lifelong professional pension plan	Joint corporate pension plan
Balance at 31 December 2005	—	—
Contributions from the employer	—	11
Balance at 31 December 2006	—	**11**
Contributions from the employer	70	64
Expected return on plans assets	4	4
Actuarial gain	—	(2)
Benefits paid	(6)	(4)
Effect of translation to presentation currency	4	3
Balance at 31 December 2007	**72**	**76**

Starting from 2006, the Group's pension plans are managed by a non-state Pension Fund "Norilsk Nickel". Contributions from the Group to this Fund for the year ended 31 December 2007 amounted to USD 201 million (2006: USD 11 million).

The major categories of pension plans assets and the expected rate of return at the balance sheet dates for each category were as follows:

	Expected return		Fair value of pension plans assets	
	2007	2006	2007	2006
Equity instruments	9.8%	46.7%	37	3
Bonds	6.6%	7.9%	76	6
Promissory notes	—	6.4%	—	1
Deposits	6.6%	8.7%	35	—
Other	—	4.9%	—	1
Weighted average expected return	**7.4%**	**10.4%**	**148**	**11**

The following table is a summary of the present value of defined benefit obligations and fair value of the pension plans assets for the current year and previous four annual periods:

	2007	2006	2005	2004	2003
Defined benefit obligations	240	119	104	70	44
Plans assets	(148)	(11)	—	—	—
Deficit	**92**	**108**	**104**	**70**	**44**

Key assumptions used in estimation of defined benefit obligations were as follows:

	2007	2006
Discount rate	6.6%	7.0%
Expected rate of return on plans assets	7.4%	10.4%
Pre-retirement increases to capital accounts	6.6%	4.5%
Future salary increases	6.6%	6.7%
Future pension increases	9.2%	5.2%
Average life expectancy of members from the date of retirement	17 years	17 years

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	2007	2006
Defined contribution plans		
Amounts recognised in the consolidated income statement in respect of defined contribution plans were the following:		
Pension Fund of the Russian Federation	199	181
Corporate pension option program	56	–
Stillwater Mining Company savings plan	5	5
Other	14	–
Total	**274**	**186**

38. ENVIRONMENTAL OBLIGATIONS

Decommissioning obligations	557	318
Provision for land restoration	26	4
Total	**583**	**322**

Balance at beginning of the year	**322**	**269**
New obligations raised (refer to note 23)	3	4
Change in estimate (refer to note 23)	86	5
Acquired on acquisition of subsidiaries (refer to note 5)	95	–
Unwinding of discount on decommissioning obligations (refer to note 19)	23	19
Charge to the income statement	30	1
Effect of translation to presentation currency	24	24
Balance at end of the year	**583**	**322**

During 2007 the Group reassessed the amount of decommissioning obligations for its operations in the Russian Federation due to changes in inflation and discount rates, and the results of an independent audit of ore reserves affecting the expected mines closure dates. As a result, additional decommissioning obligations raised, which were presented as change in estimate.

Key assumptions used in estimation of environmental obligations were as follows:

Discount rates	6.0% – 7.7%	6.6% – 7.7%
Future expected increase of expenses	25.0%	25.0%
Expected closure date of mines	2009 – 2056	2007 – 2063

Present value of expected cost to be incurred for settlement of environmental obligations was as follows:

Due from second to fifth year	148	41
Due from sixth to tenth year	72	10
Due from eleventh to fifteenth year	53	64
Due from sixteenth to twentieth year	156	83
Due thereafter	154	124
	583	**322**

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	2007	2006
39. TRADE AND OTHER PAYABLES		
Trade payables	352	191
Insurance payable	22	107
Payables for property, plant and equipment	44	21
Other creditors	168	51
Total	**586**	**370**

The maturity profile of the Group's trade and other payables was as follows:

Due within one month	406	212
Due from one to three months	45	68
Due from three to twelve months	135	90
Total	**586**	**370**

40. DERIVATIVE FINANCIAL LIABILITIES		
Cash flow hedges		
Nickel future contracts	10	–
Platinum future contracts	6	15
Total cash flow hedges	**16**	**15**
At fair value through profit and loss		
Derivatives held for trading	11	–
Total at fair value through profit and loss	**11**	**–**
Less: current portion due within twelve months and presented under current liabilities	**(24)**	**(15)**
Long-term derivative financial liabilities	**3**	**–**

The maturity profile of the Group's derivative financial liabilities was as follows:

Cash flow hedges		
Due within one month	2	2
Due from one to three months	7	3
Due from three to twelve months	7	10
Total	**16**	**15**
At fair value through profit and loss		
Due from one to three months	2	–
Due from three to twelve months	6	–
Due from one to five years	3	–
Total	**11**	**–**

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	2007	2006
Derivative financial liabilities designated as at fair value through profit and loss		
Derivatives held for trading at fair value	11	–
	11	–
Change in fair value recognised during the year attributable to changes in market risk factors	72	–
Cumulative changes in fair value attributable to changes in market risk factors	**72**	–

Derivatives held for trading represented nickel and copper forward contracts that were entered into by Norilsk Nickel Africa after the approval of the Activox Project in August 2006, valued as at 31 December 2007 at the fair value of total portfolio of forward contracts.The portfolio consisted of contracts with expiry dates between July 2007 and 31 December 2009 for nickel and 31 December 2008 for copper and is revalued on a monthly basis by reference to relevant nickel and copper forward prices.

41. DIVIDENDS

On 21 December 2007, the Company declared an interim dividend in respect of the year ended 31 December 2007 in the amount of RUR 108 (USD 4.36) per share. The dividend was paid to shareholders on 7 February 2008. The amount is net of USD 7 million due to Group subsidiaries.	792	–
On 28 June 2007, the Company declared a final dividend in respect of the year ended 31 December 2006 in the amount of RUR 120 (USD 4.64) per share. The dividend was paid to shareholders on 16 August 2007. The amount is net of USD 8 million paid to Group subsidiaries.	842	–
On 24 November 2006, the Company declared an interim dividend in respect of the year ended 31 December 2006 in the amount of RUR 56 (USD 2.11) per share. The dividend was paid to shareholders on 29 December 2006. The amount is net of USD 4 million paid to Group subsidiaries.	–	399
On 29 June 2006, the Company declared a final dividend in respect of the year ended 31 December 2005 in the amount of RUR 53 (USD 1.98) per share. The dividend was paid to shareholders on 15 August 2006. The amount is net of USD 4 million paid to Group subsidiaries.	–	373
Total	**1,634**	**772**

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42. DISPOSAL OF SUBSIDIARIES

On 25 May 2007, the Group sold its interest in Vimon Investments Limited BVI, the company which owned the entire share capital of CJSC "Kraus-M" a subsidiary, to a related party for a cash consideration of less than USD 1 million (refer to note 43). Under the terms of the sale agreement, intra-group debt of Vimon Investments Limited amounting to USD 41 million was assigned to the buyer. The carrying value of Vimon Investments Limited net assets at the date of disposal amounted to USD 18 million.

In January 2006, 51.0% Group's interest in LLC "KHK "CSKA" was disposed of for a cash consideration of USD 1 million.

Net assets of the subsidiaries disposed of were as follows:

	2007	2006
Property, plant and equipment (refer to note 23)	73	–
Other taxes receivable	4	–
Trade and other receivables	3	–
Deferred tax liabilities (refer to note 22)	(14)	–
Borrowings	(48)	–
Trade and other payables	–	(5)
Group's share of assets disposed of	**18**	**(5)**
(Loss)/gain on disposal	(18)	6
Net cash inflow from disposal of subsidiaries	**–**	**1**

43. RELATED PARTIES

Related parties are considered to include shareholders, affiliates and entities under common ownership and control with the Group and members of key management personnel. The Company and its subsidiaries, in the ordinary course of their business, enter into various sale, purchase and service transactions with related parties.

Transactions with related parties

	Sale of goods	Purchase of goods	Purchase of services	Loans given
Year ended 31 December 2007				
Company	121	11	44	72
Subsidiaries of the Group	94	242	60	–
Total	**215**	**253**	**104**	**72**
Year ended 31 December 2006				
Company	54	12	71	70
Subsidiaries of the Group	51	154	69	–
Total	**105**	**166**	**140**	**70**

Interest income received by the Group from related parties amounted to USD 26 million for the year ended 31 December 2007 (2006: USD 13 million).

In May 2007, the Group sold its investment in a subsidiary to a related party for a cash consideration of less than USD 1 million (refer to note 42).

During the year ended 31 December 2006, the Group sold property, plant and equipment to related parties for a total cash consideration of USD 19 million.

In November 2006, the Group sold its investment in OJSC "Krasnoyarskaya generatsiya" to related parties for a cash consideration of USD 156 million (refer to note 26).

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Outstanding balances with related parties

	Loans and borrowings	Investments and cash	Accounts receivable	Accounts payable
31 December 2007				
Company	–	477	22	29
Subsidiaries of the Group	8	1,031	10	8
Total	**8**	**1,508**	**32**	**37**
31 December 2006				
Company	–	463	8	63
Subsidiaries of the Group	6	212	4	20
Total	**6**	**675**	**12**	**83**

All balances are unsecured and expected to be settled in cash. At 31 December 2007 impairment provision for a loan provided to a related party amounted to USD 70 million (2006: USD 70 million).

Compensation of key management personnel

Remuneration of key management personnel of the Group for the year ended 31 December 2007 comprised salary and bonuses in the amount of USD 41 million (2006: USD 13 million), including unified social tax in the amount of USD 1 million (2006: USD 1 million).

44. COMMITMENTS

Capital commitments

The Management Board has approved the following capital expenditure budget for the year ending 31 December 2008:

Maintenance of property, plant and equipment	1,151
Expansion of property, plant and equipment	2,839
Total	**3,990**

2008 budgeted capital expenditure allocated between:

Contracted	933
Not contracted	3,057
Total	**3,990**

Contracted capital commitments beyond 2008 amount to USD 426 million.

Operating leases

The land in the Russian Federation on which the Group's production facilities are located is owned by the state. The Group leases land through operating lease agreements, which expire in various years through 2054. According to the terms of lease agreements rent fees are revised annually by reference to an order issued by the respective local authorities. The Group entities have a renewal option at the end of lease period and an option to buy land at any time, at price established by the local authorities.

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Future minimum lease payments due under non-cancellable operating lease agreements at 31 December 2007 were as follows:

Due within one year	15
From one to five years	25
After five years	17
Total	**57**

Intergovernmental agreement with Kingdom of Norway

In 2001 the governments of the Russian Federation and Kingdom of Norway signed an intergovernmental agreement in respect of provision of technical assistance in the reconstruction of metallurgical facilities of Pechenganickel Combine, a branch of OJSC "Kolskaya Mining and Metallurgical Company".

At 31 December 2007 total investment in the reconstruction of metallurgical facilities was agreed to be USD 164 million, financed as follows:

Grants from Kingdom of Norway	31
Loan from Nordic Investment Bank	30
Contribution by the Group	103
Total	**164**

At 31 December 2007 total investment in reconstruction of metallurgical facilities of Pechenganickel Combine amounted to USD 18 million.

Long-term contract with Talvivaara

OMG Harjavalta, subsidiary of the Group, has entered into a ten-year agreement with Talvivaaran Kaivososakeyhtiö Oy ("Talvivaara") to purchase total output of intermediate product containing nickel and cobalt at future prevailing market prices. During this period the Group is obliged to purchase at least 300,000 tons of nickel.

Long-term contracts with OM Group

In 2007, the Group entered into a five-year supply agreement with OM Group Incorporated to supply up to 2,500 metric tons (mt) per year of cobalt metal, up to 2,500 mt per year of cobalt contained in cobalt hydroxide concentrate and up to 1,500 mt per year of cobalt contained in cobalt sulphate solution, along with various nickel and copper based raw materials produced by Harjavalta Nickel Oy.

Social commitments

The Group contributes to mandatory and voluntary social programs and maintains social assets in the locations where it has its main operating facilities. The Group's social assets, as well as local social programs, benefit the community at large and are not normally restricted to the Group's employees. These contributions are recorded in the period in which they are incurred.

The Group's commitments will be funded from its own cash resources.

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45. CONTINGENCIES

Litigation

At 31 December 2007 unresolved tax litigation amounted to approximately USD 55 million (2006: USD 95 million). Management believes that the risk of an unfavourable outcome of the litigation is possible.

In 2007 Federal Service for Supervision of Natural Resource Usage of the Russian Federation ("Federal Service") required the Group to compensate for the damage of water resources in the amount of USD 287 million. In 2008 Federal Service has filed a lawsuit against the Group in the amount of USD 177 million. Management of the Group estimates the risk of satisfying claims related to compensation of the environmental damage as possible.

In addition, the Group had a number of claims and litigation relating to sales and purchases of goods and services from suppliers. Management believes that none of these claims, individually or in aggregate, will have a material adverse impact on the Group.

Taxation contingencies in the Russian Federation

The taxation system in the Russian Federation is at the development stage, and is characterised by numerous taxes, frequent changes and inconsistent enforcement at federal, regional and local levels.

The government of the Russian Federation has commenced a revision of the Russian tax system and passed certain laws implementing tax reform. The new laws reduce the number of taxes and overall tax burden on businesses and simplify tax litigation. However, these new tax laws continue to rely heavily on the interpretation of local tax officials and fail to address many existing problems. Many issues associated with practical implication of new legislation are unclear and complicate the Group's tax planning and related business decisions.

In terms of Russian tax legislation, authorities have a period of up to three years to re-open tax declarations for further inspection. Changes in the tax system that may be applied retrospectively by authorities could affect the Group's previously submitted and assessed tax declarations.

While management believes that it has adequately provided for tax liabilities based on its interpretation of current and previous legislation, the risk remains that tax authorities in the Russian Federation could take differing positions with regard to interpretive issues. This uncertainty may expose the Group to additional taxation, fines and penalties that could be significant.

With regards to matters where practice concerning payment of taxes is unclear, management estimate possible tax exposure at 31 December 2007 to be USD 146 million (2006: USD 204 million).

Environmental matters

The Group is subject to extensive federal, state and local environmental controls and regulations in the countries in which it operates. The Group's operations involve the discharge of materials and contaminants into the environment and the disturbance of land that could potentially impact on flora and fauna, and give rise to other environmental concerns.

The Group's management believes that its mining and production technologies are in compliance with all current existing environmental legislation in the countries in which it operates. However, environmental laws and regulations continue to evolve. The Group is unable to predict the timing or extent to which those laws and regulations may change. Such change, if it occurs, may require that the Group modernise technology to meet more stringent standards.

The Group is obliged in terms of various laws, mining licenses and 'use of mineral rights' agreements to decommission mine facilities on cessation of its mining operations and to restore and rehabilitate the environment. Management of the Group regularly reassesses environmental obligations related to its operations. Estimates are based on management's understanding of current legal requirements and the terms of license agreements. Should the requirements of applicable environmental legislation change or be clarified, the Group may incur additional environmental obligations.

Russian Federation risk

As an emerging market, the Russian Federation does not possess a fully developed business and regulatory infrastructure including stable banking and judicial systems, which would generally exist in a more mature market economy. The economy of the Russian Federation is characterised by a currency that is not freely convertible outside of the country, currency controls, low liquidity levels for debt and equity markets, and continuing inflation. As a result, operations in the Russian Federation involve risks that are not typically associated with those in more developed markets. Stability and success of Russian economy and the Group's business mainly depends on the effectiveness of economic measures undertaken by the government as well as the development of legal and political systems.

46. FINANCIAL RISK MANAGEMENT

Capital risk management

The Group manages its capital structure in order to safeguard the Group's ability to continue as a going concern and to maximise the return to shareholders through the optimisation of debt and equity balance.

The capital structure of the Group consists of debt, which includes long- and short-term borrowings, cash and cash equivalents and equity attributable to shareholders of the parent company, comprising issued capital, other reserves and retained earnings.

Management of the Group regularly reviews its gearing ratio, calculated as the proportion of net debt to equity to ensure that it is in line with the Group's investment grade, international peers and current rating level requirements.

The Group is subject to external capital requirements imposed by banks on certain loans, such as gearing ratio of not higher than 75%. During 2007 the Group complied with all the external capital requirements.

Financial risk factors and risk management structure

In the normal course of its operations, the Group is exposed to a variety of financial risks: market risk (including interest rate, currency and equity instruments price risk), credit risk and liquidity risk. The Group has in place risk management structure and control procedures to facilitate the measurement, evaluation and control of these exposures and related risk management activities.

Risk management is carried out by a financial risk management department, which is a part of treasury function. The Group has adopted and documented policies covering specific areas, such as market risk, credit risk, liquidity risk and use of derivative financial instruments.

Interest rate risk

Interest rate risk is the risk that changes in interest rates will adversely impact the financial results of the Group.

The Group's interest rate risk arises from long- and short-term borrowings at floating rates.

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During 2007 and 2006 the Group's borrowings at floating rates were denominated in US dollars. At 31 December 2007, the Group also had a credit facility denominated in Australian Dollars with interest rate varying from Bill Rate of Bank of Australia ("BBSY").

The Group performs thorough analysis of its interest rate risk exposure regularly. Various scenarios are simulated. Based on these scenarios, the Group is able to calculate the financial impact of an interest rate shift of 1%.

The table below details the Group's sensitivity to a 1% change in those borrowings subject to a floating rate. The sensitivity analysis is prepared assuming that the amount liabilities at floating rates outstanding at the balance sheet date was outstanding for the whole year.

	LIBOR-impact		BBSY-impact	
	2007	2006	2007	2006
Loss or gain	62	1	1	–

Management believes that the Group's exposure to interest rate risk fluctuations does not require additional hedging activities.

Currency risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument denominated in foreign currency will fluctuate because of changes in exchange rates.

The major part of the Group's revenue and related trade accounts receivable is denominated in US dollars and therefore the Group is exposed primarily to USD currency risk. Foreign exchange risk arising from other currencies is assessed by the management of the Group as immaterial.

Weakening of USD against other functional currencies of the Group's subsidiaries is partially offset by increase in commodity prices for metals produced by the Group, which are generally priced on world markets in US dollars.

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than functional currencies of the individual Group entities as at 31 December 2007 and 2006 were as follows:

	Assets		Liabilities	
	2007	2006	2007	2006
USD	5,273	2,515	6,764	698
EURO	66	10	86	15
AUD	2	–	–	–
Other currencies	21	7	14	–
Total	**5,362**	**2,532**	**6,864**	**713**

Currency risk is monitored on a monthly basis utilising sensitivity analysis to asses if a risk for a potential loss is at an acceptable level. The Group calculates the financial impact of exchange rate fluctuations within 5% on profit for the year in respect of USD-denominated assets and liabilities. The following table presents the sensitivity of the Group's profit before tax to a 5% strengthening of the functional currencies of the Group entities against USD.

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	US Dollars – impact	
	2007	**2006**
USD/RUR	86	(91)
USD/BWP	(12)	–
USD/AUD	–	–

Management has assessed the Group's exposure to currency risk is at an acceptable level and thus no exchange rate hedges are used.

Equity investments price risk

The Group is also exposed to equity investments price risk arising from equity investments. Certain portion of the Group's investments is held for strategic rather than trading purposes. The sensitivity analysis below has been determined based on the exposure to equity price risks at the reporting date.

If equity prices had been 5% higher/lower:

- profit for the year ended 31 December 2007 would have been unaffected as the quoted investments are classified as available-for-sale; and
- investment revaluation reserve within equity balance would increase/decrease by USD 380 million (2006: increase/decrease by USD 354 million), as a result of changes in fair value of listed securities available-for-sale.

In 2007 the Group's sensitivity to equity investments price risk did not change significantly compared to 2006.

Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. Credit risk arises from cash and cash equivalents, deposits with banks as well as credit exposures to customers, including outstanding uncollateralised trade and other receivables. The Group's exposure to credit risk is continuously monitored and controlled.

Prior to dealing with new counterparty, management assesses the credit worthiness of a potential customer or financial institution. Where the counterparty is rated by major independent credit-rating agencies, this rating is used to evaluate creditworthiness; otherwise it is evaluated using an analysis of the latest available financial statements of the counterparty.

Credit limits for the Group as a whole are not set up.

The balances of ten major counterparties are presented below:

	Outstanding balance	
	2007	**2006**
Bank A	3,438	659
Bank B	665	484
Bank C	642	402
Bank D	593	142
Bank E	550	119
Total	**5,888**	**1,806**

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	Outstanding balance	
	2007	**2006**
Company A	10	42
Company B	37	96
Company C	40	62
Company D	41	–
Company E	5	59
Total	**133**	**259**

The Group is not economically dependent on a limited number of customers because majority of its products are highly liquid and traded on the world commodity markets. Metal and other sales to the Group's customers are presented below:

	2007			2006		
	Number of customers	**Turnover, USD million**	**%**	**Number of customers**	**Turnover, USD million**	**%**
Largest customer	1	1,392	8	1	825	7
Next 9 largest customers	9	4,589	27	9	3,429	29
Total	**10**	**5,981**	**35**	**10**	**4,254**	**36**
Next 10 largest customers	10	1,986	12	10	1,940	16
Total	**20**	**7,967**	**47**	**20**	**6,194**	**52**
Remaining customers		9,152	53		5,729	48
Total		**17,119**	**100**		**11,923**	**100**

The Group has a concentration of cash and bank deposits with a related party commercial bank, that at 31 December 2007 represented 9% (2006: 22%) of total cash and bank deposit balance.

The Group believes that there is no other significant concentration of credit risk.

The maximum exposure to credit risk for cash and cash equivalents, loans and trade and other receivables is as follows:

	2007	**2006**
Cash and cash equivalents	4,008	2,178
Loans and trade and other receivables	4,459	1,005

Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle all liabilities as they fall due.

The Group has a well-developed liquidity risk management structure to exercise control over its short-, medium- and long-term funding. The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities. Management continuously monitors rolling cash flow forecasts and performs analysis of maturity profiles of financial assets and liabilities, and undertakes detailed annual budgeting procedures.

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Presented below is the maturity profile of the Group's borrowings (maturity profiles for other liabilities presented in notes 38 and 39) based on contractual undiscounted payments, including interest:

2007	Total	Due within one month	Due from one to three months	Due from three to twelve months	Due in the second year	Due in the third year	Due in the fourth year	Due in the fifth year	Due there-after
Fixed rate bank loans and borrowings									
Principle	**1,745**	8	376	824	504	2	–	–	31
Interest	**148**	10	19	65	29	2	2	2	19
	1,893	**18**	**395**	**889**	**533**	**4**	**2**	**2**	**50**
Floating rate bank loans									
Principle	**6,331**	–	222	2,543	323	2,245	665	333	–
Interest	**606**	29	57	183	190	113	32	2	–
	6,937	**29**	**279**	**2,726**	**513**	**2,358**	**697**	**335**	–
Total	**8,830**	**47**	**674**	**3,615**	**1,046**	**2,362**	**699**	**337**	**50**
2006									
Fixed rate bank loans and borrowings									
Principle	**694**	153	–	4	3	501	–	–	33
Interest	**131**	4	6	29	38	29	2	2	21
	825	**157**	**6**	**33**	**41**	**530**	**2**	**2**	**54**
Floating rate bank loans									
Principle	**96**	–	–	1	1	1	93	–	–
Interest	**29**	1	1	6	8	8	5	–	–
	125	**1**	**1**	**7**	**9**	**9**	**98**	–	–
Total	**950**	**158**	**7**	**40**	**50**	**539**	**100**	**2**	**54**

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At 31 December 2007 and 2006 the Group had financing facilities for the management of its day to day liquidity requirements available with the following banks:

	2007	2006
Committed credit lines		
OJSC "Sberbank"	611	–
Syndicated revolving credit facility arranged by Barclays Capital, ING Bank N.V. and Societe Generale	450	–
Syndicated revolving credit facility arranged by Societe Generale	400	400
Credit lines arranged by BNP Paribas (Suisse) S.A. and Societe Generale	6,000	–
Total committed credit lines	**7,461**	**400**
Uncommitted credit lines		
OJSC "VTB Bank"	489	100
CJSC "ING Bank (Eurasia)"	100	100
CJSC "West LB Vostok"	83	76
CJSC "BNP Pariba"	75	50
CJSC "Calyon Rusbank"	65	50
LLC "Deutsche Bank"	58	37
CJSC "Natexis Bank"	50	50
CJSC "Drezdner Bank"	50	50
OJSC "Uralsib Bank"	50	50
CJSC "Societe Generale Vostok"	40	40
CJSC "Commerzbank (Eurasia)"	40	20
CJSC "Raiffeisenbank Austria"	40	–
LLC "HSBC Bank (RR)"	40	–
OJSC "Eurofinance Mosnarbank"	38	35
CJSC "Citibank"	25	25
OJSC KB "MBRD"	20	20
CJSC "Gazprombank"	–	120
Total uncommitted credit lines	**1,263**	**823**
Bank overdraft facilities		
ING (Switzerland)	100	100
Rosbank (Russia)	102	95
BNP Paribas Suisse (Switzerland)	75	150
Credit Suisse (Switzerland)	75	75
Natexis (France)	75	75
Banque Cantonale Vaudoise (Switzerland)	50	50
Sampo (Finland)	45	–
UBS (Switzerland)	40	40
Total bank overdraft facilities	**562**	**585**
Total borrowing facilities	**9,286**	**1,808**
Less: Outstanding letters of credit	(587)	(194)
Less: Obtained bank loans related to the above facilities	(6,811)	(145)
Net facilities available	**1,888**	**1,469**

47. FAIR VALUE OF FINANCIAL INSTRUMENTS

The estimated fair values of certain financial instruments have been determined using available market information or other valuation methodologies that require considerable judgment in interpreting market data and developing estimates. Accordingly, the estimates applied are not necessarily indicative of the amounts that the Group could realise in a current market exchange. The use of different assumptions and estimation methodologies may have a material impact on the estimated fair values.

Where it was available, management of the Group determined fair value of unlisted shares using a valuation technique that was supported by publicly available market information. In the absence of such information available-for-sale investments, were presented at cost, net of impairment.

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At 31 December 2007, the estimated fair values of financial assets, including cash and cash equivalents, investments in securities, trade and other receivables, loans given and promissory notes, derivative financial liabilities and trade and other payables approximated their carrying values due to the short-term nature of these instruments. At 31 December 2007, a USD 500 million corporate bonds due in 2009 had a fair value of 105.85% or USD 529 million. The fair values of other fixed-rate debt and floating-rate debt approximate their carrying values.

48. DISCONTINUED OPERATION

On 30 September 2005, at an Extraordinary General Meeting of shareholders, the majority of shareholders of OJSC "MMC Norilsk Nickel" voted in favour of the spin-off of CJSC "Gold Mining Company Polyus" and its subsidiaries (the "Polyus Group") into a new company OJSC "Polyus Gold" by way of a single transaction which was completed on 17 March 2006.

The major classes of assets and liabilities of Polyus Group were as follows:

	17 March 2006
Property, plant and equipment and other non-current assets	1,164
Cash and cash equivalents	2,366
Other financial assets	772
Trade and other payables	(294)
Other liabilities	(240)
Net assets	**3,768**
Less: Shares of OJSC "Polyus Gold" received by the Group	(39)
Less: Minority interest	(31)
Net assets distributed to shareholders	**3,698**

The results of operations and net cash flows of Polyus Group were as follows:

	Period from 1 January 2006 to 17 March 2006
Metal sales	132
Cost of metal sales	(71)
General and administrative expenses	(15)
Other net operating expenses	(23)
Finance costs	(2)
Income from investments	984
Profit before tax (refer to note 22)	**1,005**
Income tax (refer to note 22)	(12)
Profit for the period	**993**
Net cash used in operating activities	(56)
Net cash generated from investing activities	1,963
Net cash generated from financing activities	50
Earnings per share	
Basic and diluted earnings per share from discontinued operations (US Dollars)	5.2

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49. EVENTS SUBSEQUENT TO THE BALANCE SHEET DATE

Share based payment arrangements

On 29 February 2008, the Board of Directors of OJSC "MMC "Norilsk Nickel" approved a new share based compensation program for management of the Company, under which top managers are entitled to receive "phantom shares" of OJSC "MMC "Norilsk Nickel". The program is effective from April 2008 to April 2011.

Disposal of investments

Disposal of available-for-sale investments in share of OJSC "OGK-5"

On 8 February 2008, the Group sold its entire shareholding of 607,181,796 ordinary shares in OJSC "Fifth Generation Company of the Wholesale Electricity Market" ("OGK-5") at a price of USD 0.18 per share. Net proceeds from the sale amounted to USD 109 million.

Disposal of available-for-sale investments in shares of OJSC "Polyus Gold"

On 1 April 2008, Corbiere Holdings Limited, a subsidiary of the Group, sold its stake in OJSC "Polyus Gold" for a cash consideration of USD 99 million.

Disposals of investments in LLC "Norilsk-Telecom", a subsidiary of the Group

On 5 May 2008, the Group sold its interest in LLC "Norilsk-Telecom", a 100% subsidiary of the Group, for a cash consideration of USD 51 million.

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50. INVESTMENTS IN SIGNIFICANT SUBSIDIARIES AND ASSOCIATES

Subsidiaries by business segments	Country	Nature of business	Effective % held 2007	Effective % held 2006
Mining and metallurgy				
OJSC "RAO "Norilsk Nickel"	Russian Federation	Investment holding	98.9	98.9
CJSC "NORMETIMPEX"	Russian Federation	Distribution	100.0	100.0
OJSC "Kolskaya Mining and Metallurgical Company"	Russian Federation	Mining	100.0	100.0
LLC "Institut Gypronickel"	Russian Federation	Science	100.0	100.0
OJSC "Norilsky Kombinat"	Russian Federation	Rental of equipment	98.8	98.8
OJSC "Kombinat "Severonickel"	Russian Federation	Rental of equipment	98.9	98.9
OJSC "Gornometallurgichesky Kombinat "Pechenganickel"	Russian Federation	Rental of equipment	98.9	98.9
LLC "Noriskgeologiya"[1]	Russian Federation	Geological works	100.0	–
LLC "GRK "Bystrinskoye"	Russian Federation	Mining	98.8	–
Norilsk Nickel (Asia) Limited	China	Distribution	100.0	100.0
Norimet Limited	Great Britain	Investment holding	100.0	100.0
Norilsk Nickel Europe Limited	Great Britain	Distribution	100.0	100.0
Norilsk Nickel Finance Luxembourg S.A.	Luxembourg	Financing	100.0	100.0
Norilsk Nickel Holding S.A.	Switzerland	Investment holding	100.0	100.0
Metal Trade Overseas S.A.	Switzerland	Distribution	100.0	100.0
Stillwater Mining Company	United States of America	Mining	54.5	54.9
Norilsk Nickel USA	United States of America	Distribution	100.0	100.0
Norilsk Nickel (Cyprus) Limited[2]	Cyprus	Investment holding	100.0	100.0
Norilsk Nickel Harjavalta Oy[3]	Finland	Metallurgy	100.0	–
Norilsk Nickel Finland Oy[3]	Finland	Investment holding	100.0	–
Norilsk Nickel Cawse Pty Limited[3]	Australia	Mining	100.0	–
MPI Nickel Limited[3]	Australia	Mining	100.0	–
Norilsk Nickel Australia Pty Limited[3]	Australia	Mining	100.0	–
Norilsk Process Technology Pty Limited[3]	Australia	Science	100.0	–
Tati Nickel Mining Company Pty Limited[3]	Botswana	Mining	85.0	–
Norilsk Nickel Africa Pty Limited[3]	Republic of South Africa	Mining	100.0	–
Energy and utility				
OJSC "Taimyrgaz"	Russian Federation	Gas extraction	98.4	98.4
OJSC "Norilsko-Taimyrskaya Energeticheskaya Kompaniya"[4]	Russian Federation	Electricity production and distribution	100.0	51.0
OJSC "Taimyrenergo"	Russian Federation	Rental of equipment	98.8	98.8
OJSC "OGK-3"[3]	Russian Federation	Electricity production and distribution	65.2	14.6
Transport and logistics				
LLC "Terminal"	Russian Federation	Sea shipping operations	100.0	100.0
OJSC "Yenisey River Shipping Company"	Russian Federation	River shipping operations	43.9	43.9
OJSC "Arkhangelsk Sea Commercial Port"	Russian Federation	Sea shipping operations	53.1	53.1
CJSC "Alykel"	Russian Federation	Airport	100.0	100.0
CJSC "Taimyrskaya Toplivnaya Kompaniya"	Russian Federation	Supplier of fuel	100.0	100.0
Other				
LLC "Norilsknickelremont"	Russian Federation	Repairs	100.0	100.0
LLC "UK "Zapolyarnaya stolitsa"	Russian Federation	Subcontractor in construction	100.0	100.0
LLC "Norilsk Telecom"[5]	Russian Federation	Telecommunications	100.0	100.0
LLC "Zapoliarnaya stroitelnaya companiya"	Russian Federation	Construction	100.0	100.0
LLC "Norilskyi obespechivaushyi complex"	Russian Federation	Production of spare parts	98.8	98.8
CJSC "Kraus-M"[6]	Russian Federation	Property holding	–	100.0

[1] Established as part of reorganisation of OJSC "MMC Norilsk Nickel".
[2] Established in 2006.
[3] Acquired in 2007 (refer to note 5).
[4] Increase of ownership in 2007 (refer to note 5).
[5] Classified as a disposal group (refer to note 33).
[6] Disposed of in 2007 (refer to note 42).

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Associates by business segments	Country	Nature of business	Effective % held 2007	Effective % held 2006
Mining and metallurgy				
Nkomati Nickel Mine[1]	Republic of South Africa	Mining	50.0	–
Energy and utility				
Smart Hydrogen Inc.	British Virgin Islands	Holding company	50.0	50.0
OJSC "TGK-14"[1]	Russian Federation	Electricity production and distribution	27.7	–
OJSC "Krasnoyarskenergo"	Russian Federation	Electricity production and distribution	25.7	25.7
OJSC "Norilskgazprom"	Russian Federation	Gas extraction	29.4	29.4
OJSC "Kolenergo"	Russian Federation	Electricity production and distribution	24.9	24.9
OJSC "KTK"[2]	Russian Federation	Steam and hot water production	50.0	–

[1] Acquired in 2007 (refer to note 26).
[2] Established in 2007 (refer to note 26).

The information sets out in this Appendix does not form part of the Accountants' Report, as set out in Appendix I to this prospectus, received from ZAO KPMG, Member of the Chamber of Auditors of Russia, and KPMG, Certified Public Accountants, Hong Kong, the joint reporting accountants of the Company, and is included herein for information only.

The unaudited pro forma financial information should be read in conjunction with the section headed "Financial Information" in this prospectus and the Accountants' Report set out in Appendix I to this prospectus.

(A) UNAUDITED PRO FORMA ADJUSTED NET ASSETS AND NET TANGIBLE ASSETS

The following is an illustrative and unaudited pro forma statement of adjusted net assets and net tangible assets of the Group which has been prepared in accordance with Paragraph 4.29 of the Listing Rules for the purpose of illustrating the effect of the Global Offering as if the Global Offering had been completed on 30 June 2009. It is based on the notes set forth below. The unaudited pro forma statement of adjusted net assets and net tangible assets has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the financial position of the Group had the Global Offering been completed as at 30 June 2009 or any future date.

(A1) **Pro forma adjusted net assets**

	Consolidated net assets/ (liabilities) of the Group as at 30 June 2009	Estimated net proceeds from the Global Offering	Unaudited pro forma adjusted net assets of the Group	Unaudited pro forma adjusted net assets per Share	
	Mln US$ (Note 1)	Mln US$ (Note 3)	Mln US$	US$ (Note 4)	HK$ (Note 5)
Based on an Offer Price of HK$**9.10** per Share	3,077	1,814	4,891	0.34	2.65
Based on an Offer Price of HK$**12.50** per Share	3,077	2,513	5,590	0.39	3.03

(A2) **Pro forma adjusted net tangible assets**

	Consolidated net tangible assets/ (liabilities) of the Group as at 30 June 2009	Estimated net proceeds from the Global Offering	Unaudited pro forma adjusted net tangible assets of the Group	Unaudited pro forma adjusted net tangible assets per Share	
	Mln US$ (Note 2)	Mln US$ (Note 3)	Mln US$	US$ (Note 4)	HK$ (Note 5)
Based on an Offer Price of HK$**9.10** per Share	(967)	1,814	847	0.06	0.46
Based on an Offer Price of HK$**12.50** per Share	(967)	2,513	1,546	0.11	0.84

Notes:

(1) The net assets of the Group as at 30 June 2009 have been extracted from the financial information presented in Appendix I to this prospectus.

(2) The net tangible assets of the Group as at 30 June 2009:

	Mln US$
Net assets of the Group as set out in Appendix I to this prospectus	3,077
Less: Intangible assets and goodwill	(4,044)
Net tangible assets/(liabilities) of the Group	(967)

(3) Estimated net proceeds from the Global Offering

	Based on an Offer Price of HK$9.10 per Share	Based on an Offer Price of HK$12.50 per Share
	Mln US$	Mln US$
Gross proceeds from the Global Offering	1,889	2,595
Underwriting fees and other expenses associated with the Global Offering	(75)	(82)
Net proceeds from the Global Offering	1,814	2,513

The estimated net proceeds from the Global Offering take no account of any Shares that may be issued upon exercise of the Over-allotment Option. The estimated net proceeds from the Global Offering are converted into US dollars at an exchange rate of HK$7.76 to US$1.00.

(4) The unaudited pro forma net assets and net tangible assets per Share are arrived at after adjustments referred to above and on the basis that a total of 14,300,511,110 Shares (including 11,628 Shares in issue as at 30 June 2009 or 12,690,218,270 Shares on an adjusted basis after giving effect of the subdivision on 24 December 2009 and the capitalisation issue in conjunction with the Global Offering, and 1,610,292,840 Shares to be issued under the Global Offering) were in issue and take no account of any Share that may be issued upon exercise of the Over-allotment Option.

(5) The translation of US dollars into Hong Kong dollars has been made at the rate of HK$7.76 to US$1.0. No representation is made that the US dollar amounts have been, could have been or could be converted to Hong Kong dollar, or vice versa, at that rate, or at any other rate or at all.

(6) Details of the valuation of the Group's properties as at 30 September 2009 are set out in Appendix V — Property Valuation. The net revaluation surplus of such properties classified under the captions "Property, plant and equipment", in the Accountants' Report set out in Appendix I, representing the excess of market values of the properties over their book values, is approximately US$395 million. In accordance with the Group's accounting policies, such properties are stated at historical cost less accumulated depreciation/amortisation and impairment. As such, the net revaluation surplus arising from the valuation of properties will not be included in the Group's consolidated financial statements for the year ending 31 December 2009. The calculation of the above unaudited pro forma adjusted net assets and net tangible assets of the Group does not take into account the revaluation surplus. Additional annual depreciation of approximately US$7 million would be charged against the income statement had such properties been stated at the revalued amounts.

(7) No adjustment has been made to reflect any trading results or other transactions entered into subsequent to 30 June 2009 except for the effects of the subdivision on 24 December 2009 and capitalisation issue in conjunction with Global Offering. In particular, the calculation of the above unaudited pro forma adjusted net assets and net tangible assets of the Group does not take into account the impact of the debt restructuring in December 2009 and of the conversion of a portion of the obligations to Onexim into Shares, nor, in the calculation of the unaudited pro forma adjusted net assets and net tangible assets per share at the denominator, the number of new shares created following the debt conversion. Details of the debt restructuring are set out in the section headed "Financial Information — Debt Restructuring" in this prospectus.

(B) UNAUDITED PRO FORMA FORECAST EARNINGS PER SHARE

The following unaudited pro forma forecast earnings per Share for the year ending 31 December 2009 has been prepared on the basis set out in the notes below for the purpose of illustrating the effect of the Global Offering as if it had been taken place on 1 January 2009. This unaudited pro forma forecast earnings per Share has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the financial results of the Group for the year ending 31 December 2009 or any future period.

Forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 *(Note 2)*	Not less than US$434 million (approximately HK$3,366 million)
Unaudited pro forma forecast earnings per Share — *(Note 3)*	Not less than US$0.03 (approximately HK$0.23)

Notes:

1 All statistics in this table are based on the assumption that the Over-allotment Option is not exercised.

2 The forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 is extracted from the section headed "Financial Information — Profit forecast" in this prospectus. The bases and assumptions on which the above profit forecast has been prepared are set out in Appendix IV to this prospectus. The directors of the Company have prepared the forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 based on the audited consolidated financial results of the Group for the six months ended 30 June 2009, the consolidated results shown in the unaudited financial information of the Group for the nine months ended 30 September 2009 (which include the audited consolidated financial results of the Group for the six months ended 30 June 2009) and a forecast of the consolidated results of the Group for the remaining three months ending 31 December 2009.

3 The unaudited pro forma forecast earnings per Share is calculated by dividing the forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 by the adjusted weighted average number of Shares outstanding of 14,353,757,032 Shares during the entire year. The adjusted weighted average number of Shares outstanding reflects the actual weighted average number of Shares outstanding prior to the debt restructuring of 11,628 Shares or 12,690,218,270 Shares on an adjusted basis to reflect the effect of (a) the share subdivision on 24 December 2009; (b) the capitalisation issue of the Company's ordinary shares in conjunction with the Global Offering; (c) 809,781,730 Shares issued on 7 December 2009 pursuant to the conversion of a portion of the obligations to Onexim, weighted for the portion of the period that such Shares were outstanding and adjusted for the share subdivision on 24 December 2009 and capitalisation issue in conjunction with the Global Offering; and (d) 1,610,292,840 Shares to be issued pursuant to the Global Offering as if the Global Offering had been completed on 1 January 2009, without taking into account the Over-allotment Option or any Shares that may be allotted and issued or repurchased by our Company pursuant to the mandate set out in the paragraph headed "Statutory and General Information" in Appendix VIII to this prospectus.

4 The translation of US dollars into Hong Kong dollars has been made at the rate of HK$7.76 to US$1.00. No representation is made that the US dollar amounts have been, could have been or could be converted to Hong Kong dollars, or vice versa, at that rate, or at any other rate or at all.

[PAGES III-4 TO III-6 INTENTIONALLY OMITTED]

The forecast consolidated net profit attributable to the equity holders of our Company for the year ending 31 December 2009 is set out in the section headed "Financial Information — Profit forecast" in this prospectus.

(A) BASES AND ASSUMPTIONS

Our Directors have prepared the forecast of the consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 based on the audited consolidated financial results of the Company and its subsidiaries (the "Group") for the six months ended 30 June 2009, the consolidated results shown in the unaudited financial information of the Group for the nine months ended 30 September 2009 (which include the audited consolidated financial results of the Group for the six months ended 30 June 2009) and a forecast of our consolidated results for the remaining three months ending 31 December 2009. The profit forecast has been presented on the basis of the accounting policies consistent in all material respects with those currently adopted by our Group as summarised in the Accountants' Report, the text of which is set out in Appendix I to this prospectus and on the following principal bases and assumptions:

Macroeconomic assumptions:

1. There will be no material change in the existing political, legal or regulatory (including changes in legislation, laws or regulations, government policies or rules), fiscal, market or economic conditions in any country or territory in which the Group operates compared to the first half of 2009.

2. The Russian inflation rate for October-December 2009 will be 0.95%, the US inflation rate for October-December 2009 is assumed to be (0.04%).

3. There will be no material change in the bases or rates of taxation or duties in any country or territory in which the Group operates compared to the first half of 2009.

4. The Directors of the Company estimate the average RUR/US$ exchange rate in real terms will decrease from 29.63 in October 2009 to 28.62 in December 2009. For other currencies, exchange rates are assumed to remain constant during October-December 2009.

Internal assumptions:

1. The Directors of the Company estimate sales volume of 2,001 thousand tonnes of primary aluminium and alloys in the second half of 2009 (including 1,021 thousand tonnes actual sales in July-September 2009) compared to 2,116 thousand tonnes in the first half of 2009. The Directors' forecast of sales volumes is based on an analysis of the LME prices during January-September 2009, the reduced production at some smelters in January-September 2009 and the assessment of the LME price developments in the market in the fourth quarter of 2009.

2. The average sales price of aluminium is estimated at US$1,991 per tonne in October-December 2009 compared to the actual average price of US$1,722 per tonne in July-September 2009 and US$1,493 per tonne in the first half of 2009. The sales prices projections are linked to the LME aluminium price forward curve published by Bloomberg on 23 October 2009.

3. The average aluminium cash cost per tonne, FOB is projected to increase from US$1,442 actually incurred in July-September 2009 to US$1,485 in October-December 2009, compared to US$1,402 in the first half of 2009. Cash cost per tonne of USD1,402 in the first half of 2009 was reviewed by Hatch and SRK. The projected increase in the cash cost per tonne in the fourth quarter of 2009 is primarily driven by the forecast increase in the LME prices and the appreciation of the Russian Rouble against the US dollar.

4. In preparing the profit forecast, the Directors of the Company have assumed the following impact of debt restructuring in December 2009 and the related cost of debt:

   a) the finance expense/(income) net before the debt restructuring impact is estimated to amount to US$504 million in the second half of 2009, of which US$534 million relates to interest expense, which was forecast based on the existing loan agreements (before restructuring) and the override agreement with international lenders and the amended bilateral agreements with the Russian and Kazakh lenders (after restructuring).

   b) restructuring fees, including standstill and waiver fees and fee warrants issued to the international lenders at the override date and other restructuring expenses are estimated to amount to US$201 million (including US$82 million incurred during the six months ended 30 June 2009) based on the agreements concluded with the lenders in December 2009,

   c) accounting for the extinguishment of the existing debt (including the deferred consideration payable to Onexim) and the recognition of the fair value of the debt under the new terms would result in a gain of US$1,268 million recognised in December 2009.

5. The Directors of the Company estimate a share of profit from associates of US$90 million in October-December 2009, including a profit of US$100 million from the investment in Norilsk Nickel compared to a profit from investment in associates and jointly controlled entities of US$146 million in July-September 2009 (including a profit of US$142 million from the investment in Norilsk Nickel). The share of profits of Norilsk Nickel in the fourth quarter of 2009 was projected based on the average forecasts of Norilsk Nickel's net profit for 2009 published by ING, Merrill Lynch, Deutsche Bank, Unicredit, URALSIB, RMG, CS, DB in October 2009 and the Group's effective ownership.

6. The Directors of the Company assume that there will be no impairment or reversals of the impairment booked in prior periods in the second half of 2009.

7. The Board is currently in the process of approving the remuneration package for the Group's CEO and management, which includes remuneration in the form of a cash bonus and shares. The expected impact on the income statement in 2009 is US$119 million.

Other assumptions:

1. The Group's operations and business will not be severely interrupted by any force majeure events or unforeseeable factors or any unforeseeable reasons that are beyond the control of the Directors, including but not limited to the occurrence of natural disasters or catastrophes, epidemics or serious accidents; and

2. The Group's operations and financial performance will not be materially and adversely affected by any of the risk factors as set out in the section headed "Risk Factors" in this prospectus.

Sensitivities

The Directors believe that the Group is exposed in the ordinary course of its business to the following key risks which may affect the projected financial results:

- fluctuations in LME (London Metal Exchange) aluminium sales prices
- changes in the RUR/US$ exchange rate
- fluctuations in key raw materials and electricity prices

The analysis below sets forth a sensitivity analysis of the forecast consolidated net profit attributable to the equity holders of the Company for the year ending 31 December 2009 with respect to:

a) the variation in the forecast average LME aluminium prices in the fourth quarter of 2009 and on the assumption that there is no change in other input variables, including fixed and variable costs:

Average LME aluminium price (US$ per tonne)	Variation from base case scenario LME aluminium price, %	Corresponding 2009 forecast net profit attributable to the equity holders of the Company, US$ million	Variation from base case, %
1,727	(15%)	259	(40%)
1,792	(10%)	318	(27%)
1,856	(5%)	376	(13%)
1,922	—	434	—
1,986	5%	492	13%
2,051	10%	550	27%
2,115	15%	608	40%

Note: The LME aluminium price represents the average price for the three months ending 31 December 2009. Only the prices for November and December are sensitised, whereas the prices for October are actual.

b) the variation in the forecast average RUR/US$ exchange rates in the fourth quarter of 2009 and on the assumption that there is no change in other input variables:

Average RUR/US$ exchange rate (RUR/USD)	Variation from base case scenario RUR/US$ exchange rate, %	Corresponding 2009 forecast net profit attributable to the equity holders of the Company, US$ million	Variation from base case,%
26.5802	(15%)	310	(29%)
27.5599	(10%)	351	(19%)
28.5396	(5%)	387	(11%)
29.5193	—	434	—
30.4990	5%	447	3%
31.4787	10%	472	9%
32.4584	15%	494	14%

Note: The average RUR/US$ exchange rate represents the average exchange rate for the three months ending 31 December 2009. Only forecast exchange rates for November and December are sensitised, whereas the October rates are actual.

c) the variation in the forecast key components of cost per tonne of aluminium produced in the fourth quarter of 2009, including alumina, other raw materials and electricity and on the assumption that there is no change in other input variables:

Average aluminium cash cost (US$ per tonne)	Variation from base case scenario aluminium cash cost per tonne, %	Corresponding 2009 forecast net profit attributable to the equity holders of the Company, US$ million	Variation from base case,%
1,115	(10%)	536	24%
1,155	(5%)	485	12%
1,195	—	434	
1,235	5%	383	(12%)
1,274	10%	331	(24%)

Note: For the purpose of this table, aluminium cash cost per tonne includes key components only (alumina, other raw materials and electricity). For the purposes of this table aluminum cash costs for October, November and December are sensitised.

[PAGES IV-5 TO IV-7 INTENTIONALLY OMITTED]

The following is the text of a letter, summary of values and valuation certificates, prepared for inclusion in this prospectus, received from American Appraisal China Limited, an independent valuer, in connection with their valuations as of September 30, 2009, of the property interests of the Group.

American Appraisal China Limited
1506 Dah Sing Financial Centre
108 Gloucester Road / Wanchai / Hong Kong
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Leading / Thinking / Performing

American Appraisal

The Board of Directors
United Company RUSAL Limited

Dear Sirs,

In accordance with your instructions, we have valued selected property interests of United Company RUSAL Limited ("RUSAL" or the "Company") and its subsidiaries (together referred to as the "Group") in Guinea, Ireland, the People's Republic of China ("PRC"), the Russian Federation ("Russia"), and Ukraine. We confirm that we have conducted investigation for the properties, made relevant enquiries and obtained such further information as we consider necessary for the purpose of providing you with our opinion of the values of such property interests as of September 30, 2009 (the "valuation date").

This letter that forms part of our valuation report explains the basis and methodology of valuations and clarifies our assumptions made on the legal title of the subject properties and the limiting conditions.

GENERAL INFORMATION

RUSAL is the world's largest aluminium and alumina producer focused on primary aluminium production and a sole global primary aluminium pureplay. 47 subsidiaries of the Company operate in 11 countries and are engaged in bauxite mining, alumina refining and aluminium smelting employing over 90,000 people.

The Group operates and/or owns 16 aluminium smelters located in Nigeria, Russia, Sweden and Ukraine. Three of the Group's smelters each produces over 500 thousand tonnes of primary aluminium per annum. Two of these, the Bratsk and the Krasnoyarsk aluminium smelters in Siberia, are the largest in the world, based on production, and each produces close to one million tonnes of primary aluminium per annum. The Company's aluminium smelters located in Siberia, Russia are the core of the Company's aluminium business. The Siberian smelters are also among the lowest cash cost aluminium smelting operations in the world. About 90% of the Company's aluminium production and 70% of alumina production are produced by high capacity low cost operations.

The Group operates and/or owns 11 alumina refineries, located in Guinea, Ireland, Italy, Jamaica, Russia and Ukraine, with an additional joint venture project in Australia, and seven bauxite mining complexes, located in Guinea, Guyana, Jamaica, and Russia. In addition, the Group also operates and/or owns three powder metallurgy plants in Russia, three silicon smelters in Russia and Ukraine, three secondary aluminium plants in Russia, three aluminium foil mills in Armenia and Russia, two cryolite plants in Russia and two cathode plants in PRC.

As of the valuation date, the Group owned about 336 parcels of land with an aggregate site area of approximately 39,900 hectares, leased about 800 parcels of land with an aggregate site area of approximately 26,500 hectares, and used in perpetuity about 90 parcels of land with an aggregate site

area of approximately 2,800 hectares. The Group also owns 18,681 buildings and land improvements with an aggregate gross floor area ("GFA") of approximately 9,100,000 square meters. The properties are located in Armenia, Guinea, Guyana, Ireland, Italy, Jamaica, Nigeria, PRC, Sweden, Russia, and Ukraine.

PROPERTIES APPRAISED

According to the Group's instructions, our valuation included only 1,535 selected real estate properties, comprising land, buildings, and land improvements which the Group considers the most important to its business as detailed in Exhibit C.

According to the information provided, the number of real estate properties selected by the Group for the purposes of the valuation and reported in the Group's IFRS compliant fixed assets registers differs from the number of properties specified in respective legal documents. For the purposes of the valuation the Group reconciled accounting and legal records and provided us with respective reconciliation tables.

The subject properties are mostly purpose-built industrial facilities operated by 18 business divisions (17 subsidiaries) of the Alumina Division and the Aluminium Division. They are located in 5 countries, including the PRC, and are used for mining, alumina refining, aluminium smelting, as well as cathodes and cryolite production. Brief descriptions of the properties appraised are provided in the valuation certificates in Exhibit B. The property values are summarized in Exhibit A hereto.

Our valuations were limited to the scope described above. As requested by the Group, other real properties owned or leased by the Group which were not considered critical to the Group's business were excluded from our consideration. A summary description of the excluded properties is provided in *Exhibit C* hereto.

BASIS OF VALUATION

As part of our valuation, the market value of the subject property was estimated which is defined by International Valuation Standards (IVS[1]) and the Royal Institution of Chartered Surveyors (RICS[2]) as "the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion".

The market value is the best price reasonably obtainable in the market by the seller and the most advantageous price reasonably obtainable in the market by the buyer. This estimate specifically excludes an estimated price inflated or deflated by special considerations or concessions granted by anyone associated with the sale, or any element of special value[3]. The value of a property is also estimated without regard to costs of sales and purchase, and without offset for any associated taxes[4].

VALUATION METHODOLOGY

The properties appraised are purpose-built industrial facilities mostly located in remote areas. They are operated according to their highest and best use with limited if any alternative use. Upon consideration of all relevant facts it was concluded that the real properties subject to valuations are specialized properties.

1 IVS: 8th Edition, 2007. Concepts Fundamental to Generally Accepted Valuation Principles, para. 5.2
2 The RICS Valuation Standards, 6th Edition 2008 (the "Red Book")
3 The RICS Valuation Standards, 6th Edition 2008: Practice Statement, par. 3.2.1
4 The RICS Valuation Standards, 6th Edition 2008: Practice Statement, par. 3.3

The market approach may not be used to value specialized property due to the fact that active market for it does not exist. As required by IVS, depreciated replacement cost approach is used where there is insufficient market data to arrive at market value by means of market-based evidence[5].

Depreciated replacement cost is defined by RICS and IVS[6] as "the current cost of replacing the asset with its modern equivalent asset less deductions for physical deterioration and all relevant forms of obsolescence and optimizations".

IVS requires that for a private sector entity with specialized assets, the valuer reports the result at market value subject to a test of adequate profitability or justified service potential, a test which is the responsibility of the entity[7].

In testing profitability the impact that current economical conditions may potentially have on the Group's operations, financial performance, expectations of financial performance or financial conditions is considered. The assessment of such impact is reflected in the models prepared by the Group for the purposes of debt restructuring and the Prospectus as well as in RUSAL most recent impairment test and management analysis of the economic environment and development in the aluminium industry, that were made available to us.

The financial statements of the Group as of June 30, 2009 report impairment of SUBR, Nikolaev Alumina Refinery, Aughinish Alumina Limited, and Friguia which are part of the Alumina Division, as well as Bogoslovsk Aluminium Smelter and Irkutsk Aluminium Smelter which are part of the Aluminium Division. Adjustments for economic obsolescence were applied accordingly.

We have attributed no commercial value to leased and rented land plots in Group I[8] as these land plots are restricted from transfer to third parties without the approval from local authorities, and substantial profit rent is lacking.

For the property interests in Group II[8], which are rented and occupied by the UC RUSAL in Guinea, they are considered to have no commercial value either because of their non-assignability in the market or because there are prohibitions against subletting and/or assignment contained in the tenancy agreements.

ASSUMPTIONS

Our valuations have been made on the assumption that due to its specialized nature the appraised property may not be sold in the market, except by way of a sale of the business or entity of which it is part.

The profitability test for the specialized assets relied on the models and projections prepared by the Group for the purposes of debt restructuring and the Prospectus as well as financial reporting in accordance with IFRS.

No allowance has been made in our valuations for any charges, mortgages or amounts owing on any of the property valued nor for any expenses or taxation which may be incurred in effecting a sale. Unless otherwise stated, it is assumed that all the property interests are free from encumbrances, restrictions and outgoings of an onerous nature which could affect their values.

5 IVS: IVG Note #8, para. 4.1
6 IVS: 8th Edition, 2007. 3.0 Definitions. Par. 3.1
7 IVS: IVG Note #8, para. 5.12.1 and IVS: IVG Note #8 Appendix A.4
8 Group I refers to owned assets and Group II refers to rented assets.

We have assumed that all consents, approvals and licenses from relevant government authorities for the buildings and structures erected or to be erected on the sites have been granted. Also, we have assumed that unless otherwise stated, all buildings and structures erected on the sites are held by the owners or permitted to be occupied by the owners.

It is assumed that all applicable zoning, land use regulations and other restrictions have been complied with unless a non-conformity has been stated, defined and considered in the valuation certificates. Further, it is assumed that the utilization of the land and improvements is within the boundaries of the property interests described and that no encroachment or trespass exists unless noted in the valuation certificates.

Other special assumptions and qualifications for each property, if any, have been stated in the footnotes of the valuation certificate for the respective property.

TITLE INVESTIGATION

We have been provided with extracts of documents in relation to the title of the property interests for the selected plants situated in Guinea, Ireland, PRC, Russia, and Ukraine.

However, we have not scrutinized the original documents to verify ownership or to verify any amendments which may not appear on the copies handed to us. We have relied to a considerable extent on the information provided by RUSAL and the opinions provided by Guinea legal advisor, Cabinet D Avocats "BAO et FILS" ("Guinea legal opinion"), PRC legal advisor, Jun He Law offices ("PRC legal opinion"), Russian legal advisor, Egorov Puginsky Afanasiev and Partners ("Russian legal opinion"), and the opinions provided by Ukraine legal advisor, Asters ("Ukraine legal opinion").

All legal documents disclosed in this letter and valuation certificates are for reference only and no responsibility is assumed for any legal matters concerning the legal title to the property interests set out in this letter and valuation certificates.

LIMITING CONDITIONS

We have relied to a considerable extent on the information provided by RUSAL and have accepted advice given to us by the Company on such matters as statutory notices, easements, tenure, occupancy, site and floor areas and all other relevant matters. Dimensions and areas included in the valuation certificates are based on information contained in the documents provided to us and are only approximations.

We have no reason to doubt the truth and accuracy of the information as provided to us by RUSAL. We were also advised by the Company that no material facts have been omitted from the information so supplied. We consider we have been provided with sufficient information to reach an informed view.

We have inspected the exterior and, where possible, the interior of the selected major properties included in the attached valuation certificates. However, no structural survey has been made and we are therefore unable to report as to whether the properties are or are not free of rot, infestation or any other structural defects. No tests were carried out on any of the services.

We have not carried out investigations on site to determine the suitability of ground conditions and services for the properties, nor have we undertaken archaeological, ecological or environmental surveys. Our valuations are prepared on the assumption that these aspects are satisfactory and that no extraordinary expenses or delays will be incurred.

COMPLIANCE

In valuing the property interests, we have complied with all the requirements contained in Paragraph 34(2), (3) of Schedule 3 of the Companies Ordinance (Cap. 32), Chapter 5 and Practice Note 12 to the Rules Governing the Listing of Securities issued by The Stock Exchange of Hong Kong Limited, the RICS Valuation Standards (6th Edition 2008) published by the Royal Institution of Chartered Surveyors, International Valuation Standards (8th Edition 2007) published by International Valuation Standards Committee and the HKIS Valuation Standards on Properties (1st Edition 2005) published by the Hong Kong Institute of Surveyors.

We understand that the exemption in respect of not undertaking valuations of the selected individual properties and buildings owned or leased by the Group, and in respect of not reproducing in this prospectus the full valuation report for the properties and buildings which are being valued, has been granted to the Group by the SFC under section 342A(1) of the Hong Kong Companies Ordinance, and the corresponding waiver has been granted by the Hong Kong Stock Exchange under the Listing Rules.

According to the above mentioned waiver, all properties owned or leased by the Group which are located in the PRC, as well as the properties the Group considers critical to its businesses were included in the valuations.

The Group identified the properties that are critical to its businesses as all properties owned or leased by the Group, on which the facilities which are the most important to the business of the Group have been built or are being built, and those which are located in proximity to such facilities and which are necessary for their operation, as well as those which are identified as being properties of significant size or importance, together with all buildings constructed on top of such properties.

For this purpose, the operations which are currently the most important to the business of the Company *(Distinct Business Units*) have been identified based on an importance of operations to the business of the Group as the producer of primary aluminum and revenue contribution. Further within these Distinct Business Units, Core and Additional Facilities were selected. *Core facilities* which are being valued have been identified based on usage, function and size of the properties, importance of properties in respect to IFRS Net Book Value. Properties of a significant size or importance *(Additional facilities)* have been identified based on usage, function and size of the properties, importance of properties in respect to IFRS Net Book Value.

With respect to the remainder of the real properties owned or leased by the Company (the "Excluded Properties"), the Company considers that inclusion of valuation information on the Excluded Properties would be irrelevant to the investment decision of potential investors in the Company's global offering and the exclusion of such information from the prospectus would not prejudice the interest of the investing public. A detailed description of the assets selection methodology is provided in Exhibit C hereto.

REMARKS

Unless otherwise stated, all monetary amounts stated in this report are in United State Dollar (USD). The exchange rate adopted in our valuations as of September 30, 2009 being 1 USD = 30.0922 Roubles = 5,025 GNF = 8.01 UAH = 0.6829 EUR.

We enclose herewith the summary of values and the valuation certificates.

Yours Faithfully,
For and on behalf of
American Appraisal China Limited

Eric M. H. Poon	**Alexander N. Lopatnikov**
MRICS, MHKIS	*MRICS, RSA*
Assistant Vice President	*Managing Director*

Note: Mr. Eric Poon, who is a Chartered Valuation Surveyor, has over 9 years experience in valuation of properties in Hong Kong, the PRC and overseas.

Mr. Alexander Lopatnikov, who is a Chartered Surveyor, has over 10 years experience in valuation in Russia and overseas.

Mr. Poon has carried out valuation of property interests in the PRC. The valuation on the property interests in overseas is supported by American Appraisal (AAR), Inc.

EXHIBIT A
Summary of Values

SUMMARY OF VALUATION

Group I — Property interests held and occupied by the Group in Ireland, Russia, Guinea, Ukraine and the PRC

No.	Property	Capital value in existing state as at September 30, 2009 (USD)
	Alumina Division	
1	Aughinish Alumina Limited, Limerick Alumina Refining Limited	126,000,000
2	OJSC Boksit Timana	24,800,000
3	JSC Friguia (Republic of Guinea)	No Commercial Value
4	LLC Nikolaev Alumina Refinery	51,500,000
5	OJSC RUSAL Achinsk Alumina Refinery	268,200,000
6	OJSC Sevuralboksitruda (SUBR)	No Commercial Value
	Sub-total:	**470,500,000**
	Aluminium Division	
7	LLC Khakass Aluminium Smelter	178,600,000
8	OJSC RUSAL Bratsk Aluminium Smelter, including affiliate in Taishet	280,800,000
9	OJSC RUSAL Krasnoyarsk Aluminium Smelter	250,000,000
10	OJSC Novokuznetsk Aluminium Smelter	65,800,000
11	OJSC RUSAL Sayanogorsk Aluminium Smelter	335,900,000
12	OJSC SUAL Bogoslovsk Aluminium Smelter branch	No Commercial Value
13	OJSC SUAL Irkutsk Aluminium Smelter branch	105,300,000
14	OJSC Polevskoy Cryolite Plant	3,600,000
15	OJSC South Ural Cryolite Plant	49,000,000
16	Shanxi RUSAL of Lingshi County	2,080,000
17	Shanxi RUSAL of Taigu County	2,900,000
	Sub-total:	**1,273,980,000**
	Total:	**1,744,480,000**

Group II — Property interests rented and occupied by the Group in Guinea

18	Compagnie des Bauxite de Kindia	No Commercial Value
	Sub-total:	**No Commercial Value**
	GRAND TOTAL:	**1,744,480,000**

EXHIBIT B
Valuation Certificates

VALUATION CERTIFICATE

Group I — Property interests held and occupied by the Group in Ireland, Russia, Guinea, Ukraine and the PRC

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
1	Selected real properties of an Industrial Complex of Aughinish Alumina Limited, Limerick Alumina Refining Limited located in Aughinish Island, Askeaton, Ireland	The subject real properties comprise assets related to the alumina refining as described below and erected on the land with a total site area of approximately 474 hectares. The selected assets of the subject property comprise 22 industrial buildings, warehouses, office buildings, and land improvements including roads and parking areas, jetty and jetty bridge, paved areas, red mud basins and other auxiliary facilities completed between 1982 and 2006. The total gross floor area of the buildings and auxiliary facilities is approximately 65,530 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouses, office, and other auxiliary facilities.	126,000,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	3	10,174.0
Office	6	10,532.0
Warehouse	2	39,800.0
Auxiliary	3	5,024.0
Land Improvements	8	—
TOTAL	**22**	**65,530.0**

Note:

1. Pursuant to Statutory Declaration of Identity, the Group is registered as full owner with absolute title to the refinery complex at Askeaton, Country Limerick.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
2	Selected real properties of an Industrial Complex of OJSC Boksit Timana located in Russia, Komi Republic, Knyazhpogostsky District, Emva	The subject real properties comprise assets related to the open pit mine and auxiliary facilities as described below and erected on 4 land parcels with a total site area of approximately 236.7 hectares. The selected assets of the subject property comprise 7 office, auxiliary buildings, warehouses and land improvements including roads completed between 1991 and 2007. The total gross floor area of the buildings is approximately 3,350.6 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as repair workshop, warehouse and other auxiliary facilities except for portion of the properties which are rented to various independent third parties (refer to Note 1).	24,800,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	—	—
Office	1	1,865.9
Warehouse	1	767.3
Auxiliary	1	717.4
Land Improvements	4	—
TOTAL	**7**	**3,350.6**

Notes:

1. Pursuant to rental agreements, 4 parcels of land with a total site area of about 236.7 hectares are leased by the Group from municipality for industrial use.
2. According to building ownership certificates, 3 buildings and 4 land improvements with a total gross floor area of about 3,350.6 sq.m. were held by the Group.
3. We have attributed no commercial value to the leased land plots with a total site area of about 236.7 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
4. The Russian legal opinion confirms, inter alia, that:
   a. The Group leases 4 land plots of total area of 236.7 hectares.
   b. The Group holds valid title to 7 real estate facilities with a total floor area of 3,350.6 sq.m.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
3	Selected real properties of an Industrial Complex of JSC Friguia (Republic of Guinea) located in BP 197 Fria-Kimbo, Republique de Guinee	The subject real properties comprise assets related to the an open pit mine, alumina refinery, port, and railway as described below and erected on 2 land parcels with a total site area of approximately 664.1 hectares. The selected assets of the subject property comprise 27 industrial buildings, auxiliary buildings, warehouses and land improvements including roads and paved areas, silos, railways, sludge depository completed between 1957 and 2009. The total gross floor area of the buildings of approximately 40,946 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshop, warehouse, and other auxiliary facilities.	No Commercial Value

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	5	10,366.0
Office	—	—
Warehouse	4	20,758.0
Auxiliary	3	9,822.0
Land Improvements	15	—
TOTAL	**27**	**40,946.0**

Notes:

1. We have attributed no commercial value to the buildings and auxiliary facilities with a total floor area of approximately 40,946 sq.m. due to the insufficient title proof to these buildings and auxiliary facilities. We are of the opinion that the depreciated replacement cost of these buildings and auxiliary facilities as at the valuation date would be USD 17,100,000.
2. The Guinean legal opinion confirms, inter alia, that:
   a. Referring to judgment N° 066 of the September 10, 2009 of the High Level Court of Kaloum, we think that up to this day, the Guinean State is the sole proprietor of the buildings of the Friguia company. Indeed, this judgment declares void the transfer contract, shares transfer that the RUSSAL Company is citing as grounds for claiming a right to the Friguia buildings. But we specify that this judgement wouldn't be definitive if one of the parties had come up with an appeal.
   b. RUSAL is the current user of the existing infrastructures of Friguia pursuant to the sale of the factory which took place, although the said sale should be the subject of a court case at the moment; in this capacity, it is using them for industrial exploitation purposes, as administrative premises, as lodging quarters for expatriate and Guinean agents, according to the case might be.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
4	Selected real properties of an Industrial Complex of LLC Nikolaev Alumina Refinery located in Ukraine, Nikolaev	The subject real properties comprise assets related to the alumina production as described below and erected on 7 land parcels with a total site area of approximately 690.4 hectares. The selected assets of the subject property comprise 80 industrial buildings, warehouses, offices, auxiliary buildings and land improvements including bauxite and alumina storages, red mud basins, roads and railroads, tanks and other auxiliary facilities completed between 1976 and 2008. The total gross floor area of the buildings is approximately 244,698.6 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshop, warehouse, office and other auxiliary facilities, except for portion of the properties which are rented to various independent third parties (refer to note 3).	51,500,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	19	123,184.0
Office	10	44,520.2
Warehouse	2	6,692.8
Auxiliary	16	70,301.6
Land Improvements	33	—
TOTAL	**80**	**244,698.6**

Notes:

1. Among the 7 parcels of land held by the Group with a total site area of about 690.4 hectares, 2 parcels with a total site area of 19.0046 hectares are leased from municipality for industrial use; 5 land parcels with a total site area of 671.4 hectares have no title.
2. The company has obtained an ownership certificate for integral property complexes.
3. Pursuant to various Tenancy Agreements, portion of the properties with a total floor area of about 55,000 sq.m. are rented to various independent third parties for various terms.
4. We have attributed no commercial value to the land improvements leased from the State as this properties are not transferable to other parties without the consent of the State.
5. We have attributed no commercial value to the leased land plots with a total site area of 690.4 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
6. The Ukrainian legal opinion confirms, inter alia, that:
   a. The Group holds due right of ownership to the owned buildings.
   b. The Group leases 2 land plots with a total site area of 19.0046 hectares.
   c. The Group holds no title to land with a total site area of about 671.4 hectares. The legal predecessor of OJSC "Nikolaev Alumina Refinery" used to hold the right of perpetual use to the mentioned land, however the mentioned right did not pass to the Group by way at legal succession as such succession with regard to the right of perpetual use is not allowed by Ukrainian law

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
5	Selected real properties of an Industrial Complex of OJSC RUSAL Achinsk Alumina Refinery located in Russia, Krasnoyarsk Region, Achinsk	The subject real properties comprise assets related to the alumina production plant, lime and nepheline open pits as described below and erected on 9 land parcels with a total site area of approximately 1,893.7 hectares. The selected assets of the subject property comprise 89 industrial buildings, office buildings, auxiliary facilities warehouses and land improvements including dams, red mud basins and other auxiliary facilities mainly completed between 1962 and 2007. The total gross floor area of the buildings is approximately 903,778.9 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouses, office and other auxiliary facilities, except for portion of the properties which are rented to various independent third parties (refer to Note 3).	268,200,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	38	624,340.5
Office	5	23,473.6
Warehouse	9	76,089.8
Auxiliary	20	179,875.0
Land Improvements	17	—
TOTAL	**89**	**903,778.9**

Notes:

1. Among the 9 land parcels held by the Group with a total site area of about 1,893.7 hectares, 6 land parcels with a total site area of about 369.5 hectares are owned freehold; 3 land parcels with a total site area of about 1,524.2 hectares are leased from municipality for industrial uses.
2. According to building ownership certificates and privatization plan, 89 buildings and land improvements with a total gross floor area of 903,778.9 sq.m. were held by the Group.
3. Pursuant to a Tenancy Agreement, a two-storey nonresidential industrial building with a total gross floor area of 8,778.6 sq.m. is rented to an independent third party for a period more than one year.
4. We have attributed no commercial value to the auxiliary facility due to the insufficient title proof to it. We are of the opinion that the depreciated replacement cost of this auxiliary facility as at the valuation date would be USD 13,100,000 assuming all relevant title certificates have been obtained and registered by the Group and the Group has legal rights to occupy, lease, mortgage or transfer these properties.
5. We have attributed no commercial value to the leased land plots with a total site area of 1,524.2 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
6. According to reconciliation tables provided by the Group, 89 buildings and land improvements subject to valuation corresponds to 96 buildings and land improvements in Russian legal opinion.
7. According to reconciliation tables provided by the Group, 9 land parcels subject to valuation corresponds to 35 land plots in Russian legal opinion.

8. The Russian legal opinion confirms, inter alia, that:

   a. The Group owns 32 land plots with a total site area of 369.5 hectares. A land plot with the total area of 57.5 hectares is in joint ownership of the Group and Eastern Siberian Industrial Railways Transport OJSC. The Group interest is 42/115.

   b. The Group leases 3 land plots with a total site area of 1,524.2 hectares.

   c. The Group holds valid title to the 74 buildings with a total gross floor area of 903,778.9 sq.m. and 21 structures.

   d. The Group holds unregistered title to 5 structures. The titles to the above real estate assets were acquired by the Group as a result of privatization before registration of real estate became compulsory. State registration of title to the unregistered properties owned by the Group is voluntary. According to Article 6 of the Real Estate Registration Law the title acquired before the registration became compulsory remains effective. For this reason the title certificates to those properties were not obtained.

   e. The group leases a part of nonresidential industrial building with a total area of 8,778.6 sq.m. to a third party for a period more than one year.

   f. The Russian Legal Advisor was unable to confirm the Group's title to the slurry field with impervious screen and overfall basis.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
6	Selected real properties of an Industrial Complex of OJSC Sevuralboksitruda (SUBR) located in Russia, Sverdlovsk Region, Severouralsk	The subject real properties comprise assets related to bauxite mine and lime-pit as described below and erected on 14 land parcels with a total site area of approximately 156.8 hectares. The selected assets of the subject property comprise 339 industrial buildings, offices, warehouses, auxiliary buildings and land improvements including mines, roads and other auxiliary facilities completed between 1936 and 2009. The total gross floor area of the buildings is 146,776.3 sq. m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouses, office and other auxiliary facilities.	No Commercial Value

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	17	31,842.3
Office	16	72,807.2
Warehouse	2	3,138.5
Auxiliary	26	38,988.3
Land Improvements	278	—
TOTAL	**339**	**146,776.3**

Notes:

1. Among the 14 parcels of land held by the Group with a total site area of about 156.8 hectares, a land parcels with a total area of 2.1 hectares is owned freehold; 13 parcels with a total site area of 154.7 hectares are leased from the State for industrial use.
2. According to building ownership certificates and privatization plan, 326 buildings and land improvements with a total gross floor area of about 146,776.3 sq.m. were held by the Group.
3. According to the information provided by the Group, an economic obsolescence of 100% was applied to the real estate properties subject to valuation.
4. We have attributed no commercial value to the leased land plots with a total site area of 154.7 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
5. According to reconciliation tables provided by the Group, 339 buildings and land improvements subject to valuation corresponds to 318 buildings and land improvements in Russian legal opinion.
6. The Russian legal opinion confirms, inter alias, that:
   a. The Group owns a land plot with a total site area of 2.15 hectares.
   b. The Group leases 13 land plots with a total site area of 154.69 hectares.
   c. The Group owns 60 buildings with a total floor area of 146,776.3 sq.m. and 245 structures.
   d. The Group holds unregistered title to 91 structures. The titles to the above real estate assets were acquired by the Group as a result of privatization before registration of real estate became compulsory. State registration of title to the unregistered properties owned by the Group is voluntary. According to Article 6 of the Real Estate Registration Law the title acquired before the registration became compulsory remains effective. For this reason the title certificates to those properties were not obtained.
   e. The Russian Legal Advisor was unable to confirm the Group's title to the 13 structures.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
7	Selected real properties of an Industrial Complex of LLC Khakass Aluminium Smelter located in Russia, Republic of Khakassia, Sayanogorsk	The subject real properties comprise assets related to primary aluminum production plant as described below and erected on 3 land parcels with a total site area of approximately 132.9 hectares. The selected assets of the subject property comprise 22 industrial buildings, auxiliary buildings and land improvements including chimney, overhead transmission lines completed between 2004 and 2008. The total gross floor area of the buildings is approximately 136,403.5 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshop and other auxiliary facilities	178,600,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	12	133,521.0
Office	—	—
Warehouse	—	—
Auxiliary	3	2,882.5
Land Improvements	7	—
TOTAL	**22**	**136,403.5**

Notes:

1. Among the 3 land parcels held by the Group with a total site area of about 132.9 hectares, a land parcel with a total area of about 127.9 hectares is owned freehold; 2 land parcels with a total site area of about 5 hectares are leased from municipality for production use.
2. According to building ownership certificates, 22 buildings and land improvements with a total floor area of 136,403.5 sq.m. were held by the Group.
3. We have attributed no commercial value to the leased land plots with a total site area of about 5 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
4. According to reconciliation tables provided by the Group, 22 buildings and land improvements subject to valuation corresponds to 28 buildings and land improvements in Russian legal opinion.
5. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns a land plot with a total site area of 127.9 hectares.
   b. The Group leases 2 land plots with a total site area of 5 hectares.
   c. The Group holds valid title to 18 real estate facilities with total floor area of 136,403.5 sq.m. and 10 structures.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
8	Selected real properties of an Industrial Complex of OJSC RUSAL Bratsk Aluminium Smelter located in Russia, Irkutsk region, Bratsk, including affiliate in Taishet	The subject real properties comprise assets related to primary aluminium production plant as described below and erected on 40 land parcels with a total site area of approximately 358.1 hectares. The selected assets of the subject property comprise 181 industrial buildings, office, warehouses and land improvements including roads and railroads, silo towers, two red mud basins and other auxiliary facilities completed between 1966 and 2007. The total gross floor area of the buildings is 754,595.3 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouse, office and other auxiliary facilities.	280,800,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	65	551,393.3
Office	6	65,375.9
Warehouse	7	34,874.6
Auxiliary	25	102,951.5
Land Improvements	78	—
TOTAL	**181**	**754,595.3**

Notes:

1. Among the 40 parcels of land held by the Group with a total site area of about 358.1 hectares, 7 land parcels with a total site area of 283.5 hectares are owned freehold, 33 land parcels with a total site area of 74.6 hectares are leased from municipality for industrial use.
2. According to building ownership certificates, 181 buildings and land improvements with a total floor area of 754,595.3 sq.m. were held by the Group.
3. We have attributed no commercial value to the leased land plots with a total site area of 74.6 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
4. According to reconciliation tables provided by the Group, 181 buildings and land improvements subject to valuation corresponds to 86 buildings and land improvements in Russian legal opinion.
5. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns 7 land plots with a total site area of 283.5 hectares.
   b. The Group leases 33 land plots with a total site area of 74.6 hectares.
   c. The Group holds valid title to 66 real estate facilities with total gross floor area of 754,595.3 sq.m. and 20 structures.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
9	Selected real properties of an Industrial Complex of OJSC RUSAL Krasnoyarsk Aluminium Smelter located in Russia, Krasnoyarsk Territory, Krasnoyarsk	The subject real properties comprise assets related to primary aluminum production plant as described below and erected on 2 land parcels with a total site area of approximately 293.4 hectares. The selected assets of the subject property comprise 106 main industrial buildings, pumping and compressor stations, offices, warehouses and land improvements including roads and railroads, chimneys and other auxiliary facilities completed between 1961 and 2008. The total gross floor area of the buildings is about approximately 832,324.5 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Company as workshops, warehouses, office and other auxiliary facilities.	250,000,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	55	611,697.5
Office	8	49,513.8
Warehouse	12	45,794.2
Auxiliary	25	125,319.0
Land Improvements	6	—
TOTAL	**106**	**832,324.5**

Notes:

1. Pursuant to ownership certificates, 2 land parcels of land held by the Group with a total site area of about 293.4 hectares are owned freehold.
2. According to building ownership certificates, 104 buildings and structures with a total floor area of about 830,512.9 sq.m. were held by the Group.
3. We have attributed no commercial value to the buildings with a total gross floor area of 1,811.6 sq.m. due to the insufficient title proof to this buildings. We are of the opinion that the market value of these buildings as at the valuation date would be USD 3,800,000 assuming all relevant title certificates have been obtained and registered by the Group and the Group has legal rights to occupy, lease, mortgage or transfer these properties.
4. According to reconciliation tables provided by the Group, 106 buildings and land improvements subject to valuation corresponds to 93 buildings and land improvements in Russian legal opinion.
5. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns 2 land plots with a total site area of 293.4 hectares.
   b. The Group holds valid title to 87 buildings with a total floor area of 830,512.9 sq.m. and 4 land improvements.
   c. The Russian Legal Advisor was unable to confirm the Group's title to 2 buildings with a total floor area of 1,811.6 sq.m.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
10	Selected real properties of an Industrial Complex of OJSC Novokuznetsk Aluminium Smelter located in Russia, Kemerovo region, Novokuznetsk	The subject real properties comprise assets related to primary aluminium production plant as described below and erected on 5 land parcels with a total site area of approximately 156.7 hectares. The selected assets of the subject property comprise 109 industrial buildings, warehouses, office buildings and land improvements including roads and railroads, tanks, a red mud basin, silo towers, and other auxiliary facilities completed between 1942 and 2008. The total gross floor area of the buildings is approximately 313,616.3 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouse, office and other auxiliary facilities.	65,800,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	39	211,770.7
Office	6	21,300.6
Warehouse	10	25,659.1
Auxiliary	17	54,885.9
Land Improvements	37	—
TOTAL	**109**	**313,616.3**

Notes:

1. Among the 5 land parcels held by the Group with a total site area of about 156.7 hectares, 4 land parcels with a total site area of 134.4 hectares are owned freehold, a land parcel with a total site area of 22.3 hectares is leased from municipality for industrial use.
2. According to building ownership certificates, 109 buildings and land improvements with a total floor area of about 313,616.3 sq.m. were held by the Group.
3. We have attributed no commercial value to the leased land plots with a total site area of 22.3 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
4. According to reconciliation tables provided by the Group, 109 buildings and land improvements subject to valuation corresponds to 90 buildings and land improvements in Russian legal opinion.
5. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns 4 land plots with a total site area of 134.4 hectares.
   b. The Group leases a land plot with a total site area of 22.3 hectares.
   c. The Group holds valid title to 67 real estate facilities with a total floor area of 313,616.3 sq.m. and 23 structures.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
11	Selected real properties of an Industrial Complex of OJSC RUSAL Sayanogorsk Aluminium Smelter located in Russia, Republic of Khakassia, Sayanogorsk	The subject real properties comprise assets related to the primary aluminum production plant as described below and erected on a land parcel with a site area of approximately 549.7 hectares. The selected assets of the subject property comprise 67 industrial buildings, warehouses, offices, auxiliary buildings, and land improvements including chimneys completed between 1985 and 2000. The total gross floor area of the buildings is approximately 637,791.7 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouses, office and other auxiliary facilities.	335,900,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	36	461,852.3
Office	11	69,669.7
Warehouse	5	29,580.1
Auxiliary	12	76,689.6
Land Improvements	3	—
TOTAL	**67**	**637,791.7**

Notes:

1. A land parcel with a total site area of about 549.7 hectares is owned freehold.
2. According to building ownership certificates, 67 buildings and land improvements with a total gross floor area of about 637,791.7 sq.m. were held by the Group.
3. According to reconciliation tables provided by the Group, 67 buildings and land improvements subject to valuation corresponds to 62 buildings and land improvements in Russian legal opinion.
4. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns a land plot with a total site area of 549.7 hectares.
   b. The Group owns 61 buildings with total gross floor area of 637,791.7 sq.m. and 1 structure.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
12	Selected real properties of an Industrial Complex of OJSC SUAL affiliate Bogoslovsk Aluminium Smelter located in Russia, Sverdlov Region, Krasnotur'insk	The subject real properties comprise assets related to the primary aluminum production plant as described below and erected on 19 land parcels with a total site area of 384.4 hectares. The selected assets of the subject property comprise 98 industrial buildings, offices, warehouses, auxiliary buildings, and land improvements including silo towers, chimney and other auxiliary facilities mainly completed between 1942 and 2008. The total gross floor area of the buildings is approximately 466,190.7 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouses, office, other auxiliary facilities.	No Commercial Value

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	41	354,400.2
Office	11	28,855.0
Warehouse	6	37,388.2
Auxiliary	21	45,547.3
Land Improvements	19	—
TOTAL	**98**	**466,190.7**

Notes:

1. Among the 19 land parcels held by the Group with a total site area of about 384.4 hectares, 18 land parcels with a total site area of about 380.5 hectares is owned freehold; a land parcel with a total site area of about 3.9 hectares is leased from municipality for industrial use.
2. According to building ownership certificates and corporate restructuring agreement, 98 buildings and land improvements with a total floor area of about 466,190.7 sq.m. were held by the Group.
3. We have attributed no commercial value to the leased land plot with a total site area of about 3.9 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
4. According to information provided by the Group, an economic obsolescence of 100% was applied to the real estate properties subject to valuation.
5. According to reconciliation tables provided by the Group, 98 buildings and land improvements subject to valuation corresponds to 83 buildings and land improvements in Russian legal opinion.
6. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns 18 land plots with a total site area of 380.5 hectares.
   b. The Group leases a land plot with a total site area of 3.9 hectares.
   c. The Group owns 67 buildings with a total floor gross area of 466,190.7 sq.m. and 16 land improvements.
   d. The Group holds unregistered title to 9 structures. The titles to the above real estate assets were acquired by the Group as a result of reorganization before registration of real estate became compulsory. State registration of title to the unregistered properties owned by the Group is voluntary. According to Article 6 of the Real Estate Registration Law the title acquired before the registration became compulsory remains effective. For this reason the title certificates to those properties were not obtained.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
13	Selected real properties of an Industrial Complex of OJSC SUAL affiliate Irkutsk Aluminium Smelter located in Russia, Irkutsk region, Shelekhov	The subject real properties comprise assets related to the primary aluminium production plant as described below and erected on a land parcels with a site area of approximately 232.8 hectares. The selected assets of the subject property comprise 109 industrial buildings, offices, warehouses, auxiliary buildings, and land improvements including roads, silo towers, a red mud basin and other auxiliary facilities completed between 1956 and 2009. The total gross floor area of the buildings is approximately 448,272.5 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouse, office, and other auxiliary facilities.	105,300,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	38	356,039.8
Office	4	13,475.1
Warehouse	8	21,799.3
Auxiliary	15	56,958.3
Land Improvements	44	—
TOTAL	**109**	**448,272.5**

Notes:

1. A land parcel with a total site area of about 232.8 hectares is owned freehold.
2. According to building ownership certificates, corporate restructuring agreement and real estate purchase and sale agreement, 107 buildings and land improvements with a total floor area of about 448,272.5 sq.m. were held by the Group.
3. We have attributed no commercial value to 2 auxiliary facilities due to the insufficient title proof to it. We are of the opinion that the market value of these auxiliary facilities as of the valuation date would be USD840,000 assuming all relevant title certificates have been obtained and registered by the Group and the Group has legal rights to occupy, lease, mortgage or transfer these properties.
4. According to the reconciliation tables provided by the Group, 109 buildings and land improvements subject to valuation corresponds to 62 buildings and land improvements in Russian legal opinion.
5. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns a land plot with a total site area of 232.8 hectares.
   b. The Group owns 45 buildings with a total floor area of 448,272.5 sq.m. and 15 land improvements.
   c. The Group holds unregistered title to a building with floor area of 1,145.6 sq.m. and 2 land improvements. The title to the above real estate assets was acquired as a result of reorganization and by virtue of a real estate purchase and sale agreement before registration of real estate became compulsory. State registration of title to the unregistered properties owned by the Group is voluntary. According to Article 6 of the Real Estate Registration Law the title acquired before the registration became compulsory remains effective. For this reason the title certificates to those properties were not obtained.
   d. The Russian Legal Advisor was unable to confirm the Group's title to 2 land improvements.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
14	Selected real properties of an Industrial Complex of OJSC Polevskoy Cryolite Plant located in Russia, Sverdlovsk region, Polevskoy	The subject real properties comprise assets related to the cryolite production plant as described below and erected on 5 land parcels with a total site area of approximately 410.9 hectares. The selected assets of the subject property comprise 38 industrial buildings, offices auxiliary buildings, warehouses and land improvements including roads, tanks, red mud basin and other auxiliary facilities completed between 1964 and 2002. The total gross floor area of the buildings is approximately 66,012 sq.m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, warehouses, offices and other auxiliary facilities.	3,600,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	4	29,534.0
Office	4	6,535.0
Warehouse	5	17,702.4
Auxiliary	10	12,240.6
Land Improvements	15	—
TOTAL	**38**	**66,012.0**

Notes:

1. Among the 5 land parcels with a total site area of about 410.9 hectares, a land parcel with a total site area of about 46.9 hectares is owned freehold; 4 land parcels with a total site area of about 364 hectares were granted to the Group for use in perpetuity for industrial use.
2. According to building ownership certificates, 8 buildings and land improvements with a total gross floor area of about 32,861 sq.m. were held by the Group.
3. We have attributed no commercial value to the buildings and auxiliary facilities with a total floor area of about 33,151 sq.m. due to the insufficient title proof to these buildings and auxiliary facilities. We are of the opinion that the depreciated replacement cost of these buildings and auxiliary facilities as at the valuation date would be USD66,000,000 assuming all relevant title certificates have been obtained and registered by the Group and the Group has legal rights to occupy, lease, mortgage or transfer these properties.
4. We have attributed no commercial value to the land plots in perpetuity with a total site area of about 364 hectares as this land is not transferable to other parties without the consent of the relevant local authorities.
5. According to reconciliation tables provided by the Group, 38 buildings and land improvements subject to valuation corresponds to 36 buildings and land improvements in Russian legal opinion.
6. The Russian legal opinion confirms, inter alia, that:
   a. The Group owns a land plot with a total site area of 46.9 hectares.
   b. The Group holds a right of permanent (indefinite) use of 4 land plots with a total site area of 364 hectares. According to Article 20(4) of the Land Code of the Russian Federation the Group may not transact with those land plots. Under the applicable Russian regulations, by January 1, 2010 the Group is required to either purchase or lease them from the owner. However, even if those land plots would not be purchased or leased by that date, the Group's title of permanent (indefinite) use to land plots will remain effective.

If the Group does not convert its title to the said land plots by January 1, 2011 a fine of up to RUB100,000 may be imposed on it. However this limitation of the Group's rights to those land plots does not affect the Group's right to sell, lease, mortgage or otherwise dispose of buildings and facilities situated on the respective land plots.

c. The Group holds valid title to 5 buildings with a total floor area of 32,861 sq.m. and a land improvement.

d. The Russian Legal Advisor was unable to confirm the Group's title to 16 buildings with a total floor area of 33,151 sq.m. and 14 land improvements.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
15	Selected real properties of an Industrial Complex of OJSC South Ural Cryolite Plant located in Russia, Orenburg region, Kuvandyk	The subject real properties comprise assets related to cryolite production plant as described below and erected on 4 land parcels with a total site area of approximately 321.4 hectares. The selected assets of the subject property comprise 28 industrial buildings, office, warehouses and land improvements including red mud basin and other auxiliary facilities completed between 1952 and 1992. The total gross floor area of the buildings is approximately 57,601.8 sq. m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshops, offices, warehouses and other auxiliary facilities.	49,000,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	4	20,706.9
Office	1	5,533.3
Warehouse	1	759.0
Auxiliary	10	30,602.6
Land Improvements	12	—
TOTAL	**28**	**57,601.8**

Notes:

1. Pursuant to rental agreements, 4 land parcels with a total site area of about 321.4 hectares are leased from the State for industrial use.
2. According to building ownership certificates and privatization plan, 24 buildings with a total floor area of 52,182.8 sq.m. were held by the Group.
3. We have attributed no commercial value to the building with a total floor area of approximately 5,419 sq.m. and 3 structures due to the insufficient title proof to these buildings and auxiliary facilities. We are of the opinion that the depreciated replacement cost of these buildings and auxiliary facilities as at the valuation date would be USD 6,300,000 assuming all relevant title certificates have been obtained and registered by the Group and the Group has legal rights to occupy, lease, mortgage or transfer these properties.
4. We have attributed no commercial value to the leased land plots with a total site area of about 321.4 hectares as this land is not transferable to other parties without the consent of the relevant local authorities, or substantial profit rent is lacking.
5. According to reconciliation tables provided by the Group, 28 buildings and land improvements subject to valuation corresponds to 28 buildings and land improvements in Russian legal opinion.
6. The Russian legal opinion confirms, inter alia, that:
   a. The Group leases 4 land plots with a total site area of 321.4 hectares.
   b. The Group owns 15 buildings with a total gross floor area of 52,182.8 sq.m. and 9 structures.
   c. The Group holds unregistered title to 13 buildings with a total floor area of 49,528.1 sq.m. and 9 structures. The titles to the above real estate assets were acquired by the Group as a result of privatization before registration of real estate became compulsory. State registration of title to the unregistered properties owned by the Group is voluntary. According to Article 6 of the Real Estate Registration Law the title acquired before the registration became compulsory remains effective. For this reason the title certificates to those properties were not obtained.
   d. The Russian Legal Advisor was unable to confirm the Group's title for a building with total gross floor area of 5,419 sq.m. and 3 structures.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
16	An Industrial Complex of Bei Wangzhong Village located in Cuifeng Town, Lingshi County, Shanxi Province, The PRC	The subject property comprises a cathode production plant erected on 2 parcels of land with a total site area of approximately 27,964.1 square meters. The industrial complex comprises 21 industrial buildings, administrative buildings, land improvements including roads, chimney, fencing wall and other auxiliary facilities completed between 2003 and 2006. The total gross floor area of the buildings is approximately 8,671 square meters. Summary of the buildings and structures is as follows:	The property was occupied by the Group for industrial purpose.	2,080,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	7	4,608
Office	1	667
Warehouse	3	1,904
Auxiliary	10	1,492
Land Improvements	—	—
TOTAL	**21**	**8,671**

Notes:

1. Pursuant to a State-owned Land Use Certificate (國有土地使用證), Ling Guo Yong (2005) No. A0101276 issued by People's Government of Lingshi County (靈石縣人民政府) on December 22, 2005, the state-owned land use rights of the property ("Land Parcel 1") with a site area of 14,260.07 square metres are held by Shanxi RUSAL Cathode Co., Ltd. (山西俄鋁碳素有限公司) ("Shanxi RUSAL") for a term expiring on September 22, 2035 for industrial purpose.
2. Pursuant to a Collectively-owned Land Use Certificate (集體土地使用證), Ling Ji Yong (2005) No. B0106021 issued by People's Government of Lingshi County (靈石縣人民政府) on December 25, 2005, the collectively-owned land use rights of the property ("Land Parcel 2") with a site area of 13,704.03 square metres are held by Shanxi RUSAL for a term expiring on December 31, 2035 for industrial purpose.
3. Pursuant to the Building Ownership Rights Certificate (房屋所有權證), Lingshi County Fang Quan Zheng 2007 Zi No. 00007656, building ownership rights of the property with a total gross floor area of 8,671 square meters all erected on Land Parcel 1 are held by Shanxi RUSAL.
4. Pursuant to the lease agreement (租用土地協議書) entered into between Shanxi RUSAL and Villagers' Committee of Beiwangzhong Cuifeng Town, Lingshi County (靈石縣翠峰鎮北王中村委) ("Villagers' Committee") on December 23, 2005, a parcel of land with a total site area of 27,964.1 square meters was rented by Shanxi Rusal for a term of 30 years commencing from January 1, 2006 to December 31, 2035 at an annual rent of RMB 85,400, which is subject to adjustment for every 8 years.
5. The PRC legal opinion states, inter alia, that:
   a. According to title certificates stated in Notes 1 and 2 above, Shanxi RUSAL is the user of the land parcels of the property.

b. In view of Shanxi RUSAL is the sole owner of the Land Parcel 1, Shanxi RUSAL is entitled to use, transfer, lease, mortgage or dispose of in other ways the said land use right in respect of the Land Parcel 1 of the property in accordance with the PRC Law within the terms specified in the relevant land use right certificate stated in Note 1 above. To the best of the legal adviser's knowledge after due and careful enquiry, as at the date of this opinion, the land use rights in respect of the Land Parcel 1 of the property are not subject to any mortgage.

c. In accordance with *the PRC Land Administration Law*, a collectively-owned land use rights is prohibited from being granted, transferred, or leased for non-agricultural purpose. The Lease as mentioned in Note 4 above may be regarded as invalid as it conflicts with the PRC Law. In addition, the Land Administration Bureau of Lingshi County may order the Villagers' Committee and Shanxi RUSAL to rectify the Lease within a specified time limit, confiscate illegal gains, and impose a fine on relevant parties. In accordance with the existing PRC laws, the fine will range from 5% to 20% of the illegal gains. Based on our previous practice, however, the fine is normally imposed on the landlord. In addition, pursuant to the Implementing Rules of the PRC Land Administration Law in Shanxi Province (*《山西省實施<中華人民共和國土地管理法>辦法》*) (the ***"Shanxi Rules"***) promulgated on January 11, 1987 and amended on May 16, 2008, collectively-owned land (i.e. Land Parcel 2) can be used for non-agricultural purpose provided that the user shall apply with and obtain collectively-owned land use right certificate from governmental authorities at county level.

d. Although the legal adviser cannot rule out the possibility that the competent authority from central level may rectify *the Shanxi Rules* in the future, they are of the view that the risk of the Lease being ruled invalid is highly remote, given the fact that the lease of the said collectively-owned land was approved by the People's Government of Lingshi County and Shanxi RUSAL has already obtained a collectively-owned land use right certificate.

e. Shanxi RUSAL is the legal and beneficial owner of the aforementioned buildings. Shanxi RUSAL is entitled to use, transfer, lease, mortgage or dispose of in other ways the buildings of the property in accordance with the PRC Law. To the best of the legal adviser's knowledge after due and careful enquiry, as at the date of this opinion, the above buildings are not subject to any mortgage.

6. In the course of our valuation, we have attributed capital value to part of the property, which comprise Land Parcel 1 and buildings with gross floor area of about 8,671 sq.m. erected on it. We have not attributed any value to Land Parcel 2 as it is not freely transferable on the market.

VALUATION CERTIFICATE

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
17	An Industrial Complex located in Shangzhuang Village, Xiaobai Town, Taigu County, Shanxi Province, The PRC	The subject property comprises a cathode plant erected on a parcel of land with a site area of approximately 52,802.24 square meters. The subject property comprises a number of industrial buildings, administrative buildings; land improvements including roads, fencing, tanks, water wells and other auxiliary facilities completed between 2003 and 2007. The total gross floor area of the buildings is approximately 16,039 square meters. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshop, office, warehouse and other auxiliary facilities.	2,900,000

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	10	10,237
Office	3	2,293
Warehouse	2	2,028
Auxiliary	14	1,481
Land Improvements	—	—
TOTAL	**29**	**16,039**

The land use rights of the property have been granted for a term expiring on May 26, 2058.

Notes:

1. Pursuant to a Taigu County State Land Resources Bureau Construction Land Notice (太谷縣國土資源局建設用地通知書), Tai Guo Tu Yi (2008) No. 6 (太國土易(2008)6號), issued by Taigu County State Land Resources Bureau (太谷縣國土資源局) dated May 26, 2008, Shanxi Taigu Baoguang Carbon Co., Ltd. (山西省太谷縣寶光碳素有限公司) ("Taigu Baoguang") had successfully bided the land use rights of the property with a site area of 52,802.24 square metres at a consideration of RMB5,920,000 for industrial purpose.
2. Pursuant to a State-owned Land Use Rights Transfer Contract (國有土地使用權轉讓合同) entered into between Taigu Baoguang and Shanxi RUSAL Cathode Co., Ltd. (山西俄鋁碳素有限公司) ("Shanxi RUSAL") dated June 27, 2008, Shanxi RUSAL acquired the land use rights of the property from Taigu Baoguang at a consideration of RMB5,920,000.
3. Pursuant to the State-owned Land Use Certificate (國有土地使用證), Tai Guo Yong (2008) No. 048 issued by the People's Government of Taigu County (太谷縣人民政府) dated July 2, 2008, the land use rights of the property with a site area of 52,802.24 square meters are held by Shanxi RUSAL for industrial use for a term expiring on May 26, 2058.
4. Pursuant to the Building Ownership Rights Certificate (房屋所有權證), Tai Quan Zheng Zi No. 0013643 issued by the People's Government of Taigu County (太谷縣人民政府) dated July 2, 2008, the building ownership rights of the property with a total gross floor area of 16,038.56 square meters are held by Shanxi Rusal.

5. The PRC legal opinion states, inter alia, that:

   a. According to title certificate stated in Note 3 above, Shanxi RUSAL is the user of the land parcel of the property.

   b. In view of Shanxi RUSAL is the sole owner of the land parcel of the property, Shanxi RUSAL is entitled to use, transfer, lease, mortgage or dispose of in other ways the said land use right in respect of the land parcel of the property in accordance with the PRC Law within the terms specified in the relevant land use right certificate stated in Note 3 above. To the best of the legal adviser's knowledge after due and careful enquiry, as at the date of this opinion, the land use rights in respect of the land parcel of the property are not subject to any mortgage.

   c. Shanxi RUSAL is the legal and beneficial owner of the aforementioned buildings. Shanxi RUSAL is entitled to use, transfer, lease, mortgage or dispose of in other ways the buildings of the property in accordance with the PRC Law. To the best of the legal adviser's knowledge after due and careful enquiry, as at the date of this opinion, the above buildings are not subject to any mortgage.

VALUATION CERTIFICATE

Group II — Property interests rented and occupied by the Group in Guinea

No.	Property	Description and tenure	Particulars of occupancy	Capital Value in existing state as at September 30, 2009 (USD)
18	Selected real properties of an Industrial Complex of Compagnie des Bauxite de Kindia located in B.P. 6505 Conakry, Simbaya, Commune de Matoto, Conakry Republique de Guinee	The subject real properties comprise assets related to the open pit mine, port, railway, and residential facilities as described below and erected on a land parcel with a total site area of approximately 143 hectares. The selected assets of the subject property comprise 8 industrial buildings, warehouses and land improvements including railways, roads and berth, completed between 2001 and 2008. The total gross floor area of the buildings is approximately 6,489 sq. m. Summary of the buildings and structures is as follows:	The property is occupied by the Group as workshop, warehouse and other auxiliary facilities.	No Commercial Value

Usage	Number of Building and Structures	Gross Floor Area (sq.m.)
Production	2	5,625.0
Office	—	—
Warehouse	2	864.0
Auxiliary	—	—
Land Improvements	4	—
TOTAL	**8**	**6,489.0**

Notes:

1. We have attributed no commercial value to a leased land, buildings, land improvements for the reason that the property is not allowed to transfer to other parties without the approval from the State. We are of the opinion that the depreciated replacement cost of the property (excluding the land) as at the valuation date would be USD 59,148,000 assuming all relevant title certificates have been obtained.
2. The Guinean legal opinion confirms, inter alia, that:
   a. the Guinean State is the sole proprietor of the facilities, infrastructures and equipment of the CBK complex through the State Company named SBK. As a result, RUSSAL through its Guinean subsidiary — the CBK is merely a tenant of the fixed assets under the conditions stipulated in the basic agreement dated 3 November 2000.
   b. The lease was concluded for duration of twenty-five years (Article 25 of the basic agreement). This lease confers on the CBK, by virtue of Article 5 of the basic agreement, the right to carry out all the industrial operations of exploitation and commercialization within the limits set out in the said basic agreement.
   c. Our opinion is that the CBK and or RUSSAL cannot form a mortgage on the properties of the SBK even less to sell them or be able to dispose of them in whatever manner, owing to the fact that the State is the sole proprietor of these properties.

EXHIBIT C

Methodology for Identifying Valuation Properties, Buildings and Improvements

Methodology for Identifying Valuation Properties, Buildings and Improvements

(A) **Properties in the People's Republic of China**

Properties owned or leased (*Properties*) by the Company and its subsidiaries (*Group*) in the People's Republic of China together with all buildings and improvements thereon will be subject to valuation. Upon calculation it was found that such properties, buildings and improvements accounted for 0.2% of the net book value of the Group's real property.

(B) **Properties with Crucial Facilities**

Other Properties, on which the facilities which are the most important to its business have been built or are being built, were identified using the following method:

(1) Identify Distinct Business Units

(A) Identify the divisions which are critical to the business of the Group as the producer of primary aluminum (*Critical Divisions*). These would be the Alumina Division and the Aluminum Division, accounting for about 98% of Group revenue. The divisions which represent non-core business of the Group, i.e. downstream operations, generating only about 2% of Group revenue are excluded.

(B) Identify all the distinct business operating units within such Critical Divisions of the Group which are the most important in terms of production capacity, revenue, operating or non-operating status, and the Group's plans regarding future use (*Distinct Business Units*). Such qualitative and quantitative metrics are applied on a non-cumulative basis in order to capture all potential higher production capacity and all lower cost higher margin operations. Upon testing aggregate production capacity and aggregate contribution to revenue, it was found that the 16 Distinct Business Units represented about 62% of alumina and about 90% of aluminum production capacity of the Group and that the revenue from the aluminum smelters operated by Distinct Business Units represented about 94% of total Group revenue.

(2) Identify all buildings and improvements located on the Properties of the Distinct Business Units which are of the following nature (*Core and Proximate Buildings and Improvements*):

(A) for mines: (i) shafts and mine workings; (ii) collar houses; (iii) winder buildings; (iv) other buildings and improvements critical for production;

(B) for alumina refineries: (i) crushing and milling buildings; (ii) digestion buildings; (iii) red and white filtration buildings; (iv) evaporation buildings; (iv) slag storages; (v) chimney stacks; (vi) other buildings and improvements critical for production;

(C) for aluminium smelters: (i) pot rooms; (ii) foundry buildings; (iii) anode paste production, anode baking and assembly production buildings; (iv) other buildings and improvements critical for production;

(D) for cryolite plants: (i) furnaces building; (ii) hydrofluoric acid production building; (iii) gas purification facilities; (iv) aluminum sulfate production building; (iv) other buildings and improvements critical for production;

(3) Check what is the aggregate net book value of the Properties of all the Distinct Business Units and the Core and Proximate Buildings and Improvements.

(C) **Other Significant and Important Properties**

Other Properties, which were identified as being properties of significant size or importance, using the following method:

(1) Identify all buildings and improvements located on the Properties of the Distinct Business Units which support the operations of the Core and Proximate Buildings and Improvements and are of the following nature (*Additional Buildings and Improvements*):

(A) for mining operations: (i) administrative buildings; (ii) locker rooms; (iii) mechanical shop building; (iv) warehouses; and (v) other significant buildings and improvements;

(B) for alumina refineries: (i) boiler houses; (ii) administrative buildings; (iii) buildings for storage of raw materials and final products; (iv) red mud ponds; (v) cooling towers; (vi) stacks; (vii) other significant buildings and improvements;

(C) for aluminium smelters: (i) boiler houses; (ii) slag storages; (iii) transformer substations; (iv) railways; (v) repair shops buildings; (vi) stacks; (vii) other significant buildings and improvements;

(D) for cryolite plants: (i) administrative buildings; (ii) slime storage; (iii) warehouses; (iv) final product storage; (v) other significant buildings and improvements;

(2) Check what is the aggregate net book value of the Additional Buildings and Improvements. Upon calculation it was found that such buildings and improvements accounted for another 18% of the net book value of the Group's real property, making a total of 68.2% of the net book value of the Group's real property under valuation after adding the PRC Properties and the Properties and the Core and Proximate Buildings and Improvements described in paragraph (B)(3) above.

Details and description of properties and buildings that have not been valued

Usage of properties and buildings	Aggregate net book value (Note) (US$)	% of the consolidated total assets of the Group	Number of properties and buildings (Note)
Smelters	441,173,511	1.96%	9,711
Refineries	194,744,702	0.86%	5,290
Other Production Facilities in Current Use	101,578,489	0.45%	497
Non-Core Downstream Operations	101,332,113	0.45%	391
Production Facilities in the PRC	0	0.00%	0
Production Facilities in Indefinite Suspension	0	0.00%	1,593
TOTAL	**838,828,815**	**3.72%**	**17,482**

Note: Based on the Company's IFRS data as of September 30, 2009

Details and description of properties and buildings that had been valued

Usage of properties and buildings	Aggregate net book value (Note) (US$)	% of the consolidated total assets of the Group	Number of properties and buildings (Note)
Smelters	1,107,625,392	4.91%	831
Refineries	296,387,037	1.32%	585
Other Production Facilities in Current Use	0	0.00%	0
Non-Core Downstream Operations	0	0.00%	0
Production Facilities in the PRC	4,662,109	0.02%	119
Production Facilities in Indefinite Suspension	0	0.00%	0
TOTAL	**1,408,674,538**	**6.25%**	**1,535**

Note: Based on the Company's IFRS data as of September 30, 2009

Details and description of all properties and buildings of the Group

Usage of properties and buildings	Aggregate net book value (Note) (US$)	% of the consolidated total assets of the Group	Number of properties and buildings (Note)
Smelters	1,548,798,903	6.87%	10,542
Refineries	491,131,739	2.18%	5,875
Other Production Facilities in Current Use	101,578,489	0.45%	497
Non-Core Downstream Operations	101,332,113	0.45%	391
Production Facilities in the PRC	4,662,109	0.02%	119
Production Facilities in Indefinite Suspension	0	0.00%	1,593
TOTAL	**2,247,503,353**	**9.97%**	**19,017**

Note: Based on the Company's IFRS data as of September 30, 2009

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Date: 30 September 2009

Dear Sirs,

Independent Technical Report for the mining and non-mining assets held by United Company RUSAL Limited and its subsidiaries

1. Introduction

1.1 Purpose of Report

This report has been prepared by Hatch Associates Limited ("Hatch") and SRK Consulting (UK) Limited ("SRK") for inclusion in the prospectus (the "Prospectus") to be published by United Company RUSAL Limited ("UC RUSAL" or the "Company" or the "Group") in connection with a global offer of ordinary shares and/or global depositary receipts representing shares ("GDRs") in UC RUSAL to listing on one or more international stock exchanges (the "Listing").

Hatch and SRK were instructed by the Directors of the Company to prepare a technical report for the bauxite, alumina, aluminium, aluminium raw materials, silicon, coal, energy and downstream assets held by the Company and its subsidiaries (the "Group"). This report, which summarises the findings of Hatch's and SRK's respective reviews, has been prepared in accordance with the recommendations for a technical report as set out in the Prospectus Directive in conjunction with the recommendations of the Committee of European Securities Regulators ("CESR"). Chapter 18 of Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited together with The Chapter 19 of the UK Listing Rules which were in force until 1 July 2005, have been adhered to for the purposes of the reporting of this Independent Technical Report.

SRK has reviewed, but not recalculated, the practice and estimation methods undertaken by the Company for reporting reserves and resources in accordance with the Former Soviet Union "Classification and Estimation Methods for Reserves and Resources", last revised in 1981. This procedure establishes the nature of evidence required to ensure compliance with the Committee of Reserves of the Ministry of National Resources of the Russian Federation (the "GKZ" classification). Within this there are "Conditions for Estimation of Reserves and Resources" unique to each deposit.

SRK has reviewed, but not recalculated, the reserves and resources statements compiled by the Group and has restated the resources and reserves in accordance with the Prospectus Directive and the Prospectus Rules, in conjunction with the recommendations of CESR and in accordance with the criteria for internationally recognised reserve and resource categories of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (December 2004) published by the Joint Ore Reserves Committee (the "JORC") of the Australasian Institute of Mining and Metallurgy (the "IMM"), the Australian Institute of Geoscientists and the Minerals Council of Australia (the "JORC Code").

In this report, all reserves and resources estimates initially prepared by the Company in accordance with the GKZ Classification, have been substantiated by SRK through evidence obtained from SRK site visits and observations, and supported by details of drilling results, analyses and other evidence and takes account of relevant information supplied by the Group's management.

1.2 Capability and Independence

This report was prepared by Hatch and SRK as the signatories to this letter. Details of the qualifications and experience of the consultants who carried out the work are set out in Annex A to this report.

Hatch and SRK are separate entities and each operate as independent technical consultants providing geology, mining, process engineering and valuation services to clients. Hatch and SRK have received, and will receive, professional fees for the preparation of this report. However, neither Hatch nor SRK nor any of their respective directors, staff or sub-consultants who contributed to this report have any interest in:

- the Company or any of its subsidiaries; or
- the assets reviewed; or
- the outcome of the Global Offer.

Drafts of this report were provided to the Group, but only for the purpose of confirming both the accuracy of factual material and the reasonableness of assumptions relied upon in the report.

1.3 Scope of Work/Materiality/Limitations of Liability and Exclusions

This report contains the expression of the professional opinion of Hatch and SRK based on limited information available and conditions existing at the time of preparation. This report should be read as a whole, and sections should not be read or relied upon out of context.

Hatch and SRK have independently reviewed and assessed the Group's mining and non-mining assets by reviewing pertinent data, including resources, reserves, technology, manpower requirements, environmental issues, and the life-of-mine plans relating to productivity, production, operating costs, capital expenditures and revenues. This review and assessment has been done in accordance with the scope of work and exclusions and limitations and on the basis of the materiality criteria set out in Annex B to this report.

Save for Section 2.1.2.1, Section 2.1.3.1, Section 2.1.4.1, Section 2.1.5.1, Section 2.1.6.1, Section 2.1.7.1, Section 2.2, Section 2.4.3, Section 3 and the attributable Appendices, for which SRK takes responsibility, and Section 2.4.1, for which Hatch and SRK take joint responsibility, subject to the disclaimers, exclusions and limitations of liability contained in this Article 1.3, all opinions, findings and conclusions expressed in this report are solely those of Hatch and its

sub-consultants. All opinions, findings and conclusions expressed in Section 2.1.2.1, Section 2.1.3.1, Section 2.1.4.1, Section 2.1.5.1, Section 2.1.6.1, Section 2.1.7.1, Section 2.2, Section 2.4.3, Section 3 and the attributable Appendices are solely are those of SRK and its sub-consultants. Neither Hatch nor SRK accepts any responsibility or liability for the sections of this report that were prepared by the other party. This division of responsibility reflects the respective areas of expertise of Hatch and SRK. SRK is a consulting company providing a comprehensive range of services to resource industries. This includes assisting with mineral resource projects from exploration, development, exploitation through to closure. Specialising in the traditional fields of geology, mining and infrastructure these are further enhanced with bio-physical and social services. SRK has experience in preparing independent technical reports in support of public and private finance, and mergers and acquisitions. By contrast, Hatch's primary focus in the metals and mining sector is process design and engineering, process plant environmental management, financial evaluation, business consulting and project and construction management.

Save for any responsibility of experts responsible for a prospectus arising under Hong Kong Ordinances, SECT 38C and SECT 342B and UK Listing Rules Chapter 5, 5.5.3R(2)(c) or (f), items 1.2 or 23.1 of Annex I and/or Annex X of the Commission Regulation (EC) 809/2004 or section 40 of the Companies Ordinance to any person as and to the extent there provided, and save for any responsibility that Hatch or SRK has expressly agreed in writing to assume, to the fullest extent permitted by law neither Hatch nor SRK assumes any responsibility and nor will Hatch or SRK accept any liability to any other person for any loss suffered by any such other person as a result of, arising out of, or in connection with (a) this report or (b) their respective statements, required by and given solely for the purposes of complying with items 1.2 or 23.1 of Annex I and/or Annex X to Commission Regulation (EC) 809/2004 and sections 38C and 342B of the Companies Ordinance, consenting to its inclusion.

1.4 Inherent Risks

Mining and chemical and metallurgical processing are carried out in an environment where not all events are predictable.

Whilst an effective management team can, firstly, identify the known risks, and secondly, take measures to manage and mitigate these risks, there is still the possibility for unexpected and unpredictable events to occur. It is therefore not possible to remove all risks or state with certainty that an event will not occur that may have a material impact on the operation of a mine or chemical or metallurgical processing operation.

1.5 Glossary of Terms

Defined and technical terms used in this report are set out in Annex C.

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ANNEXES

Annex A: Qualifications of Consultants

Annex B: Scope of Work/Limitations and Exclusions

Annex C: Glossary of Abbreviations/Terms/Units

2. Overview

2.1 General

2.1.1 Description of Assets

UC RUSAL is a vertically integrated upstream focused aluminium company. It comprises production assets located in thirteen countries across five continents which are involved in the production of bauxite, nepheline, alumina, primary aluminium, secondary aluminium, aluminium packaging, silicon, cryolite, aluminium fluoride, power generation, coal, cathodes, anodes, flourite, limestone and carborundum. The Group currently has full or partial ownership of 14 mines or mine complexes, 13 alumina refineries, 16 aluminium smelters and 16 downstream and raw material plants. UC RUSAL also has an extensive project portfolio, in various stages of development, in all parts of the aluminium value chain.

UC RUSAL is organised across autonomous Divisional business units. There are four divisions within the Company: Alumina, Aluminium, Packaging, and Engineering and Construction. All bauxite, nepheline, quartzite and limestone mining operations are included in the Alumina division of UC RUSAL. All raw materials facilities, namely the cryolite and cathode plants, are included in the Aluminium Division of UC RUSAL.

The assets in Table 2.1, whose ownership has been advised by UC RUSAL and whose locations are shown in Figure 2.1, were reviewed, with the exception of Queensland Alumina Ltd. which was commented based on publicly available information. Figure 2.2 presents the consolidated attributable production flow within the Group's assets for 2008. Figure 2.2 is based on information provided by UC RUSAL which has not been verified by Hatch nor SRK. UC RUSAL also has a portfolio of projects under development, details of which are presented in Section 2.2.10 and Section 2.3.8.

Table 2.1: List of UC RUSAL Assets Reviewed

Asset	Asset Type	Rusal Ownership[2] (%)	Technical Reviewing Body
Petropavlosk Limestone Mine	Limestone Mine	100.0	SRK
Kiya Shaltyr Nepheline/Mazulsky Limestone Mine	Nepheline Mine/ Limestone Mine	100.0	SRK
Kindia	Bauxite Mine	100.0	SRK
Guyana	Bauxite Mine	90.0	SRK
Friguia	Bauxite Mine	100.0	SRK
Windalco (Ewarton and Kirkvine)	Bauxite Mine	93.0	SRK
Alpart	Bauxite Mine	65.0	SRK
North Urals	Bauxite Mine	100.0	SRK
Timan	Bauxite Mine	80.0	SRK
Bogatyr	Coal Mine	50.0	SRK
Cheremshansk	Quartzite Mine	99.91	SRK
Glukhovsky	Quartzite Mine	97.55	SRK
Yaroslavsky	Fluorite Mine	50.0	SRK
Queensland Alumina Ltd	Alumina Refinery	20.0	Hatch
Fria Alumina Refinery	Alumina Refinery	100.0	Hatch
Aughinish Alumina	Alumina Refinery	100.0	Hatch
Euroallumina	Alumina Refinery	100.0	Hatch
Alpart	Alumina Refinery	65.0	Hatch

Asset	Asset Type	Rusal Ownership[2] (%)	Technical Reviewing Body
Windalco-Ewarton Works	Alumina Refinery	93.0	Hatch
Windalco-Kirkvine Works	Alumina Refinery	93.0	Hatch
Bogoslovsk Alumina Refinery	Alumina Refinery	100.0	Hatch
Achinsk Alumina Refinery	Alumina Refinery	100.0	Hatch
Urals Alumina Refinery	Alumina Refinery	100.0	Hatch
Boxitogorsk Alumina Refinery	Alumina Refinery	100.0	Hatch
Nikolaev Alumina Refinery	Alumina Refinery	100.0	Hatch
Zaporozhye Alumina Refinery	Alumina Refinery	97.55	Hatch
Bratsk Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Krasnoyarsk Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Sayanogorsk Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Novokuznetsk Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Irkutsk Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Khakas Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Bogoslovsk Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Volgograd Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Urals Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Nadvoitsy Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Kandalaksha Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Volkhov Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Alukom-Taishet Aluminium Smelter	Aluminium Smelter	100.0	Hatch
Taishet Aluminium Smelter[1]	Aluminium Smelter	100.0	Hatch
Kubikenborg Aluminium	Aluminium Smelter	100.0	Hatch
Zaporozhye Aluminium Smelter	Aluminium Smelter	97.55	Hatch
ALSCON	Aluminium Smelter	85.0	Hatch
Boguchansky Smelter Project[1]	Aluminium Smelter	50.0	Hatch
Krasnoturinsk Powder Metallurgy	Downstream Aluminium Processing	100.0	Hatch
Shelekhov Powder Metallurgy	Downstream Aluminium Processing	100.0	Hatch
Volgograd Powder Metallurgy	Downstream Aluminium Processing	100.0	Hatch
Irkutsk Silicon	Silicon Plant	99.91	Hatch
Urals Silicon	Silicon Plant	100.0	Hatch
Zaporozhye Silicon	Silicon Plant	97.55	Hatch
Resal	Downstream Aluminium Processing	100.0	Hatch
Belis	Downstream Aluminium Processing	100.0	Hatch
Zvetmetobrabotka	Downstream Aluminium Processing	100.0	Hatch
ARMENAL	Downstream Aluminium Processing	100.0	Hatch
SAYANAL	Downstream Aluminium Processing	100.0	Hatch
Urals Foil	Downstream Aluminium Processing	100.0	Hatch

Asset	Asset Type	Rusal Ownership[2] (%)	Technical Reviewing Body
Polevskoy Cryolite	Downstream Aluminium Processing	94.17	Hatch
South Urals Cryolite	Downstream Aluminium Processing	93.49	Hatch
Lingshi Cathode Plant	Cathode Plant	100.0	Hatch
Taigu Cathode Plant	Cathode Plant	100.0	Hatch
Boguchanskaya HPP[1]	Hydroelectric Power Plant	46.85	Hatch

Note:

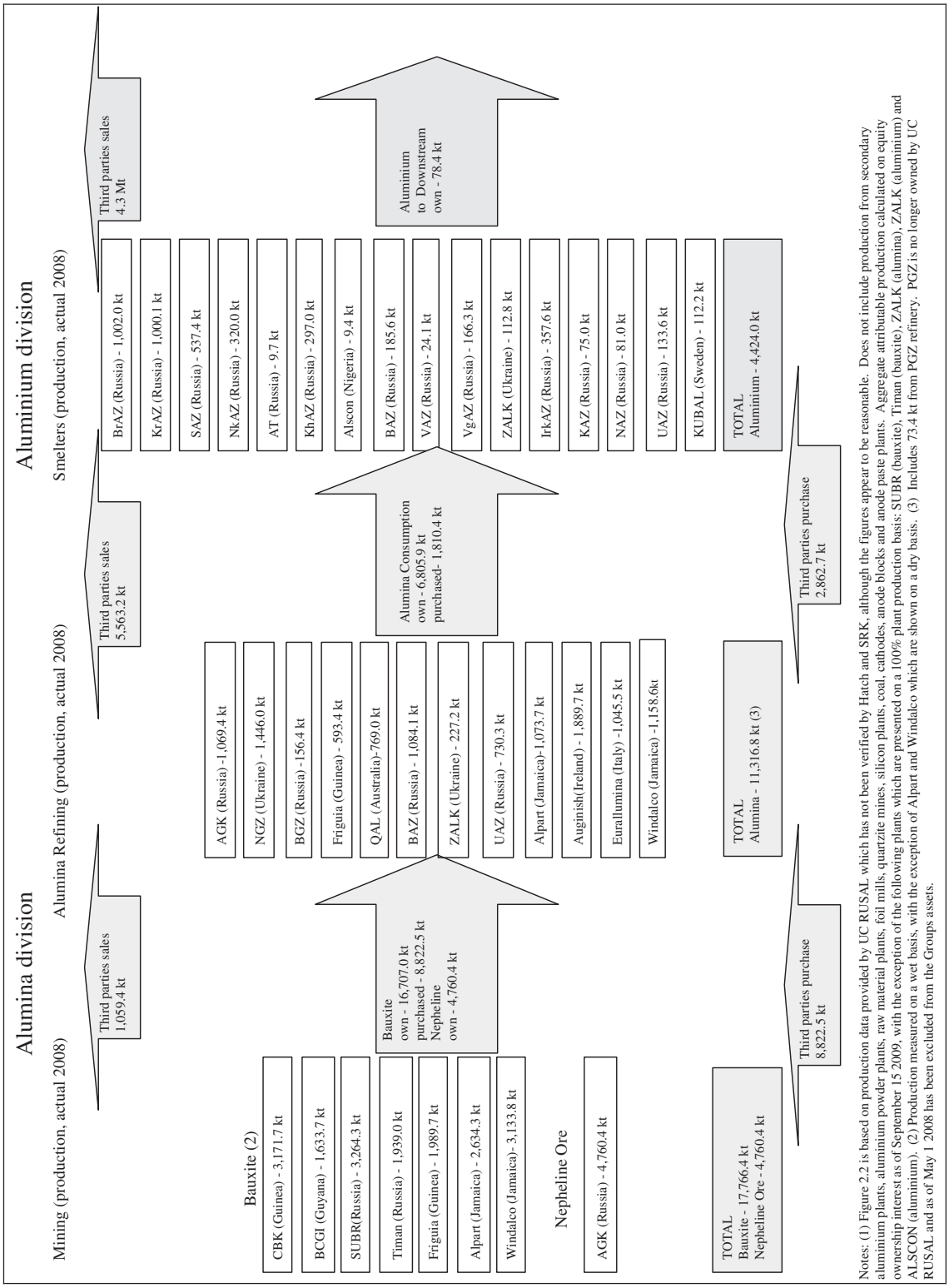
(1) Assets currently under construction.

(2) Equity ownership as at 15 September 2009.

Figure 2.1: Map of UC RUSAL Assets[1]

(1) Excluding the quartzite, fluorite and coal mines.

Figure 2.2: UC RUSAL 2008 Aggregate Attributable Production (1)



Notes: (1) Figure 2.2 is based on production data provided by UC RUSAL which has not been verified by Hatch and SRK, although the figures appear to be reasonable. Does not include production from secondary aluminium plants, aluminium powder plants, raw material plants, foil mills, quartzite mines, silicon plants, coal, cathodes, anode blocks and anode paste plants. Aggregate attributable production calculated on equity ownership interest as of September 15 2009, with the exception of the following plants which are presented on a 100% plant production basis: SUBR (bauxite), Timan (bauxite), ZALK (alumina), ZALK (aluminium) and ALSCON (aluminium). (2) Production measured on a wet basis, with the exception of Alpart and Windalco which are shown on a dry basis. (3) Includes 73.4 kt from PGZ refinery. PGZ is no longer owned by UC RUSAL and as of May 1 2008 has been excluded from the Groups assets.

2.1.2 Management

2.1.2.1 Mining Assets

During the reviews of the UC RUSAL mining assets and visits to their mining operations, SRK's consultants had the opportunity to meet and have discussions with numerous UC RUSAL management and technical staff. It is SRK's opinion that the technical capabilities of the senior engineering staff are sufficient for the mining operations. It is clear that they have the planning and implementation skills which are required to work towards achieving the annual targets and the ability to assess the requirements for the longer term sustainability of production of raw materials. In all operations, a keen awareness and desire for improvements in environmental, health and safety issues to the benefit of the efficiency of the operations was apparent.

It is evident that there are different approaches of management in the various mining assets with some being devolved and some being centralised. There is the opportunity to improve investment planning and procurement at some operations by decentralising the management to the operations as well as there being additional opportunities in the improved central buying power of the enlarged UC RUSAL company. Some of the operations have the opportunity to reduce management structure, while some are more lean in terms of management. As with all operations on different continents with different methodologies, UC RUSAL faces challenges with integrating the best practices of the various operations, in terms of management style and approach, to realise the opportunities available.

The UC RUSAL operations will benefit from a more rigorous international approach in the integrated longer term planning of the mines and their downstream processing facilities moving the focus from annual planning to rolling 5 year plans within the framework of a Life of Mine Plan ("LoMp").

Training is a key element in mines and facilities in the Russian Federation and in particular for overseas mines, where UC RUSAL has training programmes at all its operations. It is SRK's opinion that the level of training is sufficient at all the mining assets.

The implementation of development projects also has its challenges which the integrated UC RUSAL is now considering. SRK is satisfied that within the current management and their consultants there are the skills to implement the proposed plans and the various projects and initiatives as outlined in this report.

2.1.2.2 Non-Mining Assets

During this review, Hatch's consultants were in regular contact and held numerous discussions with UC RUSAL management at various levels. Based upon this contact and direct observations of the operations, Hatch is satisfied that UC RUSAL's current management has the skills required to implement the proposed production plans and initiatives outlined within this report. Furthermore, it was abundantly clear that during the historical review period the technical, financial, environmental and health and safety performance of the assets has improved.

UC RUSAL has, over the course of its creation and development, transformed significantly in to a large vertically integrated global mining and metals industry participant. As with any such transformation, UC RUSAL management must constantly strive to adapt to new pressures. The Group has shown it has the ability to successfully achieve this.

A key positive change and improvement has been the development of targeted management incentives. Under previous regimes, management was generally measured only in relation to reaching pre-defined production targets. UC RUSAL has now introduced a Balanced Scorecard

approach to performance management which combines traditional physical production measures with financial, environmental, health and safety and other non-financial key performance indicators. Accordingly, since implementation of the Balanced Scorecard approach, there have been positive trends witnessed in these indicators.

2.1.3 Health and Safety

2.1.3.1 Mining Assets

UC RUSAL has a formal Health and Safety Policy and promotes health and safety awareness at the mines and associated operations. Health and Safety have improved significantly in recent years.

As evidenced at the visits by SRK, Health and Safety at all of the open-pit mining facilities generally met, or is working towards, accepted international norms, and training programmes were in place to raise safety awareness and closely monitor occupational accidents.

The open-pit operations have good safety records. At the underground mining facilities at North Urals, there are challenging conditions with the operations being some 800 to 1,100 m below surface, with some areas of relatively poor ground conditions. Some safety standards are currently below internationally accepted norms. This has been identified and is being addressed. For example, underground infrastructure projects at North Urals, which include transport systems, are expected to improve working conditions.

All of the mining facilities have on-site medical facilities for treatment of injury and illness. These facilities are adequately staffed and equipped.

The health and safety statistics for the mines are included in the numbers in Section 2.1.3.2.

2.1.3.2 Non-Mining Assets

UC RUSAL has a formal Health, Industrial & Fire Safety Policy which complies with international best practices with the goal of eliminating harm caused to employees at all stages of its production activity. The Health and Safety awareness at the facilities has improved significantly in recent years, and there is recognition from UC RUSAL management at all levels that safe working practices, environmental protection and efficient natural resource utilisation are fundamental to long-term business success. While Hatch has noted improvement at UC RUSAL's facilities, health and safety still does remain below international best practices at some facilities.

All managers are responsible for the continuous improvement of health and safety performance within their immediate area of control as well as within subordinate units. Management have used external assistance from world recognised service providers such as DuPont and Det Norske Veritas to develop Industrial & Fire Safety systems. Currently, 10 UC RUSAL facilities hold OHSAS 18001 Occupational Health & Safety certification. It is the objective of the Company to acquire OHSAS 18001 Occupational Health & Safety certification for all the operating facilities, although Hatch is not aware of any timeframe to complete this objective. All recorded occupational injuries are investigated regardless of their gravity. This internal investigation does not replace investigations prescribed by law but is instead a parallel process. After completion of the internal investigations, all interested parties, including other operations, are informed of actions planned to prevent similar accidents from occurring in the future. The employees are then informed through information notices which have become part of the regular industrial & fire safety information exchange process.

The health and safety conditions at certain UC RUSAL Russian and Ukrainian plants are not up to international best-practice standards, reflecting their design and construction during a previous regime that had different priorities. However, they are typical of other aged industrial facilities within the former Soviet Union, Eastern Europe and Central Asia. During site visits in September — October 2008 at certain facilities, Hatch observed tripping hazards, potential for head injury, poor fall protection, poor machine guarding and poor procedures for moving hazardous liquids. Application of rules for Personal Protective Equipment (PPE) was haphazard in certain instances, and in particular a lack of eye protection was noted at certain facilities. In addition, signage and general communication fell below international best practice at many facilities in the Russian Federation and Ukraine.

The Group has undertaken significant effort in recent years to address such issues in conjunction with the modernisation of the assets and Hatch were informed that this will continue as required. UC RUSAL Health and Safety policy stipulates safety instructions and training for new employees and daily safety inductions for shift workers, as well as requiring employees to undertake safety exams on a regular basis. The policy is based on a grievance mechanism allowing employees to contribute towards its continuous development by capturing health and safety improvements from practical experience. UC RUSAL has recently completed several modernisation programmes of its assets. In addition to the benefits of higher production and improved environmental performance, these programmes typically also focussed on reducing potential safety hazards and on improvements in safety awareness of employees. These programmes include recently completed modernisations of Sayanogorsk Aluminium Smelter and Krasnoyarsk Aluminium Smelter. Additionally UC RUSAL has recently introduced the Continuous Production Improvement programmes at Bratsk Aluminium Smelter and Sayanogorsk Aluminium Smelter, which include targeted improvements in health and safety and employee responsibility.

The majority of UC RUSAL's facilities have on-site medical facilities for treating injuries and alleviating acute occupational illness symptoms. Where these facilities are not provided on-site, there is access to municipal clinics.

The Lost Time Injury Frequency Rate (LTIFR) is one of the statistics used to monitor safety efficiency in the international metals and mining industry. The LTIFR is a measure of overall industrial & fire safety performance, and indicates the frequency of Lost Time Injuries. Within UC RUSAL the LTIFR is measured per 200,000 hours worked. Information provided by UC RUSAL, which has not been verified by Hatch, states that the LTIFR was constant at 0.22 in the first half 2009 and 0.23 in 2008, compared with 0.19 in 2007, 0.20 in 2006 and 0.25 in 2005. Table 2.2 and Figure 2.3 presents the LTIFR for the UC RUSAL group (all divisions, including mining operations) and demonstrates that tangible effects of improvement were made from 2004 to 2007 with respect to health and safety performance. However, there was a slight reversal in the recent historical downward trend in the LTIFR in 2008, although this was followed by a slight reduction in the first half of 2009.

Table 2.2: Health and Safety Performance Indicators (Group)[1]

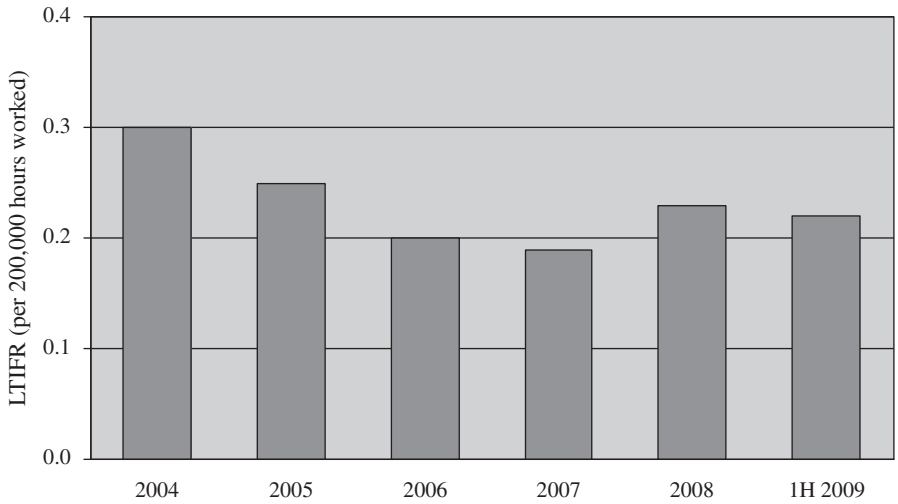
Categories	2005 (actual)	2006 (actual)	2007 (actual)	2008 (actual)	H1 2009 (actual)
Number of Employees - Group	97,664	96,128	95,869	88,279	77,266
Lost Time Accident Frequency Rate (per 200,000 hours worked)	0.25	0.2	0.19	0.23	0.22
Fatalities	15	11	22	12	5
of which:					
Employees of UC RUSAL	12	6	15	8	3
Employees of Joint Ventures	0	0	4	0	0
Contractors	3	5	3	4	2
Third parties (on a railway)	12	19	6	6	4

Note:

(1) All information has been provided by UC RUSAL and has not been verified by Hatch

Information provided by UC RUSAL, which has not been verified by Hatch, states that between 2005 and the first half of 2009 there were at least 65 fatalities at UC RUSAL operations (including mining operations), of which 48 fatalities were to UC RUSAL employees (including Joint Ventures) and 17 fatalities were to contractors to UC RUSAL. Table 2.2. demonstrates that significant improvement has been made in 2008 and the first half of 2009 in reducing the number of fatalities at UC RUSAL facilities.

Figure 2.3: Health and Safety Performance Indicators (UC RUSAL group)[1]



Note:

(1) All data has been provided by UC RUSAL and has not been verified by Hatch.

Occupational Health forms a major component of the Health and Safety programme. Due to the nature of UC RUSAL's operations, employees are exposed to health risks from physical and chemical hazards such as dust, heat, exposure to chemical compounds, hazardous liquids and slurries. These hazards are common across the aluminium industry and are not specific to UC RUSAL operations.

The major types of occupational diseases at UC RUSAL's operations are respiratory diseases and fluorosis, but other occupation related impairments are experienced. Information provided by UC RUSAL, which has not been verified by Hatch, states that for all divisions of the Group, 184 employees were newly diagnosed with an occupational health disease in 2008.

Hatch is unaware of any instances of worker litigation pertaining to occupational health issues within UC RUSAL, however, other companies in similar industries have experienced such cases, especially in Western countries. Employees in aluminium smelter potrooms face exposure to hydrogen fluoride gas and fluoride and fugitive dust. Those plants using Söderberg smelting technology face more exposure than is the case in modern pre-bake smelting operations since the dust may contain Polycyclic Aromatic Hydrocarbons (PAHs). All employees of UC RUSAL operating in hazardous environments are provided with certified PPE in accordance with industry requirements, which is expected to assist in the mitigation of long-term respiratory diseases. However, there have been occasions where personnel have suffered extended exposure to potroom environments without such PPE, and hence the task of UC RUSAL is to enforce the wearing of appropriate PPE by all employees.

No major occupational diseases have been associated with alumina refineries — bauxite and alumina dust is benign. However, caustic soda is an acute hazard as a result of chemical burn in the case of exposure, especially to soft tissue. There is also the potential for hearing loss — which must be engineered out by enclosing offending equipment, and as a last resort designating areas requiring PPE noise protection. These areas are predominantly powerhouses, air compressors, mills and large fans.

Prevention of occupational diseases at UC RUSAL's operations is primarily represented by initiatives aimed at improving working conditions by reducing the impact of dust and substances which may impact workers' health. International Best Practice is elimination of chemical and physical hazards by ventilation of work areas and capture of emissions. The use of PPE is used as the last means of defence.

A key aim of UC RUSAL is to decrease exposure of its employees to fluoride emissions resulting from operation of Söderberg cells. UC RUSAL has developed a Clean Söderberg Technology which improves cell hooding efficiency and reduces fluoride emissions exiting to the potroom and impacting reduction area personnel working with cells and anode changing procedures. Hatch has been advised that approval has been granted to introduce the technology to four potrooms of Krasnoyarsk Aluminium Smelter. It is intend to expand its application to other aluminium smelters, although this has yet to be approved. Within the scope of the same modernisation programme, Krasnoyarsk Aluminium Smelter has switched to the use of anodes with lower contents of sulphur. Finally, to improve indirect exposure to aluminium smelting process contaminants, UC RUSAL has installed new dry scrubbing Gas Treatment Centres at Krasnoyarsk Aluminium Smelter to capture and treat fluoride emissions. UC RUSAL plans to introduce similar measures at other aluminium smelters when temporarily suspended modernisation programmes are recommenced.

Generally, better management of health related issues is present at modern plants with less effective management at older facilities. This is mainly because modern equipment and facilities are designed with a higher degree of awareness of the importance of these issues. As the older plants are modernised and awareness of these issues increases, it is expected that overall improvements will follow.

2.1.4 Transport

2.1.4.1 Mining Assets

On-site mine transport of the ore predominantly relies on haul trucks which transport ore from the open-pit to the mine gate or to a railhead. Subsequently, the ore is reloaded to trains on dedicated railway lines, or on conveyor belts or aerial ropeways to the refinery complex or port loading facilities. In the underground mines, dedicated rail lines take the hoisted ore to the blending yards from where it is sent to various refineries by rail. In the case of the Guyana operations, the bauxite is also transported by barge.

The capital replacement programmes for mine transport that are in place are in most cases considered by SRK to be sufficient for the production targets to be met. In a number of mines, ongoing capital investment is required to replace and supplement current equipment, and ensure that deeper ore and waste can be mined according to plan. UC RUSAL is conducting studies regarding upgrading the transport equipment to take advantage of technological improvements where these can be achieved economically. The requirement for road access, and bridges, is most evident at the Guinea operations, and the Jamaica suspended operations, in order to achieve LoM targets.

The railway maintenance facilities inspected during the site visit were in good condition. Some operations have restrictions on capacity due to a single track line and/or equipment constraints. However SRK confirms that the current LoMps do not exceed the current rail capacities.

Regarding the rail transport in Russia and former Soviet Union countries, UC RUSAL has advised that the current agreement (for UC RUSAL facilities) will continue through 2009. This predominantly affects the shipment of the aluminium division and is discussed in more detail under the non-mining assets below.

In a few operations the raw ore requires transportation along privately owned rail lines or by use of leased equipment which has led in the past to relatively high transport costs.

Currently, costs to transport ore from the Kiya Shaltyr Nepheline Mine to the Achinsk Alumina Refinery are being reduced, actions have been developed and evaluation is underway.

2.1.4.2 Non-Mining Assets

UC RUSAL production facilities located in the Russian Federation rely almost entirely upon the Russian national railway network for the importing of raw materials and the exporting of finished products. Russia is the world's largest country, with much of its population separated by long distances. Trunk road links are relatively poor throughout and therefore the entire country is heavily dependent upon the rail system for the movement of all types of freight.

As such, the rail network, although aging and not comparable with modern systems in terms of equipment and signalling, has been maintained to a sufficient level to ensure a relatively efficient transport link and reliable rail infrastructure.

The Russian rail network is largely controlled by Russian Railways, a wholly owned entity of the Russian Federation. Russian Railways was created in September 2003 as the successor to the Ministry of Railways and assumed all assets and operations of the former Ministry of Railways. Russian Railways currently has a monopoly on infrastructure, locomotives and most freight businesses and continues to be the main owner and provider of locomotives and rail cars within the Russian Federation.

Russian railway tariffs are currently regulated by the government and consist of two parts: infrastructure costs and carriage costs. Rail freight rates have increased in recent years, reflecting the reduction of subsidies and local cost inflation which is affecting all Russian industries.

In 2004 RUSAL (prior to the formation of UC RUSAL) signed an agreement with Russian Railways for favourable tariffs on transportation of aluminium and its alloys, alumina, coke and pitch, fluorides and refractories. Under this agreement, the infrastructure component of the railway tariff for transportation on specified routes of certain materials was fixed in US dollars with a fixed exchange rate of 30.6142 RUR/USD until December 2011, provided that increasing annual volume levels were met. The tariffs set by the 2004 agreement are currently applicable to the former RUSAL Russian aluminium smelters and alumina refineries. This agreement does not apply to the former SUAL facilities, which instead pay general tariff rates as set annually by Russian Railways. At the beginning of each year Russian Railways increase general tariffs by the expected rate of price inflation for the forthcoming year. The expected inflation rate is based on the forecast of the Russian Ministry of Economic Development. However, UC RUSAL advised that Russian Railways then subsequently calculates its own rate which in turn determines the tariff indexation. As a rule, the tariff indexation includes an investment component (to implement investment projects) in addition to the general inflation forecast which is based on the increase in the price of materials etc. At the end of the year the rates are retrospectively revised to reflect actual price inflation should inflation turn out higher than applied in the pricing formula for that year.

As UC RUSAL has grown internationally, ocean freight had become more important to the Group's supply chain. Due to the tonnages involved, UC RUSAL constituent companies have traditionally not had any reported problems in securing competitive ocean freights and there is no reason to believe that this will change in the future. Hatch have no reason to believe, therefore, that UC RUSAL will be disadvantaged, compared with its industry peers, with regard to ocean-going freight rates.

2.1.5 Status of Environmental Compliance

2.1.5.1 Mining Assets

UC RUSAL has in place the required environmental permitting and licence requirements in the numerous jurisdictions in which it operates its mines and associated infrastructure (Table 2.3). The significant majority of the operations are in full compliance with the local, regional and national requirements. Whereas some improvements are required to attain current international codes of practice, it is clear that on those properties which the Company has taken over in the last few years, significant improvements have been made and in some instances UC RUSAL has exceeded the legislated local/international requirements, both for projects as well as operations. Further improvements can be made including formal environmental social management and mine closure planning. In many cases, the local management are developing these plans according to the Company's stated objectives.

Ongoing communication is maintained between the UC RUSAL management and the local, regional and national environmental authorities, with the result that UC RUSAL is generally in good terms with their stakeholders.

The most significant environmental challenges at open-pit bauxite mines in the drier environments are related to dust and rehabilitation. In the majority of cases, UC RUSAL's rehabilitation programmes are up to date and in accordance with the regulatory authorities' requirements. In other areas, resettlement and long term social obligations pose potential risks to the operations, though progress is being made to address these challenges such as carrying out additional consultation with the affected parties.

UC RUSAL has, with some of its international assets, inherited environmental problems in areas of historically less regulated mining, such as in Guyana. Here, the Company has the challenge to bring these operations up to its own standards and to the standards of environmental compliance agreements that form part of its mining contract. The Company has been rehabilitating disturbed land in excess of that disturbed by its own operations, to steadily reduce the backlog of inherited environmental disturbance.

In UC RUSAL's operations in the Russian Federation and former Soviet Union, the Company policy is in line with that of other national operators and aims to ensure compliance with legislation and to limit emissions to the amounts stipulated in its permits. The older operations generally do not have an OVOS (EIA) or ESIA, or formal management or closure plans. The newer operations and projects generally have followed more rigorous environmental assessment processes.

In September 2008, UC RUSAL introduced a new operational policy "Assets Retirement and Land Rehabilitation: General Requirements and Guidelines for Liability Assessment". The policy establishes uniform approaches and requirements for rehabilitation of the disturbed lands at UC RUSAL production facilities in accordance with the UC RUSAL Environmental Policy which has recently been implemented. Accounting Policy and International Financial Reporting Standards ("IFRS") are taken into account. Efforts and rehabilitation are actively ongoing and becoming a more integrated part of the operations. Aside from the estimated current environmental liabilities as of 1 July 2009, SRK has to date not reviewed any formal and completed closure plans taking into account past and future planned disturbance and activities.

UC RUSAL's accounting policy requires the recognition of provisions for the restoration and rehabilitation of each site when a legal or constructive obligation exists to dismantle the assets and restore the site. The provision represents management's best estimate of the value to retire the assets as they exist at the time of estimation. This has been termed the Asset Retirement Obligation ("ARO"). This ARO provision is periodically reviewed and updated. The ARO does not incorporate the terminal benefits, being costs related to the retrenchment of employees, which may include various aspects such as retraining. The ARO should not be understood to be equivalent to the mine closure cost at the end of the life of mine. The difference between ARO and mine closure is the additional disturbance to come from future operations.

SRK believes that UC RUSAL has the corporate intent and capabilities to address challenges at those assets that are currently not in compliance with their licence conditions and to address the above considerations to achieve its objective of compliance with international standards. UC RUSAL has demonstrated their commitment to improvements through initiatives such as new environmental policies which have been implemented in 2009.

Four licences are currently "awaiting approval" as shown in Table 2.3. This forms part of the operating practice and is further discussed in Section 2.1.5.2 as relates to Table 2.4.

In the case of North Urals, the operating company SUBR does not currently have the air emissions and waste licences in place. UC RUSAL is currently addressing this and some delay in doing so may result in fines being imposed up to a maximum of RUR 70,000. No additional impact is expected on the operation.

Table 2.3: UC RUSAL Mining Asset Environmental Compliance

Mining Asset	Country	Environmental permit	Water discharge	Air emissions	Waste
Bauxite					
Alpart	Jamaica	Currently not required, controlled by Memorandum of Understanding with Government	Currently idle	Currently idle	Currently idle

Mining Asset	Country	Environmental permit	Water discharge	Air emissions	Waste
Windalco Ewarton	Jamaica	Currently not required, controlled by Memorandum of Understanding with Government	Currently idle	Currently idle	Currently idle
Windalco Kirkvine	Jamaica	Currently not required, controlled by Memorandum of Understanding with Government	Currently idle	Currently idle	Currently idle
Kindia	Guinea	Understood to be covered by mining licence	Not required	Not required	Not required
Friguia	Guinea	Understood to be covered by mining licence	Not required	Not required	Not required
Bauxite Co. de Guyana	Guyana	Not required for historical operations, with environmental aspects controlled by a Compliance Agreement.	Not required	Not required	Not required
North Urals (incl. Petropavlovsk)	Russia	Environmental controls on exploration and project development specified in mining licence.	Obtained and valid to 31 December 2012	awaiting approval	awaiting approval
Timan	Russia	OVOS (EIA) approved by Pechorskiy Interregional Department of Technological and Environmental Supervision on 6 February 2007 and to for 6 February 2012)	Obtained and valid to 31 December 2012	Obtained and valid to 31 December 2011	Obtained and valid to 9 June 2013
Nepheline Syenite/Limestone					
Kiya Shaltyr Nepheline Syenite	Russia	Site became operational before OVOS requirements	Obtained and valid to 12 December 2009	Obtained and valid to 1 January 2012	Obtained and valid to 13 December 2011
Mazulsky Limestone	Russia	Site became operational before OVOS requirements	Obtained valid to 1 January 2014	Obtained and valid to 30 December 2009	Obtained and valid to 31 December 2009
Quartzite					
Cheremshansk	Russia	Environmental controls on exploration and project development specified in mining licence	not required	awaiting approval	Obtained and valid to 2 October 2010
Glukhovsky	Ukraine	Environmental controls on exploration and project development specified in mining licence	Obtained and valid to 13 December 2012	Obtained and valid to 31 December 2013	Obtained and valid to 31 December 2009
Fluorite					
Yaroslavsky	Russia	Environmental controls on exploration and project development specified in mining licence	awaiting approval	Obtained and valid to 19 May 2013	Obtained and valid to 28 April 2011
Coal					
Bogatyr	Kazakhstan	Environmental controls on exploration and project development specified in mining licence	31 December 2009 (annually renewed)	31 December 2009 (annually renewed)	31 December 2009 (annually renewed)

2.1.5.2 Non-Mining Assets

Environmental permits

UC RUSAL operates facilities across a number of geographical locations. Rules and regulations regarding environmental licences and permitted emission levels vary depending on local environmental legislation.

The majority of UC RUSAL assets are located in the Russian Federation. The Russian Federation, like many other jurisdictions, has rules limiting air, water and solid waste discharges to the environment from industrial facilities. These limits, set for the obtainment of environmental permits necessary for plant operations, are different from other guidelines in terms of acceptable emissions levels. Environmental legislation is based on a number of environmental principles contained in the Russian Constitution and enshrined in the Russian Environmental Protection Act. There are more than 20 environmental laws in the Russian Federation and more than 200 related environmental documents.

Following Russian legislation procedures, all industrial facilities must develop a Maximum Permissible Emissions (PDV) Draft based on substances emitted into air, Maximum Permissible Discharge (PDS) Draft for water and Draft Waste Generation Standards and Waste Disposal Limits for solids (PNOOLR). These drafts are further submitted to the local authorities and form the ground for issuing the environmental permit.

Basic payment rates are written into Russian legislation for the emission of one tonne of each matter. In cases where the quantity of contaminants released exceeds the set limits, the plant will be required to make "environmental payments" calculated using the basic payment rates. A plant can be awarded a temporary increase in the PDV/PDS called VDV/VDS (Temporary Permissible Emissions/Discharge) although it must demonstrate initiatives to reduce future pollutants.

Environmental permits for each facility in the Russian Federation are awarded based on expected production and therefore expected emission levels for the duration of the permit. The duration of environmental permits is identified individually for each production facility. Once the permit has expired, the facility is required to apply for a renewal by submitting a new application to the local State environmental authorities under the supervisory body of Rostekhnadzor. In the case of a facility expanding production capacity prior to the end of an existing permit, and therefore increasing expected emission levels, a new permit must be obtained.

As a matter of practice a facility in the Russian Federation can operate without the required permits while its application for relevant documentation to the State environmental authorities is under review. In Table 2.4 this situation is denoted "awaiting approval". This is considered a normal practice and does not impose significant risk to the facility operations. The facility can continue operating without the required environmental permits during the entire permit renewal process. Though the Russian legislation provides that in such circumstances suspension of operations of the relevant facility may be imposed, such penalty is not usually applied in practice. However, during the renewal period there is a risk of increased environmental payments for emitted pollutants. However, these payments are made within limits established by environmental legislation and are not classified as environmental penalties or fines.

Table 2.4 presents the current permitting status at each UC RUSAL facility for solid, air and liquid emissions, as advised by UC RUSAL to Hatch.

Table 2.4: UC RUSAL Environmental Permits

	Air Emissions	Liquid Emissions	Solid Emissions
Asset	**Expiry of Permit**	**Expiry of Permit**	**Expiry of Permit**
Queensland Alumina Refinery	unlimited permit	unlimited permit	unlimited permit
Fria Alumina Refinery	no permit required	no permit required	no permit required
Aughinish Alumina	IPPC[1] & GHG Licences until 16 April 2013	IPPC[1] & GHG Licences until 16 April 2013	IPPC[1] & GHG Licences until 16 April 2013
Eurallumina	currently idle[2]	currently idle[2]	currently idle[2]
Alpart	currently idle[2]	no permit required	no permit required
Windalco-Ewarton Works	currently idle[2]	no permit required	no permit required
Windalco-Kirkvine Works	currently idle[2]	no permit required	no permit required
Bogoslovsk Alumina Refinery (BAZ)	1 September 2010	1 November 2009, new permit expected on 15 December 2009	31 December 2011
Achinsk Alumina Refinery (AGK)	31 December 2009	Issue 1: 1 January 2010 Issues 2 and 3: 1 January 2014	31 December 2009
Urals Alumina Refinery (UAZ)	31 December 2009	2 December 2009	1 January 2010
Boxitogorsk Alumina Refinery (BGZ)	31 December 2011	31 December 2013	1 January 2010
Nikolaev Alumina Refinery (NGZ)	27 December 2012	no permit required	31 December 2009
Zaporozhye Alumina Refinery (ZALK)	currently idle[2]	currently idle[2]	currently idle[2]
Bratsk Aluminium Smelter (BrAZ)	31 December 2009	no permit required	31 December 2009
Krasnoyarsk Aluminium Smelter (KrAZ)	31 December 2009	1 January 2010	31 December 2009
Sayanogorsk Aluminium Smelter (SAZ)	31 December 2010	no permit required	23 April 2012
Novokuznetsk Aluminium Smelter (NkAZ)	31 December 2009	15 November 2009	1 January 2010
Irkutsk Aluminium Smelter (IrkAZ)	31 December 2009	no permit required	31 December 2009
Khakas Aluminium Smelter (KhAZ)	31 December 2010	no permit required	23 April 2012
Bogoslovsk Aluminium Smelter (BAZ)	1 September 2010	1 November 2009, new permit expected on 15 December 2009	11 December 2011
Volgograd Aluminium Smelter (VgAZ)	1 June 2010	no permit required	1 December 2009
Urals Aluminium Smelter (UAZ)	31 December 2009	2 December 2009	1 January 2010
Nadvoitsy Aluminium Smelter (NAZ)	31 December 2009	no permit required	3 May 2010
Kandalaksha Aluminium Smelter (KAZ)	1 December 2010	awaiting approval[3]	31 December 2009
Volkhov Aluminium Smelter (VAZ)	31 December 2011	no permit required	1 December 2009
Alukom Taishet Aluminium Smelter	currently idle[2]	currently idle[2]	currently idle[2]
Kubikenborg Aluminium (KUBAL)	31 December 2011	31 December 2011	31 December 2011
Zaporozhye Aluminium Smelter (ZALK)	awaiting approval[3]	31 December 2009	31 December 2009
Aluminium Smelting Company of Nigeria (ALSCON)	no permit required	no permit required	no permit required

	Air Emissions	Liquid Emissions	Solid Emissions
Asset	**Expiry of Permit**	**Expiry of Permit**	**Expiry of Permit**
Krasnoturyinsk Powder Metallurgy	awaiting approval(3)	no permit required	1 March 2011
Shelekhov Powder Metallurgy	31 December 2009	no permit required	1 January 2010
Volgograd Powder Metallurgy	6 August 2010	no permit required	1 October 2009
Irkutsk Silicon	31 December 2009	no permit required	22 February 2010
Urals Silicon	1 January 2010	no permit required	10 June 2010
Zaporozhye Silicon	currently idle(2)	currently idle(2)	currently idle(2)
Resal	1 January 2011	no permit required	1 January 2012
Bellis	30 September 2010	no permit required	31 December 2013
Zvetmetobrabotka	1 January 2014	no permit required	awaiting approval(3)
ARMENAL	25 December 2011	17 July 2010	no permit required
SAYANAL	31 December 2009	no permit required	11 June 2013
Urals Foil	awaiting approval(3)	no permit required	15 April 2010
Polevskoy Cryolite Plant	19 December 2009	awaiting approval(3)	21 April 2010
South Urals Cryolite Plant	awaiting approval(3)	no permit required	15 December 2010
Lingshi Cathode Plant	30 December 2010	no permit required	no permit required
Taigu Cathode Plant	15 June 2011	no permit required	no permit required

Note:

(1) Unlimited Integrated Pollution Prevention and Control.

(2) Facility is currently idled. As such the permit is not currently required, but must be reapplied for once operations restart.

(3) Final Permit has been submitted for approval by the State environmental authorities. The facility is allowed to operate with a temporary approved permit.

Alumina refinery air emissions

The principal air emissions of concern at alumina refineries are related to the fugitive dust created by materials handling. Typically bauxite unloading, stockpiles, crushing and transfer operations, residue disposal and alumina product transfer all generate non-point source dust emissions which can become a problem during high winds. These sources are difficult to manage, but best practices are to minimize exposed areas, keep stockpiles to a minimum and keep areas where material is exposed wetted to prevent dust generation. Bauxite and alumina can be transferred in enclosed conveyors, with dust collection at transfer points.

Other sources of air emissions are sinter kilns, calciner kilns and power plants. Particulate capture is typically affected by electrostatic precipitators. The capture efficiency will usually depend on the age of the precipitator. SO_2 emissions are controlled by the use of low sulphur fuel. Best practice is a modern precipitator or scrubber technology to significantly reduce point source emissions, both from raw materials handling and process off gases.

Site specific emission issues may occur with odour from release of complex organics (principally from digester vents), and from caustic mists (principally from the Bayer plant flash tank relief).

A number of the Group's plants have historically maintained capital investment in equipment upgrades, but certain older plants in the Russian Federation and Ukraine have not benefited from the same historical level of environmental capital investments.

Alumina refinery liquid emissions

Liquid emissions from alumina refineries can be categorised as follows:

- Process effluents consisting of excess liquor from the process, including spills, and overflows.
- Stormwater from the process plant area.
- Groundwater flowing through, or off, the plant site footprint.
- Red mud excess liquor discharging to environment.
- Stormwater from the red mud containment area, discharging to the environment.
- Groundwater under red mud containment flowing through the site or offsite.

In addition, liquid releases to the environment can occur from storage tank overflows or failures, where these are not bunded or otherwise contained.

Modern best practice for liquid effluent is zero liquid discharge during normal operations. This is achieved by:

1. Providing each process area within the plant with kerbed pad and internal drainage reporting to a spill collection sump. Any sump contents are recycled back to the process.

2. Stormwater from process areas also reports to this sump and is recycled as far as possible, depending on intensity and duration of storm. When the capacity of the internal recycle is exceeded during heavy rain events, the stormwater overflows to a site drainage system which reports to a stormwater management pond. This pond is sized to contain run off resulting from significant storms. Exact capacity is sized based on consequences of discharge to downstream. These ponds are equipped with recycle pumps so that stormwater can be returned for processing. (Stormwater run off is normally contaminated with some soda and metals). Any stormwater that is unavoidably discharged to the environment requires treatment by neutralisation/precipitation.

3. Groundwater contamination is an issue that is currently receiving attention. The concrete pads typically used for process areas are subject to corrosion from caustic and thus groundwater under the plant can become contaminated. The problem can be managed during initial construction by installing an impervious barrier. However almost all existing refineries are built without this feature due to their age and where groundwater contamination is likely to be an issue in the long term, containment well point dewatering followed by recycle to the plant, or groundwater treatment before discharge to the environment is required.

4. Best practice is to recycle the liquor back to the plant to make use of the soda values and avoid liquor treatment costs, as treatment to neutralise/precipitate solids is required before discharge to the environment. Some facilities are designed with a layer of sand above the liner which drains to a recycle sump. This aids in the dewatering of the red mud.

5. Stormwater management requires containment of the excess run off in the red mud pond followed by gradual recycle back to the plant. Any excess stormwater to be discharged to the environment requires treatment by neutralisation/precipitation.

6. Bauxite residue, which is commonly known as "red mud", is a by-product of the Bayer and sintering process. Where groundwater is identified as being contaminated by seepage/leakage from red mud containment areas, the remedial action should be as indicated in item 3 above. Modern red mud containment areas are typically installed with impervious liners (high-density polyethylene or similar) to prevent this issue.

Historically, in the Russian Federation, dried red mud was compacted to form an impermeable liner. This may represent a future liability of presently unknown magnitude for those red mud storage areas that have followed this practice. However, all new red mud storage areas within Russia are constructed using an impervious membrane.

Certain of UC RUSAL's plants have legacy issues relating to red mud containment and associated groundwater contamination issues. Management is aware of this and efforts are underway to mitigate these legacy issues.

Alumina refinery solid emissions

Bauxite residue is chemically stable and is not defined as toxic. However, it is considered to be a low to medium hazard waste because of its corrosive nature. The amount of residue generated by the Group's operations per tonne of alumina produced varies greatly depending on the type of bauxite used, from 0.3 tonnes for high grade bauxite to more than 2.5 tonnes for very low grade.

Key general concerns with respect to the operation of bauxite residue disposal facilities include the following:

- Due to large production volumes, extensive areas of land are required for disposal, with corresponding rehabilitation and closure requirements to ensure a stable landform in the long term. In many cases the land is not able to be returned to its previous use.

- Seepage of alkaline liquor into the environment can impact on natural ecosystems and potable water resources.

- Dust generated from red mud disposal facilities can be irritating due to its alkalinity and may negatively impact on local residents and businesses.

- Disposal facilities typically contain large volumes of wet and soft materials that require stringent engineering design and construction of containment embankments that often exceed 50 m in height to avoid the potential for catastrophic failure.

The alumina industry has long recognised that there is a need to improve residue disposal techniques in order to reduce both the cost and environmental impact of bauxite residue disposal facilities. As a result, there has been a move towards more economically efficient and environmentally acceptable disposal methods.

Current global (minimum) best practices can be summarized as follows:

1. The containment will be lined with a minimum of 0.5 m of mechanically compacted clay. Other types of acceptable liner systems are synthetic or composite liners which achieve at least the same impermeability.

2. Installation of a base drainage system below the liner to reduce hydrostatic pressure on the liner.

3. Containment of stormwater for not less than the 1 in 25 year storm event.

4. Embankments designed for long term stability.

5. Buffer zone around facility.

6. Monitoring wells located on the perimeter to detect seepage/leakage.

7. Dust management by planting tree barriers and wetting of dry areas.

8. Improvements to low density deposition of bauxite residue are high rate thickeners to increase density and reduce liquor content resulting in less land required. Further increases in density can be achieved by filtration, however this is costly.

9. Rehabilitation and Closure plan prepared and budgeted from current income to provide funds at end of life of containment pond. (Sometimes known as Asset Retirement Obligations).

10. Annual inspections by an independent third party.

Historically, in the Russian Federation, red mud after mechanical compaction was used as a liner to red mud containment areas. This is considered by the operations to be a sufficient barrier to prevent leakage and seepage from red mud containment facilities, although this is not considered to be adequate elsewhere in the world. However, all new red mud storage areas within Russia are constructed using an impervious membrane.

This may represent a future liability for the Russian Federation refineries. Refer to Section 4 for an overview of the alumina process residue disposal situation at individual UC RUSAL refineries.

Aluminium smelter air emissions

Air emissions from the primary aluminium smelting process include gaseous and particulate fluorides; alumina dust, coke dust, sulphur and carbon dioxides, tars, PAHs, carbon dust, fluxing emissions and carbon oxides. The potlines are the major source of air emissions, with the gaseous and particulate fluorides being of prime concern. Anode effects, caused by a temporary instability in the electrolytic smelting process, result in emissions of carbon tetrafluoride (CF_4) and carbon hexafluoride (C_2F_6), which are greenhouse gases (GHG) of concern because of their high "equivalent carbon dioxide" status. The above-referenced emissions from the aluminium process can generally be classified as particulates or gases.

Limits and guidelines for the emissions from smelters generally relate to gaseous and particulate (dust) fluorides and Volatile Organic Compounds (VOC) emissions. Gaseous emissions arising from anode effects are typically not included in limits and guidelines prescribed by environmental authorities since these situations are not considered to be representative of "normal" aluminium smelter operations.

Oxides of sulphur and nitrogen are generally produced in greater quantities in Söderberg cells than in pre-bake cells. These emissions have both a local and regional effect on vegetation and human health. Internationally, they are generally controlled by the use of specific mixes of cokes and pitches in the production of the anode or paste. Hydrogen fluoride is of major concern locally to the smelters due to its effects on vegetation and consequent animal and human health and, following the Kyoto protocols and the Rio and Johannesburg Earth Summits, GHG emissions are now of similar concern both locally and internationally.

CO_2 is used as the base GHG emission measure. In the manufacturing of aluminium metal, large quantities of CO_2 are produced both from non-hydro fuel power generation and from the process itself. In the smelter, approximately 3.6 tonnes of CO_2 are produced from the cells for every tonne of aluminium produced. Of more importance though, from a GHG perspective is to minimize anode effects and the associated emission of the Perfluorocarbons (PFCs), C_2F_4 and C_2F_6. These gases cannot be captured by fume treatment plants, but their emissions can be decreased by reducing anode effects with improved pot control systems.

The occurrence of anode effects, and thus the volume of PFCs released, is reduced when using modern pre-bake technology as compared with Söderberg technology. As discussed in Section 2.3.2.1, a majority of UC RUSAL's primary aluminium production uses Söderberg technology and, as a result, PFC emissions and overall air emissions in general are higher than compared with the modern pre-bake technology.

There are, however, various specific capital investment programmes, which are being undertaken by UC RUSAL to improve the environmental performance of Söderberg technology, including the introduction of gas-scrubbing systems, electrostatic precipitators and point feeders. These measures are expected to reduce the risk of claims by the environment protection authorities for breaching harmful air emissions limits and improve the ecological situation in the regions surrounding the aluminium smelting facilities.

Aluminium smelter solid emissions

A significant solid waste from aluminium smelters is cathode waste shown as Spent Pot Lining (SPL) which is classified as a hazardous material. Internationally, SPL is currently stored in hazardous waste disposal sites pending developments in waste treatment and recovery techniques. SPL has properties that can make it a valuable material for use in other processes, such as cement production, mineral wool production, low-grade coke production and construction.

Currently, the majority of UC RUSAL smelters store SPL in lined and enclosed landfill facilities adjacent to the plants with only a small portion of the material being utilised for other operations. Russian aluminium smelters previously sold part of the carbon from SPL to third parties, but this is no longer typically practiced. In order to re-use SPL for needs of other industries, this material has to meet specific requirements related to its physical parameters. There is a plan to expand an existing SPL processing facility at Novokuznetsk Aluminium Smelter and develop a process to obtain a suitable material for the steel making industry based on the SPL waste accumulated at other nearby Siberian smelters, including Sayanogorsk Aluminium Smelter, Khakas Aluminium Smelter, Bratsk Aluminium Smelter and Krasnoyarsk Aluminium Smelter.

2.1.6 Specific Risks and Future Opportunities

2.1.6.1 Mining Assets

Specific Risks

- **Legal, Political and Regulatory Risk** — In the countries where UC RUSAL has operations and projects, there is a degree of legal, political and regulatory risk such as changes to laws or the judicial interpretation of laws, expropriation, changes in taxation or royalty regimes, non-issuance, and cancellation or revocation of permits or licences. Other large mining and metal companies also operate in these same countries. The World Bank and IFC are also often involved in large resource projects and other capacity building, aid, infrastructure health and education projects which can confer stability on such countries.

- **Freight and Transport** — Regarding UC RUSAL's mining operations in Russia, in-country national rail freight rates cannot be negotiated under long-term contracts at present. Without the ability to do this, mitigating rising freight rates in excess of those rates forecast, is difficult. The locations of UC RUSAL's overseas mines which do not have a local refinery, and where the refineries which they feed are remote, are influenced by sea freight price changes. UC RUSAL is also at some risk of price increases where the rail lines or equipment do not belong to the Company. Tariffs are generally regulated by the State and the Transport Ministry and UC RUSAL is continually negotiating with transport entities to secure long-term agreements to manage the freight price risks.

- **Social/Labour Risks** — UC RUSAL operates in countries and areas with known histories of social and labour disputes. Such disputes may continue to impact on a local and regional basis.

- **Environmental Compliance and Liabilities** — The significant majority of the mines are in compliance with environmental regulations. A few are not in compliance mainly due to historic liabilities. In some mines, environmental practices need to be improved to meet international standards. The current practice in Russia is that upon decommissioning of an asset, the land, facilities and the historical environmental liability revert to the State. This practice may at some point change in line with internationally accepted practice, putting the responsibility for both environmental and social remediation onto UC RUSAL. In addition, all the projects and operations face the risk of increasing international attention on labour and community issues, which may result in increased regulatory and stakeholder pressure for greater financial commitments in the future. Whilst a number of UC RUSAL's mines have communities which are largely dependent on the continuation of the operations for their sustainability, eventual closure of the mines may lead to liabilities not currently anticipated.

- **Ore Reserve Risk for Continuity of Mining Operations** — UC RUSAL currently has title to JORC Code compliant bauxite Mineral Resources of approximately 1.8 billion tonnes including approximately 384 million tonnes of JORC Code compliant bauxite Ore Reserves of saleable grade. This is sufficient for medium to long term feed to most of the UC RUSAL plants, a few of the Ore Reserves for specific UC RUSAL plants are only sufficient for a limited number of years. UC RUSAL is aware of these situations and has only short to medium term programmes in place to continue to convert Mineral Resources to Ore Reserves and to increase their Mineral Resources through exploration to secure the longer term future of the operations.

- **Equipment Risk** — A significant proportion of UC RUSAL's mining equipment, although well maintained, is ageing and has exceeded its expected technical or economical life. UC RUSAL annually allocates funds for sustaining capital for equipment replacement. UC RUSAL is pioneering the use of the high technology of surface miners for bauxite mining. Whereas this technology is improving, where the surface miners are proposed to be the sole or prime excavation method, there is a degree of risk regarding equipment availability. Further analysis and development is proposed by UC RUSAL to increase equipment availability. Whereas this, and the provision of backup equipment may mitigate much of this risk, there may be the requirement to provide for the alternative of conventional drill and blast excavation and/or additional surface mining units.

- **Mines under Care and Maintenance** — Operations at Alpart and Windalco have been suspended and the mines (and refineries) placed under care and maintenance. This may have future implications on the respective licences held by UC RUSAL or its subsidiaries.

Future Opportunities

- UC RUSAL has the ability to secure and develop reliable, good quality, low cost supplies of bauxite from its overseas and Russian mines which can support downstream refineries and smelters either through the acquisition of others' interests or by the nearby expansion of its existing mines by ways of exploration programmes. The Company continues active exploration programmes to add to its Mineral Resource inventory of 1.8 billion tonnes and is continuously undertaking infill exploration work to convert its Mineral Resource inventory to Ore Reserves.

- **Development of Integrated Mines and Refineries** — UC RUSAL is actively expanding its portfolio of bauxite exploration projects in areas with significant potential and where mine mouth alumina refineries could be established. In this way UC RUSAL would further consolidate its strategic position.

- **Increasing Ore Reserves** — Most of UC RUSAL's properties have significant Mineral Resources which may, with ongoing exploration, study and life of mine planning for each operation, be translated into Ore Reserves and hence prolong the life and quality of the feed to the alumina refineries and other mineral processing plants.

- **Technology and Efficiency Improvements** — The replacement of the ageing mining and transport equipment with new equipment, and the introduction of new technologies can improve efficiencies and provide an opportunity to reduce costs.

- **Long-Term Mine Planning** — Long-term mine planning and life of mine planning using up to date computerised methods will allow improved capital investment planning, economic optimisation, flexibility and utilisation of the resources.

- **Environmental Opportunities** — The implementation of improved environmental and social management planning and the definition and implementation of integrated planning for closure may mitigate the environmental risks and, in the long-term, improve efficiencies, reduce costs and create an improved culture and motivation of the workforce.

- **Knowledge Transfer** — The Company has developed specific know-how of mining bauxites in particular conditions. This knowledge can be transferred within the Company and may result in improved mining efficiencies.

2.1.6.2 Non-Mining Assets

Specific Risks

Any organisation such as UC RUSAL which has inherited and procured a diverse range of aging assets in recent history would be expected to be subject to a range of technoeconomic and operational risks. The following points illustrate the primary risk factors that may potentially affect UC RUSAL should they arise:

- **Energy Provision** — The energy providers to UC RUSAL have, in some instances, a similar aging group of energy generation facilities ranging from hydroelectric to gas and coal fired power plants to nuclear facilities. Although they are known to have been designed with redundancy provision in case of major breakdown or maintenance, it is difficult to mitigate against the risk of catastrophic failure to one or more of the energy providers'

installations. Depending upon the region and size of alternative network supply, this may have a material impact on UC RUSAL's production. The incident at the Sayano-Shushenskaya HPP on 17 August 2009 provides an example of the potential risks to the provision of energy to UC RUSAL facilities.

- **Electrical Energy Pricing** — The on-going deregulation within the Russian electricity industry creates a risk of increased energy costs. This is balanced against the need for the generation and transmission companies to sell their product in isolated areas, and of competition from energy providers in areas of more abundant energy supply. Ultimately, UC RUSAL may decide to develop more of its energy in-house which is normally achievable at rates that enable economic aluminium production.

- **Gas Market Deregulation** — Gas prices in the Russian Federation are currently strictly regulated by the State and are set at levels significantly lower than prices achieved by resident gas producers for exporting gas. The State has announced that these controls will be lifted by 2011, allowing Russian gas suppliers to charge the same prices, minus a freight differential, to domestic and export customers. The end of regulated gas prices in the Russian Federation from 2011 creates the risk of higher energy prices, which could negatively impact UC RUSAL's refining operations.

- **Freight** — Although the rail infrastructure in the Russian Federation has proved itself capable of transporting many million tonnes of material over large distances, much of the system is aging and requires sustaining capital expenditure in addition to upgrading of rolling stock, signalling and other improvements. Historically, freight rates have been comparatively cheap when benchmarked with other international rail systems. However, with potential deregulation and privatisation in addition to all the noted cost pressures, there is a risk that freight rates within the Russian Federation may increase at a rate greater than general price inflation.

- **Labour Cost Inflation** — Fluctuations in the Russian labour market could impact upon the costs for recruiting and retaining skilled engineers, constructors and operators. Although the market is currently depressed and labour is freely available, this may not be the case over the next few years.

- **Rising Capital Costs** — The cost of building new alumina refining and aluminium smelting capacity has increased strongly worldwide in recent years. This is largely being driven by the requirement to meet increasingly stringent environmental laws and regulations. However, bulk material labour and equipment costs represent good value at the present time, although this may not be the case over the next few years if global economies recovery more quickly than forecast. UC RUSAL developmental capital projects could also be subject to these pressures.

- **Social/Labour Risk** — UC RUSAL operates in areas with known histories of social and labour disputes and this may have a negative impact on its operations should these bear relevance to its operations and/or local areas.

- **Environmental Compliance** — UC RUSAL is subject to a broad range of increasingly stringent laws and regulations in each of the jurisdictions in which it has operations. Any changes in such laws and regulations may significantly impact the costs of operations and in certain cases may impact the ability of UC RUSAL to continue operations at certain facilities.

- **Environmental Liabilities** — The current practice in the Russian Federation is that upon decommissioning of an asset the land and facilities, including any historical environmental liability, revert to the State. This practice may at some point change in line with internationally accepted practice, putting the responsibility for both environmental and social remediation onto UC RUSAL. Generally, it is accepted that the cost of decommissioning a smelter and associated facilities is normally cash neutral due to the amount of aluminium, steel and land to be released. It is not possible without extensive, detailed evaluation, to mitigate the potential for long term environmental liabilities to be applied to any site under UC RUSAL's control.

- **Asset Integrity** — Many UC RUSAL assets are operating beyond their normal economic life and consequently many buildings, structures and large items of equipment have far exceeded their original design life. While it is considered that all of UC RUSAL's assets can continue to operate in the medium term should sufficient sustaining capital be allocated to each facility, structural or other failures could be possible which may affect production of one or more production facilities within the group. However, UC RUSAL has advised Hatch that it maintains adequate levels of insurances against production losses due to infrastructure or equipment failure.

- **Natural Hazard Events** — UC RUSAL operates in areas with known histories of natural hazard events, such as hurricanes and earthquakes, and this may have a negative impact on its operations should these bear relevance to its operations and/or local areas. For example, UC RUSAL alumina refineries in Jamaica have been impacted to varying degrees and suffered production losses through hurricane events in recent years. However, UC RUSAL has advised Hatch that it maintains adequate levels of insurances against production losses due to natural hazard events.

- **Dependence on Bauxite Purchases** — UC RUSAL currently procures a significant volume of its bauxite requirements each year for its alumina refining operations. Eurallumina and Aughinish Alumina are reliant on imported third party bauxite from one or more supplier. Nikolaev Alumina Refinery and Zaporozhye Alumina Refinery meet a portion of their annual bauxite requirements through third party purchases. Queensland Alumina Ltd, in which UC RUSAL holds a minority stake, sources bauxite from the Weipa mine (not owned by UC RUSAL). However, the supply of Weipa material is not considered a risk since the owner of the Weipa mine, Rio Tinto, is also the largest shareholder in Queensland Alumina Ltd. Third party bauxite is predominantly sourced through long-term contracts, which are augmented by occasional spot market purchases. UC RUSAL has a long-term strategy to reduce reliance on purchased bauxite through the development of the Dian-Dian project. Should there be any delays to these projects, this will maintain UC RUSAL's significant exposure to the third party bauxite market and may potentially result in higher bauxite costs.

- **Legal, Political and Regulatory Risk** — Like with any company operating in countries where UC RUSAL has operations, UC RUSAL faces legal, political and regulatory risk such as changes to laws and regulations or the judicial interpretation of laws, expropriation, changes in taxation or royalty regimes and non-issuance, cancellation or revocation of permits or licenses.

In addition to general risks, Hatch has identified risks which are specific to individual facilities. These are discussed in the relevant facility section of Sections 4 to 9 of this report.

Future Opportunities

Any organisation on the scale of UC RUSAL also has many opportunities open to it. The main areas of opportunity include:

- **Proprietary Smelting Technology** — Many of the world's largest aluminium companies are actively developing their own specific form of technology, and UC RUSAL is no exception. UC RUSAL is in the process of developing new high amperage pre-bake technology at Sayanogorsk Aluminium Smelter including RA-300M, RA-400 and plan to install RA-500 cells in the near future. The technology development has been reviewed with the assistance of recognised industry experts and a variant of the RA-300 cell technology was selected for the Khakas Aluminium Smelter. RA-500 is considered by Hatch to still require significant development, however. The cell technology represents an intangible asset which combined with the cell development experience at the Company is expected to be used to support the development of new UC RUSAL smelters in the region and possibly revenue from additional technology sales to others. The provision of UC RUSAL proprietary smelting technology was an important factor in securing partnership for the Boguchanskoye Energy and Aluminium Complex. Sayanogorsk Aluminium Smelter provides a training ground for smelter operators ensuring that UC RUSAL employees are operationally ready for the new smelter projects.

- **Stranded Energy Utilisation** — A long-term low cost energy supply is key to the development of all smelter projects. Russia is one of the few regions of the world with abundant energy supplies in the form of hydro, coal and gas. UC RUSAL, with its highly prospective portfolio of smelter development projects is uniquely placed to take advantage of the stranded energy through long-term contracts and proposed power plant projects.

- **Project Development Experience** — The construction of IrkAZ-5 and Khakas Aluminium Smelter represent the first major aluminium capacity projects in the Russian Federation since Sayanogorsk Aluminium Smelter was constructed in the 1980s. The IrkAZ-5 and Khakas Aluminium Smelter projects have provided an opportunity to demonstrate the internal Engineering, Procurement and Construction Management (EPCM) capabilities of UC RUSAL. The engineering, fabrication, construction and operations start-up experience that has been gained on these projects is intended to assist the portfolio of growth projects. UC RUSAL and its subsidiaries will have obtained significant expertise from the IrkAZ-5 and Khakas Aluminium Smelter projects.

- **Growth Projects** — UC RUSAL has a number of attractive greenfield and brownfield expansion projects in various stages of development that are expected to provide significant future growth opportunities for the Company.

- **Modernisation of Existing Facilities** — In addition to the proprietary cell technology, UC RUSAL has developed stationary calciners, dry gas treatment centres, centralised alumina distribution systems, point feeders, cell control systems, process control systems and a comprehensive range of other technologies that are expected to improve efficiency, reduce emissions, increase production, improve quality and reduce costs. The Engineering Technology Centre creates the opportunity to capture this "know how" and coordinate the implementation across the UC RUSAL group companies.

- **Aluminium Smelter Efficiency Upgrade** — It is common within the aluminium industry to progressively increase line current. This is commonly referred to as production creep. UC RUSAL has performed a benchmarking exercise of their existing cell technologies with

other operations and has identified opportunities to increase metal production at several facilities at relatively low CAPEX. In addition, all smelter management teams are now focused on improving the cathode life of cells and reducing the cell turnaround time. These two important initiatives were observed at UC RUSAL smelters during the site visits. These projects may assist in reducing OPEX of the existing operations under current input price arrangements.

- **Alumina Refinery Efficiency Upgrade** — It is common within the alumina industry to progressively increase alumina production by identifying and removing bottlenecks within the production process. The higher production delivered from a de-bottlenecking project is typically achieved at a lower capital expenditure per tonne of alumina than compared with brownfield capacity expansion projects and may also contribute to reduction of operating costs. Ability to undertake debottlenecking initiatives were observed at UC RUSAL refineries during the site visits, and they may prove economic as suggested above.

- **Product/Market Opportunities** — Several opportunities present themselves at UC RUSAL facilities to enhance existing products or develop new product lines using existing or new technology. Such opportunities, where they exist, are discussed in the individual facility descriptions in Sections 4 to 9.

- **Overseas Opportunities** — The Group has many overseas opportunities which may result in obtaining reliable long-term, low cost supply of bauxite, alumina, anodes and cathodes. These are planned to further reduce operating costs and increase profitability.

- **Synergies** — There is potential for further synergy from the creation of UC RUSAL in 2007. This includes improvements in supply chain management, the adoption of best practice operational and management techniques and implementation of project optimisation methods. The Company incorporates assets located throughout the world, and this is expected to provide benefits through cross-education, information and experience sharing.

- **Vertical Integration** — UC RUSAL is vertically integrated throughout the aluminium supply chain. This provides partial security of raw material supply and off-take for its production.

- **Strategic M&A** — Consolidation of the global aluminium industry continues to offer attractive opportunities. UC RUSAL is a leading player in the global aluminium industry and is well positioned to add value through future merger and acquisition activity.

In addition to general opportunities, Hatch has identified opportunities which are specific to individual facilities. These are discussed in the relevant facility section of Sections 4 to 9 of this report.

2.1.7 Sales and Marketing

2.1.7.1 Mining Assets

UC RUSAL uses the mined raw materials predominantly within its own downstream processing units and has a number of internal departments and trading companies which conduct international and in-Russia sales as well as raw material purchases. These are as follows:

- The Department for the Supply of Alumina and Bauxite is responsible for sales and purchase of bauxite.

- The Department for Power Resources is responsible for sales of coal for power generation.

A number of the mining facilities deliver their raw materials directly to their downstream processing units. In these cases, the mine is considered to be a cost centre of the integrated facility and generally delivers the materials either at cost, or on a cost-plus margin basis. In some instances the mine has a fixed or renewable contract in place with the receiving facility. These contract transfer prices may be lower than the cost of producing the raw materials and delivering them to the transfer point.

Bauxite

UC RUSAL consumes all of the bauxite that it produces, with the exception of minor third party sales from time to time.

The following companies, which are integrated parts of UC RUSAL, are responsible for the sales of bauxite:

- RTI Limited: for Kindia bauxite.
- Trombetas purchases and resells bauxite.
- BCGI: Guyana.
- JSC Timan Bauxite: OAO Sevuralboksitruda for its own bauxites.
- UC 'RUSAL-Trading House' (sales to third parties inside Russia).

Nepheline Syenite and Limestone (AGK)

The Kiya Shaltyr Nepheline Syenite mine and the Mazulsky Limestone mine deliver all of their products to the Achinsk Alumina Refinery. There is no external market for the nepheline syenite and limestone other than as aggregate. The products from the Achinsk process include alkali salts as well as alumina.

Quartzite and Silica

The Cheremshansk Quartzite Mine delivers the majority of its higher value products to the Kremny plant, also named Irkutsk Silicon. A lesser tonnages of silica for smelting to silicon metal is supplied to Kremny Ural, also named Uralsky Silicon. High quality quartzite (1 and 2 grade) is supplied to Irkutsk Silicon, and Uralsky Silicon occasionally consumes quartzite of 3 and 4 grade.

As of 2010, the Glukhovsky Quartzite Mine's silica product, will be sold externally from UC RUSAL, under contract, yet to be agreed and signed. The silica was previously supplied to the now closed UC RUSAL JSC Zaporozhnye Aluminium Industrial Complex, a subsidiary of JSC ZALK.

Fluorite

UC RUSAL is 50% owner of the Yaroslavsky Fluorite mine. The other 50% owner is OOO RGRK who is the managing entity. The Aluminium Division of UC RUSAL determines the requirements of CaF_2 for the UC RUSAL aluminium plants and places orders of between 100 and 110 ktpa, equating to some 94% of total production. The remaining product is sold primarily within Russia.

Coal

The coal from TOO Bogatyr Komir is sold to power plants located both in Kazakhstan and Russia. In 2008, 22 Mt of coal from the mine was sold to Russian power stations and 24 Mt sold to Kazakh power stations. Large system-forming power plants such as Reftinskaya GRES, Troitskaya GRES, Ekibastuzskaya GRES-1 and Ekibastuzskaya GRES-2 are among TOO Bogatyr Komir's customers.

2.1.7.2 Non-Mining Assets

Selling process

RUSAL Trading International (registered in Jersey with its office in Gibraltar) is the Principal for international sales of products executed by RUSAL Marketing GmbH.

Rusal Marketing GmbH (located in Switzerland) acts as an undisclosed agent of RUSAL Trading International in respect to the sales of alumina and aluminium to third parties

UC RUSAL has several other non-resident trading companies which are involved in internal transfers within the group related to alumina, namely Alumina and Bauxite Ltd. (Albaco), Mont Cervin Consultadoria e Servicos (Mont Cervin), Calibre Properties Worldwide Limited (Calibre) and UC RUSAL Alumina Jamaica II Holdings Ltd. (UC RUSAL Holding).

UC RUSAL has a number of trading companies which conduct aluminium sales, which include:

- RUSAL Marketing GmBH (located in Switzerland) acting as an undisclosed agent undertakes international sales (with the exception of CIS countries) of primary aluminium (ingots, sows and T-bars), aluminium alloys (wire rod, slabs, extrusion billets and a wide variety of primary foundry and secondary aluminium alloys) and foil. Silicon is also sold by RUSAL Marketing GmBH on behalf of Rusal Trading International.

- RUSAL America Corp. (located in the USA) is responsible for international sales of primary aluminium (ingots, sows and T-bars), and aluminium alloys (billets, slabs, primary foundry alloys and wire rod).

- RUSAL Trading International (located in the USA) is responsible for North American sales of primary aluminium products to CIS countries (with the exception of Belorussia).

- RUSAL Europe (located in Germany) was previously responsible for international sales of foil products to Europe, but is currently being wound-up in accordance with current restructuring plans.

- UC RUSAL — Trading House (located in the Russian Federation) is responsible for domestic sales of primary aluminium (ingots, sows and T-bars), and aluminium alloys (billets, slabs, primary & secondary foundry alloys), foil, silicon and other aluminium goods, e.g. busbar and rod.

- Zaporozhye Aluminium Smelter is responsible for the sale of primary aluminium products to Ukraine.

- SUAL-PM LLC is responsible for the sale of aluminium powder products.

Alumina

UC RUSAL has historically been a seller of alumina to third parties. Traded alumina was from two sources; firstly, from the Company's alumina trading activities, and secondly, from the surplus of alumina produced internally by its refineries over the internal consumption of alumina from its aluminium smelters.

Historically, alumina has been sold through a mixture of spot and contracted sales.

UC RUSAL attributable alumina production in the first half of 2009 was not sufficient to meet the alumina requirements of its aluminium smelters, thus requiring the net purchase of alumina from third parties.

Aluminium

UC RUSAL has a comprehensive strategy for sales and marketing of its primary aluminium production built around two principles:

- Market driven approach — where the marketing function is driving the production function in order to deliver the optimal product mix that maximises the profits and increases the sustainability of the company

- Balanced regional sales strategy which allows UC RUSAL to be represented in all major markets

- Targeting end-users as priority customers and utilising opportunities provided y trading companies to sell the total volume of UC RUSAL's production capacity.

UC RUSAL apply the following criteria in order to meet the above principles:

- Ensuring the entire annual production capacity is sold

- Optimising premiums

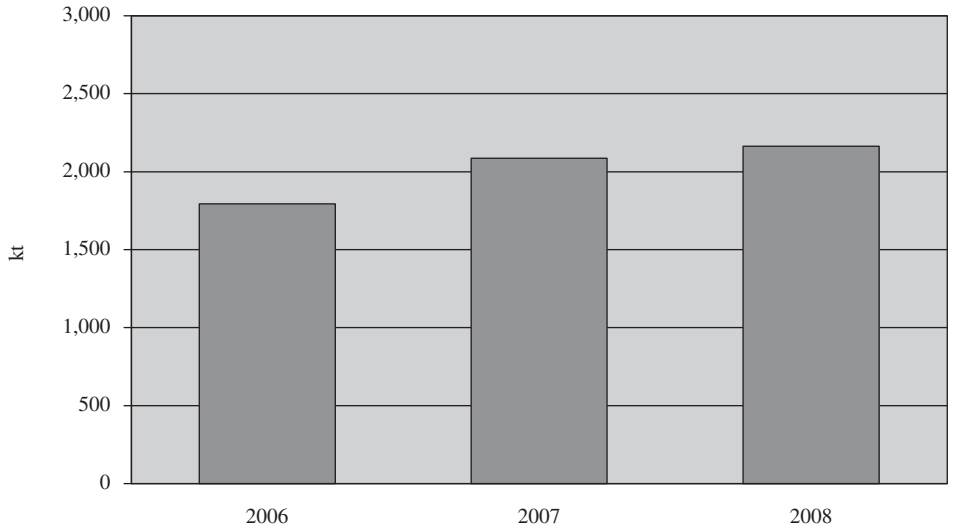
- Developing value added products

- Minimising risk

The first priority of the Company is to maximise the sale of Value Added Products (VAPs), such as alloys, billets, slabs, wire rod and high purity aluminium, and then to sell the remainder as primary metal (remelt ingot). UC RUSAL also considers the domestic market as a priority regional market.

Over the past three years, the volume of VAPs produced by UC RUSAL has increased from 1,793 kt in 2006, 2,086 kt in 2007 to 2,164 kt in 2008, as shown in Figure 2.4, highlighting the successful implementation of this strategy. In terms of the percentage of UC RUSAL aggregate attributable saleable aluminium production, VAP's comprised approximately 45 per cent of the total in 2006, 50 per cent in 2007, and 49 per cent in 2008. Combined with its strategy of increasing production of VAPs, UC RUSAL has successfully increased sales directly to customers, and in particular large and established aluminium processing companies, and reduced deliveries onto the LME and sales to traders.

Figure 2.4: Output of Value Added Products(1)



Note:

(1) All data has been provided by UC RUSAL and has not been verified by Hatch.

UC RUSAL's entire yearly production capacity is sold through a combination of annual contracts and spot sales. The Company plans to sell as much VAPs through annual contracts as possible, and around 50 to 80 per cent of the annual production volume of primary aluminium through annual contracts. The balance is made through spot sales. The percentage of export metal sold on an annual basis is decided year by year, depending on demand forecasts and expectations for premiums.

While UC RUSAL prioritises domestic sales over exports, the general low level of downstream aluminium processing in Russia results in UC RUSAL exporting a high percentage of the output of its Russian smelters. In 2008, UC RUSAL sales by geographic region were: Europe (48% of total), Asia (23% of total), CIS (23% of total) and the United States of America (8% of total). While UC RUSAL exports its goods throughout the world, the Company has stated the priority of markets for sales of VAPs as follows (in order of priority): CIS, Europe, Asia and North America. Within this stated aim UC RUSAL plans to maintain a presence in all markets to take advantage of evolving regional conditions, particularly in terms of premium maximization and logistical issues but look for opportunities in other markets as well.

UC RUSAL sells primary aluminium based on a combination of the LME cash aluminium price (typically the average of the month) plus premium. The premium depends on the market, product type, quality, brand reputation, terms of delivery, payment terms, quotation period, and current market trends. The Company maintains a flexible approach to the setting of premiums, although it will attempt to fix premiums on an annual basis when particularly attractive terms are on offer.

All prices for Russian customers are limited in accordance with the document of the FAS (the Federal Anti-monopoly Service) of the Russian Federation.

Powder, Silicon, Secondary Aluminium and Raw Materials

The price for silicon metal for export sales is calculated on the basis of the existing market situation (supply/demand), production cost and the published price indicator of the market. For domestic sales, the price is calculated on the basis of published price indicators in major world markets.

The price for aluminium powders is defined on the basis of LME quotations for the period, in addition to a premium. The premium depends on the market, product type, quality, terms of delivery, payment terms, quotation period, and current market trends.

All prices for Russian customers are to be limited in accordance with the document of FAS (Federal Antimonopoly Services) of the Russian Federation.

The vast majority of aluminium fluoride and cryolite produced by UC RUSAL is consumed internally by UC RUSAL aluminium smelters, although a small volume each year is typically sold to the aluminium smelters located in Azerbaijan and Tajikistan.

The entire production of reduction cell lining products and cathode blocks from the Lingshi and Taigu cathode plants is used internally at UC RUSAL smelters in the Russian Federation and Ukraine.

Packaging Division

UC RUSAL's packaging operations export a significant proportion of output, with the remainder being consumed in Russia. During 2008, the Packaging Division shipped product to consumers in Europe, North and South America, Africa, Australia and the Middle East during this period.

The terms of sale for packaging products is typically based on the average LME cash aluminium price for the month proceeding the month of sale.

2.2 Mining Assets

2.2.1 Bauxite Mines

UC RUSAL has full or part ownership in five operating mine complexes and a further three mines (in Jamaica) on care and maintenance. UC RUSAL has additional projects which are at the exploration or feasibility study stage. The operating mines also have a number of projects in place, with the goal of Mineral Resource and Ore Reserve accumulation.

A number of different types of bauxite deposits are mined. These include plateau and hillslope types which are generally soft rocks and covered by relatively shallow superficial deposits of a few metres or less such as Guinea; moderately deeply buried older and harder rock bauxites, such as at Timan in Russia; and very deeply buried bauxites which have to be mined by underground mining methods, such as North Urals.

2.2.2 Nepheline Syenite/Limestone Mines

The alumina refinery at Achinsk located in Central Siberia has been utilising a process to produce alumina from nepheline syenite since 1965. Aluminium-rich (approximately 26.5% Al_2O_3) nepheline syenite ore from the Kiya Shaltyr deposit is blended with limestone ore obtained from the Mazulsky open-pit in a ratio of approximately 5:7 respectively. The aim is to blend the continuous flow of the materials in such a manner that the chemistry of the feed to a hydro-chemical plant is uniform which then feeds to a sinter process for the subsequent winning of alumina. The mining is essentially conventional drill, blast, load and haul open-pit mining with a degree of selectivity for grade requirements. The sensitivity of the Al_2O_3 grade in the nepheline syenite is quite high, and there has previously been a need to augment the nepheline grade with bauxite (4% - 2007 from UC RUSAL's Timan Bauxite Mine).

2.2.3 Quartzite Mines

The Cheremshansk Quartzite Mine exploits a very high quality quartzite to obtain very low iron silica which is fed to UC RUSAL's Irkutsk Silicon operation to produce silicon metal. Additional higher iron products and aggregate materials are produced as by-products, which from time to time have a market. The facility currently processes 200 ktpa of quartzite and has sales of approximately 120 ktpa of the specified silicon product grade, which is then transported by rail to the facilities at Irkutsk.

The Glukhovsky Quartzite Mine similarly exploits a high grade resource of 20-90 mm lumpy quartzite suitable for silicon metal production at UC RUSAL's Zaporozhny smelter complex and for ferrosilicon production at Novolipetsk ferrosilicon plant. Up to 2008 the facility processed approximately 250 kt of quartzite to produce 50-60 kt of 20-90 mm product per annum. In addition 0-20 mm quartzite has been sold to the construction industry. The Glukhovsky mine is currently suspended following the temporary closure of the ZALK silicon facilities. The mine plans to re-commence production in 2010 and is still in talks to finalise and secure the sales under contract.

2.2.4 Fluorite Mine

The Yaroslavsky fluorite mine is 50% owned by UC RUSAL but managed by OOO RGRK. It produces FF-90 (90% CaF_2) concentrate for use in UC RUSAL's aluminium processes. The operation is a conventional drill, blast, load and haul open-pit operation with processing done by means of flotation to produce the concentrate. CaF_2 production has been some 800 ktpa at 30% CaF_2 with sales of 100 to 185 ktpa FF-90.

2.2.5 Coal Mine

The Bogatyr open-pit coal mine is managed and 50% owned by UC RUSAL. It produces high ash thermal coal. Approximately half the coal produced feeds power stations in Kazakhstan and the other half adjacent areas of Russia. Bogatyr is one of the largest coal mines worldwide, in terms of annual production and Mineral Resources. Bogatyr produces some 40 Mtpa coal.

2.2.6 Mineral Resource and Ore Reserve Statement

In presenting the Mineral Resource statement, the following points apply:

- UC RUSAL's Mineral Resources are JORC Code compliant as reported herein by SRK. This follows SRK's review of the available data, conversion of the GKZ approved reserves where appropriate and confirming their potential economic extraction.

- Mineral Resources are inclusive of those Mineral Resources modified to produce Ore Reserves.

- The Mineral Resource statement presented herein is dated 1 July 2009 and has not been depleted to reflect the publication date of the listing document.

Table 2.5: UC RUSAL Mineral Resources (1 July 2009)[(1), (2), (3), (4), (5)]

Mining Asset	Mineral Resources									
	Measured		Indicated		Subtotal		Inferred		Total	
	Tonnage (Mt Dry)	Al_2O_3 (%)	Tonnage (Mt Dry)	Al_2O_3 (%)	Tonnage (Mt Dry)	Al_2O_3 (%)	Tonnage (Mt Dry)	Al_2O_3 (%)	Tonnage (Mt Dry)	Al_2O_3 (%)
Bauxite										
Kindia	—	—	37.9	39.5	37.9	39.5	61.6	37.8	99.5	38.5
Friguia	36.8	40.8	142.4	43.0	179.2	42.5	152.6	43.2	331.8	42.8
BCGI	3.6	51.5	41.3	58.0	44.9	57.5	4.2	52.7	49.1	57.1
North Urals	11.8	55.4	180.4	55.2	192.3	55.2	113.5	55.7	305.7	55.4
Timan	113.1	49.4	67.1	49.9	180.2	49.6	—	—	180.2	49.6
Alpart	15.2	43.0	40.7	40.7	55.9	41.3	38.0	45.3	94.4	42.9
Windalco-Ewarton	17.1	42.3	18.2	42.4	35.3	42.4	11.2	43.6	46.5	42.7
Windalco-Kirkvine	11.6	42.5	27.5	42.1	39.1	42.2	0.5	43.6	39.6	42.2
Dian-Dian Project	401.9	48.1	70.2	45.7	472.1	47.7	216.6	47.9	688.7	47.8
Total Bauxite	**611**	**47.7**	**626**	**48.1**	**1,237**	**47.9**	**598**	**46.9**	**1,835**	**47.6**
Kiya Shaltyr Neph. Syen.	—	—	8.9	26.9	8.9	26.9	54.2	27.2	63.1	27.1
	Tonnage (Mt)	CaO (%)	Tonnage (Mt)	CaO (%)	Tonnage (Mt)	CaO (%)	Tonnage (Mt)	CaO (%)	Tonnage (Mt)	CaO (%)
Limestone										
Mazulsky (dedicated to Kiya Shaltyr)	—	—	90.1	54.4	90.1	54.4	—	—	90.1	54.4
Petropavlovsk	15.6	55.0	6.9	54.9	22.5	54.9	—	—	22.5	54.9
	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO_2 (%)	Tonnage (Mt)	SiO2 (%)
Quartzite										
Cheremshansk	0.4	99.0	1.6	99.0	2.0	99.0	35.1	99.0	37.1	99.0
Glukhovsky	1.1	99.0	7.9	99.0	9.0	99.0	0.3	99.0	9.3	99.0
	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)	Tonnage (Mt)	CaF_2 (%)
Fluorite										
Yaroslavsky	3.3	52.7	17.1	37.2	20.4	39.7	1.5	39.7	21.9	39.7
	Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)		Tonnage (Mt)	
Coal										
Bogatyr	2,276		170		2,446		484		2,930	

(1) The mines' individual Mineral Resources are further details in Section 3 of this report.

(2) Mineral Resources are recorded on an unattributable basis, equivalent to 100% ownership.

(3) Mineral Resources tonnages include Ore Reserve tonnages presented in the Ore Reserve statement.

(4) Mineral Resources are reported as dry weight (excluding moisture).

(5) The alumina grades are presented as available alumina, as opposed to total alumina.

In presenting the Ore Reserve statement, the following points apply:

- UC RUSAL's Ore Reserves are JORC Code compliant as reported here by SRK. SRK has visited UC RUSAL's operations, and reviewed the historical and forecast production and cost data. SRK has further considered the mine plans supporting the Ore Reserves, and verified that they are technically achievable.

- For the bauxite Ore Reserves, SRK has tested the economics by considering the overall integrated processes, starting with bauxite mining through to aluminium production. This has been deemed appropriate as the mine production is dependent on the downstream upgrading. Mines will supply bauxite at varying costs, delivered to the respective refineries. It is possible that some of the mines deliver bauxite at a higher unit cost than bauxite may be purchased at spot prices and these bauxite Ore Reserves may be replaced by more competitive producers.

- The Ore Reserves of the bauxite mines are hence dependent on revenues of aluminium sales, along with limited alumina sales. Only minor third party bauxite sales have been forecast, as this is all consumed downstream. SRK has used an aluminium price which has been independently assessed and which it considers to be a market consensus forecast.

- The Ore Reserves for coal, quartzite, limestone, and fluorite, are dependent on revenues generated from sales of those commodities, based on market consensus forecast prices, or prices stipulated under contracts.

- For commodities other than bauxite, SRK has considered the economics on a mine by mine basis.

- SRK has considered the operating costs of the mine, refineries, smelters including the transport costs from mines to refineries and smelters, to the point of sales, including royalties at the mines, and head office costs in Moscow. SRK has excluded the closure costs of the assets, to cover both biophysical and terminal benefits liabilities. In addition to the costs considered to confirm the Ore Reserves, it is recognised that UC RUSAL has additional costs, such as care and maintenance costs. These indirect costs are not attributable to the Ore Reserves and are not deemed material.

- The mine forecast operating costs which have been used, are best estimates based on currently available information. The costs for H2 2009 and beyond are similar to those of H1 2009, which in turn are significantly lower than the precedent three years for a number of mines, notably Timan, BCGI and North Urals. SRK finds a high degree of volatility in unit operating costs, since 2006, at some mines more than others. This impacts negatively on the confidence which SRK attributes to the operating costs and is hence deemed to be an area of risk.

- The bauxite grades are presented throughout this report as available alumina, as opposed to total alumina. The available alumina grades will be affected on the receiving refinery process method. Hence a low, or high temperature Bayer, or sinter processing method would result in different available alumina grade for the same bauxite ore.

- SRK has considered the capital costs required to sustain the operations, and expand these where planned, at the mines, refineries and smelters. As a result of the global downturn, UC RUSAL has curtailed or deferred capital expenditure at its operations and projects. SRK is not aware of how susceptible UC RUSAL's capital expenditure plans are to changing in the short or medium term.

- SRK considers UC RUSAL's forecasts plans to be, as a minimum, equivalent to a pre-feasibility level of study and that all technical disciplines are materially compliant with this level of study. Further, UC RUSAL's production plans are solely based on Measured and Indicated Mineral Resource categories, and not Inferred Mineral Resources, as is expected practice.

- The Ore Reserve statement presented herein is dated 1 July 2009 and has not been depleted to reflect the publication date of the listing document.

Additional information is given on the mines production and costs in Sections 2.2.6 to 2.2.8 and in Section 3 which describes their operations.

Table 2.6: UC RUSAL Ore Reserves (1 July 2009)[(1), (2), (3), (4), (5), (6)]

Mining Asset	Ore Reserves					
	Proved		Probable		Total	
	Tonnage	Al_2O_3	Tonnage	Al_2O_3	Tonnage	Al_2O_3
	(Mt Dry)	(%)	(Mt Dry)	(%)	(Mt Dry)	(%)
Bauxite						
Kindia	—	—	38.2	39.2	38.2	39.2
Friguia	37.3	40.0	77.8	41.7	115	41.1
BCGI	2.3	49.7	3.3	52.3	5.6	51.2
North Urals	7.3	51.6	83.0	50.9	90.3	51.0
Timan	99.7	54.8	35.4	57.1	135	55.4
Alpart	—	—	—	—	—	—
Windalco-Ewarton	—	—	—	—	—	—
Windalco-Kirkvine	—	—	—	—	—	—
Dian-Dian Project	—	—	—	—	—	—
Total Bauxite	147	50.8	238	46.9	384	48.4
Kiya Shaltyr Neph. Syen.	—	—	8.7	26.3	8.7	26.3
	Tonnage	CaO	Tonnage	CaO	Tonnage	CaO
	(Mt)	(%)	(Mt)	(%)	(Mt)	(%)
Limestone						
Mazulsky (dedicated to Kiya Shaltyr)	—	—	12.8	53.8	12.8	53.8
Petropavlovsk	13	54	6	54	19	54
	Tonnage	SiO_2	Tonnage	SiO_2	Tonnage	SiO_2
	(Mt)	(%)	(Mt)	(%)	(Mt)	(%)
Quartzite						
Cheremshansk	0.2	99.0	0.8	99.0	1.0	99.0
Glukhovsky	—	—	—	—	—	—
	Tonnage	CaF_2	Tonnage	CaF_2	Tonnage	CaF_2
	(Mt)	(%)	(Mt)	(%)	(Mt)	(%)
Fluorite						
Yaroslavsky	—	—	0.5	27.4	0.5	27.4
	Tonnage		Tonnage		Tonnage	
	(Mt)		(Mt)		(Mt)	
Coal						
Bogatyr	288		742		1,030	

(1) The mines' individual Ore Reserves are further details in Section 3 of this report.

(2) Tonnages are based on ore mined as per UC RUSAL's production plans.

(3) Ore Reserves are recorded on an unattributable basis, equivalent to 100% ownership.

(4) Ore Reserves are reported as dry weight (excluding moisture).

(5) The alumina grades are presented as available alumina, as opposed to total alumina.

(6) Kindia Ore Reserve tonnage is marginally higher than it equivalent Mineral Resource, as of result of the effect of loss and dilution.

2.2.7 Production

The production history is given in Table 2.7 below.

Table 2.7: Mining Production History - All assets[1]

Mining Asset	Country	UC RUSAL Interest	2006	2007	2008		H1 2009
		(%)	Total	Total	Total	Att[2]	Total
Bauxite (Mt wet)							
Alpart	Jamaica	65	5.0	4.5	5.0	3.2	0.4
Windalco-Ewarton	Jamaica	93	2.3	2.0	2.1	2.0	0.1
Windalco-Kirkvine	Jamaica	93	2.0	1.9	2.0	1.9	0.1
Kindia	Guinea	100	3.1	3.0	3.2	3.2	1.4
Friguia	Guinea	100	1.9	1.7	2.0	2.0	0.9
BCGI	Guyana	90	1.2	1.9	1.6	1.6	0.7
North Urals	Russia	100	3.3	3.4	3.3	3.3	1.6
Timan	Russia	80	2.4	1.9	1.9	1.9	1.0
Total (Mt wet)			21.1	20.4	21.1	19.1	6.1
Kiya Shaltyr Nepheline Syenite	Russia	100	5.1	4.9	4.8	4.8	2.2
Limestone (Mt)							
Mazulsky (dedicated to Kiya Shaltyr)	Russia	100	6.9	6.9	7.4	7.4	3.1
Petropavlovsk	Russia	100	1.0	1.0	1.0	1.0	0.4
Quartzite (kt)							
Cheremshansk	Russia	99.91	208	199	230	230	95
Glukhovsky	Ukraine	97.55	55	51	55	54	4
Fluorite (kt)							
Yaroslavsky	Russia	50	807	899	799	400	441
Coal (Mt)							
Bogatyr	Kazakhstan	50	41.6	38.4	46.1	23.1	14.2

(1) Ownership as at 15 September 2009.

(2) The attributable production presented for 2008 for BCGI and Timan is based on consolidated production numbers, and therefore presented as 100% attributable, as opposed to UC RUSAL's interest.

2.2.8 Operating Costs

The mines' historical operating costs are presented in Table 2.8. These include the operating costs to the delivery points which vary from the mine gate, port or refinery where these are nearby the mine. UC RUSAL head office costs are attributed to the smelters and no portion is hence carried by the mines.

Table 2.8: Historical Operating Costs - All Assets (US$ million)[(1), (2)]

Mining Asset	Country	UC RUSAL Interest	2006	2007	2008		H1 2009
		(%)	Total	Total	Total	Att[(3)]	Total
Bauxite							
Alpart	Jamaica	65	42.7	81.5	95.5	62.1	n/a
Windalco	Jamaica	93	72.2	90.0	83.4	77.6	n/a
Kindia	Guinea	100	22.2	35.0	36.1	36.1	13.9
Friguia	Guinea	100	8.1	10.2	8.2	8.2	3.3
BCGI	Guyana	90	57.3	70.6	85.1	85.1	21.3
North Urals	Russia	100	135.3	168.7	168.6	168.6	61.7
Timan	Russia	80	31.4	32.6	35.1	35.1	10.2
Total			369.2	488.6	512.1	472.8	110.4
Kiya Shaltyr Nepheline Syenite	Russia	100	48.6	61.3	68.7	68.7	22.8
Limestone							
Mazulsky	Russia	100	13.8	20.9	21.2	21	6.1
Petropavlovsk	Russia	100	1.9	2.8	3.5	3.5	0.9
Quartzite							
Cheremshansk	Russia	99.91	2.6	3.9	4.1	4.1	1.7
Glukhovsky	Ukraine	97.55	0.9	0.9	1.1	1.0	0.1
Fluorite							
Yaroslavsky	Russia	50	31.6	37.2	36.4	18.2	12.0
Coal							
Bogatyr	Kazakhstan	50	365.6	379.6	499.6	249.8	133.5

(1) Ownership as at 15 September 2009.

(2) n/a — not available.

(3) The attributable numbers presented for 2008 for BCGI and Timan are based on consolidated numbers, and therefore presented as 100% attributable, as opposed to UC RUSAL's interest.

2.2.9 Capital Expenditure

The capital expenditure which has been spent on the respective mines is presented in Table 2.9.

Table 2.9: Historical Capital Expenditures - All Assets (US$ million)(1), (2)

Mining Asset	Country	UC RUSAL Interest	2006	2007	2008		H1 2009
		(%)	Total	Total	Total	Att(3)	Total
Bauxite							
Alpart	Jamaica	65	9.0	7.7	2.3	1.5	n/a
Windalco	Jamaica	93	2.5	0.0	0.7	0.7	n/a
Kindia	Guinea	100	2.2	6.3	6.2	6.2	0.0
Friguia	Guinea	100	0.0	1.4	0.7	0.7	n/a
BCGI	Guyana	90	17.4	4.7	7.7	7.7	0.2
North Urals	Russia	100	31.3	39.4	41.0	41.0	5.6
Timan	Russia	80	10.5	9.1	3.0	3.0	0.0
Total			72.8	68.4	61.5	60.8	5.8
Kiya Shaltyr Nepheline Syenite	Russia	100	8.1	3.3	3.8	3.8	3.9
Limestone							
Mazulsky	Russia	100	2.5	7.9	5.7	5.7	0.4
Petropavlovsk	Russia	100	0.0	0.0	0.0	0.0	0.0
Quartzite							
Cheremshansk	Russia	99.91	0.1	0.2	0.0	0.0	0.0
Glukhovsky	Ukraine	97.55	0.0	0.0	0.0	0.0	0.0
Fluorite							
Yaroslavsky	Russia	50	0.4	1.0	2.8	1.4	0.0
Coal							
Bogatyr	Kazakhstan	50	20.8	26.5	23.9	11.9	4.2

(1) Ownership as at 15 September 2009.

(2) n/a — not available.

(3) The attributable numbers presented for 2008 for BCGI and Timan are based on consolidated numbers, and therefore presented as 100% attributable, as opposed to UC RUSAL's interest.

UC RUSAL has made changes to the capital investment programmes at its mines and SRK is unaware how this may affect the mine production plans.

2.2.10 *Mining Rights and Titles*

SRK has been presented with details on the licences under which each of the assets operates. These are summarized in Table 2.10 below. Where licences expire within the life of the Ore Reserve, SRK has assumed that these will be renewed as UC RUSAL is confident that these will be renewed, in a timely manner.

Table 2.10: Mining Rights and Titles

Mining Asset	Country	Licences	Type of Licence	Validity	Comments
Bauxite					
Alpart	Jamaica	SML-167 SEPL-541 SML-130	Mining Exploration Third party mining Govt. Lease	 2014 2035	Jamalco Contract to mine 25 Mt.
Windalco Ewarton	Jamaica	SML-162 SEPL-524	Mining Exploration Govt. Lease	 2031	
Windalco Kirkvine	Jamaica	SML-161	Mining	2031	
Kindia	Guinea	Government Convention		2025	
Friguia	Guinea	Government Convention	Mining	2033	New Convention being drafted
Bauxite Co. de Guyana (BCGI)	Guyana	22 Kurubuka Araima (N, S&W)	Mining Mining	2013 2013	
North Urals	Russia	SVE 13037 TE SVE 13035 TE SVE 13036 TE SVE 13038 TE SVE 01179 TE SVE 01728 TE	Mining Mining Mining Mining Mining Mining	2014 2014 2014 2014 2015 2014	Cheremukhovskaya Novo-Kalyinskaye Kalyinskaye Krasnaya Shapochka Toshimskaya Petropavlovsk (limestone)
Timan	Russia	SYK 11363 TE	Mining and Exploration	2022	
Dian-Dian Project	Guinea	No permit required run according to Concession Agreement	Mining and Exploration	2026	
Nepheline Syenite/Limestone					
Kiya Shaltyr Neph. Syen.	Russia	KEM 00402 TE	Mining	2016	
Mazulsky Limestone	Russia	KPP 01694TE 62: 42:13:0122002/3/4	Mining Land Lease	2022 2013	
Quartzite and Fluorite					
Cheremshansk	Russia	UDE 00712TE	Mining	2014	
Yaroslavsky	Russia	VLV No. 14557-TE HOR No. 596 OSCH HOR No. 595 OSCH	Mining Exploration Exploration	2013 2015 2013	Voznesensk, Pogranichny Dachny Moskalensky
Glukhovsky	Ukraine	No. 1006 (29.07.1997)	Mining and Exploration	2017	
Coal					
Bogatyr	Kazakhstan	No. 975 (29.06.2002)	Mining	2047	

2.2.11 *Mining Projects*

2.2.11.1 *Management of Development Projects*

UC RUSAL follows a structured approach to the development of its projects from land acquisition, exploration, conceptual feasibility study, preliminary feasibility study through to final feasibility study and ultimately project implementation. The Engineering and Construction Division of UC RUSAL is located in Moscow and local project offices are located in the project regions and countries.

The various levels of feasibility studies are attained through the use of international and in-house specialist consultants. The Company is fully conversant with the requirement for Bankable Feasibility Studies for project finance. In the Russian Federation, the Technical and Economic studies ("TEO") and Environmental Impact Assessments ("EIA") are required for obtaining permits and licences.

The Mineral Resources and Ore Reserves of the projects are subject to classification as appropriate to the requirements of local jurisdiction and financing. International resource and reserve reporting codes such as the JORC Code are adhered to. In the Russian Federation, for in country reserves, it is a requirement that the State Committee for Reserves ("GKZ") approves the "reserves".

All stages of the project's implementation are subject to internal review and approval by the Board of Directors of the Engineering and Construction Division, Management Board and Board of Directors of UC RUSAL. In order to progress the project from the completion of the Bankable Feasibility Study to the securing of funding for the project, a Front End Engineering and Design ("FEED") period is undertaken.

UC RUSAL also co-operates with the State Inter-Departmental Commissions which include representatives from external stakeholders such as JSC Russian Railways, and other government bodies, including power and water supply agencies. As the State Inter-Departmental Commission is involved throughout the process, the final TEO and EIA will reflect their mutual decision.

2.2.11.2 *Short-to-Medium Term Projects*

All of the mine capital expenditure estimates below have been provided by UC RUSAL and, although they appear reasonable, have not been subject to independent verification or audit.

- **North Urals Bauxite Mines** — UC RUSAL is developing a number of projects at each of the four shaft sections of Cheremukhovskaya, Novo Kalyinskaye, Kalyinskaye and Krasnaya Shapochka to extend the mining life as well as support a production increase from the current level of 3.34 Mtpa (wet). An increase in production is planned to be effected through an increase in mining at Cheremukhovskaya as well as the build-up to full production at Novo Kalyinskaye in the future. The projects would extend the lowest level of mining to some 1,400 m below surface. The current mining operations are 800 m to 1,100 m below surface. Total capital expenditure for the 2008-2020 period is estimated at US$251.4 m (including VAT), with US$50 m spent as of 1 July 2009. SRK has included this project in support of the Ore Reserves.

- **Kindia Bauxite Mine** — Mine production from Kindia 2 is anticipated to increase to approximately 3,800 ktpa by 2012 to feed the planned increase in alumina production at the Nikolaev Alumina Refinery. By 2011, with the exhaustion of the Debele ore reserves, the crushing plant at Debele is due to be obsolete and is not planned for renewal. This requires that the production tonnage from the Kindia deposits will be mined entirely using Wirtgen surface miners which produce a sized product which does not require subsequent crushing.

Additional surface miners will be purchased. The longer term mining plan at Kindia requires new access roads, rail links and a stockpile handling and loading station. The mining capital required during the period is US$76 m (including VAT), of which some US$24 m (including VAT) has been spent to 1 July 2009. SRK has included this project to support the Ore Reserves.

2.2.11.3 *Long-term Projects*

UC RUSAL plans to increase bauxite, alumina and aluminium production over the long-term through a number of projects. The Company has a number of highly prospective bauxite deposits, refinery projects and smelter projects for production growth over the longer term. All of the mine capital expenditure estimates below have been provided by UC RUSAL and, although they appear reasonable, have not been subject to independent verification or audit.

- **Dian-Dian Bauxite Project** — Dian-Dian is a greenfield project to be constructed in Guinea. The studies to date have identified Measured and Indicated Mineral Resources compliant with the JORC Code of 472.1 Mt with 47.7% Al_2O_3 and 1.5% silica. The expected volume of bauxite mined, subject to confirmation by additional studies is 13.1 Mtpa (for alumina production) and 10 Mtpa (for export). A feasibility study has been prepared by international consultants. The capital expenditure of the mining aspects of the project has been estimated at US$425 m, which would include the development of the mine and mine related infrastructure.

- **Guyana BCGI** — The 22-Kurubuka Mine is scheduled to replace the depleted Ore Reserves of the current deposits. The planned production for BCGI is 2.4 Mtpa. The feasibility study is currently on hold. The project will need the construction of access roads, crushing facilities, barge loading facilities, overburden stripping and drainage. The capital expenditure for the project is currently estimated at US$59.3 m of which some US$0.6 m (incl VAT) has been spent to 1 July 2009.

2.3 Non-Mining Assets

2.3.1 Alumina Division

2.3.1.1 *Alumina Refining Technology*

The Bayer process is the most widely used and economical method of extracting pure alumina from mined bauxite. All alumina refineries in the world, excluding a small number of plants in China and the Russian Federation, are Bayer process facilities.

The process was developed by Joseph Bayer and has changed very little since the first alumina refinery was opened in 1893, although the application continues to be developed and improved. In broad terms, aluminium hydroxide (alumina) is first separated from impurities in the bauxite ore by dissolution into caustic soda. After the insoluble impurities have been removed, the aluminium hydroxide is precipitated in pure form.

The Bayer process is based on alkaline leaching, which provides efficient separation of alumina from iron materials. It has the disadvantage that silicates (the other main impurity in bauxite) can be reactive, so the process works best when ores with low reactive silica are processed. These ores are plentiful, but mainly located in the tropics. Many plants de-silicate after grinding to improve efficiencies when using high silica bauxite as feed.

Strategic and economic factors have historically resulted in process development to enable extraction of alumina from domestic mineral resources in countries that do not have abundant supply of good quality (high grade, low reactive silica) bauxite. In the former USSR, indigenous ores with high reactive silica led to the development of a sintering process to extract more of the alumina and another process was developed to extract alumina from nepheline ore. Two UC RUSAL refineries apply the sinter process, namely Achinsk Alumina Refinery and Boxitogorsk Alumina Refinery. A further three UC RUSAL refineries apply two methods of producing alumina, namely one production train is based on sintering and one production train is based on the Bayer process. These plants are Ural Alumina Refinery, Bogoslovsk Alumina Refinery and Zaporozhye Alumina Refinery.

All other UC RUSAL alumina refineries are based on the standard Bayer process. All UC RUSAL alumina refineries process bauxite, with the exception of Achinsk Alumina Refinery which uses nepheline ore as the feedstock.

Cash operating costs at Bayer-sinter, sinter and nepheline processing plants are typically higher than at plants utilising the standard Bayer process, mainly due to higher energy consumption. However, it remains commercially and economically viable to continue producing alumina with these other process routes in the Russian Federation and Ukraine given the vertical integration of the Company with its associated freight savings, comparatively low energy costs and fully depreciated equipment.

UC RUSAL is progressively upgrading and modernising its alumina refining equipment to improve the alumina quality, yield, physical properties and raw material consumption. UC RUSAL has developed its own proprietary stationary calciner, which has successfully been operating at Urals Alumina Refinery. UC RUSAL plans to progressively introduce this at additional facilities, and has commenced a programme at Bogoslovsk Alumina Refinery, although construction works has temporarily been suspended. This process produces a higher quality alumina, with a low alpha content which is suitable for the high amperage pre-bake reduction technology. In addition, substantial work is being undertaken at some refineries to upgrade the precipitation and digestion circuits to replace equipment nearing the end of its conventional economic life with a view to producing sandy grade alumina. These projects may reduce operating costs at UC RUSAL alumina refineries and may also reduce operating costs and fluoride emissions at UC RUSAL aluminium smelters. UC RUSAL is also currently reviewing options to replace monohydrate bauxites with trihydrate bauxites with the potential for reductions in energy consumption and operating costs.

2.3.1.2 Alumina Refining

UC RUSAL has full or partial equity ownership of 13 alumina refineries. The Company is the controlling shareholder in all of these plants, with the exception of Queensland Alumina Ltd in which it holds a 20 per cent equity stake. The alumina assets of UC RUSAL are located in seven countries; Russian Federation (four plants), Jamaica (three plants), Ukraine (two plants), Guinea (one plant), Ireland (one plant), Italy (one plant) and Australia (one plant).

Similar to other aluminium industry participants, UC RUSAL has since mid-2008 undertaken a programme to address a reduction in demand for its products. The programme resulted in the full closure or partial closure of a number of operating facilities. With regard to alumina refining, the following operations remain fully idled as of 15 September 2009; Eurallumina, Alpart, Windalco-Ewarton, Windalco-Kirkvine and Zaporozhye Alumina Refinery.

Section 4 of this report describes in detail each of the alumina refining operations of UC RUSAL.

The combined alumina production from UC RUSAL plants in 2008 was 15,058 kt. UC RUSAL aggregate attributable production in 2008 was 11,317 kt. Aggregate attributable production is calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are calculated on a 100% plant production basis to reflect UC RUSAL effective control of finished product: PGZ and ZALK Table 2.11 shows the contribution from each facility. Also shown is approximate production attributable to the Bayer process, sinter process and nepheline process.

Table 2.11: Alumina Production from Refining Operations (kt)

	Total Plant Production[1]						
	Year Ended 31 December			6 months to 30 June	6 months to 30 June	UC RUSAL Interest[2]	UC RUSAL Attributable Production[3] Year Ended 31 December
Asset	2006[a]	2007[a]	2008[a]	2008[a]	2009[a]	%	2008[a]
Queensland Alumina Ltd. (QAL)	3,868	3,817	3,845	1,908	1,927	20.0	769
Fria Alumina Refinery	530	527	593	272	272	100.0	593
Aughinish Alumina	1,816	1,803	1,890	935	565	100.0	1,890
Eurallumina	1,103	1,069	1,045	530	92	100.0	1,045
Alpart	1,574	1,606	1,652	838	227	65.0	1,074
Windalco (Ewarton and Kirkvine Works)	1,214	1,241	1,246	623	165	93.0	1,159
Bogoslovsk Alumina Refinery (BAZ)	1,100	1,100	1,084	532	500	100.0	1,084
Achinsk Alumina Refinery (AGK)	1,073	1,082	1,069	542	452	100.0	1,069
Urals Alumina Refinery (UAZ)	726	731	730	363	349	100.0	730
Pikalyovo Alumina Refinery (PGZ)[4]	218	255	73	73		0.0	73
Boxitogorsk Alumina Refinery (BGZ)	149	165	156	81	60	100.0	156
Nikolaev Alumina Refinery (NGZ)	1,410	1,420	1,446	712	733	100.0	1,446
Zaporozhye Alumina Refinery (ZALK)	262	236	227	114	29	97.6	227
TOTAL PRODUCTION	15,041	15,051	15,058	7,523	5,370		11,317
Approximately Attributed To:							
Bayer Process	13,293	13,231	13,437	6,668	4,716		9,973
Sinter Process	457	483	479	240	201		202
Nepheline Process	1,291	1,337	1,143	615	452		1,142

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. Production data includes both calcined and hydrate alumina. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are presented on a 100% plant production basis to reflect UC RUSAL effective control of finished product: PGZ and ZALK. (4) PGZ Refinery sold in 2008. Attributable production shown assuming UC RUSAL ownership interest prior to asset disposal.

2.3.2 Aluminium Division

2.3.2.1 Aluminium Smelting Technology

The basis for all modern primary aluminium smelting plants is the Hall-Héroult Process, invented simultaneously in 1886 by Paul Héroult in France and Charles Martin Hall in the United States. Alumina is dissolved in an electrolytic bath of molten cryolite (sodium aluminium fluoride) within a large carbon or graphite lined steel pot (cell). An electric current is passed through the electrolyte at low voltage but very high amperage, typically at around 350 kA at modern facilities. The electric current flows between a consumable carbon anode (positive), made of petroleum coke and pitch, and a cathode (negative), formed by the thick carbon or graphite lining of the pot. Molten aluminium is deposited at the bottom of the pot and is siphoned off periodically, taken to a holding furnace where it is often blended to an alloy specification, purified and then generally cast. The carbon anode forms CO_2 with the oxygen released by the reduction of alumina into aluminium, which is then exhausted along with fluoride gases, released by the molten cryolite, into the atmosphere. Modern smelters employ gas collection and scrubbing units whereby the fluoride gases are adsorbed into the alumina which is then fed back into the process.

There are two main types of aluminium smelting technology, Söerberg and pre-bake. The principal difference between the two is the type of anode used. Söderberg technology uses a continuous anode which is delivered to the cell (pot) in the form of a solid paste, which melts into the form of the anode and then bakes in the cell prior to being consumed within the bath. Pre-bake technology uses multiple anodes in each cell, which are pre-baked in a separate facility and attached to "rods" that suspend the anodes in the cell. New anodes are exchanged for spent anodes ("anode butts") before being recycled into new anodes.

All new aluminium smelters constructed at the present time utilise pre-bake technology. Söderberg technology is considered outdated as a result of its lower operating efficiency, higher labour requirements and the difficulty in containing emissions. There are two variants of Söderberg smelting technology. The earliest variants are referred to as Horizontal Stud Söderberg (HSS) technology. The emissions to atmosphere are higher from this technology than Vertical Stud Söderberg (VSS) technology. HSS cells remain in operation at Bogoslovsk Aluminium Smelter, Urals Aluminium Smelter, Nadvoitsy Aluminium Smelter, Novokuznetsk Aluminium Smelter, Kandalaksha Aluminium Smelter and Zaporozhye Aluminium Smelter.

A key feature of modern pre-bake technology is the ability to enclose each pot with respect to gas emissions. Fugitive emissions from these cells are therefore very low, with less than 2 per cent of the generated emissions escaping to the atmosphere, predominantly from where the covers have to be removed for servicing the pot. The balance of the emissions is collected inside the cell itself and carried away to very efficient central scrubbing systems which remove the majority of particulates and gases, most notably the fluoride emissions. Computer technology controls the process precisely, which minimises the occurrence of anode effects — the condition which causes small quantities of PFCs to be produced.

In addition to lower direct emissions from the smelting process, pre-bake technology also results in lower electricity consumption as there is no requirement to bake the anode in situ. The average net (reduction area) consumption is approximately 15 MWh/tonne of aluminium for Söderberg technology, while most modern pre-bake facilities are as low as 13 MWh/tonne of aluminium. However, a Söderberg smelting plant does not require energy use within a dedicated anode plant, which creates a saving of 0.7 MWh/tonne of aluminium on the 15 MWh/tonne of aluminium that it uses.

Approximately 14 per cent of world primary aluminium was produced from Söderberg pots in 2008 and as such the technology still represents a significant proportion of operating capacity (source: International Aluminium Institute). In the case of UC RUSAL, attributable saleable primary aluminium production from its smelter assets was 4,420 kt in 2008 of which 60 per cent was from VSS pots, 13 per cent from HSS pots and 27 per cent from pre-bake pots.

UC RUSAL's Söderberg potlines still have many years of useful life ahead of them with the correct levels of sustaining capital investment applied, although in the medium to long-term, it may become increasingly difficult to continue operating them due to the increasing constraints of environmental legislation. UC RUSAL is therefore actively following a strategy of constructing new potlines using modern pre-bake technology whilst modernising as many of its existing Söderberg potlines as practical. There are several methods of improving the operational and environmental performance of Söderberg pots which UC RUSAL is undertaking at its facilities. Operational and environmental performance have shown strong improvement at UC RUSAL smelters in recent years, although the extent to which improvement has been shown varies by facility, depending upon whether HSS or VSS cells are installed.

The performance of UC RUSAL's Söderberg cells has generally been, or is in the process of being improved with the introduction of:

- wet or dry scrubbing technology for gases;
- alumina point-feeding systems;
- implementation of automated cell control systems;
- implementation of "dry" anode technology; and
- improved gas suction.

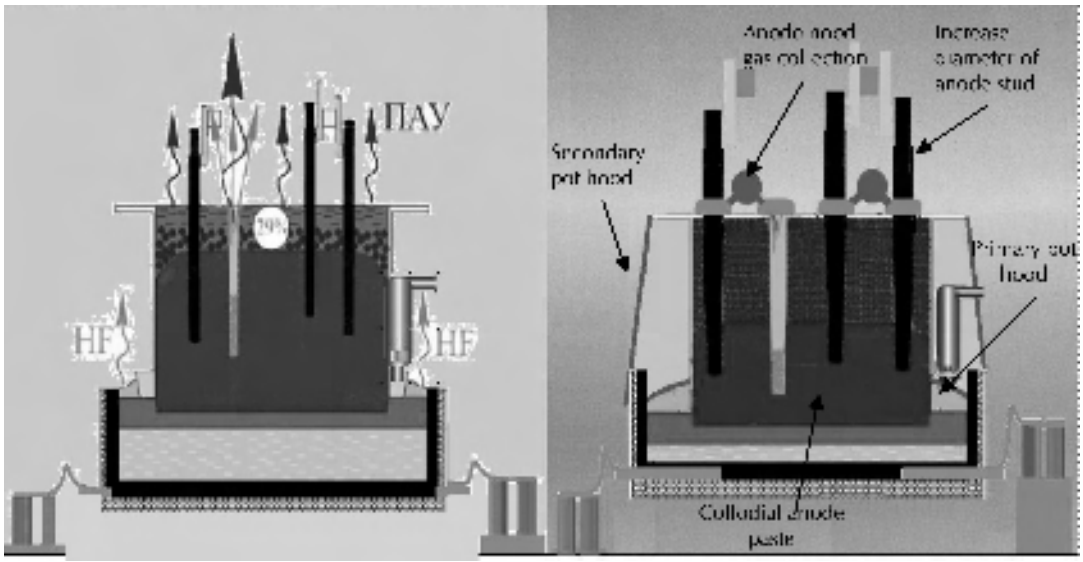
The additional environmental expenditure has primarily been financed through increases in line current and hence metal production whilst reducing unit consumption of fluoride and alumina through improved gas scrubbing and in some cases higher electrical efficiency, saving energy costs.

The Engineering Technology Centre adjacent to Krasnoyarsk Aluminium Smelter has been conducting research and trials to improve the environmental performance of C8-BM VSS cells in a project referred to as Clean Söderberg Technology. The objective of the project is to improve the environmental performance of the cells beyond the levels achieved through the implementation of the above projects and finance the environmental expenditure through additional metal production through increased line current and current efficiency. The three major environmental projects include:

- cell hooding
- improved burner design
- colloidal anode paste technology

The increases in line current requires modifications to the cathode lining, increases in the diameter of the anode studs, modified bus bar layouts and improvements in the anode paste. The design changes are represented in Figure 2.5.

Figure 2.5: The Clean C8-BM VSS Technology Cell



The project commenced in 2002, and there are currently five test cells in operation at the Krasnoyarsk Aluminium Smelter, operating at 180 kA, which incorporate the full range of cell modifications that when combined constitute the Clean Söderberg Technology. A further 15 test cells each contain one or more of the modifications, but not all. The anode paste plant at Krasnoyarsk was modified in 2008 and is now capable of producing batches of colloidal anode paste required for the technology to be applied in four potrooms (352 cells). Hatch has been advised that approval to expand the Clean Söderberg Technology programme to four potrooms (352 cells) has recently been approved.

UC RUSAL is in the process of further development to demonstrate that making the operational/technical changes described above can reduce emissions from C8-BM VSS cells. Total fluoride emissions from C8-BM cells are currently around 1.6 kg/t Al under best practice operation. Early test work undertaken by UC RUSAL indicates that total fluoride emissions from this type of cell technology can be reduced to 1.0 kg/t Al. The Company has set an ultimate target of reducing emissions from C8-BM cells to 0.6 kg/t Al. Hatch is aware that the Clean Söderberg Technology project is in the early stages of development and has not been provided with any information from UC RUSAL to demonstrate the likelihood of reducing fluoride emissions from C8-BM cells to 0.6 kg/t Al.

The successful implementation of the Clean Söderberg Technology project could allow facilities that have already been fully depreciated to continue production with low on-going capital expenditure and ongoing environmental approvals. However, development works are still ongoing and there has been no timetable set for the full-scale roll-out of Clean Söderberg Technology.

UC RUSAL also have a development programme to convert older C2 and C3 VSS cells to pre-bake cells and this is in the early stages of development at Novokuznetsk Aluminium Smelter. The basic cell design has been completed by RusEng, although plans for pilot-scale implementation in 2011 within an experimental area of one potline at NkAZ were postponed. If implemented, the conversion would raise metal output from the cells through an increase in line current to 167 kA, from the existing 143 kA, and at an improved current efficiency. This

programme may also be implemented at other UC RUSAL smelters upon successful demonstration of the technical, economic and environmental merits of this pre-bake conversion. This can therefore be considered as a long-term plan by UC RUSAL which enables their VSS facilities to continue operation.

HSS cells are considered more of a concern as it is not possible to undertake the Clean Söderberg Technology programme in the same way due to the configuration of these cells. UC RUSAL has stated that it expects all HSS cells will be permanently closed in the coming few years. This process has already begun, with Potlines 2 and 3 at Urals Aluminium Smelter recently closed and shortly to be dismantled.

In terms of general development of technology, raising the line current is the main performance indicator. Initially, low amperage technology of around 50 to 80 kA was possible. Later, when the electromagnetic and thermal characteristics were better understood, medium amperage technologies of approximately 160 kA to 220 kA were developed. Currently, magnetic compensation and state of the art computerised process control systems enable operation at line amperages in excess of 300 kA in prebaked anode cells, termed high amperage technology.

Many of the world's largest aluminium companies are actively developing their own specific form of pre-bake technology and UC RUSAL is no exception. UC RUSAL has a test section at Urals Aluminium Smelter which is operating in excess of 330 kA using technology developed by SibVAMI, the Company's own technology company. The Engineering Technology Centre as part of the RUSAL Engineering Company has been developing new high amperage pre-bake technology at Sayanogorsk Aluminium Smelter including a test section of sixteen RA-400 cells and plans to install a test section of RA-500 cells in the near future. The technology development has been reviewed with the assistance of recognised industry experts and a variant of the RA-300 cell technology was selected for Khakas Aluminium smelter adjacent to the Sayanogorsk smelter. This new facility is now operating commercially at 320 kA. The pilot potroom at Sayanogorsk Aluminium Smelter currently comprises five RA-300 cells designed for the development of RA-300 technology at Khakas Aluminium Smelter and Boguchansky Aluminium Smelter. Another pilot potroom at Sayanogorsk Aluminium Smelter includes 16 RA-400 cells designed to test RA-400 technology for Taishet Aluminium Smelter. UC RUSAL is also planning to replace the C-255 cells with eight RA-500 cells in the same pilot potroom at Sayanogorsk Aluminium Smelter. The successful development of Khakas Aluminium Smelter has demonstrated the potential for the development of new smelters within UC RUSAL using high amperage technology, although it should be noted that RA-500 technology is considered by Hatch to still require significant development.

The RA-300 test cells were first operational in December 2003 and the RA-400 test cells in December 2005. The development cycle for reduction technology is fairly slow in the aluminium industry, at least in the Western World, and the development of the RA-300 and RA-400 technologies over a comparatively short period of time can be considered impressive. However, as the technology has not yet completed one full pot cycle on a commercial scale, the technology cannot be considered "mature" and therefore has a higher risk associated with it than other mature technologies in existence today. There are specific issues to a short development time:

- Firstly the achieved performance (specifically relating to current efficiency, anode effect rate and specific power consumption) is lower than current industry leading technologies. Conversely a potential for improvement exists; and

- Pot life has only been extrapolated from a few autopsies of voluntarily cut out cells. There is a risk that underestimated or undetected problems will surface as the cell ages.

Overall, the RA cell technology represents a significant intangible asset which combined with the cell development experience at SUAL (prior to the formation of UC RUSAL) is expected be used to support the development of new UC RUSAL smelters.

2.3.2.2 Aluminium Smelting

UC RUSAL has full or partial equity ownership of 16 aluminium smelters (excluding facilities currently under construction). The Company is the controlling shareholder in all of these plants. The aluminium smelting assets of UC RUSAL are located in four countries; Russian Federation (13 plants), Sweden (one plant), Ukraine (one plant) and Nigeria (one plant).

Similar to other aluminium industry participants, UC RUSAL has since mid-2008 undertaken a programme to address a reduction in demand for its products. The programme resulted in the full closure or partial closure of a number of operating facilities. With regard to aluminium smelting, the following operations remain fully idled as of 15 September 2009; Alukom Taishet Aluminium Smelter.

Section 5 of this report describes in detail each of the aluminium smelting operations of UC RUSAL.

The combined saleable aluminium production from UC RUSAL plants in 2008 was 4,424 kt. UC RUSAL aggregate attributable production in 2008 was 4,424 kt. Aggregate attributable production is calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are calculated on a 100% plant production basis to reflect UC RUSAL effective control of finished product: ZALK and ALSCON. Table 2.12 shows the contribution from each facility. Also shown is the approximate production attributable to Söderberg and pre-bake production technology.

Table 2.12: Saleable Aluminium Production from Smelting Operations (kt)

Asset	Total Plant Production[1] Year Ended 31 December 2006[a]	2007[a]	2008[a]	6 months to 30 June 2008[a]	6 months to 30 June 2009[a]	UC RUSAL Interest[2] %	UC RUSAL Attributable Production[3] Year Ended 31 December 2008[a]
Bratsk Aluminium Smelter (BrAZ)	979	989	1,002	499	488	100.0	1,002
Krasnoyarsk Aluminium Smelter (KrAZ)	949	987	1,000	500	471	100.0	1,000
Sayanogorsk Aluminium Smelter (SAZ)	523	533	537	268	261	100.0	537
Novokuznetsk Aluminium Smelter (NkAZ)	315	317	320	160	128	100.0	320
Irkutsk Aluminium Smelter (IrkAZ)	297	297	358	165	169	100.0	358
Khakas Aluminium Smelter (KhAZ)	1	173	297	148	147	100.0	297
Bogoslovsk Aluminium Smelter (BAZ)	184	184	186	93	62	100.0	186
Volgograd Aluminium Smelter (VgAZ)	158	162	166	83	73	100.0	166
Urals Aluminium Smelter (UAZ)	133	134	134	67	46	100.0	134
Nadvoitsy Aluminium Smelter (NAZ)	80	81	81	40	28	100.0	81
Kandalaksha Aluminium Smelter (KAZ)	74	75	75	37	28	100.0	75
Volkhov Aluminium Smelter (VAZ)	23	24	24	12	6	100.0	24
Alukom Taishet Aluminium Smelter	10	11	10	5	2	100.0	10
Kubikenborg Aluminium (KUBAL)	117	122	112	58	33	100.0	112
Zaporozhye Aluminium Smelter (ZALK)	113	113	113	57	36	97.6	113
ALSCON	0	0	9	2	2	85.0	9
TOTAL PRODUCTION	3,958	4,202	4,424	2,196	1,980		4,424
Approximately Attributed To:							
HSS Technology	583	585	594	296	179		594
VSS Technology	2,580	2,629	2,633	1,321	1,201		2,633
Prebake Technology	795	987	1,197	579	599		1,197

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are presented on a 100% plant production basis to reflect UC RUSAL effective control of finished product: ZALK and ALSCON.

Table 2.13 shows the estimated saleable aluminium capacity and capacity utilisation of each facility. Saleable aluminium capacity is defined as the estimated volume of cast aluminium which could be produced at the facility within the period defined, irrespective of whether the plant is operating or fully/partially idle. The estimate of saleable aluminium capacity can be considered subjective. The key determining factor is liquid aluminium capacity (i.e. the volume of aluminium produced by the electrolytic pots), which is predominantly determined by the number

of installed pots, pot amperage and current efficiency. Saleable aluminium capacity is based on liquid aluminium capacity adjusted for melt loss and alloying/scrap additions. The estimates presented in Table 2.13 show the capacity that is reasonably considered available for the production of saleable aluminium given the installed technology and equipment of that particular facility.

Table 2.13 shows that UC RUSAL aluminium smelters generally operated at full or near-full capacity in the period 2006 to 2008. This level of capacity utilisation is considered normal for well operated aluminium smelters. The reduction in capacity utilisation in the first half of 2009 reflects the closure of smelting capacity as referred to above.

Table 2.13: Saleable Aluminium Capacity at Smelting Operations (kt)

	Total Plant Saleable Aluminium Capacity[1][2]				Total Plant Capacity Utilisation			
	Year Ended 31 December			6 months to 30 June	Year Ended 31 December			6 months to 30 June
Asset	2006[a]	2007[a]	2008[a]	2009[a]	2006[a]	2007[a]	2008[a]	2009[a]
Bratsk Aluminium Smelter (BrAZ)	986	995	1,006	497	99.3%	99.4%	99.6%	98.1%
Krasnoyarsk Aluminium Smelter (KrAZ)	956	995	1,008	494	99.3%	99.2%	99.2%	95.4%
Sayanogorsk Aluminium Smelter (SAZ)	527	538	542	265	99.3%	99.0%	99.1%	98.5%
Novokuznetsk Aluminium Smelter (NkAZ)	318	320	322	170	99.2%	99.2%	99.3%	74.9%
Irkutsk Aluminium Smelter (IrkAZ)	299	300	360	225	99.3%	99.0%	99.3%	75.4%
Khakas Aluminium Smelter (KhAZ)	1	173	297	148	100.0%	100.0%	100.0%	99.9%
Bogoslovsk Aluminium Smelter (BAZ)	185	185	187	84	99.2%	99.3%	99.4%	73.6%
Volgograd Aluminium Smelter (VgAZ)	160	164	168	84	99.2%	99.0%	99.1%	87.1%
Urals Aluminium Smelter (UAZ)	133	134	134	78	99.5%	99.5%	99.4%	58.7%
Nadvoitsy Aluminium Smelter (NAZ)	81	81	81	38	99.2%	99.3%	99.6%	73.3%
Kandalaksha Aluminium Smelter (KAZ)	75	75	76	37	99.7%	99.7%	99.2%	75.3%
Volkhov Aluminium Smelter (VAZ)	24	24	24	12	99.2%	99.1%	99.1%	46.6%
Alukom Taishet Aluminium Smelter	11	11	11	6	92.5%	99.3%	88.2%	35.7%
Kubikenborg Aluminium (KUBAL)	118	122	128	51	99.5%	99.9%	87.4%	65.3%
Zaporozhye Aluminium Smelter (ZALK)	114	114	114	57	99.0%	99.1%	99.0%	63.5%
ALSCON[3]	n/a	n/a	96	48	n/a	n/a	9.8%	4.3%
TOTAL	3,987	4,233	4,556	2,293	99.3%	99.3%	97.1%	86.3%

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Saleable aluminium capacity is the weight of the aluminium which, it is estimated, could be produced within the period defined. It includes the capacity of existing plant, irrespective of whether the plant is operating or idle. Capacity is shown on a total plant basis and irrespective of ownership. (3) UC RUSAL completed the purchase of ALSCON in 2007. No capacity for 2006 and 2007 is declared.

2.3.2.3 Aluminium Powder

UC RUSAL has full equity ownership of three powder metallurgy plants, all of which are located within the Russian Federation. UC RUSAL aggregate attributable production in 2008, based on ownership interest as at September 15 2009, was 18.7 kt. Table 2.14 shows the contribution from each facility. Each of these plants is described in Section 6 of this report.

Table 2.14: Aluminium Powder Production (kt)

	Total Plant Production[1]					
	Year Ended 31 December			6 months to 30 June 2009[a]	UC RUSAL Interest[2] %	UC RUSAL Attributable Production[3] Year Ended 31 December 2008[a]
Asset	2006[a]	2007[a]	2008[a]			
Krasnoturyinsk Powder Metallurgy	8.8	9.6	8.3	2.7	100.0	8.3
Shelekhov Powder Metallurgy	4.2	4.9	4.7	2.0	100.0	4.7
Volgograd Powder Metallurgy	5.6	5.9	5.7	2.0	100.0	5.7
TOTAL PRODUCTION	18.6	20.4	18.7	6.7		18.7

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as at 15 September 2009.

2.3.2.4 Silicon Smelting

UC RUSAL has full or partial equity ownership of three silicon smelters, all of which are located within the Russian Federation. The Company is the controlling shareholder in all of these plants. The combined silicon production from UC RUSAL plants was 58.0 kt in 2008. UC RUSAL aggregate attributable production in 2008 was 58.0 kt. Aggregate attributable production is calculated on equity ownership interest as of September 15 2009, with the exception of the following plants which are calculated on a 100% plant production basis to reflect UC RUSAL effective control of finished product: Irkutsk Silicon and Zaporozhye Silicon. Table 2.15 shows the contribution from each facility.

Similar to other aluminium industry participants, UC RUSAL has since mid-2008 undertaken a programme to address a reduction in demand for its products. The programme resulted in the full closure or partial closure of a number of operating facilities. With regard to silicon smelting, the following operations remain fully idled as of September 15 2009; Urals Silicon and Zaporozhye Silicon.

Section 6 of this report describes in detail each of the aluminium smelting operations of UC RUSAL.

Table 2.15: Silicon Production (kt)

Asset	Total Plant Production[1] Year Ended 31 December 2006[a]	2007[a]	2008[a]	6 months to 30 June 2009[a]	UC RUSAL Interest[2] %	UC RUSAL Attributable Production[3] Year Ended 31 December 2008[a]
Irkutsk Silicon	32.0	31.3	32.7	8.4	99.9	32.7
Urals Silicon	24.0	25.4	23.9	0.6	100.0	23.9
Zaporozhye Silicon	6.2	0.0	1.3	0.0	97.6	1.3
TOTAL PRODUCTION	62.2	56.7	58.0	9.0		58.0

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are presented on a 100% plant production basis to reflect UC RUSAL effective control of finished product: Irkutsk Silicon and Zaporozhye Silicon.

2.3.2.5 *Secondary Aluminium*

UC RUSAL has full equity ownership of three secondary aluminium plants, all of which are located within the Russian Federation. UC RUSAL aggregate attributable production in 2008, based on ownership interest as at 15 September 2009, was 28.7 kt. Table 2.16 shows the contribution from each facility. Each of these plants is described in Section 6 of this report.

Table 2.16: Secondary Aluminium Production (kt)

Asset	Total Plant Production[1] Year Ended 31 December 2006[a]	2007[a]	2008[a]	6 months to 30 June 2009[a]	UC RUSAL Interest[2] %	UC RUSAL Attributable Production[3] Year Ended 31 December 2008[a]
Resal	16.0	18.3	14.2	2.9	100.0	14.2
Belis	14.0	11.5	7.2	3.5	100.0	7.2
Zvetmetobrabotka	15.0	16.1	7.3	3.7	100.0	7.3
TOTAL PRODUCTION	45.0	45.9	28.7	10.0		28.7

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as at 15 September 2009.

2.3.2.6 *Raw Materials*

UC RUSAL has full or partial equity ownership of two cryolite plants and two cathode plants. The Company is the controlling shareholder in all of these plants. The main products of the cryolite plants are cryolite and aluminium fluoride, which are both used in UC RUSAL's aluminium smelters. Polevskoy Cryolite Plant and South Urals Cryolite Plant are located in the Russian Federation, while Lingshi Cathode Plant and Taigu Cathode Plant are located in China. Each of these plants is described in Section 6 of this report.

Table 2.17: Cryolite, Aluminium Fluoride and Cathode Production (kt)

Asset	Product	Total Plant Production[1] Year Ended 31 December 2006[a]	2007[a]	2008[a]	6 months to 30 June 2009[a]	UC RUSAL Interest[2] %	UC RUSAL Attributable Production[3] Year Ended 31 December 2008[a]
Polevskoy Cryolite Plant . . .	Cryolite	5.5	4.0	4.0	0.7	94.2	4.0
	Alum. Fluoride	36.2	35.0	36.3	7.5		36.3
South Urals Cryolite Plant . . .	Cryolite	9.0	7.0	6.4	2.4	93.5	6.4
	Alum. Fluoride	53.1	55.0	56.7	21.6		56.7
Lingshi Cathode Plant	Cathodes	11.2	15.4	14.4	8.5	100.0	14.4
Taigu Cathode Plant	Cathodes	0.0	0.0	0.2	1.8	100.0	0.2

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are presented on a 100% plant production basis to reflect UC RUSAL effective control of finished product: Polevskoy Cryolite Plant and South Urals Cryolite Plant.

2.3.3 Packaging Division

UC RUSAL has full equity ownership of three aluminium foil mills. The SAYANAL and Urals Foil facilities are located in the Russian Federation, and ARMENAL is located in Armenia. UC RUSAL can produce aluminium foil with thicknesses ranging from 7 to 240 micron, 3003 aluminium alloy strap and a broad range of alufoil-based flexible packaging and household products. Each of these plants is described in Section 7 of this report.

The combined aggregate attributable aluminium foil and packaging material production from UC RUSAL plants in 2008, based on ownership interest as at 15 September 2009, was 68.5 kt. Table 2.18 shows the contribution from each facility.

Table 2.18: Aluminium Foil and Packaging Production (kt)

Asset	Total Plant Production[1] Year Ended 31 December 2006[a]	2007[a]	2008[a]	6 months to 30 June 2009[a]	UC RUSAL Interest[2] %	UC RUSAL Attributable Production[3] Year Ended 31 December 2008[a]
ARMENAL	0.9	12.3	12.9	9.7	100.0	12.9
SAYANAL	38.3	39.5	40.6	14.4	100.0	40.6
Urals Foil	15.6	16.1	15.0	5.1	100.0	15.0
TOTAL PRODUCTION	54.8	67.8	68.5	29.1		68.5

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch, although the figures appear to be reasonable. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as at 15 September 2009.

2.3.4 Engineering and Construction Division

The Engineering and Construction Division provides a wide range of services within UC RUSAL, including technical support, engineering and construction operations. The division undertakes modernisation work of existing plants, including the programmes at Bratsk Aluminium Smelter (which is temporarily suspended) and Krasnoyarsk Aluminium Smelter (completed in September 2009). The division also undertakes the construction of new facilities, including the on-going construction of Taishet Aluminium Smelter.

- Russian Engineering Company (RUS-Engineering) — RUS-Engineering organises, manages and administers the Engineering and Construction Division. RUS-Engineering also comprises the following units:

  - Engineering and Technology Centre (ETC) — ETC is located in Krasnoyarsk and was founded by RUSAL in 2002. ETC is focused on the aluminium smelting assets of UC RUSAL, and in particular large-scale modernisation projects and the implementation of leading edge operational practices, including reducing the environmental impact of UC RUSAL aluminium smelting operations. ETC is currently undertaking projects aimed at increasing pot amperage and current efficiency, the installation of dry anode technology at Bratsk Aluminium Smelter and Krasnoyarsk Aluminium Smelter, and the installation of dry gas scrubbers and automatic alumina feeder systems. ETC undertook the design and engineering of the RA-300 cell, which underwent testing at Sayanogorsk Aluminium Smelter and is now fully implemented on a commercial scale at Khakas Aluminium Smelter. The Boguchansky Aluminium Smelter, which is currently under construction, will use RA-300 technology. ETC started development of the RA-400 cell (to be operated at 400 kA) in 2004. UC RUSAL plans to implement the RA-400 technology at Taishet Aluminium Smelter. ETC are now planning to test RA-500 technology (to be operated at 500 kA) at Sayanogorsk Aluminium Smelter. ETC are also currently investigating technology aimed at reducing greenhouse gas emissions and aluminium cash operating cost reductions. ETC has also undertaken modernisation work in the casthouses of UC RUSAL smelters as part of the UC RUSAL strategy to increase the production of value-added casthouse products.

- In addition, RUS-Engineering undertakes the following activities;

  - Maintenance and repair activities at UC RUSAL's Russian alumina refineries and aluminium smelters, undertaken with resources located at each of these facilities.

  - Feasibility studies (encompassing concept, pre-feasibility and feasibility studies) through its design institute in Krasnoyarsk.

  - Engineering, Procurement, Construction and Management (EPCM) services for development and modernisation programmes.

- VAMI — VAMI is a large-scale operation that was founded in 1931 and was purchased by RUSAL in 2003 (prior to the formation of UC RUSAL). More than 40 facilities for production of alumina, aluminium, magnesium and carbon products have been constructed based on VAMI design and engineering services. The majority of these facilities are located in the former Soviet Union, but exceptions include facilities constructed in countries such as China, India, Turkey and Israel. VAMI offers experience and expertise in undertaking R&D, feasibility and engineering studies and engineering projects in the light metals industry, for both new and existing facilities. The core capabilities and recent technology processes undertaken by VAMI include:

  - equipment and technology for alumina production from the bauxite and nepheline resources of the former Soviet Union;

  - modernisation of VSS and HSS smelting technology;

  - development of 255 kA PFPB cells;

  - busbar systems for aluminium smelters;

  - process control systems for Söderberg and pre-bake cells;

  - technology and equipment for magnesium production;

  - engineering design and construction of new, and modernisation of existing, carbon plants, as well as carbon facilities at aluminium smelters; and

  - environmental protection measures, including developments in gas dry scrubbing systems and technology for removal of fine suspended matter, dissolved and emulsified oils.

- Glinozemservice — Glinozemservice was established in 2004 by RUSAL (prior to the formation of UC RUSAL) and undertakes all repair and maintenance services at Achinsk Alumina Refinery, and for other plants as required.

- Timan Engineering — Timan Engineering provides the Engineering, Procurement, Construction and Management (EPCM) services for the Komi Alumina Project.

- Engineering and Construction Company (ECC) — ECC undertakes project and construction management of UC RUSAL facilities. ECC completed construction of Khakas Aluminium Smelter in 2006, the first major aluminium smelting capacity project in the Russian Federation for almost 20 years, and is also undertaking the construction of Taishet Aluminium Smelter and Boguchansky Aluminium Smelter. The quality of the workmanship

at Khakas Aluminium Smelter is reasonable compared with Western Standards. It is anticipated that ECC will have learnt valuable lessons from the Khakas Aluminium Smelter project and this is expected to provide much scope to build upon this experience during construction of Taishet Aluminium Smelter and future UC RUSAL projects.

- Service Center Metallurg — Service Center Metallurg undertakes minor and major repairs, and maintenance of all equipment, at Nikolaev Alumina Refinery. It also provides services to other UC RUSAL assets, and cooperates with other industrial companies within Ukraine to supply cast products, as well as non-standard equipment and spare parts. Service Center Metallurg was established as an independent entity in 2003, having previously been part of Nikolaev Alumina Refinery.

- SibVAMI — SibVAMI was established in 1959 as the Irkutsk branch of VAMI. SibVAMI undertakes development of projects in all parts and at all stages, from preparation of technical proposals and investment appraisal to submittal of detail documentation for both industrial and civil facilities to client. SibVAMI has licenses required for performance of the whole range of research, design and engineering services.

2.3.5 Power

The security of the electrical energy supply to any aluminium smelter is a major factor to be considered during the plant operations and power contract negotiations. Unexpected total loss of power for even relatively short durations of several hours can cause permanent damage to the cells, and in worst-cases, the liquid aluminium in the pots can freeze leading to the requirement for major capital repair and the loss of smelter production for a long period.

All but one of UC RUSAL's Russian Federation smelters are classified as Category One or Category Two power users, i.e. they have at least two independent power transmission routes to the smelter switchyard, each of which is capable of providing the full power requirements of the smelter in the event of loss or damage to the other transmission line. The sole exception amongst the Russian Federation smelters is Kandalaksha Aluminium Smelter, which does not have 100 per cent redundancy. However, given the nature of the busbar supply from the adjacent power plant the risk of business interruption is substantially mitigated.

Zaporozhye Aluminium Smelter, in Ukraine, has sufficient redundancy in power supply due to its two connections to different parts of the regional grid. ALSCON in Nigeria has a dedicated gas-fired power plant. The power plant has been designed with (n+2) redundancy (i.e. the full power requirements of the smelter can be met under the scenario of two units being out of operation), the gas supply pipelines with (n+1) redundancy and additional back-up fuel supply reflecting best practice.

There were 18 reported power outages at UC RUSAL smelters in 2008, however these were typically for short time periods. Hatch was informed that aluminium production was unaffected in 15 cases, which is consistent with the effects of short-term power losses at similar smelters globally.

In August 2009, a major accident occurred at the Sayano-Shushenskaya HPP in Siberia, which was the main supplier of electricity to Sayanogorsk Aluminium Smelter and Khakas Aluminium Smelter. Hatch understands that the accident resulted in the temporary loss of power to Sayanogorsk Aluminium Smelter, Khakas Aluminium Smelter, SAYANAL and a reduction in power supplies to Novokuznetsk Aluminium Smelter. Hatch understands that production at these facilities was not materially affected in the immediate aftermath of the accident as alternative sources of power were quickly identified. Hatch understands that both Sayanogorsk Aluminium Smelter and Khakas Aluminium Smelter, the two facilities most affected by the accident, are currently receiving power from the regional grid ("Siberian Power Pool") and in particular the

regions of Krasnoyarsk and Kemerovo which form part of the Siberian Power Pool. UC RUSAL has stated that it does not expect aluminium production at Sayanogorsk Aluminium Smelter and Khakas Aluminium Smelter to be affected during the reconstruction of Sayano-Shushenskaya HPP, which the owners, RusHydro, expect to last for four years.

Table 2.19 details total AC electricity consumption at UC RUSAL aluminium smelters in 2008 and the first half of 2009. The reported consumption figure includes power consumed by the smelting pots, including a transformation loss from AC to DC power, and auxiliary electricity consumption, for such areas as the casthouse, anode production process and lighting.

Table 2.19: Electrical Power Consumption at UC RUSAL Smelters in 2008 and H1 2009

	2006(2)	2007	2008	H1 2009
Asset	**AC GWh**	**AC GWh**	**AC GWh**	**AC GWh**
Bratsk Aluminium Smelter	16,831	17,094	17,250	8,339
Krasnoyarsk Aluminium Smelter	16,747	17,410	17,620	8,201
Sayanogorsk Aluminium Smelter	8,735	8,969	9,054	4,331
Novokuznetsk Aluminium Smelter	5,232	5,315	5,381	2,113
Irkutsk Aluminium Smelter	n/a	4,866	5,918	2,691
Khakas Aluminium Smelter	34	2,731	4,564	2,139
Bogoslovsk Aluminium Smelter	n/a	3,195	3,214	1,027
Volgograd Aluminium Smelter	n/a	2,664	2,733	1,204
Urals Aluminium Smelter	n/a	2,430	2,443	757
Nadvoitsy Aluminium Smelter	n/a	1,362	1,350	472
Kandalaksha Aluminium Smelter	n/a	1,281	1,284	473
Volkhov Aluminium Smelter	n/a	382	385	96
Alukom Taishet Aluminium Smelter	187	202	199	48
Kubikenborg Aluminium	n/a	1,825	1,515	485
Zaporozhye Aluminium Smelter	n/a	1,975	1,953	646
ALSCON	n/a	n/a	n/a(3)	26
TOTAL	47,765	71,700	74,862	33,047

Notes: (1) All data has been provided by UC Rusal and has not been verified by Hatch. (2) Electricity consumption in 2006 was provided for former Rusal facilities only. (3) Electricity consumption at ALSCON in 2008 was not provided. This smelter accounted for 0.2% of UC RUSAL saleable aluminium production in 2008, and therefore is not considered material.

The reduction in electrical power consumption at UC RUSAL smelters in the first half of 2009 compared with 2008, on a pro rate basis, is due to production cutbacks at several facilities during this period.

The importance of a stable and secure electricity supply has resulted in the vast majority of aluminium smelters in the world securing electricity under medium to long-term contracts. In the Russian Federation and Ukraine, it is current market practice and regulatory practice to have a guaranteed power supply contract(s) with annually negotiated power tariffs.

The majority of UC RUSAL's smelters are in locations where there is no similar competitive demand for the volume of electricity and thus the company can benefit from this "stranded" energy for the production of aluminium. In addition, these assets typically represent the bulk of demand for the power stations supplying them. Power stations situated in isolated locations would find it virtually impossible to replace an aluminium smelter as a customer, due to the limited availability of nearby large electricity consumers and the inability of the power grid to transport this electricity to more distant consumers. It is therefore clear that both power providers and UC RUSAL must engage in economic behaviour that is in their mutual interests.

Table 2.20 shows the electricity tariffs paid by UC RUSAL aluminium smelters in 2008 and the first half of 2009. These prices include a combination of transmission charges, capacity charges and energy charges. All information on electricity contracts presented in this section has been provided by UC RUSAL and has not been verified by Hatch.

Table 2.20: Electrical Power Supply Tariffs at UC RUSAL Smelters, 2008 and H1 2009(1)

	Local Currency	2006		2007		2008		H1 2009	
Asset	(LC)	LC/ MWh	US$/ MWh(2)	LC/ MWh	US$/ MWh(3)	LC/ MWh	US$/ MWh(4)	LC/ MWh	US$/ MWh(5)
Bratsk Aluminium Smelter .	RUB	271	10.0	282	11.0	414	16.6	502	15.2
Krasnoyarsk Aluminium Smelter.	RUB	298	11.0	335	13.1	474	19.0	714	21.6
Sayanogorsk Aluminium Smelter.	RUB	262	9.6	331	12.9	482	19.4	550	16.6
Novokuznetsk Aluminium Smelter.	RUB	456	16.8	495	19.4	675	27.1	853	25.5
Irkutsk Aluminium Smelter.	RUB	n/a	n/a	282	11.0	493	19.8	496	14.7
Khakas Aluminium Smelter.	RUB	409	15.1	339	13.3	478	19.2	596	18.0
Bogoslovsk Aluminium Smelter.	RUB	n/a	n/a	792	31.0	880	35.3	1170	33.8
Volgograd Aluminium Smelter.	RUB	n/a	n/a	1,122	43.9	1154	46.4	1053	31.8
Urals Aluminium Smelter. .	RUB	n/a	n/a	780	30.5	891	35.8	1195	34.0
Nadvoitsy Aluminium Smelter.	RUB	n/a	n/a	593	23.2	957	38.4	902	27.5
Kandalaksha Aluminium Smelter.	RUB	n/a	n/a	469	18.3	774	31.1	742	22.5
Volkhov Aluminium Smelter.	RUB	n/a	n/a	643	25.1	936	37.6	638	19.1
Alukom Taishet Aluminium Smelter.	RUB	368	13.6	334	13.1	378	15.2	n/a	n/a
Kubikenborg Aluminium . .	USD	n/a	n/a	42.2	42.2	46.7	46.7	41.0	41.0
Zaporozhye Aluminium Smelter.	USD	n/a	n/a	51.9	51.9	68.1	68.1	49.3	49.3
ALSCON	USD	n/a	n/a	n/a	n/a	n/a	n/a	15.1	15.1

Notes: (1) All data has been provided by UC RUSAL and has not been verified by Hatch. (2) Converted from LC/MWh to US$/MWh at the exchange rate of 27.17 RUB/US$. (3) Converted from LC/MWh to US$/MWh at the exchange rate of 25.58 RUB/US$. (4) Converted from LC/MWh to US$/MWh at the exchange rate of 24.90. (5) Converted from LC/MWh to US$/MWh using exchange rate from UC RUSAL Financial Model "Project Oysters DRAFT 090903.xls"

The energy supply to UC RUSAL smelters in the Russian Federation and the Ukraine can be considered in terms of three principle geographical regions:

- **Siberia** — The energy supply to Bratsk Aluminium Smelter, Krasnoyarsk Aluminium Smelter, Sayanogorsk Aluminium Smelter, Irkutsk Aluminium Smelter, Khakas Aluminium Smelter is substantially provided by low cost hydro-electric power. Novokuznetsk

Aluminium Smelter is substantially provided by coal-fired power stations. This energy is "stranded" with little competing demand and few options to export the energy via high voltage transmission lines. The production of aluminium, which is essentially packaged energy, is very well suited to exploiting this resource. On an aggregate attributable basis (refer to Table 2.12), UC RUSAL smelters located in the "Siberia" region produced 3,524 kt of saleable aluminium in 2008 and accounted for approximately 79.7 per cent of total saleable aluminium production from UC RUSAL smelters in 2008. Aluminium smelters in the "Siberia" region paid an aggregate attributable production-weighted average of 19.2 US$/MWh for electricity in 2008.

- **Urals** — The energy supply to Urals Aluminium Smelter and Bogoslovsk Aluminium Smelter is substantially provided by coal and gas fired power plants. On an aggregate attributable basis, UC RUSAL smelters located in the "Urals" region produced 319 kt of saleable aluminium in 2008 and accounted for approximately 7.2 per cent of total saleable aluminium production from UC RUSAL smelters in 2008. Aluminium smelters in the "Urals" region paid an aggregate attributable production-weighted average of 35.5 US$/MWh for electricity in 2008.

- **European** — Nadvoitsy Aluminium Smelter, Volkhov Aluminium Smelter and Kandalaksha Aluminium Smelter are located in regions with a combination of both stranded hydro-electric and nuclear power. In 2006 SUAL (prior to the formation of UC RUSAL) signed a memorandum with Rosatom for the long-term development of nuclear power plants. This agreement may provide continued low cost energy supply to these smelters in the future. Volgograd Aluminium Smelter and Zaporozhye Aluminium Smelter are the only smelters which operate in locations of high energy demand and regional power supply deficits. Accordingly the pricing of energy for these two assets reflects the nature of the supply/demand dynamics of those regions. On an aggregate attributable basis, UC RUSAL smelters located in the "European" region produced 459 kt of saleable aluminium in 2008 and accounted for approximately 10.4 per cent of total saleable aluminium production from UC RUSAL smelters in 2008. Aluminium smelters in the "European" region paid an aggregate attributable production-weighted average of 47.3 US$/MWh for electricity in 2008.

In addition, Kubikenborg Aluminium paid 46.7 US$/MWh for electricity in 2008. No information has been provided on ALSCON electricity tariffs in 2008, although it should be noted that this plant was attributable for only 0.2% of total saleable aluminium production from UC RUSAL smelters in 2008.

The Russian Federation electricity sector is undergoing major changes, with the break-up of the former state-owned monopoly into generation, transmission, distribution and other units and eventual market liberalisation. The exact pricing structure for the industry once deregulation has occurred is difficult to determine, and there are a number of conflicting factors. Key challenges for UC RUSAL are:

- the resultant change in the price mechanism exhibited in other countries following a period of deregulation;

- the maturity profile of power assets, potentially current unsatisfactory financial returns, and the need for re-investment/re-construction;

- the future direction of natural gas, coal and uranium prices;

- the scale of the industrial market versus other users, and future demand trends; and

- locational issues.

Kubikenborg Aluminium and ALSCON have secured, longer term contracts with agreed commercial terms. In respect of Kubikenborg Aluminium, there is a power contract to 2016 which is indexed to Swedish consumer price inflation. The power pricing reflects a mixture of both hydro and nuclear power supply in Sweden. The power contract requires UC RUSAL to continue the commitment to convert the remaining Söderberg cells to pre-bake anode technology. In respect of ALSCON, UC RUSAL has recently agreed a long-term gas supply contract with Nigerian Gas Company until 2025, although Hatch has concerns over the reliability of gas supply within this contracts (refer to Section 5.17.5).

2.3.6 Projects

2.3.6.1 Management of Development Projects

The project progression in UC RUSAL, from a concept to a fully committed project aims to follow a structured approach. After initial definition of concept, a pre-feasibility study is prepared which determines the broad project scope, location, cost, technology and other key parameters. Upon internal approval, this is then expanded into a Detailed Feasibility Study, commonly referred to as a TEO in Russia.

In addition to internal investment approval, projects in Russia also require permits and operating licences from State regulatory bodies. UC RUSAL also co-operates with the State Inter-Departmental Commissions which include representatives from external stakeholders such as JSC Russian Railways, power, environment and other government bodies. As the State Inter-Departmental Commission is involved throughout the process, the Final Feasibility Study and environmental impact assessment (EIA) will reflect their mutual decision.

At all stages of the projects implementation and key stages throughout the process, the project is subject to internal review and approval by the Board of Directors of the Engineering and Construction Division, Management Board and Board of Directors of UC RUSAL. Subject to the project reaching internal investment hurdles, securing finance and obtaining key raw material contracts and permits, the project is committed and the construction phase commences. This date is typically referred to as "financial close".

In order to progress the project between the completion of the Detailed Feasibility Study and financial close, the project typically enters a Front End Engineering and Design (FEED) stage. This allows the engineering and procurement on many of the long-lead items and early site preparation works to be initiated, therefore fast-tracking the project progression upon an unconditional decision to proceed.

2.3.6.2 Short-to-Medium Term Projects

UC RUSAL has advised Hatch of a number of projects for production growth in the short-to-medium term, defined as those projects that received UC RUSAL Board approval and which generally fall within a five-year time horizon. All of the CAPEX estimates below, including the spend to the date specified, if at all, are in real 2008 terms and have been provided by UC RUSAL and, although they appear reasonable, have not been subject to detailed estimate review by Hatch, or independent verification or audit.

- **IrkAZ-5** project refers to the construction of Potline 5 at Irkutsk Aluminium Smelter, which is expected to provide an additional 169 ktpa of aluminium capacity at the nominal line current of 300 kA. The new potline comprises 200 pots utilising high amperage pre-bake technology developed by SibVAMI. Construction of IrkAZ-5 commenced in May 2005, and the potline produced first metal in late 2007. Full commissioning of the potline is expected by the end of 2009. The CAPEX of the project is currently estimated at US$617 million, including VAT, of which US$561 million had been spent as of 30 June 2009.

- **Boguchanskoye Energy & Metallurgy Combine (BEMO)** project involves the construction of a 588 ktpa greenfield aluminium smelter and 3,000 MW hydro power plant (HPP). BEMO is structured as a joint venture partnership between UC RUSAL and RusHydro. The joint-venture owns 100% of the aluminium smelter project, with this equally divided between the joint venture partners. The joint-venture owns 93.7% of the HPP, with this share equally divided between the joint venture partners. The remaining of the HPP is owned by the government of the Russian Federation (2.9%) and other shareholders (3.4%). The aluminium smelter will be located at Karabula, in the Boguchansk district of Krasnoyarsk Region, and have a capacity of 588 ktpa. UC RUSAL's attributable capacity based on its equity ownership will be 294 ktpa. The smelter is proposed to consist of two potlines (672 cells) of RA-300 technology at an amperage of 320 kA. A Technology Agreement has been signed with the joint venture partner to provide the mechanism for UC RUSAL to financially benefit from its 'know how'. The smelter will be commissioned in two stages. The first stage of commissioning is scheduled to be completed in 2012 and the second stage is scheduled for completion by end-2015. The Boguchanskaya HPP project is an initiative to construct a 3,000 MW HPP located 160 km from the site of the Boguchansky Aluminium Smelter. UC RUSAL owns a 46.85 per cent stake in the Boguchanskoye HPP project. The project was approved in 1979 but construction stopped in 1992 due to lack of funding. Construction recommenced in 2006, with construction of the concrete gravity dam and rockfill dam now underway. The commissioning of the first three turbines is scheduled for December 2010. A further three turbines will be commissioned in 2011, and the final three turbines commissioned in 2012. The joint venture partners have signed an agreement for the infrastructure requirements of the project (including power transmission lines, road construction and bridges) to be financed by the Investment Fund of the Russian Federation. The CAPEX for the aluminium smelter (excluding facilities which it is currently believed will be paid by the Russian government) is currently estimated at US$1,692 million, including VAT, and US$1,434 million, excluding VAT. UC RUSAL's share of CAPEX will be US$846 million, including VAT, and US$717 million, excluding VAT, based on 50 per cent equity ownership of the aluminium smelter project. As of 30 June 2009, payments are US$296 million, including VAT, and US$251 million, excluding VAT, for the aluminium smelter (entire plant basis). The CAPEX for the hydro power plant is currently estimated at US$1,712 million, including VAT, and US$1,450 million, excluding VAT. UC RUSAL's share of CAPEX will be US$856 million, including VAT, and US$725 million, excluding VAT. As of 30 June 2009, payments are US$864 million, including VAT, and US$732 million, excluding VAT, for the hydro power plant (entire plant basis).

- **Taishet Aluminium Smelter** project is a greenfield 750 ktpa aluminium smelter, which is located approximately 10 km to the north-east of the existing Alukom Taishet Aluminium Smelter and immediately adjacent to the main East Siberian railway line. It is proposed to use UC RUSAL's proprietary RA-400 smelting technology. Taishet Aluminium Smelter will include all associated facilities such as anode paste production, anode forming, anode baking, potline services and metal casting facilities. The smelter will have access to electrical energy from the Bratsk hydroelectric station and other local connections to the Irkustkenergo grid. A contract for electrical supply to 2021 has been agreed with Irkutskenergo. Preliminary groundworks commenced at the Taishet Aluminium Smelter site in April 2007, and construction of the smelter has commenced. In late-2008 UC RUSAL decided to scale back construction activities at the smelter due to the prevailing economic climate. First hot metal from the Taishet Aluminium Smelter is forecast for December 2011, with all cells started-up by the end of 2014 and full smelter production reached in 2015. The total CAPEX for the aluminium smelter, excluding the anode plant, is currently estimated at US$2,229 million, including VAT, and US$1,987 million, excluding VAT. As of 30 June 2009, payments are US$576 million, including VAT, and US$495 million, excluding VAT.

- **ALSCON** was acquired by RUSAL (prior to the formation of UC RUSAL) in February 2007 and is a reasonably modern aluminium smelter located in Nigeria. The smelter has been troubled with respect to its operations, never having reached full capacity since it was first commissioned. The smelter first produced in 1997, but in June 1999, with only 25 per cent of the plant started up and 45 kt of aluminium produced, a decision was taken by the previous investors to close the smelter. It is the intention of UC RUSAL to use the outstanding equipment, namely potshell, busbar, superstructures and pot tending assemblies, to complete the two potlines and to modernise the pots with newly designed cell linings and a modern cell control system. In addition, the Imo River will need to be dredged so as to accept 25 to 30 kt alumina vessels prior to the plant start up. The nominal plant capacity is 197 ktpa, comprised of two potlines of 216 cells each. The first of the cells was brought into operation in February 2008. As of September 2009, 54 cells are reportedly operating. UC RUSAL plan to commission a further 54 cells by end-2010, to make a total of 108 cells operational. The whole plant, 432 cells, is planned to be fully operational by 2013. The CAPEX of the aluminium smelter is currently estimated at US$298 million, of which US$76 million had been spent as of 30 June 2009.

- **Kubikenborg Aluminium** is currently implementing a major modernisation programme to convert all of the Söderberg cells in Potline 2 to pre-bake cells. Associated project works on other facilities include an upgrade to the anode rodding shop, installation of both new and refurbished rectifier transformers and the erection of a modern GTC. Commissioning of the first 20 pre-bake cells occurred in June 2008, and all 262 cells are planned to be commissioned by the end of 2009. Hatch understands that the Swedish environmental authorities have ruled that Kubikenborg Aluminium must convert cells to pre-bake technology or undergo closure for environmental reasons. As a result of the project, liquid aluminium capacity will increase by approximately 40 ktpa. The CAPEX of the project is currently estimated at US$283 million, including VAT, of which US$239 million had been spent as of 30 June 2009.

- UC RUSAL is undertaking extensive **modernisation programmes** at several of its aluminium smelters using VSS technology. Typically the scope of each programme includes projects to improve environmental performance, increase metal production, reduce unit consumption of raw materials, replace equipment at the end of its service life, improve the operating environment for the workers and align the casthouse product capabilities with the marketing plan. The environmental scope of the modernisation projects includes conversion to dry anode technology, installation of dry scrubbers, modifications to the burners and installation of point feeding on all cells. The capital costs of such modernisation programmes including environmental expenditure are all intended to be financially justified through increases in metal production and improved premiums from value added products.

  - The **Krasnoyarsk Modernisation Programme** commenced in 2004 and was completed in August 2009. The Modernisation Programme has benefited aluminium production through the through the installation of additional cells and increasing line current. The environmental scope of the Modernisation Project included the installation of 22 GTCs, conversion to dry anode technology, installation of dry scrubbers, modifications to the burners and installation of point feeding on all cells. The CAPEX of the project was US$305 million, including VAT, of which US$298 million had been spent as of 30 June 2009.

  - The **Bratsk Modernisation Programme** (Stage 1) commenced basic engineering in 2007, although it has now been temporarily suspended. The plans for a significant upgrade of the smelter under the Modernisation Programme are similar to those implemented at Krasnoyarsk Aluminium Smelter. The scope of the modernisation programme includes the addition of 64 new cells within the existing potrooms,

upgrading electrical equipment to increase the line current and the construction of dry scrubbers and point feeders on all potlines. It is planned that smelter capacity will progressively increase to 1,044 ktpa within five years after recommencement of the Modernisation Programme. The CAPEX of the project is currently estimated at US$419 million, including VAT, of which US$26 million had been spent as of 30 June 2009.

- In addition to the specific Modernisation Programmes referred to above, all smelters with pre-bake, VSS and HSS cells are undergoing progressive modernisations as part of the planned annual sustaining capital programmes.

- **Nikolaev Alumina Refinery** expansion is scheduled to increase plant production from 1.4 Mtpa to 1.7 Mtpa. Construction at the expansion project is progressing and expected to reach design capacity in 2011. The main scope of the project includes new railway tracks, upgrades to bauxite handling equipment, an update of the control system, full implementation of sweetening on all digestion trains, an additional mill (the seventh at the plant), two dedicated pre-desilication tanks, pumps directing the sweet bauxite slurry to flash tanks, and additional heat exchangers added to each of the autoclave banks, upgrade to security filters, addition of plate heat exchangers for cooling green liquor, fifteen mechanically agitated precipitators, five disk filters in the 'white filtration area', revamping of the evaporation area, and three new boilers and one steam turbine in the captive power plant. The CAPEX of the expansion project is currently estimated at US$155 million, including VAT, of which US$125 million had been spent as of 30 June 2009.

2.3.6.3 Long-term Projects

UC RUSAL has advised Hatch of a number of projects for production growth in the long-term, defined as those projects with UC RUSAL Board pre-approval and which generally fall within an eight year time horizon. All of the CAPEX estimates below are quoted in real 2008 terms and have been provided by UC RUSAL and, although they appear reasonable, have not been subject to detailed estimate review by Hatch, or, independent verification or audit. As the projects progress through detailed study and the capital approval process, further updates on the CAPEX are to be expected.

- The **Fria** expansion project is a brownfield expansion of Fria Alumina Refinery to 1,050 ktpa of alumina. A detailed feasibility study on the expansion/modernisation of Fria Alumina Refinery has been completed. The project is currently on hold due to limitations in power supply. Key areas for development include implementation of a new red mud settling and washing system, implementation of a two-stage inter-stage cooling facility in precipitation, addition of new precipitator tanks with mechanical agitation and implementation of new equipment (such as mills, conveyor belts, pumps, calciner, bauxite storage, etc.) as necessary to handle increased material flows. A further 10 m lift of Dam No. 3 in the residue disposal area would also be required. The CAPEX of the project is currently estimated at US$307 million, including VAT, of which US$17 million had been spent as of 30 June 2009.

- **Dian-Dian** is a greenfield alumina refinery project which is planned for construction in Guinea, West Africa. A detailed feasibility study has been completed for a 5.1 Mtpa alumina refinery including a power plant, railway, port and other associated infrastructure. First alumina is currently scheduled for 2015. The CAPEX for this project, including development of the bauxite mine, is estimated at US$5,566 million, of which US$42 million had been spent as of 30 June 2009.

- The **Bogoslovsk Modernisation Project** relates to the existing alumina refinery and has been in the planning stage since 2004. Bogoslovsk Alumina Refinery is currently implementing the process modifications required to improve alumina quality. The process modifications include reconstruction of sintering facilities, including reconstruction of rotary kiln electrostatic precipitators and sinter kiln rotary coolers, and construction of a 365 ktpa cyclone calciner to produce sandy product and reduce fuel consumption. A feasibility study is currently ongoing with plans to increase production to 1,300 ktpa. The total CAPEX is currently estimated at US$267 million for the refinery, including VAT.

- The Engineering Technology Centre adjacent to Krasnoyarsk Aluminium Smelter has been conducting research and trials to improve the environmental performance of C8-BM VSS cells in a project referred to as **Clean Söderberg Technology** (refer to Section 2.3.2.1). All UC RUSAL employing C8-BM VSS cells, namely Krasnoyarsk Aluminium Smelter, Bratsk Aluminium Smelter, Novokuznetsk Aluminium Smelter, Irkutsk Aluminium Smelter and Volgograd Aluminium Smelter, are anticipated to implement the Clean Söderberg Technology project. The Clean Söderberg Technology project is anticipated to financially justify the additional capital requirements through increased metal production at the respective plants. The additional metal production arising from the implementation of the project is expected to be approximately 234 ktpa. The project is currently in the development and testing phase and is expected to be realised in the period 2012 to 2016. The estimated total CAPEX, excluding VAT, for undertaking the Clean Söderberg Technology project and the additional production anticipated at each smelter is:

  - Krasnoyarsk Aluminium Smelter: CAPEX of $136 million, including VAT. Anticipated increase in production of 85 ktpa.

  - Bratsk Aluminium Smelter: CAPEX of $123 million, including VAT. Anticipated increase in production of 102 ktpa.

  - Novokuznetsk Aluminium Smelter: CAPEX of $26 million, including VAT. Anticipated increase in production of 7 ktpa.

  - Irkutsk Aluminium Smelter: CAPEX of $77 million, including VAT. Anticipated increase in production of 28 ktpa.

  - Volgograd Aluminium Smelter: CAPEX of $8 million, including VAT. Anticipated increase in production of 12 ktpa.

- **Urals Aluminium Smelter** expansion project anticipates the modernisation and amperage increase of all HSS cells employed at the smelter. The line load in pre-bake potrooms 1N and 2N will be increased to 195-200 kA. The capacity of potrooms 1N and 2N will increase by 14 ktpa to a total capacity of 83 ktpa. The total CAPEX is currently estimated at US$47 million, including VAT.

- **UAZ-300** project is an expansion of the existing Urals Alumina Refinery, which is expected to add additional capacity of 300 ktpa through the decommissioning of approximately 200 ktpa of old and inefficient facilities and the installation of approximately 500 ktpa of new capacity for a final plant capacity of approximately 1,025 ktpa. The additional bauxite supply is expected to be provided from the Timan Bauxite Mine. The total CAPEX is currently estimated at US$308 million for the refinery, including VAT.

- UC RUSAL is currently studying the option of **converting older C-2 and C-3 VSS cells to pre-bake technology**. The project will improve the environmental performance of the cells. The estimated total CAPEX, excluding VAT, for undertaking the conversion project at each smelter is:

  - Novokuznetsk Aluminium Smelter: CAPEX of $296 million, including VAT.

  - Volgograd Aluminium Smelter: CAPEX of $204 million, including VAT.

  - Irkutsk Aluminium Smelter: CAPEX of $143 million, including VAT.

2.3.6.4 Long-term Prospects

Long-term prospects relate to project opportunities that are currently in the initial conceptual stages of development or require resolution of key issues. As such, the scope, schedule and related OPEX and CAPEX are less defined than the long-term projects referred to above. The long-term prospects include:

- UC RUSAL plans to construct a new 2.0 Mtpa alumina handling complex in the **Port of Vanino**. The new port handling terminal will be wholly owned by UC RUSAL and sized to accommodate vessels up to 40,000 dwt, with total alumina storage facilities of 60,000 tonnes. The new terminal will improve UC RUSAL's ability to import alumina and transport it by rail to smelters in Siberia. Vanino is located on eastern seaboard of the Russian Federation, north of Vladivostok. Port of Vanino is classed as a medium sized seaport, however it currently has limited alumina handling and storage capacity (0.8 to 1.2Mtpa). The main storage and handling facilities to be provided at Vanino will comprise; berths equipped with rail-mounted vacuum unloader, three storage silos, car loading station, conveyer systems for alumina handling from the berth to the warehouse and from the warehouse to the car loading station, and general port facilities. A decision whether to undertake the project has been postponed since January 2009. The CAPEX of the project is currently estimated at US$117 million, including VAT, of which US$1 million had been spent as of 30 June 2009.

- UC RUSAL plans to construct a new alumina and aluminium handling complex in the Port of Ust Luga. Ust Luga is located on the Baltic Sea, approximately 50 km west of St. Petersburg. Port of Ust Luga is classed as a small seaport, but is currently undergoing a major expansion programme. The new port terminal will be wholly owned and dedicated to UC RUSAL operations. A definitive size of the new terminal is yet to be finalised, however current plans are handling capacity for 3.5 Mtpa of alumina imports and 2.6 Mtpa of aluminium exports. The commercial arrangements for ownership of the new terminal have not been finalised, however it may comprise a three way agreement between UC RUSAL, Russian Railways and the port handling operator. The main storage and handling facilities to be provided as part of the project will comprise; berths equipped with a rail-mounted vacuum unloader, storage silos, packaged aluminium storage, container storage, railroad and car loading station, conveyer systems for alumina handling from the berth to the warehouse and from the warehouse to the car loading station, and general port facilities. A conceptual feasibility study on the project was completed in 2009. The CAPEX of the project is currently estimated at US$296 million, including VAT.

- The **Novokuznetsk** coal fired power station is planned to take advantage of abundant coal resources in the Novokuznetsk region and supply electrical energy to the Novokuznetsk aluminium smelter. It is planned to commence a feasibility study for the development of a 600 MW power plant. The scope of the project may vary following the feasibility study.

- A pre-feasibility study has been completed on the **Alpart Expansion** project which is planned to expand refinery capacity to 1,950 ktpa. The scope of the project is focused on both increasing flow and yield through debottlenecking and including additional seed filtration.

- **Windalco Expansion** refers to the expansion of the Windalco-Ewarton refinery by 500 ktpa. A feasibility study has been completed, although it is understood that further development work is required to be undertaken. In addition UC RUSAL are studying the option of constructing a coal fired heat and power plant to provide the steam and electricity requirements of the Windalco-Ewarton refinery with benefits in the reduction of the alumina operating costs at the facility.

- At **Queensland Alumina Ltd**. potential exists for further capacity expansion of the refinery to 5 Mtpa or beyond should the owners unanimously agree.

- The **Indonesia Alumina Refinery** project includes the construction of a 3.5 Mtpa bauxite mine and a 1.2 Mtpa alumina refinery in Indonesia. Two potential locations are currently being evaluated; one near the bauxite supply and one near the Pontianak Port. A Memorandum of Understanding to develop the project was signed in 2007 between UC RUSAL and PT Aneka Tambang (PT Antam). UC RUSAL owns 51 per cent of the project, while PT Antam owns the remaining 49 per cent. An independent evaluation of resources is currently being carried out on two bauxite deposits in West Kalimantan that are intended to supply the alumina refinery, namely at Pantas and Munggu Pasir.

- The **Sakhalin Energy and Metallurgical Complex** project envisages the construction of a greenfield aluminium smelter of 380 ktpa capacity using UC RUSAL's proprietary RA-400 smelting technology. The smelter will be located at Uglegorsk, Sakhalin Island, located in the far east of the Russian Federation. The project requires the construction of a greenfield coal fired power plant, which is currently planned to be constructed and operated by a third-party. UC RUSAL are considering supplying coal to the power plant from an adjacent open-cut coal mine to provide additional assurance over electricity supply to the smelter. The smelter is planned to be located near a port 12 km from the coal deposit, providing access for raw materials and finished product. UC RUSAL has a Memorandum of Understanding with the owner of the coal mine and has completed a conceptual feasibility study.

- The **Ekibastus Aluminium Smelter** project is a plan to construct a greenfield aluminium smelter in the Kazakhstan Republic. The project envisages a smelter capacity of 375 ktpa based on UC RUSAL's proprietary RA-400 smelting technology. It is intended that a fourth power unit will be constructed at the GRES-2 coal-fired power station to provide dedicated electricity supply to the smelter. The additional power unit will be an equal joint venture between the government of the Kazakhstan Republic and UC RUSAL. A pre-feasibility study into the Ekibastus Aluminium Smelter project has been completed.

- The **Saratov Aluminium Smelter** project envisages the construction of a greenfield aluminium smelter of 1.05 Mtpa capacity using UC RUSAL's proprietary RA-400 smelting technology. The smelter will be located in Saratov region, located in the south-west of the Russian Federation. It is intended that two additional power units will be constructed at the Balakovskaya Nuclear Power Plant (Blocks 5 and 6) to meet the electricity requirements of the smelter. The Balakovskaya Nuclear Power Plant currently comprises four power units with the construction of Blocks 5 and 6 planned to provide an additional 2,000 MW of electricity supply. UC RUSAL are currently negotiating a long-term electricity supply agreement with Rosatom, the owner of the Balakovskaya Nuclear Power Plant.

- The **Far East Energy and Metallurgic Complex** project envisages the construction of a greenfield aluminium smelter at Komsomolsk-na-Amure, near Port Vanino in Khabarovsk region. UC RUSAL has yet to commence conceptual studies on this project.

- The **Kemerovo CHP Plant** project is a plan to construct a coal-fired combined heat and power (CHP) plant in Kemerovo region. A definitive power plant capacity is yet to be finalised, however current plans are for electricity generating capacity of 300-600 MW. The power plant will be fed from a coal mine located in the south of the Kemerovo region. UC RUSAL are currently negotiation with the regional government with a view to acquiring the coal mine to provide security of raw material supply to the power plant. It is envisaged that the Kemerovo CHP Plant will supply electricity either to Novokuznetsk Aluminium Smelter or a new smelter in Kemerovo region (Kemerovo Aluminium Smelter).

- The **Kemerovo Aluminium Smelter** project envisages the construction of a greenfield aluminium smelter in Kemerovo region supplied electricity from Kemerovo CHP Plant. The smelter size is contingent on the installed generating capacity of Kemerovo CHP Plant, however current plans are for aluminium capacity of 150-300 ktpa.

- The **Sverdlovsk Aluminium Smelter** project envisages the construction of a greenfield aluminium smelter in Sverdlovsk region. UC RUSAL has yet to commence conceptual studies on this project.

- The **Libya Aluminium Smelter** project is a plan to construct a greenfield aluminium smelter of 600 ktpa capacity using UC RUSAL's proprietary RA-300 smelting technology. The smelter will be located in Libya, however the final site location is yet to be finalised. The project also includes the construction of a 1,500 MW dedicated gas-fired power plant. A Memorandum of Understanding to develop the project was signed in April 2008 between UC RUSAL and the Economic and Social Development Fund of Libya. UC RUSAL owns 60 per cent of the project, with the Economic and Social Development Fund owning the remaining 40 per cent. UC RUSAL has completed a pre-feasibility study into the project.

2.3.7 Costs

2.3.7.1 Operating Costs

Hatch was provided with alumina and aluminium plant operating costs data by UC RUSAL.

The Alumina Cash Operating Cost represents the average cost of producing one tonne of alumina, excluding freight costs to point of sale, depreciation, amortisation, group overheads, but including selling costs. The UC RUSAL Alumina Cash Operating represents a production-weighted average of ex-works cash costs at UC RUSAL alumina refineries in the period specified.

The Aluminium Cash Operating Cost data provided represents the average cost of producing one tonne of aluminium product, excluding depreciation, amortisation, group overheads, but including selling and distribution costs to port for onward shipping. The UC RUSAL Aluminium Cash Operating Cost represents a production-weighted average of Cash Operating Costs at UC RUSAL aluminium smelters in the period specified.

Aluminium Cash Operating data for 2006 and 2007 for each facility was not provided in a format that allowed direct comparison with data provided for the first half of 2009. The data provided for the period 2006 and 2007 was at the level of consolidated UC RUSAL and did not permit review, analysis and reconciliation for each facility.

Table 2.21 shows historical Cash Operating Costs for alumina refineries and aluminium smelters.

Table 2.21: Cash Operating Costs, 2006 — H1 2009[1]

	Average Cash Operating Cost (US$/tonne)			
	Year Ended 31 December			6 months to 30 June
Categories	2006[a] [2]	2007[a]	2008[a]	2009[a]
Alumina Refineries	225	285	349	249
Aluminium Smelters	1,488	1,778	1,915	1,402

a = actual

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch. (2) 2006 data corresponds to former RUSAL plants only.

Table 2.22 presents average Alumina Cash Operating Costs for each facility and the UC RUSAL consolidated average for the first half of 2009.

Table 2.22: Alumina Cash Operating Costs in H1 2009[1]

Asset	Total Plant Production H1 2009, kt	UC RUSAL interest[2] %	UC RUSAL Attributable Production[3]	Alumina Cash Cost H1 2009 ($/t)
Queensland Alumina Ltd. (QAL)	1,927	20.0	385	249
Fria Alumina Refinery	272	100.0	272	237
Aughinish Alumina	565	100.0	565	267
Eurallumina	92	100.0	92	378
Alpart	227	65.0	147	268
Windalco (Ewarton and Kirkvine Works)	165	93.0	153	261
Bogoslovsk Alumina Refinery (BAZ)	500	100.0	500	254
Achinsk Alumina Refinery (AGK)	452	100.0	452	177
Urals Alumina Refinery (UAZ)	349	100.0	349	261
Boxitogorsk Alumina Refinery (BGZ)	60	100.0	60	489
Nikolaev Alumina Refinery (NGZ)	733	100.0	733	261
Zaporozhye Alumina Refinery (ZALK)	29	97.6	29	363
TOTAL	5,370		3,738	249

Note:

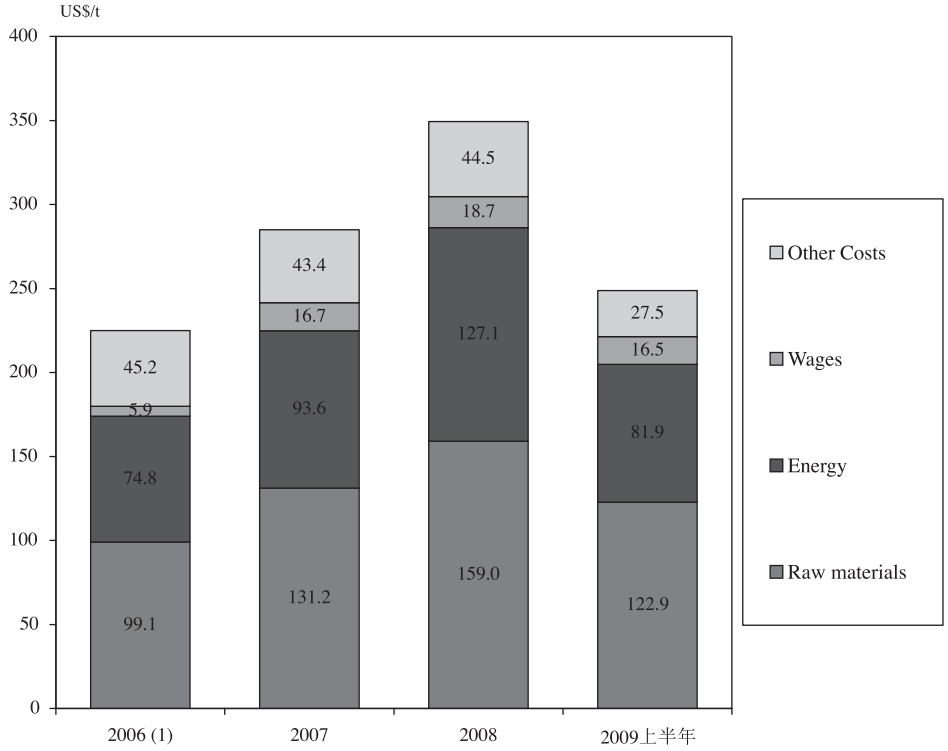
(1) All data has been provided by UC RUSAL and has not been verified by Hatch.

(2) Equity ownership as at 15 September 2009.

(3) Attributable production calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are presented on a 100% plant production basis to reflect UC RUSAL effective control of finished product: ZALK.

Figure 2.6 illustrates the historical breakdown of Alumina Cash Operating Costs by major cost component.

Figure 2.6: Average Alumina Cash Operating Costs, 2006 - H1 2009



Note: The sum of the cost components may not equal the total presented in Table 2.20 due to rounding. (1) 2006 data corresponds to former RUSAL plants only.

Source: UC RUSAL

Table 2.23 presents average Aluminium Cash Operating Costs for each facility and the UC RUSAL consolidated average for the first half of 2009.

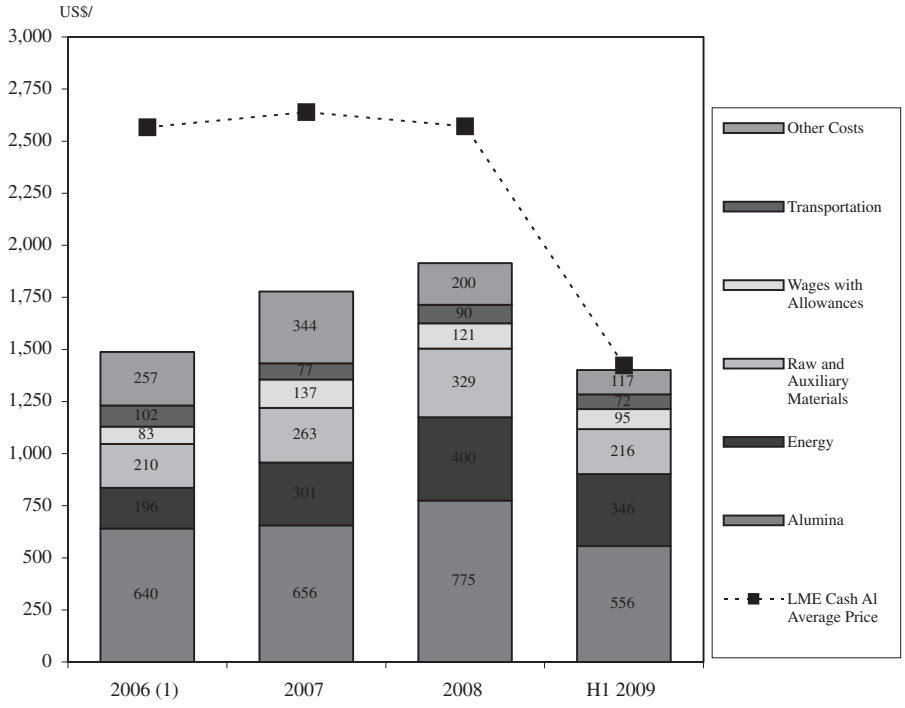
Table 2.23: Aluminium Cash Operating Costs in H1 2009[1]

Asset	Total Plant Production H1 2009, kt	UC RUSAL interest[2] %	UC RUSAL Attributable Production[3]	Aluminium Cash Cost H1 2009 ($/t)
Bratsk Aluminium Smelter (BrAZ)	488	100.0	488	1,282
Krasnoyarsk Aluminium Smelter (KrAZ)	471	100.0	471	1,338
Sayanogorsk Aluminium Smelter (SAZ)	261	100.0	261	1,375
Novokuznetsk Aluminium Smelter (NkAZ)	128	100.0	128	1,433
Irkutsk Aluminium Smelter (IrkAZ)	169	100.0	169	1,468
Khakas Aluminium Smelter (KhAZ)	147	100.0	147	1,231
Bogoslovsk Aluminium Smelter (BAZ)	62	100.0	62	1,597
Volgograd Aluminium Smelter (VgAZ)	73	100.0	73	1,547
Urals Aluminium Smelter (UAZ)	46	100.0	46	1,713
Nadvoitsy Aluminium Smelter (NAZ)	28	100.0	28	1,524
Kandalaksha Aluminium Smelter (KAZ)	28	100.0	28	1,523
Volkhov Aluminium Smelter (VAZ)	6	100.0	6	1,770
Alukom Taishet Aluminium Smelter	2	100.0	2	1,404
Kubikenborg Aluminium (KUBAL)	33	100.0	33	2,115
Zaporozhye Aluminium Smelter (ZALK)	36	97.6	36	2,240
ALSCON	2	85.0	2	3,916
TOTAL	1,980		1,980	1,402

Note: (1) All data has been provided by UC RUSAL and has not been verified by Hatch. (2) Equity ownership as at 15 September 2009. (3) Attributable production calculated on equity ownership interest as of 15 September 2009, with the exception of the following plants which are presented on a 100% plant production basis to reflect UC RUSAL effective control of finished product: ALSCON and ZALK.

Figure 2.7 illustrates the historical breakdown of Aluminium Cash Operating Costs by major cost component.

Figure 2.7: Average Aluminium Cash Operating Costs, 2006-H1 2009



Note: The sum of the cost components may not equal the total presented in Table 2.20 due to rounding. (1) 2006 data corresponds to former RUSAL plants only.

Source: UC RUSAL

The increase in Aluminium Cash Operating Costs between 2006 and 2008 was principally due to local cost inflation, rising commodity prices and exchange rate effects which increased the cost of alumina, energy, raw materials and labour costs. The reduction in Aluminium Cash Operating Costs between 2008 and the first half of 2009 was attributable to several reasons.

- UC RUSAL reduced production at several of its higher cost facilities in the first half of 2009, which had the affect of reducing the consolidated Cash Operating Cost.

- The weakening of the Russian Rouble versus the US Dollar reduced Russian Rouble denominated costs when converted into US Dollars.

- UC RUSAL aluminium smelters benefited from lower alumina costs through the reduction in Alumina Cash Operating Costs at UC RUSAL alumina refineries in the first half of 2009.

- The prices of principle raw materials in the global market fell during the first half of 2009.

- UC RUSAL also negotiated advantageous supply contracts with suppliers within the Russian Federation for certain raw materials, including raw coke, baked coke, anodes and pitch.

- UC RUSAL benefited from improved operating efficiency through the reduction in the unit consumption per tonne of aluminium produced of certain raw material inputs at certain facilities.

- UC RUSAL took the decision at several aluminium smelters to reduce operating costs by not relining reduction cells as they approached the end of their life or failed. This resulted in a significant reduction in UC RUSAL consolidated pot relining costs in the first half of 2009. It should be noted that such a cost reduction is not sustainable over the medium-to-long term.

2.3.7.2 Capital Costs

Development Capital Expenditure

Developmental capital expenditure includes all projects which provide benefit through increased production both at brownfield and greenfield sites. Table 2.24 presents historical development capital expenditure for UC RUSAL alumina refineries and aluminium smelters.

UC RUSAL sharply reduced development capital expenditure in the first half of 2009 as it cancelled or temporarily suspended the majority of its major development projects. This approach was common across the aluminium industry as a number of UC RUSAL's peers also announced delays or cancellations to development projects as a practical approach to reduce cash outgoings during this period of economic uncertainty.

UC RUSAL has an extensive portfolio of development projects at various stages of development. Refer to Section 2.3.8.

Table 2.24: UC RUSAL Development Project CAPEX, 2006 — H1 2009

	Developmental Capex ($US million, inc. VAT)[1] Year Ended 31 December			
	Year Ended 31 December			6 months to 30 June
	2006[a][2]	2007[a]	2008[a]	2009[a]
Alumina Refineries	163.7	172.0	127.2	2.4
Aluminium Smelters[3]	712.8	1,127.9	964.3	113.0

a = actual
Note:
(1) All data has been provided by UC RUSAL and has not been verified by Hatch.
(2) Does not include former SUAL and Glencore assets.
(3) Includes Boguchanskaya HPP.

Sustaining Capital Expenditure

Sustaining capital expenditure includes all costs related to the replacement of major items of equipment, overhauls and environmental upgrades. All costs associated with the maintenance of the facilities by REC are not included, as they are included in operating costs.

UC RUSAL sharply reduced sustaining capital expenditure in the first half of 2009 in response to the deteriorating market environment within the aluminium industry in this period. The reduction in capital expenditure is consistent with the notion that sustaining capital projects at a particular facility can be deferred for a short period of time, although in order to maintain the facility to ensure on-going efficient, safe and environmentally compliant operations, there will be a requirement for the sustaining capital allocation to increase in subsequent years.

Table 2.25: UC RUSAL Sustaining CAPEX, 2006 — H1 2009

	Sustaining Capex ($US million, inc. VAT)[1] Year Ended 31 December			
	Year Ended 31 December			6 months to 30 June
	2006[a][2]	2007[a]	2008[a]	2009[a]
Alumina Refineries[3]	42.0	203.4	106.1	26.2
Aluminium Smelters[3]	79.5	180.5	82.2	6.2

a = actual

Note:

(1) All data has been provided by UC RUSAL and has not been verified by Hatch.

(2) Does not include former SUAL and Glencore assets.

(3) No breakdown was provided between smelter and refinery sustaining capital at the integrated operations of BAZ, UAZ and ZALK. UC RUSAL advised Hatch for the purposes of this table to assume that total sustaining capital at these facilities is divided approximately into alumina refinery (80%) and aluminium smelter (20%).

2.4 Conclusions

2.4.1 Joint Hatch and SRK Conclusions

Hatch and SRK jointly concluded that:

- Facilities generally appear to be well managed at an operating level.
- Management's technical knowledge and understanding appear to be of a sufficient level to support short to medium term planning as appropriate.
- Material risks identified appear to be understood by plant management. Appropriate action to mitigate these risks is either being taken or is under discussion.
- Long-term planning requires greater attention and focus.

2.4.2 Hatch Conclusions

Hatch concludes, from its specific scope of work, that:

- Ore processing, process and downstream plants and associated infrastructure appear to be capable of supplying products of the quality required to satisfy the relevant markets at the production levels planned by UC RUSAL, not withstanding the additional care and maintenance requirements required for some of the more mature installations.
- Much progress has been made in the education of the whole workforce in improving safety performance, and the Company provides good training and support for workers safety and welfare which should continue the improvement in these areas.
- Environmental issues appear to be managed in accordance with current local requirements and there are no apparent issues that may materially impede production, subject to changes in regulations.
- Management operates a management accounting system based on SAP which is able to extract data and report in accordance with both Russian Accounting Standards and IFRS, where required. Management is able to monitor and forecast production and cost parameters which should provide more controllability and transparency as the organisation matures.

2.4.3 SRK Conclusions

SRK concludes, from its specific scope of work, that:

- Geological investigation and interpretation have been carried out according to the standards required and are appropriate.
- The short term and annual mine plans appropriately consider geological and geotechnical factors to minimise mining hazards.
- The operating mining units are capable of continuing to supply products to satisfy the current demands of the downstream refineries and plants and generally have the capacity to increase production given relatively modest capital investment.
- Operations at Alpart and Windalco have been suspended and the mines (and refineries) placed under care and maintenance. This may have future implications on the respective licences held by UC RUSAL or its subsidiaries.
- The Company would benefit from long term planning of its mineral assets which would add value in terms of increasing the Ore Reserves base and its flexibility to respond to changes in the market.
- The mine operating costs have on the whole decreased between 2008 and H1 2009, and some substantially. UC RUSAL forecast operating costs are based on H1 2009 and are lower in some cases. The volatility in operating costs between 2007, 2008, H1 2009 and H2 2009 impacts on the confidence which SRK attributes to these forecasts.
- In general, UC RUSAL's mining equipment (either in place or planned in the capital forecasts) is suited to its mine plans and adequate for the production levels forecast.
- As a result of the global downturn, UC RUSAL has curtailed or deferred capital expenditure at its operations and projects. The effect of this in the short to medium term cannot be quantified, however may be significant, especially should capital expenditure cuts need to continue.

3. Mining Operations

3.1 Alpart Bauxite Mine

3.1.1 Introduction

SRK undertook a site visit to the Alpart Bauxite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

In March 2009, operations at the mine and refinery were suspended and these were placed under care and maintenance. SRK understands this to be due to the lack of demand and the drop in prices received on the open market for alumina.

3.1.2 History and Location

Aluminium Partners of Jamaica ("Alpart"), is situated on the Caribbean island of Jamaica, lying some 150 km south of Cuba and 160 km west of Haiti. The island measures 200 km from E to W and 65 km from N to S, and has a population of some 2.6 million.

Alpart is a joint venture between UC RUSAL and Hydro. The complex comprises an alumina refinery, a shipping port (Port Kaiser) and a bauxite mine. The production volume of Alpart is some 1.65 Mt of alumina annually.

The terrain of Jamaica is mostly mountainous with narrow, discontinuous coastal plain. The relief ranges from 0 m at the Caribbean sea level to 2,256 m at the peak in the Blue Mountain. Access to all mining areas is excellent via tarred roads, and the island is accessible by a number of international flights via international airports.

The climate is tropical, hot and humid with temperate interior. The island has in the past been subjected to hurricanes, and was particularly affected by hurricane Ivan in 2004. Temperatures are fairly constant averaging around 26°C. The wind prevails from the east or northeast and brings rains to the island with an average rainfall of 190-380 cm per annum.

Bauxite was discovered in the 1930s when a farmer sent soil for analysis as certain portions of his land failed to yield crops, and the result identified the high alumina in the soils.

Mining in the Alpart area commenced in the 1950s in the valley deposits located near to the refinery site. Valley deposit mining was abandoned in the 1970s due to processing issues relating to the pisolites, lower available alumina and high SiO_2 content, which resulted in higher processing costs and low alumina production. Production since has concentrated on the plateau type deposits.

Alpart currently holds one mining licence, SML-167 (Plateau, Essex Valley and Malvern), one exploration licence SEPL-541 (Outside Valley), and has a contract agreement to mine portions of a further licence SML-130 (Plateau) owned by third party company Jamalco. As far as SRK understands, these licences are all currently valid and are annually renewed with the Jamaican Bauxite Institute ("JBI").

The Jamalco agreement states 25 Mt (dry) to be mined up to 2014, with options for extensions. Excluding the Jamalco licence, some 55% of the surface rights within the Alpart licences are owned by either Alpart or the government which makes these areas immediately accessible for mining. The remaining 45% is privately owned, and will require land acquisition and possible resettlement of residents if economically viable before mining can commence.

In addition, Alpart has a signed 30-year agreement dated 2005 which obliges the government to guarantee suitable quantities and qualities of bauxite resource areas to meet the plant requirements for the period of the agreement. This material cannot be reported as either Mineral Resource or Ore Reserve in accordance with the JORC Code.

3.1.3 Geology

Bauxite deposits are generally located across the central portion of the island and cover a significant area of the land. The geology of the island comprises Cretaceous Basement complex of volcanic, volcaniclastics and intrusives, Post Cretaceous trough sediments, volcanic and intrusives and Tertiary white/yellow limestones which conformably overly the older rock types and cover approximately 70% of the island.

Jamaican bauxites and bauxitic clays of commercial quality are deep red in colour, overlay Tertiary white limestones and often occur in association with faulting of the limestone. The faulting resulting in major elevation differences allows the separation of the bauxites into Plateau and Graben/Valley types. The deposits are overlain by an average of 0.6 m topsoil which is kept and used for restoration.

Plateau type bauxites contain predominantly haematitic, gibbsitic bauxite ("THB") with <3% goethite and <3% boehmite, whereas Graben/Valley type bauxites contain predominantly gibbsitic goethitic with >3% boehmite ("MHB") as the gibbsite transforms to boehmite concurrently with the haematite to goethite transition.

The Jamaican bauxite deposit occurrences are strongly correlated with water tables lying significantly below the surface and are found to lie on the karstic weathered surface of the Tertiary limestones with an extremely sharp contact with no transition whatsoever. The origin of the bauxites is thought to have been from the bauxitisation of volcaniclastic material deposited sub-aerially which filled in the karstic topography.

Deposits exhibit considerable variations in size ranging from less than 1 wet tonne to in excess of 1,000 wet tonnes, down to maximum depths of around 40 m. The Graben/Valley type deposits are generally deeper than the Plateau types.

The SML-167 Plateau deposits comprise mature THB bauxites in pockets/lenses infilling the high relief karstic weathered limestones. The deposits average around 7,500 m^2 in area, 3.4 m thickness, and 25,000 dry tonnes.

The SML-167 Essex Valley Graben/Valley deposits comprise MHB bauxites in pocket/lense type low-elevation bauxites infilling low relief karstic surface. The deposits average around 13 m in thickness and are similar in size to the Plateau deposits averaging around 25,000 dry tonnes. The bauxites may suffer in terms of processability due to high pisolite content and potentially higher Haematite/Goethite ratios.

The SML-167 Malvern Graben/Valley deposits comprise MHB bauxites, averaging around 50,000 dry tonnes, but transform to more THB bauxites in the north.

The SML-130 Plateau deposits are owned by Jamalco, but extracted by Alpart, and comprises mainly mature THB bauxites in overlapping pocket/blanket type infill in high relief karstic surface, averaging 24,000 m^2 in area, 4.3 m thick on average, but up to 20 m thick in places, and 130,000 dry tonnes.

In addition, the SEPL-541 Outside Valley exploration permit contains MHB Graben/Valley bauxites, currently being explored, which average around 50,000 dry tonnes.

The Alpart bauxites typically have the following properties: bulk density of 1.75 t/m^3, moisture content of around 21.4%, alumina content between 38-47%, and silica content between 1-8%.

The bauxites in Jamaica are very patchy, pocket-like and discontinuous, generally because of the highly undulating and variable karstic weathered limestone footwall. The grade continuity is also variable within the pockets of bauxite, however the average chemistry and grade of individual deposits in comparison with adjacent geologically separate deposits are very similar. Therefore, on a deposit-scale the grade continuity may be poor-moderate, but on a more regional scale, moderate-good. The Alpart deposits are generally much smaller in average tonnage when compared to those deposits at Windalco.

However, the poor geological continuity is helped considerably by the fact that areas where bauxite has "very high potential" to be found, it can be easily delineated from aerial/satellite imagery, due to the fact that the deep red coloured bauxites are clearly visually distinguishable from the footwall limestones which are white in colour.

The THB and MHB bauxites at Alpart are blended together and processed in a high temperature Bayer process.

3.1.4 Mineral Resources and Ore Reserves

Resource estimates are undertaken using a combination of approaches mainly utilising aerial/satellite photo imagery, outcrop mapping and continuous flight auger drilling. Bauxite targets are initially identified from photo imagery as they are clearly visible due to the lack of vegetative cover, following this surface mapping and ground truthing is undertaken which tends to eliminate around 50% of the bauxite targets and finally auger drilling is undertaken on wide grids (approximately 100 m) stepping down eventually to 30 m and 15 m grids prior to mining.

Samples are collected from the auger drilling at 3 m intervals, with adjustments made to lengths to enable them to tie in with reference bench elevation levels. Samples are reduced and prepared prior to analysis using standard accepted practices and are then analysed both elementally and mineralogically using X-Ray Fluorescence ("XRF") and quantitative X-Ray Diffraction ("XRD") techniques and bomb digest tests for available alumina and Reactive Silica ("RSI"). Quality control and quality assurance are monitored at the laboratory to a satisfactory level including the regular use of standards, duplicates and external laboratory checks.

Recent confirmatory drilling has been undertaken to confirm historical "book tonnages" calculated by previous owning companies and to calculate in-house resource estimates in a more robust manner. This work has resulted in factors being calculated to adjust "book tonnages" to be more in-line with current estimates.

Alpart's Mineral Resources estimate is undertaken using a combined approach of GIS (ArcGIS), Microsoft Access Databases and Vulcan Mining Software. The methodology is fairly simple due to the nature of the bauxites and follows a logical system. Deposit estimates of tonnages and grade comprise both adjusted historical "book" estimates, recent Vulcan 3D estimates and estimates interpolated from surrounding deposits that have been explored in detail. The highest confidence estimates completed in Vulcan, which reconcile well with the plant, are only complete for a small percentage of the deposits, some three months in advance of mining.

The resultant resource/reserve information for all deposits is stored in ArcGIS with exports produced in Microsoft Excel format containing detailed information for every deposit, including fields such as bauxite area, tonnages, grades, land-ownership status, drillhole information type, mining/restoration status, mined quantities, etc.

SRK comments that the geology and major controls of the bauxite are well understood enabling sufficient confidence in the modelling of the bauxite. The poor geological continuity due to the karstic weathered footwall is counteracted somewhat by the visually clear contact between the deep red bauxite and the white limestone footwall. The data quality and quantity is considered sufficient for classification into the Measured, Indicated and Inferred Mineral Resource categories as defined by the JORC Code, especially given the good reconciliations.

In order to classify the Mineral Resources, SRK has assessed land-ownership, drilling status, drilling density and sterilisation, and only included deposits considered potentially economic by applying cut-off grades ("CoG") of >38% available alumina, <10% SiO_2 and a minimum deposit size of 5,000 wet tonnes. Re-drilled drilling grids of 15 x 15 m are considered Measured Mineral Resource, 30 x 30 m or historical drilling as Indicated Mineral Resource and historical data >30 x 30 m or interpolated from adjacent deposits as Inferred Mineral Resource. All tonnages are reported in dry metric in-situ tonnes without the application of any other "modifying factors".

Table 3.1: Alpart Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5)]

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	—	—	—	Measured	15.2	43.0	2.4
Probable	—	—	—	Indicated	40.7	40.7	2.2
Total	—	—	—	**Subtotal**	**55.9**	**41.3**	**2.3**
				Inferred	38.0	45.3	2.0
				Total	**93.9**	**42.9**	**2.2**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina grades are presented as available as opposed to total alumina.

(4) Silica grades are presented as reactive as opposed to total silica.

(5) Mineral Resources are inclusive of Ore Reserves.

No Ore Reserves are stated for Alpart as the operations have been suspended.

3.1.5 Mining Operations and Infrastructure

Until the suspension in March 2009, bauxite was mined from the Manchester Plateau and delivered to the Refinery (situated in the Essex Valley) by means of a 17 km belt conveyor. Two grades of bauxite were mined, MHB and THB, with the approximate feed mixture at 70% MHB and 30% THB. On the Manchester Plateau, there is a contractual arrangement between Alpart and Jamalco for mining of up to 25 Mt of MHB and THB before 2014 from within the Jamalco licence area.

In the years preceding 2005, the mine operations were undertaken by an international mining contractor, but since liquidation of that company the mining has been undertaken mainly as an owner-miner operation.

The mining method is typical for Jamaica and is based upon truck/shovel operations. The mining is more onerous on the Manchester Plateau, as the average size of future pits is only 25,000 dry tonnes, equivalent to only two to three days of production. The emphasis for mining is more directed onto the access into the mining areas rather than actual production.

Selective mining techniques are used, and because of the variation in grades between deposits, bauxite is mined from several orebodies simultaneously. It is common to mine two or three pits at the same time to provide more consistent grades for the blending processes, which take place at the stockpile area. Mobile loaders feed blended bauxite from the stockpile onto the conveyor belt and away to the processing plant approximately 17 km distant.

Local contractors are being used to mine small pits especially near to dwellings and local communities, also to rehandle and crush the rejected material from the seizer, at both loading points.

Grade control at Alpart is undertaken in order for the processing plant to make adjustments relating to the feed bauxite quality. No further in-pit sampling is undertaken, however samples are collected from the cable belt on a routine basis and composited to provide three shift samples a day. These samples are subjected to the same analysis as for standard auger drilling samples. It is understood that no further stockpile or blending sampling is undertaken on a routine basis.

3.1.6 Environmental and Social Considerations

The criteria used for the environmental and social assessment are those required by relevant host country legislation and generally accepted practices in the mining industry. Jamaica's National Environment Planning Agency ("NEPA") is the executive agency responsible for protection of the environment and promotion of sustainable development. The other key players are the Commissioner of Mines and JBI both under the Ministry of Mining and Telecommunications.

UC RUSAL has a formal management system in place which is ISO 14001 accredited.

Mining is carried out in close proximity to human settlements therefore the key issues are fugitive dust, land acquisition, compensation and timely restoration of mined out land. Alpart is responsible for management of environmental and social issues. The key programmes are land rehabilitation, land acquisition and compensation against impacts related to dust and noise.

Alpart appears to enjoy a good relationship with Government agencies; communication is good and the mine is aware of likely changes in legislation that will affect it. Alpart also has regular meetings with community representatives, and there is extensive support of community development projects.

Alpart holds regular meetings with community representatives who constitute the Alpart Community Council. There is extensive support for community development projects focusing on education, sport, agriculture and general wellbeing of the community. Therefore the general risk of community displeasure is considered low except for community concern over resettlement.

Land negotiations are on a one to one basis rather than any collective of land owners, resulting in a situation where some landowners receive less compensation than others. In this respect the current processes are not aligned with the internationally accepted resettlement action plan process (IFC 2002).

Alpart has a large backlog of unrestored land (about 3,000 acres in the beginning of 2008) due to a slower rate of restoration. Although Alpart has begun the process of clearing this backlog by bringing in contractors with additional equipment, it will take at least 3 years. Under the Mining Regulations 1947 (as amended in 2005) the Government can penalise a mining company if it fails to restore disturbed land within 3 years. Therefore if there are any further delays they could lead to Government penalties.

Fugitive dust around the mine has led to complaints and was observed during the site visit. Although ambient air quality monitoring indicates compliance with the legal limits for the mine, it is expected that nuisance dust, particularly during the dry season, may lead to additional claims for compensation in highly populated areas.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$22.5 m on an attributable basis. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.1.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- No Ore Reserve has been reported for Alpart due to the suspension of the operations in March 2009.

Table 3.2: Alpart historical production and cost statistics[(1), (2), (3)]

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	4.99	4.48	4.98	0.37
Grade	(% Al_2O_3)	44.8	44.6	43.5	44.0
Factor	($t_{bauxite}$:$t_{alumina}$)	2.39	2.40	2.43	2.40
Expenditures					
Cash operating cost. . . .	(US$m)	42.7	81.5	95.5	n/a
Cash costs per unit	(US$/t)	8.56	18.20	19.16	n/a
Capital expenditure	(US$m)	9.0	7.7	2.3	n/a

(1) Grades are given as available alumina.
(2) All numbers are reported on a 100% attributable basis.
(3) n/a — not available.

3.1.8 Material Developments

Since SRK's site visit in October 2008, Alpart has been placed under care and maintenance following suspension of the operations. The cost the care and maintenance programme associated with the mine, has been estimated at some US$0.1 m per annum.

3.1.9 Specific Risks and Future Opportunities

Specific risks to the operation include:

- **Production Re-Start** — a number of aspects may present risk if or when production resumes.
- **Land ownership and community issues** on future mining areas, such as Malvern Plateau, mainly concerned with the purchase of properties within the "reserve area". Historically, Alpart has successfully bought approximately 50% of the properties available. The concern over land owners rights and possible issues over resettlement issues are seen as minimal. There is a risk of a reserve shortfall if drilling in advance of mining and private land acquisitions are not done in timely manner.
- **Government Intervention** — The Government may intervene on mining rights if Alpart does not catch up on their restoration backlog.
- **Processing of Future Reserves** — Processability issues for pisolites at Alpart may lead to lower recovery. The Reserve base is mainly monohydrate whereas they are currently processing 2.3:1 split MHB:THB. Double digestion may be required in the future.

Future opportunities to the operation include:

- **Ore Reserves** — whilst no Ore Reserve has been reported, this is due to the state of suspended operation and no firm plan being in place for re-commencement of production.

3.2 Windalco Bauxite Mines

3.2.1 Introduction

SRK undertook a site visit to the Windalco Bauxite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

In March 2009, operations at the mine and refinery were suspended and these were placed under care and maintenance. SRK understands this to be due to the lack of demand and the drop in prices received on the open market for alumina.

3.2.2 History and Location

West Indies Aluminium Company ("Windalco") is situated on the Caribbean island of Jamaica, lying some 150 km south of Cuba and 160 km west of Haiti. The island measures 200 km from E to W and 65 km from N to S, and has a population of some 2.6 million.

Windalco is a joint venture between UC RUSAL and the Government of Jamaica. Windalco comprises two alumina refineries (Ewarton and Kirkvine works), a shipping port (Port Esquivel), and also bauxite mines in Swallenburgh (Ewarton) and Rusell Place (Kirkvine) and farms in Manchester and St Ann. The production volume of the company is some 1.2 million tonnes of alumina annually. Currently Windalco employs in excess of 1000 people.

The terrain of Jamaica is mostly mountainous with narrow, discontinuous coastal plain. The relief ranges from 0 m at the Caribbean sea level to 2,256 m at the peak in the Blue Mountain.

The climate is tropical, hot and humid with temperate interior. The island has in the past been subjected to hurricanes. Temperatures are fairly constant averaging around 26°C. The wind prevails from the east or northeast and brings rains to the island with an average rainfall of 190-380 cm per annum.

Bauxite was discovered in the 1930s when a farmer sent soil for analysis as certain portions of his land failed to yield crops, and the result identified the high alumina in the soils.

Mining in the Kirkvine area was initiated in the 1950s in the plateau deposits. Mining in the Ewarton area was initiated in the 1960s.

Windalco currently holds two mining licences and one exploration licence. As far as SRK understands, these licences are all currently valid and are annually renewed with the JBI. The majority of the surface rights for the Windalco licences are privately owned by third parties. Past experience has shown that the majority of these areas become available for mining upon timely surface rights acquisition and residents resettlement.

Bauxite from both the Ewarton and Kirkvine operations are processed at their respective refineries. None of the bauxite is exported.

3.2.3 Geology

Bauxite deposits are generally located across the central portion of the island and cover a significant area of the land. The Geology of the island comprises Cretaceous Basement complex of volcanic, volcaniclastics and intrusives, Post Cretaceous trough sediments, volcanic and intrusives and Tertiary white/yellow limestones which conformably overly the older rock types and cover approximately 70% of the island.

Jamaican bauxites and bauxitic clays of commercial quality are deep red in colour, overlay Tertiary white limestones and often occur in association with faulting of the limestone. The faulting resulting in major elevation differences allows the separation of the bauxites into Plateau types and Graben/Valley types. The deposits are overlain by an average of 0.6 m topsoil which is kept and used for restoration.

Plateau type bauxites contain predominantly THB with <3% goethite and <3% boehmite, whereas Graben/Valley type bauxites contain predominantly MHB as the gibbsite transforms to boehmite concurrently with the haematite to goethite transition.

The Jamaican bauxite deposit occurrences are strongly correlated with water tables lying significantly below the surface and are found to lie on the karstic weathered surface of the Tertiary limestones with an extremely sharp contact with no transition whatsoever. The origin of the bauxites is thought to have been from the bauxitisation of volcaniclastic material deposited sub-aerially which filled in the karstic topography.

Deposits exhibit considerable variations in size ranging from less than 1 wet tonne to in excess of 1000 wet tonnes, down to maximum depths of around 40 m. The SML-162 Plateau and Graben/Valley deposits at Ewarton comprise mainly mature THB bauxites in overlapping pocket/blanket type infill in high and low relief karstic surface and average around 100,000 dry tonnes in size.

The SML161 Plateau and Graben/Valley deposits at Kirkvine comprise mainly mature THB bauxites in overlapping pocket/blanket type infill in high and low relief karstic surface and average around 160,000 dry tonnes in size. The deposits have been mined considerably in the past with remaining deposits mainly exhibiting a much higher haematite to goethite ratio ("HGR") in remaining Resources and Reserves. This has caused issues with processability, with the problem compounded by the lack of HGR information in some 95% of the data for the remaining Mineral Resources. The Windalco bauxites typically have the following properties: bulk density of 1.63 t/m^3, moisture content of around 20%, alumina content between 38-52%, and silica content between 2-8%.

In comparison with other bauxite deposits around the world, such as Guinea, Australia, Guyana, Russia, the bauxites in Jamaica are pocket-like and discontinuous, generally because of the highly undulating and variable karstic weathered limestone footwall. The grade continuity is also variable within the pockets of bauxite, however the average chemistry and grade of individual deposits in comparison with adjacent geologically separate deposits are very similar. Therefore, on a deposit-scale the grade continuity may be poor-moderate, but on a more regional scale, moderate-good. The Windalco deposits are generally much larger in average tonnage when compared to those deposits at Alpart.

However, the poor geological continuity is offset considerably by the fact that areas where bauxite has "very high potential" to be found, it can be easily delineated from aerial/satellite imagery, due to the fact that the deep red coloured bauxites are clearly visually distinguishable from the footwall limestones which are white in colour.

The THB bauxites are amenable to low temperature Bayer processing whereas the MHB bauxite to high temperature Bayer processing.

3.2.4 Mineral Resources and Ore Reserves

Mineral Resource estimates are undertaken using a combination of approaches mainly utilising aerial/satellite photo imagery, outcrop mapping and continuous flight auger drilling. Bauxite targets are initially identified from photo imagery as they are clearly visible by the lack of vegetative cover, following this surface mapping and ground truthing is undertaken which tends to eliminate around 50% of the bauxite targets and finally auger drilling is undertaken on wide grids (approximately 100 m) stepping down eventually to 30 m and 15 m grids prior to mining.

Samples are collected from the auger drilling at 3 m intervals, with adjustments made to lengths to enable them to tie in with reference bench elevation levels. Samples are reduced and prepared prior to analysis using standard accepted practices and are then analysed both elementally and mineralogically using XRF and quantitative XRD techniques. Quality control and quality assurance are monitored at the laboratory to a satisfactory level including the regular use of standards, duplicates and external laboratory checks.

Windalco's Mineral Resource estimates are undertaken using a combined approach of GIS (ArcGIS), Microsoft Access Databases and Microsoft Excel spreadsheets. The methodology is fairly simple due to the nature of the bauxites and follows a logical system calculating tonnages and grades using area of influence, thickness and length weighted grades, however is very manual and in need of automation. The base information has been collected historically by many companies, with more recent re-drilling undertaken to re-confirm historical drilling information, resulting in more robust Mineral Resource estimates.

Bauxite tonnages and grades are calculated using simple area of influence, thickness, volume, tonnage calculations and applying length weighted average grades with no grade interpolation, with all results stored in Microsoft Excel format containing detailed information for every deposit, including fields such as tonnages, grades, land-ownership status, drillhole information type, mining/restoration status, mined quantities, etc.

SRK comments that the geology and major controls of the bauxite are well understood enabling sufficient confidence in the modelling of the bauxite. The poor geological continuity due to the karstic weathered footwall is counteracted somewhat by the visually clear contact between the deep red bauxite and the white limestone footwall. The data quality and quantity is considered sufficient for classification into the Measured, Indicated and Inferred Mineral Resource categories, especially given the moderate-good reconciliations, which generally show underestimation of bauxite.

To classify the Mineral Resources, SRK has assessed land-ownership, drilling status, drilling density and sterilisation, and only included deposits considered potentially economic by applying CoGs of >38% available alumina, <10% SiO_2 and a minimum deposit size of 5,000 wet tonnes. Re-drilled drilling grids of 15 x 15 m are considered Measured Mineral Resource, 30 x 30 m or historical drilling as Indicated Mineral Resource and historical data >30 x 30 m or interpolated from adjacent deposits as Inferred Mineral Resource. All tonnages are reported in dry metric in-situ tonnes without the application of any other "modifying factors".

Table 3.3: Windalco Ewarton Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5)]

	Ore Reserve Category				Mineral Resource Category		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	—	—	—	Measured	17.1	42.3	1.9
Probable	—	—	—	Indicated	18.2	42.4	2.6
Total	**—**	**—**	**—**	**Subtotal**	**35.3**	**42.4**	**2.3**
				Inferred	11.2	43.6	0.5
				Total	**46.5**	**42.7**	**1.8**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina grades are presented as available as opposed to total alumina.

(4) Silica grades are presented as reactive as opposed to total silica.

(5) Mineral Resources are inclusive of Ore Reserves.

Table 3.4: Windalco Kirkvine Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5)]

	Ore Reserve Category				Mineral Resource Category		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	—	—	—	Measured	11.6	42.5	2.1
Probable	—	—	—	Indicated	27.5	42.1	2.0
Total	**—**	**—**	**—**	**Subtotal**	**39.1**	**42.2**	**2.0**
				Inferred	0.5	43.6	1.8
				Total	**39.6**	**42.2**	**2.0**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina grades are presented as available as opposed to total alumina.

(4) Silica grades are presented as reactive as opposed to total silica.

(5) Mineral Resources are inclusive of Ore Reserves.

3.2.5 Mining Operations and Infrastructure

The Windalco mining operations comprise two discrete areas, Ewarton and Kirkvine, which will be discussed separately. Both operations are currently suspended.

Ewarton

In June 2006, a ten year mining contract was signed with Washington Group International for the exploration, drilling, mine development, post-mining reclamation and stockpile management. Windalco maintains responsibility for community relations and the long term mine plan.

The current mine operates on a full seven days a week schedule, utilising a 3-shift roster per day. The mining method is based on truck/shovel operation, with the bauxite mined from several orebodies simultaneously.

No blasting is required of the bauxite and access to the bauxite is immediate from shallow pits following stripping of the thin topsoil by scrapers. The pits are generally shallow and are mined in 4.6 m lifts. The bauxite is loaded into haul trucks and dispatched to the stockpile.

Historically, the bauxite mined has been transported from the stockpile to the processing facility by an aerial rope way, however due to increased tonnages beyond its capacity and congestion on public highways, an internal highway has been constructed through a fairly undulating terrain in order to connect the stockpiles to the Ewarton alumina refinery. This road greatly improves efficiency of hauling bauxite however faces its own challenges in terms of rock falls from slopes and contract miner discussions with regards to increased costs.

Haul trucks, including larger capacity road-trains are loaded by hydraulic excavator at the stockpiles for delivery to the plant. Auxiliary equipment is also available to provide permanent support to the mining, restoration and roads maintenance.

Grade control at Ewarton is undertaken in order for the processing plant to make adjustments relating to the feed bauxite quality with samples being collected from the plant feed cable belt and going into the plant from the hopper on a routine basis. In addition, stockpiles are drilled and sampled twice a year. All of the grade control samples are subjected to the same analysis as for standard auger drilling samples.

Kirkvine

Similarly to Ewarton, the mining method is based on conventional truck/shovel operations. In general, Kirkvine has a less variable quality parameter distribution in comparison to Ewarton, however, an increasing goethite-hematite ratio in planned and active mining areas has resulted in problems and required an extensive re-sampling programme to be initiated.

Mining and hauling is undertaken by contractor owned and operated equipment.

Mine operations are generally on a 5 day week 24 hr basis, but are restricted to a single shift basis where there is a proximity to local communities. Proximity to the mining of housing and communities is an issue at Kirkvine.

No overburden removal or blasting is required, and the small amount of topsoil is removed and stockpiled near the pit for further use in reclamation.

Ore is hauled to the stockpile in order to blend the bauxite and maintain the specified quality parameters. Haul trucks or front end loaders feed directly into the reception hopper and onto the screen and conveyor belt.

Grade control at Kirkvine follows the same general methodology as those employed at Ewarton.

SRK is confident that production levels can be maintained under the current working conditions and production levels; however any significant increase in mine production may require additional transport equipment.

3.2.6 Environmental and Social Considerations

The criteria used for environmental and social assessment are those required by relevant host country legislation and generally accepted practices in the mining industry. Jamaica's National Environment Planning Agency is the executive agency responsible for protection of the environment and promotion of sustainable development. The other key players are the Commissioner of Mines and JBI both under the Ministry of Mining and Telecommunications.

UC RUSAL has a formal management system in place which is ISO 14001 accredited.

Mining is carried out in close proximity to human settlements therefore the key issues are fugitive dust, land acquisition, compensation and timely restoration of mined out land. Windalco is responsible for management of environmental and social issues. The main programmes are land rehabilitation, land acquisition and compensation against impacts related to dust and noise.

Windalco maintains consistent communication with relevant government agencies. It is aware of likely changes in legislation that can affect them. Therefore the risk of new legislation or unexpected government enforcement is considered to be low.

Windalco supports community development projects in education, sport, agriculture and general wellbeing. It spends approximately US$300 k per annum on local development projects with a further US$100 k per annum spent on a corporate level on larger scale projects. Windalco engages regularly with the stakeholders through the local community councils. The general risk of community displeasure is considered low.

Land negotiations are on a one to one basis rather than any collective of land owners, resulting in a situation where some landowners receive less compensation than others. In this respect the current processes are not aligned with the internationally accepted resettlement action plan process (IFC 2002).

Fugitive dust around the mines is likely to remain as a cause for complaints from the neighbouring communities. Although ambient air quality monitoring indicates compliance with the legal limits for the mine, it is likely that nuisance dust, particularly during the dry season may lead to additional claims for compensation particularly at the Kirkvine operation.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$14.67 m on an attributable basis. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.2.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- No Ore Reserve has been reported for Windalco due to the suspension of operations.

Table 3.5: Windalco historical production and cost statistics(1), (2), (3)

Statistics	Units	2006	2007	2008	H1 2009
Production Ewarton					
Tonnage	(Mt wet)	2.25	2.02	2.11	0.10
Grade	(% Al_2O_3)	42.6%	43.3%	43.4%	43.0%
Factor	($t_{bauxite}$:$t_{alumina}$)	2.88	2.56	2.58	2.59
Production Kirkvine					
Tonnage	(Mt wet)	1.99	1.93	2.03	0.10
Grade	(% Al_2O_3)	42.5%	42.5%	42.5%	42.0%
Factor	($t_{bauxite}$:$t_{alumina}$)	2.85	2.75	2.70	2.78
Total expenditures					
Cash operating cost	(US$m)	72.2	90.0	83.4	n/a
Cash costs per unit	(US$/t)	17.04	22.80	20.12	n/a
Capital expenditure	(US$m)	2.5	0.0	0.7	n/a

(1) Grades are given as available alumina.

(2) All numbers are reported on a 100% attributable basis.

(3) n/a — not available.

3.2.8 Material Developments

Since SRK's site visit in October 2008, Windalco has been placed under care and maintenance following suspension of the operations. The cost of the care and maintenance programme associated with the mine, has been estimated at some US$0.072 m per annum.

3.2.9 Specific Risks and Future Opportunities

Specific risks at the Ewarton operation include:

- **Production Re-Start** — a number of aspects may present risk if or when production resumes.

- **Flooded Areas** — Resource areas are affected by standing and artesian water.

Specific risks at the Kirkvine operation include:

- **Production Re-Start** — a number of aspects may present risk if or when production resumes.
- **Land ownership and community issues** — Land ownership and community issues on current areas such as Blue Mountain and future areas such as Coffee Grove.
- **Bauxite Mineralogy** — The quality of future bauxite reserves indicates an increasing haematite/goethite ratio, which has a detrimental effect on the processing capability and cost profile. Much additional sampling is required to further improve the available data to assess the issue.
- **Land Acquisition** — The risk that sufficient land may not be acquired in time to ensure adequate drilling and testing of the potential resource base prior to mining. This is compounded by an ad hoc land acquisition and resettlement process that has not been formally agreed with affected communities.
- **Government Intervention** — The Government may intervene on mining rights if Alpart does not address their restoration backlog.

Specific future opportunities at the Ewarton and Kirkvine operations include:

- **Ore Reserves** — whilst no Ore Reserve has been reported, this is purely due to the state of suspended operation and no firm plan being in place for re-commencement of production.

3.3 Kindia Bauxite Mine

3.3.1 Introduction

SRK undertook a site visit to the Kindia Bauxite Mine in September 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.3.2 History and Location

The Kindia Mine ("Kindia") in Guinea is operated by Compagnie des Bauxites de Kindia ("CBK"). The mine comprises of: bauxite mining facilities exploiting several mining areas; a crushing plant; a rail facility with two loading points at the mine, one off loading and a 130 km single track rail line; the Simbaya site near Conakry with its main office facilities and rail workshops; and a port load out facility in Conakry. The state owned company, Société des Bauxites de Guinée ("SBK") owns the Kindia related equipment and infrastructure, including the Simbaya offices, the railway and port facilities. CBK rents and has the exclusive use of these fixed and certain movable assets from SBK. CBK is required to hand back the property and assets on conclusion of their contract in 2025.

CBK is operating under a Convention signed in 1958 that has been amended from time to time and currently includes numerous addendums and their appendices. It stipulates technical and economic operating conditions for the mine, the railway and the port. At present:

- CBK pays royalties of US$1/t of bauxite mined.
- CBK is subject to a zero corporate income tax rate on its profits.

- The Convention expires in 2025.

In 2008, it was reported that all Conventions in Guinea would be reviewed. This has not occurred as yet. CBK has a legal office in Conakry and maintains good working relations with various Government departments and Ministries.

The bauxite is shipped predominantly to UC RUSAL's Nikolaev refinery, Ukraine.

Bauxite extraction at Kindia began in 1974 after the Office des Bauxites de Kindia was formed in 1969 on a Soviet/Guinean agreement. CBK's production began following the 2000 agreement between the Guinean government and CBK.

The Kindia deposits are located in southeast Guinea 90 km northeast of the capital, Conakry and 32 km southwest of the local administrative town of Kindia.

The region is typified by hills and escarpments at about 750 m above sea level. Plateaus host the Kindia bauxite deposits. The climate of Guinea is tropical with a dry season (November through March) and a wet season (April through October). The heaviest rainfall of the wet season is in June. Temperatures range from 11˚C to 35˚C.

3.3.3 Geology

The bauxite deposits formed as a result of tropical weathering of Silurian-Devonian clayey schists, siltstones and mudstone and Mesozoic dolerites. The bauxite is generally found on hills, domes and slopes of the higher plateaus.

Average thicknesses of the bauxite deposits vary from 7 to 11 m, (and up to 32 m at Kobeleta due to tectonic influences during weathering). Total silica grades have a distinct increase in grade towards the lower footwall contact. Only a thin, soil or occasional iron rich lateritic overburden is present.

The samples are prepared and assayed routinely for total Al_2O_3, SiO_2 and Fe_2O_3 on site using titration and photo-calorimetric techniques.

No formal quality control protocols are in place other then periodical sample duplicates sent to external laboratories and standard bauxite samples added into the sample stream, although no results of this quality control has been received by SRK.

Density data is routinely recorded with densities seen to vary from around 1.8 to 1.98 t/m^3.

Water content is also recorded, but no formal sampling programme is in place. Distinct seasonal variations have been recorded with moisture content ranging from 6.5% in the dry season to 13.5% in the wet season.

3.3.4 Mineral Resources and Ore Reserves

The majority of the Mineral Resource at Kindia has been calculated by polygonal methods whereby each drillhole is given an average grade and thickness and an area of influence produced in the 1970s to GKZ standards.

The Balandougou deposit has been re-estimated using three dimensional digital software, although the official Mineral Resource figures are still taken from the 1970s GKZ reserve estimate.

New estimates are produced on an annual basis from these GKZ reserve estimate depleted to date as well as increased from exploration results. SRK has reconciled the December 2008 resource as well as production data from January to June 2009.

SRK has classified areas sampled on a 25 x 25 m grid as Indicated Mineral Resources. Measured Mineral Resources have been reduced to Indicated Mineral Resources from due to the lack of formal quality control and density measurement procedures.

Kindia assays for total alumina grades rather than available alumina. Available alumina grades are calculated by applying a downgrading factor of 15%. This is a simplistic conversion approach. Whilst the total alumina grades are therefore deemed reasonably accurate, the calculated available alumina grades are deemed inaccurate and as such have been rounded off.

Areas assayed on grids greater than 75 m have been classified as Inferred Mineral Resources while the Fineralougan deposit, which only has visual occurrences of bauxite, has been left unclassified.

Grade control sampling of stockpiles routinely takes place although no robust reconciliation data exists. Instead, the original GKZ reserve figures for all deposits are depleted by tonnage of the material mined and the discrepancies are attributed to losses and dilution, therefore assuming "perfect" reserve estimation.

Ore Reserves

Ore Reserves have been calculated by subjecting Indicated Mineral Resource tonnages to average losses and dilution figures, by deposit, going back six years and have been separated into areas planned for either drill and blast or Wirtgen mining. Where no data existed, a mine average was used.

No minimum deposit size or maximum haulage distance was attributed.

Table 3.6: Kindia Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5), (6), (7)]

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	—	—	—	Measured	—	—	—
Probable	38.2	39.2	2.4	Indicated	37.9	39.5	2.3
Total	**38.2**	**39.2**	**2.4**	**Subtotal**	**37.9**	**39.5**	**2.3**
				Inferred	61.6	37.8	3.6
				Total	**99.5**	**38.5**	**3.1**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina content is presented as available, as opposed to than total. Kindia's available alumina grade is based on the total alumina grade, which is then reduced by a straight 15%. Hence these are not assay grades, and the conversion method applied is very simplistic.

(4) Kindia's silica content is presented as total, as opposed to reactive.

(5) Mineral Resources are inclusive of Ore Reserves.

(6) Kindia Ore Reserve tonnage is marginally higher than it equivalent Mineral Resource, as a result of the effect of loss and dilution.

(7) The proportion of Ore Reserves contributed by Kindia 2 is approximately 89%.

3.3.5 Mining Operations and Infrastructure

Mining methods

Current production at CBK is planned at 2.4 Mtpa for 2010 potentially rising to 3.285 Mtpa by 2011. Overburden stripping is low, averaging some 0.8 m, representing a stripping ratio of less than 0.2. Two mining methods are employed: conventional drilling and blasting ("D&B"); and surface mining using Wirtgen surface miners. The mining method is chosen on an area by area basis depending on a number of factors including: distance from plant; ore geometry; ore hardness, etc. The Wirtgen miner produces a sized product which does not require crushing. The drill and blast ore has to be hauled to the crusher for size reduction before delivery to the port. The Wirtgen product is delivered to the Balandougou railhead for direct loading onto the trains. CBK's intention is to move fully to surface mined ore by 2011.

- The drill and blast mining is mainly in the Central, North-West, Sankaren and East Deposits. These generally dip steeper, or have uneven footwalls.

- The German manufactured Wirtgen surface miner is a non-blasting method of mining and is used particularly in the softer Balandougou deposits, the "safety pillars", and remnants of the Central deposits which are close to structures and habitation.

- The haul fleet at Kindia has recently been upgraded. The new Caterpillar trucks which replace the Belaz trucks can achieve 35 km/hr and have improved the haulage times significantly.

- The infrastructure for the Kindia Complex includes the mine, offices and workshops; crushing and train loading system at Debele; a rail yard, stocking/blending and loading area at Balandougou crossing, including a rail track; the locomotive and rolling stock maintenance facilities and main offices at Simbaya; and the port facilities including: rail yard and train unloading station, stacker-reclaimer and stockpile/blending facilities, shiploader; and quay.

The main future mining considerations include:

- **Implementation of Kindia II** — The resources at Kindia offer a continuing opportunity for low cost bauxite. The implementation of Kindia II and the exploitation of these resources is designed to secure the medium to long term future of the operations. The access road to the Balandougou deposits is nearing completion and road haulage of the bauxite to the Balandougou loading station is planned for a production level of 3.8 Mtpa.

- **Debele Loading Station** — The capacity, throughput, and additional capital for loading and blending after the crusher is decommissioned in 2011 need to be ensured. The condition of the crusher loading station is poor with the loading silos being effectively out of commission. The EKT-5A shovel loader has very low mechanical availability and suffers from a spares shortage. Alternative loading is by a single excavator/loader shared between Debele and Balandougou. There is a single shunting locomotive which is shared between Debele and Balandougou.

- **Crusher Obsolete by 2011** — The Debele crusher is proposed to be made obsolete by 2011 and Wirtgen mining is proposed to be the sole method of mining which precludes the need for drilling and blasting and crushing of the ore.

- **Cessation of Drill and Blast Mining** — The proposed cessation of drill and blast mining and the sole dependency on the surface miners introduces an element of risk. An option would be to introduce a mobile crusher(s) and continue with drill and blast for flexibility.

- **Surface Mining** — The increasing dependence on surface mining assumes a degree of further development and improvements in maintenance, availability and utilisation of the surface miner equipment.

- **Balandougou** — The loading station is small, limited to 22 wagons and would benefit from an increased stockpile area which currently is limited to 60 kt and restricts the loading capacity. An increase of 12 kt is possible with an increase in train length by 75 m which is possible.

Infrastructure

The main infrastructure facilities for the operation include:

- **Processing operation** — The processing facilities comprise the crusher and rail load out facility at Debele. The crusher is over 30 years old and is due to be made obsolete in 2011. The facilities were not inspected in detail but at the site visit appeared to be in relatively poor condition and were in need of investment.

- **Rail facilities and rolling stock** —

  - The 100 km rail link between the mine and port has 3 passing loops. The loops can take a maximum of 4 locos and 54 wagons. Currently the trains operate with 3 locos and 44 wagons due to a shortage of wagons. 20 wagons are on order at US$144 k per wagon delivered from Ukraine.

  - The total rail equipment comprises 168 x 50m^3 (65 to 71 t) wagons and 15 locomotives of Ukrainian origin (13xTM2 and 2xTM18's the latter newly acquired in 2007). Ancillary equipment includes 10 flatbeds, 2 hopper dozers, 5 covered wagons and 1 x 25 t crane. The serviceable life expectancy of locos is 35 years and 15 years for wagons. Current loco availability is approximately 60% out of a rated availability of 84%.

  - Maintenance facilities at Simbaya are of a good standard. A minimum of 4 locomotives are on maintenance per day. One locomotive was out of commission during the visit of September 2008. Spare parts procurement for the locos and wagons has suffered from delays.

  - The rail facilities currently have a stated maximum potential capacity of 3.83 Mtpa. The current capacity is stated at 3.5 Mtpa. With the planned delivery of the 20 wagons the rail capacity will increase to 3.75 Mtpa. An additional 14 wagons would increase the rail capacity to between 4 and 4.25 Mtpa.

  - The track is in reasonably good condition and the sustaining capex includes repair of 2 km per annum.

  - A derailment in September 2007 resulted in the decommissioning of 20 wagons. The record over the past 15 years records six rail related incidents over the period.

  - There are 6 bridges on the track. Specialist inspections are carried out periodically. Two bridges have recently been repaired. A third bridge is due for repair in 2009. The remaining bridges are in good condition.

  - The unloading area at the Port is constrained due to the shunting area and the unloading area which is restricted to 11 wagons. Consideration is being given to a new shunting area closer to the unloading station than the current shunting area which is 2 km distant which

impacts on the time to unload and thus the trains per day. Consideration is also being given to increase the number of wagons to be unloaded at a time from 11 to 19 by extending the loadout station. Braking efficiency on the locos however needs to be upgraded for this option to be successful.

- Public Safety statistics on the rail lines continues to be of concern due to trespass of pedestrians on the line by the villagers along the rail corridor and in particular on the outskirts of Conakry.

- **Port Facilities —**

  - The CBK facility is a single berth which can take 40 kt ships and can accommodate a 11.5 m and 9 m draught at high and low tide respectively. Currently 7-8 average boats per month are loaded over 20 days loading with 10 days maintenance.

  - The stated current throughput capacity at the port is 3.0 to 3.2 Mtpa with the main constraint being the unloading station.

  - The stockpile capacity at the port is a total of 150 kt bauxite.

  - A new shiploader with a capacity of 2,500 tph was installed in 2007. This is sufficient for the planned throughput. The old shiploader is still installed and available as back-up.

  - The stacker-reclaimer which feeds the shiploader, whilst still fit for duty is old, being commissioned in 1976 and last given a major overhaul in 1986. In 2008, UC RUSAL was considering options for overhaul and upgrade of this equipment including the provision of new gearboxes.

  - The quay wall is suffering from subsidence and its deterioration was affecting the tracks of the shiploader in 2008. Repairs are urgently required. The ownership of the quay rests however with the Government of Guinea. UC RUSAL estimates that a period of 2-3 months would be required to effect repairs. Engineering Company UC RUSAL asked for plans and timing in this regard and mitigation plans re port throughput during the repairs. A provision of US$6.5 m is being made by UC RUSAL in respect of the quay repairs.

  - The Government of Guinea Port Authority is planning a quay expansion which would have a benefit to CBK. The date for this expansion is not yet established.

  - To achieve an increase of capacity of the port to 4 Mtpa would require reduced shunting and unloading time, increase in loader conveyor belt speed and reconfiguration. This is considered achievable given the required investment.

3.3.6 Environmental and Social Considerations

Environmental aspects are managed by a central team with environmental staff responsible at the mine, Simbaya and the port. CBK has made significant improvements since 2000 and all sites are now maintained to a high level in terms of health and safety and the working environment. The sites are operated well in excess of the required codes. UC RUSAL has targeted implementation of: ISO 9001, ISO 14001 and OHSAS 18001.

Environmentally, the major issue at the sites is dust, particularly at the port. At the mine, dust arises continually from the surface miners and from truck haulage. Workers are provided with masks while operating in any dusty conditions. At the port, dust is a major issue from the ship

loadout. The dust covers the infrastructure but most falls into the sea. The washdown dust and stormwater drainage is also discharged into the harbour. The loadout equipment is in the process of upgrading and replacement, but further work to control escape of bauxite to the harbour should be considered.

There is a programme of rehabilitation at the mine sites, though a backlog of 331 ha exists. Under the mining convention these areas are not the responsibility of UC RUSAL, however CBK has an annual plan to rehabilitate them. There is a four year forward plan to rehabilitate large areas which includes experimental areas. Rehabilitation trees are grown and planted under contract with local people. Current rehabilitation practices are not to international standards, however, the areas which have been rehabilitated for a few years have a good cover with trees a few metres high, and it is acknowledged that the land may be of more value to the locals than pre-mining in most cases.

All properties operated by UC RUSAL are on lease from the Government and have to be returned to the Government at least in the state that they were taken over. There is no closure plan in place, reportedly due to the long life of mine. There is no programme or plan of integration of staff should the mine close early, and staff would be laid off according to Guinean regulations.

There is a problem of locals operating adjacent to the railway line as it provides an easy access route across the country. UC RUSAL and the Government have an initiative to educate people in the schools and mosques about the dangers, as well as to remove people who build close to the line. In 2006, 16 people were killed in accidents on the line. This number has been decreased since the programme started, to 3 fatalities in 2008.

The Government recently changed the retirement age from 55 to 60 for office workers and to 55 for non office workers which resulted in recent social troubles. The reduction in retirees has also put some pressure on UC RUSAL to maintain higher levels of staff for five years as fewer are retiring.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$0.5 m. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.3.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is 13 years.
- The production rate from 2011 onwards is 3.29 Mtpa.
- The operating costs include royalties and delivery to the port in Conakry.
- The economics have been verified based on an overall integrated flow of bauxite through to aluminium, as described in Section 2.2.5.

Table 3.7: Kindia historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	3.12	3.01	3.17	1.38
Grade	(% Al_2O_3)	39	39	39	39
Factor	($t_{bauxite}$:$t_{alumina}$)	2.87	2.87	2.87	2.85
Expenditures					
Cash operating cost. .	(US$m)	22.2	35.0	36.1	13.9
Cash costs per unit . .	(US$/t)	7.12	11.62	11.39	10.10
Capital expenditure . .	(US$m)	2.2	6.3	6.2	0.0

(1) Alumina content is presented as available as opposed to total alumina content. Kindia's available alumina grade is based on the total alumina grade which is then reduced by a straight 15%. Hence these are not assay grades and the conversion method applied is very basic.

3.3.8 Material Developments

In October 2008, civil unrest in the town of Mambia close to Kindia over a claim by residents regarding a claimed lack of provision of public services by UC RUSAL resulted in two deaths and several woundings when Government security forces open fire on the protestors.

3.3.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Resource Risk** — The resource tonnages were seen to vary significantly depending on the density of drill sampling. In addition, no robust reconciliation of the mined tonnages takes place which impacts on the confidence of the Mineral Resource statement.

- **Mining Risks** — Risks are associated with the full dependence on the surface miners once the Debele crusher is made obsolete and drill and blast mining is no longer an option. The current 6 year life expectancy of these units will require capital replacement.

- **HIV/AIDS** — Prevalence rates in Guinea, though overall lower than other African countries, are higher among miners (4.7% compared to the national average of <2%) and will require proactive management and prevention programmes.

Future opportunities to the operations include:

- **Mineral Resources** — The significant resources of Kindia offer a surety of supply of quality bauxite to future refineries.

- **Haulage Costs** — These may be reduced by the utilisation of alternative trailer/prime mover combinations.

3.4 Friguia Bauxite Mine

3.4.1 Introduction

SRK undertook a site visit to the Friguia Bauxite Mine in September 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

As of 1 September 2009, the Friguia mine and refinery have been taken over by the Guinean Government. The future ownership is currently unknown.

3.4.2 History and Location

Friguia Bauxite Mine is located on the Fouta Djalon plateau in the northwest of Guinea around 105 km from Conakry, accessed by a tarred road and served by a 143 km dedicated rail link on which the processed alumina is transported to a dedicated port facility. The Friguia Bauxite Mine is operated by Friguia SA and has the capacity to produce over 2.5 Mtpa. The mine is integrated with the adjacent Friguia Refinery which is wholly owned by UC RUSAL.

The Friguia area consists of plateaus and hills with elevations ranging from 300-350 m which rise around 100 m above the lower plains. The climate of Guinea is tropical with two alternating seasons, a dry season (November through March) and a wet season (April through October).

Exploration drilling was first conducted in the 1950s and later expanded upon in the 1970s. The Guinean 1986 Mining Code, last amended in 1995, allows for large scale mining and is governed by a Convention between the Government of Guinea and the mining company.

Friguia SA is operating under a Convention signed in 1958 that has been amended from time to time and today includes numerous addendums and their appendices. The Convention expires in 2009. The Company and the Government of Guinea are in dispute regarding the validity of the sale of the refinery to UC RUSAL in 2006. A new Convention will be required. SRK understands that two other mining companies have been granted rights which overlap the land under the Convention. At present:

- Friguia SA pays royalties of US$0.50/t of bauxite mined.
- Friguia SA is subject to a 30% corporate income tax rate on its profits.
- Friguia SA is subject to a Special Tax on export of 10% of the sales price of alumina FOB Conakry, with a minimum of US$17.5/t.

SRK has been informed by Friguia SA that all payments and conditions under the Convention have been met up to date, and that the relevant technical requirements and costs have been included in the operating budgets.

3.4.3 Geology

North-west Guinea forms part of the upper Proterozoic and Palaeozoic platform of North Africa. These have been interpreted as terrigenous sediments of Ordovician to Silurian age and in some locations these are intruded by Triassic dolerite sills. All of these country rocks have been heavily altered by tropical weathering. Bauxitisation is a function of bedrock composition, geomorphology and weathering. The bauxite is generally found on hills, domes and slopes of the upper plateaus in the region.

The bauxites of the Friguia region are classical plateau type and form a draped weathering profile across the plateaus and hills with elevations up to 300-350 m. Thickness ranges from 6-15 m, while topsoil is limited to an average of 50 cm. With increasing depth through the profile, the bauxites grade from brown, ferruginous and indurate, to yellow, white or brown. Towards the footwall contact the bauxites become more lateritic and richer in silica and are commonly visible due to the sudden increase in Fe_2O_3 content.

Total available alumina and reactive silica are routinely assayed. Fe_2O_3 and deleterious materials are only assessed during the early stages of exploration to determine a characteristic signature for each deposit. Traditional wet chemistry is used in the assaying of the bauxites. A standard quality control protocol is in place at the assaying laboratory to assess the feed to the refinery, chemical assaying and the crushing and milling. This includes internal and external control sampling.

Zone 6 deposits have been excluded from the Mineral Resources due to their distant location and due to some of the deposits lying outside the current Friguia lease area.

3.4.4 Mineral Resources and Ore Reserves

Grade control drilling is practiced on a 6 x 6 m grid during drill and blast mining to aid in the blending process, however data is rarely used to reconcile the estimated Mineral Resource or Ore Reserve. Careful records are kept for each deposit detailing their depletion and main characteristics, but reconciliation data is restricted to defining losses and dilution tonnages back calculated from those tonnages received at the stockpiles, and therefore might not accurately define the inaccuracies in estimation, particularly in assay grades.

In the derivation of Ore Reserves, SRK has reconciled historical production, along with losses and dilution figures, against the GKZ reserves inventory produced by Pechiney in 1979 for each deposit and a LoMp provided to SRK during the mine visit in September 2008 to calculate a revised reserve tonnage. As the split between drill and blast and Wirtgen zones is not accurately defined, average figures have been used from both mining methods.

Table 3.8: Friguia Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5)]

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	37.3	40.0	0.9	Measured	36.8	40.8	0.9
Probable	77.8	41.7	0.8	Indicated	142.4	43.0	0.8
Total	**115.1**	**41.1**	**0.8**	**Subtotal**	**179.2**	**42.5**	**0.8**
				Inferred	152.6	43.2	0.7
				Total	**331.8**	**42.8**	**0.8**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina grades are presented as available as apposed to total alumina.

(4) Silica grades are presented as reactive as opposed to total silica.

(5) Mineral Resources are inclusive of Ore Reserves.

The annual operating costs at Friguia may exceed the revenues for the alumina products on the basis of the product prices which are fixed on an annual basis. Whereas it is expected that UC RUSAL will make a balancing provision and that the downstream profitability of the aluminium products is ensured, there may be some risk that the Friguia alumina are higher cost than those on the open market and thus the Friguia bauxites may be at risk to being replaced by cheaper sourced materials. The ability to issue an Ore Reserves statement in terms of JORC Code compliancy for the Friguia bauxites assumes the downstream profitability of the Friguia alumina.

3.4.5 Mining Operations and Infrastructure

The Friguia Bauxite Mine operation has a capacity of approximately 2.5 Mtpa of run of mine ore. The historical production figures are approximately 1.9 Mt for 2008 and 0.85 Mt for H1 2009. There has been a shortfall of actual to planned bauxite production due to problems with the plant and power supply resulting in mine production stoppages.

The longer term production plan proposes that the production will increase to 3.75 Mtpa bauxite (1.05 Mtpa alumina) with an expansion of the plant. The Mineral Resource base at Friguia is considered to be able to respond to these levels, provided additional investment in mining equipment is made.

The mining of the Friguia deposits is essentially simple contour mining of the bauxite bearing superficial deposits on the plateaus and flanks of the hills. The mining methods employed at Friguia are: conventional drill and blast and mechanical surface miners ("SM") using a single Wirtgen 2500 SM. All equipment is owned and operated by Friguia SA. The ratio of D&B to SM has been increasing significantly from 45:55 in 2005, 53:47 in 2006, 62:38 in 2007 and 85:15 for ytd August 2008. The latter figures reflect that the SM operations were becoming undermanned, underperforming and suffering from spares shortages and maintenance problems. During the visit in 2008, the Wirtgen was not in operation pending resolution of the problems.

For the conventional drill and blast methods the minimum mining thickness is 3 m. The topsoil which is generally less than 1 m thick is only preserved by dozing where consistently thick enough. The prime loaders are CAT992s with 6 m^3 buckets. The haul trucks are 100 t, CAT777s. The equipment fleet is sufficient for the current production targets and mining areas, but as the deposits near the plant become depleted, additional trucks will be required.

Whilst the equipment fleet is considered by SRK to be sufficient for the short term, a programme of replacement of the ageing machines and additional new machines is required for the longer term. An additional surface miner for a production increase is required.

Processing

The Friguia Bauxite Mine is vertically integrated with the adjacent Friguia Refinery to which all of its production is sent. This enhances the value of the Friguia bauxites. There are currently no facilities to export bauxite at the mine or at the Conakry alumina loading point.

3.4.6 Environmental and Social Considerations

The most significant mining environmental issues are rehabilitation of the mined areas and dust during mining and hauling. There are also some issues of proximity of mining to existing settlements, with one village adjacent to the mining operations.

Mined land is being remediated immediately after mining with mango and acacia, and tree growth appears to be reasonably good. SRK understands that under the mining convention for Friguia, rehabilitation of the formerly mined land is the responsibility of UC RUSAL. A large part of those areas have been rehabilitated. A total of 601 ha have been disturbed and 441 ha have been rehabilitated to date. By 2009, all but the operating areas are expected to be restored. The mine also has 20 ha of experimental vegetation systems.

Environmental reporting is three monthly but focussed on rehabilitation. An independent environmental audit has been completed. The audits will be a regular item in future. Training systems, working conditions and remuneration are based on similar systems to Kindia.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$1.13 m. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.4.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is in excess of 25 years.
- The production rate is 2 Mtpa.
- The operating costs include royalties and delivery to the refinery.
- The economics have been verified based on an overall integrated flow of bauxite through to aluminium, as described in Section 2.2.5.

Table 3.9: Friguia historical production and cost statistics(1), (2)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	1.85	1.71	1.99	0.85
Grade	(% Al_2O_3)	40.5	40.8	40.5	40.5
Factor	($t_{bauxite}$:$t_{alumina}$)	3.37	3.37	3.25	3.23
Expenditures					
Cash operating cost	(US$m)	8.1	10.2	8.2	3.3
Cash costs per unit	(US$/t)	4.35	5.98	4.13	3.92
Capital expenditure	(US$m)	0.0	1.4	0.7	n/a

(1) Grades are given as available alumina.
(2) n/a — not available.

3.4.8 Material Developments

As of 1 September 2009, UC RUSAL is in dispute with the Government of Guinea over the ownership of the Friguia mine and refinery. The Government is disputing the validity of the sale due to the purchase price paid by UC RUSAL.

Friguia has significantly reduced its operating costs in H1 2009. SRK has not reviewed the detail behind the H1 2009 cost reductions, nor been able to assess the sustainability of such lower operating costs into the future.

3.4.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Ownership** — The ownership of the Friguia mine and refinery is under dispute with the Guinean Government.
- **New Convention** — Terms of the new Mining Convention have not been determined to date. In addition, the Government has granted other mining companies tenure rights, overlapping with the area under the Convention.

- **Geological risks** — The assumption of a single bulk density figure of 2 t/m^3 across all deposits reduces the confidence in the resource and reserve figures.

- **Remote Deposits** — The lease area at Fria is very large and the deposits are becoming more remote from the current plant location. Bauxite transport fleets and haulage costs can be expected to increase with time. Additional infrastructure costs can be anticipated for roads and bridges to access the deposits.

- **Friguia Refinery** — Decisions have to be made regarding the upgrading of the Friguia Refinery to include up to date technologies and efficiencies. The Friguia Refinery costs are relatively high, reducing the advantage of the low cost bauxites in terms of the integrated product.

- **Tailings Dam** — The tailings dam capacity is needed to be increased in the short to medium term as the present facility will be full by 2011. A 4 m raising of the dam wall would allow a 5 year extension of capacity. There are however technical and environmental issues related to the raising of the existing dam and several options are under consideration.

- **HIV/AIDS** — Prevalence rates in Guinea, though overall lower than other African countries, are higher among miners (4.7% compared with the national average of <2%) which will require proactive management and prevention programmes.

Future opportunities to the operations include:

- **The ability of the available deposits to satisfy increased production** — The lead time to achieve higher production is relatively short.

- **Improved Mine Planning and Optimisation** — Computerisation and block modelling provides the opportunity for more efficient utilisation of the Mineral Resources and reconciliation of Mineral Resources and Ore Reserves.

3.5 Guyana Bauxite Mine

3.5.1 Introduction

SRK undertook a site visit to the Guyana Bauxite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.5.2 History, Location

Guyana is located in the north of South America bordering the Atlantic Ocean between Suriname and Venezuela. The mining operations are located some 200 km south of the capital Georgetown. The terrain of Guyana is mostly rolling highlands, low coastal plains and savannah in the south. The relief ranges from sea level to 2,835 m at the peak in Mount Roraima, and can be described as comprising rolling highlands, low coastal plain and savannah in the south. The mining area can be accessed via tarred roads and dirt roads.

The climate in Guyana can be described as equatorial-tropical, hot with an average temperature of around 26°C, humid, and moderated by north-easterly winds. There are two main wet seasons, May to August and November to January, with average annual rainfall of over 2,500 mm. The last few years have been particularly wet in comparison with historical rainfall statistics which has caused operational difficulties.

Bauxite was first discovered in 1919 along the river/creek banks, with bauxite mining production occurring fairly continuously in the area from the 1940s up to the present day. The two main bauxite deposit areas, Aroaima and Kwakwani, which have been operated both independently of each other as well as together, have been operated by a number of companies both private and government owned, in addition to joint ventures. The current company Bauxite Company of Guyana ("BCGI") has been operating since 2006. BCGI is a joint venture between Aroaima Mining Company Inc. ("AMC") registered in Guyana (10% shareholder), and Bauxite & Alumina Mining Venture Ltd. ("BAMV") registered in Cyprus (90% shareholder), which is a subsidiary company 100% owned by UC RUSAL.

The mining assets comprise two main bauxite deposit areas, namely Kwakwani and Aroaima, each currently having single mining areas, with a crushing and barge loading facility at Kwakwani to transport bauxite some 30 km to Aroaima where blending, drying and barge loading facilities are located to load dried bauxite onto barges for delivery to an offshore vessel loading facility located in New Amsterdam, located some 240 km upstream.

Mining licences are held for all of the operational areas, which are short-term, but are routinely renewed at the necessary time. In addition, exploration licences are held for a number of deposits.

Bauxite is currently exported and sold, principally as two different products, metallurgical grade bauxite and chemical grade bauxite. Existing contracts are in place which state bauxite tonnages and qualities as well as transfer prices and conditions. BCGI predominantly sells/transfers its bauxite to UC RUSAL's refineries, however also sells bauxite to external companies intermittently. SRK has reviewed these contracts and concludes that the saleable tonnages, quality, and prices are achievable from the operations.

3.5.3 Geology

The bauxite deposits of Guyana are located in the north western part of the country, with in excess of 100 deposits discovered. The Guyana bauxite deposits take the form of irregular and lenticular deposits ranging in size from 100 kt up to in excess of 10 Mt. The deposits are overlain by significant thicknesses of overburden, often in excess of four times the thickness of the bauxite, comprising water-bearing sands, loams and clay.

The bauxite deposits found on the Guyanese Shelf, are of Tertiary Age, and formed as a result of tropical weathering of Precambrian granite and gabbro-dolerite rocks and associated gneisses and mica schists. Under a coastal sea climate and lagoons, it is thought that large braided river systems eroded the igneous material and re-deposited it into channel and pod like sedimentary structures, were then subjected to continental uplift and tropical lateritic weathering resulting in the bauxitisation process, leaching away iron minerals and silicates. The bauxites were then preserved by younger sands, loams and clays.

In general, the bauxites form blanket-like horizontal beds, with thicknesses varying between 1.8-13.0 m, and generally sit on kaolinitic clays. The bauxites are overlain by argillaceous clays, sometimes sandy, which is 30-70 m thick, light brown sand (often loamy) which is 20-50 m thick, all covered by a 10-20 m thickness of white sands. The overlying sand horizons form groundwater conduits in connection with surface water courses and therefore need to be understood fully in order to control water inflow into the excavations. The bauxite footwall is usually kaolinite clays up to 20 m thick extending into sands (main aquifer), saprolite zones up to 20 m thick and down into the underlying granite basement.

The bauxites vary in colour but are generally grey-yellow-cream-brown in colour, are layered in structure and range from soft to hard. In general, grey bauxites are softer, clayey and contain lower iron, whereas darker brown bauxites are harder and contain more iron.

The bauxites typically have the following properties; bulk density with natural moisture of 2.04 t/m^3, moisture content ranging from 14-19%, aluminium content between 55-60%, silica content between 2-7%, titanium oxide content between 2-6% and total iron between 1-10%.

The bauxites in the Aroaima area are generally less complex in terms of geological structure than those found in Kwakwani, where there are often multiple bauxite lenses, and assay defined contacts with hanging wall and footwall contacts.

The mineralogy of the bauxites can be described as fairly simple, being predominantly trihydrate gibbsite, the main aluminous mineral, followed by silica contained in kaolinite and iron contained in haematite and crystalline silica in quartz. Most Guyana bauxites also contain some minor boehmite, anatase, rutile and alumogoethite. Re-silicification of the bauxite has taken place near to ground water sources converting the bauxite to kaolinite.

The bauxite can be categorised into two main types based upon metallurgical properties, that is metallurgical grade bauxite (M1, M2 and M3), and chemical grade bauxite (C1 and C2), both types being defined by specific Al_2O_3, SiO_2 and Fe_2O_3 and moisture contents as specified by the bauxite receiving processing plants.

In general, the geological continuity is good and the deposits very large in terms of tonnage when compared with the nearby Jamaican bauxites, with moderate grade continuity in the horizontal plane but more irregular grade fluctuations vertically through the banded layers within the bauxites.

3.5.4 Mineral Resources and Ore Reserves

The Mineral Resource estimation procedures follow a combination of approaches including both 3D estimates using Mining Software and basic polygonal methods using Microsoft Excel, all of which based almost entirely on borehole sample data.

Exploration at the bauxite areas generally follows the following key stages; reconnaissance drilling, early stage exploration drilling at 490 x 490 m spacing, exploration drilling at 245 x 245 m, detailed drilling at 120 x 120 m and 60 x 60 m spacing, and infill/production drilling at 20 x 20 m spacing on stripped bauxite exposures for short-term mine planning. Topographic surveys are routinely undertaken using differential GPS equipment, and have been undertaken across deposit areas actively operational.

The drilling methodologies historically and currently employed utilise chisel/tri-cone drilling down to hanging wall clay marker horizons, followed by conventional double-tube core (50 mm core diameter), drilling for recovery of bauxite samples, with casing of overlying soft sediments to avoid possible contamination. Samples are collected at 0.61 m intervals (2 ft).

Samples are sent to the on-site laboratory for preparation and analysis, located in Aroaima. There is also a small laboratory located at Kwakwani. The samples are split using both cone and quartering and Jones-riffle splitting methods, and crushed using conventional jaw crushers and then milled. Analysis comprises wet chemistry methods for SiO_2, Fe_2O_3, TiO_2 and Loss on Ignition ("LOI") and bomb digest testwork using low temperature Bayer conditions for available alumina and reactive silica. There is no analysis for Al_2O_3. SRK has not undertaken a detailed Quality Assurance/Quality Control ("QAQC") audit, however understands that routine QAQC samples are introduced and provide acceptable cross-checks of analysis accuracy, precision, and repeatability.

The density factor applied to historical tonnage estimates is 2.03 t/m^3 for wet tonnes and 1.71 t/m^3 for dry tonnes, applying 18.5% moisture content.

BCGI's Mineral Resource estimates have been undertaken using different methods including 3D models completed in Surpac Mining Software incorporating statistical, geostatistical and block modelling, 2D models created using computerised contour polygonal methods by Russian Institutes and historical estimates completed by previous companies calculating tonnages and grades using area of influence, thickness and length weighted grades.

The highest confidence estimates completed in Surpac have only been completed for the West deposit, with the less confident Russian contour estimate for the 22-Kurubuka deposit and the least confident remaining deposits calculated using conventional mathematical techniques. The 22-Kurubuka deposit has been included in the Mineral Resource estimate, with 30 Mt (dry) in the Indicated category.

SRK comments that the geology and major controls of the bauxite are well understood enabling sufficient confidence in the modelling of the bauxite. The data quality and quantity is considered sufficient for classification into the Measured, Indicated and Inferred Mineral Resource categories in accordance with the JORC Code.

SRK has assessed land-ownership, exploration history, drilling density, quality of estimation and sterilisation, and only included deposits considered potentially economic by applying CoGs of >38% available alumina, <10% SiO_2 and a stripping ratio of less than 8 m^3/t. SRK has excluded two deposits from the current Mineral Resources, namely the 28-Kurubuka and the 29-Mora Creek deposits, which contain very sparse sampling information and high stripping ratios. These deposits require further exploration to be JORC Code compliant Mineral Resources. In addition SRK has not included any Mineral Resource for Block 5 NE for which, although planned to be mined in the near future, the licence is not currently held by BCGI.

SRK has categorised deposits in the Aroaima area with 60 x 60 m drill grid or less as Measured Mineral Resource (West deposit). The complex Kwakwani area and the Aroaima area, which have been drilled on a maximum of 120 x 120 m drill grid are categorised as Indicated Mineral Resource. Those deposits with very few boreholes to a maximum of 300 x 300 m drill grid are categorised as Inferred Mineral Resource. All tonnages are reported without the application of any other "modifying factors".

The Mineral Resource and Ore Reserve statement has been achieved by depleting the 2008 numbers by the production tonnages excavated in the interim period. In deriving the Mineral Resource and Ore Reserve, SRK has adopted a conservative approach.

Table 3.10: BCGI Mineral Resource and Ore Reserve Statement (1 July 2009)(1), (2), (3), (4). (5)

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	2.3	49.7	5.8	Measured	3.6	51.5	5.8
Probable	3.3	52.3	6.5	Indicated	41.3	58.0	5.1
Total	5.6	51.2	6.2	**Subtotal**	**44.9**	**57.5**	**5.2**
				Inferred	4.2	52.7	5.0
				Total	**49.1**	**57.1**	**5.1**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina grades are presented as available as opposed to total alumina.

(4) Silica grades are presented as reactive as opposed to total silica.

(5) Mineral Resources are inclusive of Ore Reserves.

To convert the Mineral Resources into Ore Reserves, SRK has applied modifying factors supported by information reviewed, the observations of mining activities, and SRK's experience.

SRK considers that the number of detailed studies covering the required technical areas relating to an international standard Pre-Feasibility Study level or greater is insufficient, and therefore cannot yet convert certain deposits within the Measured and Indicated Mineral Resource categories to Ore Reserves. SRK only considers the West deposit and stockpiles, which are planned to be mined and have sufficient technical studies, to be converted to Ore Reserves.

BCGI states dilution and losses to be 5% for each, which SRK considers to be adequate given the geological continuity, and in addition has applied the historical 0.5% diluting grade for SiO_2. Once the technical work for Kwakwani has been completed it is likely that the dilution and losses applied may need to be modified, given the lack of a visually distinguishable contact at the footwall and hanging wall. No dilution has been applied to the stockpiles, however a 5% loss has been applied to material left at the base of the stockpiles to avoid dilution.

3.5.5 Mining Operations and Infrastructure

Mining operations are conducted in two areas denoted as the West pit in the Aroaima area and across the river in the 16-Bissaruni deposit in the Kwakwani area, with very limited production from stockpiles, both of which are accessible by a network of haul roads and a river crossing.

Stripping operations in both areas utilise hydraulic excavators, free digging, which load into 40 t and 50 t trucks. Soils are dozed, loaded and transported to localised dumps for later restoration. The overburden excavation and bauxite extraction is conducted by the same excavators, with the in-situ material being loosened by ripping and in some cases where the bauxite is iron-rich, it is blasted.

In the West deposit, following stripping, bauxite is transported directly to the plant stockpile at Aroaima ready for blending, crushing using a rolls crusher and drying. The material is crushed and stockpiled ready for blending with bauxite from the Kwakwani deposits.

Bauxite from the Kwakwani deposit, 16-Bissaruni, is taken to an intermediary stockpile, some 1.5 km outside of the working area. The bauxite is stockpiled by grade and characteristic, and grade control sampled to determine the required blending. The ore is subsequently transported to a further intermediate stockpile at the waterfront for further crushing and barge out loading. It is then transported to the wobble crusher and onto river barges, via conveyors and shipped to the Aroaima drying facility. Here the bauxite is offloaded using a dragline and front-end loaders and delivered to the stockpiles located near the dryers ready for blending.

The mining and plant operations are planned for continuous operation. The plant operates a 2-shift work schedule of 12 hours for 365 days per annum, however very rarely runs continuously due to weather conditions. The operations and productivity are heavily affected by wet weather during the rainy season, which generally results in the planned quantities of material mined never reaching the planned levels.

Grade control sampling is undertaken within the open-pits, at the dryer and on the barges, all of which ensuring barge tonnages and grade are in specification. Unfortunately, due to a lack of available bauxite for blending, a number of barges have been out of specification. SRK recommends that stockpiles inventories are re-established to ensure sufficient material for blending in the future.

Geotechnical and hydrological/hydrogeological conditions have a great impact on the mining activities, due to a combination of the overlying sands which are instable and act as an aquifer and the closeness on surface water courses which are hydraulically connected to the overlying sands. The current mining methods do not address these conditions and as a result, there are dangerous mining conditions and large water inflows into the pits. These issues need to be addressed as a matter of urgency.

Short-Medium term mine planning is done annually using Surpac Mining Software.

Blending is undertaken using front-end loaders, following a relatively detailed blending schedule. Blending operations are essentially live, and modified following laboratory results from samples collected as material is fed onto the barges.

Drying of the bauxite is achieved through two rotary kilns, with capacities ranging between 150-250 tph, dependent on whether the bauxite is metallurgical grade with 8-10% moisture or chemical grade which is required to be 5%. The kilns combined capacity is 2.5 Mtpa.

Following drying, the material is loaded onto Oldendorf 4,000-6,000 t barges using shiploader conveyors and transfer equipment, and transported some 140 km upstream from Aroaima to the Berbice River Loading Basin near New Amsterdam, where the barges unload onto ships ranging in capacity from 26,000-38,000 t.

3.5.6 Environmental and Social Considerations

BCGI mining operations are located in a highly diverse flora and fauna area. The main water body within the mine area is the Berbice River. Local communities use water from Konkoure River for fishing, washing, swimming, agriculture, and laundering. The Berbice River provides transport for local people and it is navigable from the project area to the Atlantic Ocean.

There are four communities in the area of influence of the mining operations Kwakwani, Aroaima, Ladernville and Mapletown. Most agricultural production of the communities consists of subsistence farming. The area on the right bank of the Berbice River is almost inhibited with the only village of Hururu which is an Amerindian tribe. The rest of villages on the left river bank were formed to accommodate employees and are strongly dependent on the bauxite mine.

All aspects of BCGI's mining operations are regulated by the regulations of Guyana. Mining activities in Kwakwani are regulated by Special Mining Permit No. 3 (2006) which requires BCGI to use its best efforts to minimise the negative impacts on forest, land, wildlife and human settlements and also requires reforestation and protection of land in accordance with the standard international mining practice. Additionally, there is a Compliance Agreement signed in 2006 between BCGI and the Guyanese Environmental Protection Agency ("EPA"). This agreement has stipulated a number of actions to be undertaken by BCGI at its existing operations within a period of 1 year. According to the last Compliance Monitoring Report (September 2009) submitted to the EPA by BCGI's external consultant, there are still a number of areas where BCGI is not compliant with the Compliance Agreement. In that respect there is significant element of non compliance although the EPA has extended the compliance schedule. There are no other environmental permits required for BCGI operations.

The Environmental Protection Act in Guyana has also established the requirement for the Environmental and Social Impact Assessment ("ESIA") in 1996. ESIAs for Aroaima and Kwakwani have not been compiled as the mining operations started before the establishment of the legislation.

There is no closure and rehabilitation plan in place although it is reported that the plan is being prepared by BCGI. Under the Special Mining Permit No. 3 (2006) and Compliance Agreement 2006, a rehabilitation and closure plan is required at BCGI. The BCGI closure and decommissioning plan has been submitted to EPA and is awaiting approval. The estimation of the total rehabilitation requirements for the mine has not been established nor estimated.

BCGI does not have formal systems to manage the environmental and social aspects. Currently an annual environmental and social management programme has been established by UC RUSAL for mitigation of the identified social and environmental risks and impacts; however the mining operations do not have site specific environmental and social programmes and action plans based on the outcome of community consultations.

The key environmental issues of BCGI are the absence of rehabilitation plans, waste water management, waste management, stakeholder engagement plan and community development plans.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$3.7 m on an attributable basis. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.5.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is approximately 6 years.
- The production rate 1.4 Mtpa until 2010 then reducing to 870 ktpa.
- The operating costs include royalties and transport cost to the port.
- The economics have been verified based on an overall integrated flow of bauxite through to aluminium, as described in Section 2.2.5.

Table 3.11: BCGI historical production and cost statistics(1), (2)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	1.25	1.89	1.61	0.71
Grade	(% Al_2O_3)	52.1	52.1	50.1	50.3
Factor	($t_{bauxite}$:$t_{alumina}$)	2.38	2.37	2.39	2.34
Expenditures					
Cash operating cost. .	(US$m)	57.3	70.6	85.1	21.3
Cash costs per unit . .	(US$/t)	45.93	37.36	53.01	29.82
Capital expenditure . .	(US$m)	17.4	4.7	7.7	0.2

(1) Grades are given as available alumina.
(2) All numbers are reported on a 100% attributable basis.

3.5.8 Material Developments

BCGI has significantly reduced its operating costs in H1 2009. SRK has not reviewed the detail behind the H1 2009 cost reductions, nor been able to assess the sustainability of such lower operating costs into the future.

3.5.9 Specific Risks and Future Opportunities

Specific risks to the operation include:

- **Ore Reserve Shortage** — The mine plan, and hence Ore Reserve, currently only covers 6 years of production.

- **Mining and Exploration Licence Renewals** — BCGI should progress on licence terms and ensure renewal applications are submitted in a timely manner.

- **Under-exploiting of Exploration Potential** — The areas surrounding the deposits have huge potential to yield additional deposits and there is much historical exploration data covering them which is held on site, however no exploration licences are held for them and they are in danger of beyond lost to competing companies, as was the recent example of the licence at Tarakuli, with over 65 Mt of bauxite, which has been taken by BHP Billiton.

- **Mining Licence Compliance** — The mining licence could be suspended if BCGI does not improve compliance with the environmental Compliance Agreement however, SRK has no reason to suspect that this will happen if planned improvements are implemented.

- **Geotechnical and Hydrological/Hydrogeological Issues** — The mining operations at both Bissaruni and the West pit are nowhere close to optimal in terms of slope angles and water inflow/dewatering. Detailed engineering solutions to the issues are available in on-site technical reports however are not being followed.

- **Environmental and Social Issues** — Whilst BCGI have completed most of the major activities under the compliance schedule, some non-compliance issues remain.

- **Health and Safety** — The instability of overhanging overburden/sand faces apparent during the SRK site visit are considered a major health and safety hazard, and slopes should be scaled back and the slope angles reduced immediately in order to avoid a potential failure which could endanger human life.

Future opportunities to the operations include:

- **Block 5 NE** — This deposit in the Kwakwani deposit area is located favourably near existing infrastructure, to provide additional Ore Reserve in the short-term to make up any shortfall of bauxite.

- **General Additional Resources** — There are deposits in the area of sufficient size, quality and strip ratios to maintain mining in the area for a number of years. There is also good potential for other deposits near Linden and Ituni to be developed, as well as the possibility of a processing facility.

- **Current Studies** — The 22-Kurubuka project is planned to be in operation once the technical studies required have been completed.

- **Regional Resource Potential** — The area has excellent potential for bauxite resources but requires further technical studies along with a further reduction of high freight/shipping costs in order to become more economical to extract. The bauxite in the area is world class in terms of its quality and in SRK's opinion is underdeveloped in comparison with other bauxite areas around the world.

3.6 North Urals Bauxite

3.6.1 Introduction

SRK undertook a site visit to the North Urals Bauxite Mine in September 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.6.2 History and Location

Mining at the North Urals bauxite operations ("SUBR") has been continuous since 1938. The SUBR bauxite mining area consists of seven underground deposits and a surface deposit. SUBR currently mines the Krasnaya Shapochka, Kalyinskaye, Novo-Kalyinskaye and Cheremukhovskaya deposits from underground, and the Toshimskaya deposit from a series of open pits. The Toshimskaya open pits are located some 160 km north of the underground mines. There is also a limestone quarry at Petropavlovsk, adjacent to the town of Severouralsk.

The North Urals bauxite and limestone deposits are located on the Eastern slopes of the Ural Mountains, at 60º90" N latitude and 59º31" longitude, some 400 km north of Ekaterinburg. The area is hilly, with a relief of 400 to 900 m, with peaks separated by swamp dominated depressions. The area closest to the mines has a limited relief of between 190-200 m. The climate of the area is continental, with minimum winter temperatures of -53ºC, and maximum summer temperatures of +38ºC. The average temperature is -1°C, and there are typically 180-200 days of sub-zero temperatures per year. The annual precipitation is 480 mm, which mainly occurs during the summer.

SUBR has mining authorizations for limestone and bauxite mining operations, as well as surface rights.

3.6.3 Geology

The North Urals bauxite and limestone deposits are located on the north-south trending Tagilsky megasyncline. The area is characterised by intrusive and pyroclastic rocks, with widely developed Silurian and Devonian carbonate sediments. The bauxite deposits are located in two main zones, to the west (Petropavlovskaya) and the east (Turninskaya) of the Krutolovsko-Konovalovsky thrust fault. The highest quality bauxite deposits are located within the Petropavlovskaya region.

The underground bauxites strike approximately north-south and outcrop along a strike length of approximately 35 km, except for a 3.5 km gap caused by a strike slip fault. The down dip extent of the bauxite is currently unknown, but bauxite has been intercepted at depths of 2 km. The bauxites dip 25° to 35° towards the east and vary in thickness from 1-35 m averaging between 4.5-7.8 m for all deposits. The underground orebodies are stratiform and tabular, with a relatively flat hanging wall. The relief of the footwall is complex, and therefore impacts on the geological continuity of the deposit. The Toshimskaya open-pit deposits differ from the underground deposits in that the footwall contact is more regular.

The North Urals bauxite is good quality bauxite, with a high Al_2O_3 content between 53.4% and 58.2% and low SiO_2 content between 1.5% and 4.7%. The main contaminants in the bauxite are CaO (between 1.9% and 4.0%) and sulphur (between 0.1% and 1.3%). The mineralogy of the bauxite also changes across the individual deposits.

3.6.4 Mineral Resources and Ore Reserves

The North Urals bauxite and limestone Mineral Resource estimates have been completed using traditional FSU polygonal methods using plan view areas and average bauxite/limestone thicknesses. SRK has reviewed these estimates and made corrections where necessary in presenting the Mineral Resources in accordance with the JORC Code.

Table 3.12: North Urals Bauxite Mineral Resource and Ore Reserve Statement (1 July 2009)(1), (2), (3)

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	7.3	51.6	4.7	Measured	11.8	55.4	3.1
Probable	83.0	50.9	3.7	Indicated	180.4	55.2	3.2
Total	**90.3**	**51.0**	**3.8**	**Subtotal**	**192.3**	**55.2**	**3.2**
				Inferred	113.5	55.7	3.0
				Total	**305.7**	**55.4**	**3.2**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Mineral Resources are inclusive of Ore Reserves.

Table 3.13: Petropavlosk Limestone Mineral Resource and Ore Reserve Statement (1 July 2009)(1), (2), (3)

	Ore Reserve				Mineral Resource		
	Tonnage	CaO	SiO_2		Tonnage	CaO	SiO_2
	(Mt)	(%)	(%)		(Mt)	(%)	(%)
Proved	13.2	54.0	0.5	Measured	15.6	55.0	0.5
Probable	5.9	53.9	0.4	Indicated	6.9	54.9	0.4
Total	**19.1**	**54.0**	**0.5**	**Subtotal**	**22.5**	**54.9**	**0.5**
				Inferred	—	—	—
				Total	**22.5**	**54.9**	**0.5**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Mineral Resources are inclusive of Ore Reserves.

3.6.5 Mining Operations and Infrastructure

The mining infrastructure at North Urals bauxite comprises various vertical shafts, decline shafts, ventilation and service infrastructure required to support the underground mining of bauxite. Surface infrastructure includes administration offices, workshops, heat generating plants, stockpile areas, messing facilities, fuel collection and distribution areas and electrical substations. Electrical power is obtained from the regional power utility.

All shafts and declines from surface have historically been located in the footwall of the orebody to avoid intersections with the hanging wall aquifer. Current workings are some 800 m to 1,100 m below surface and as the orebody dip across the complex is relatively shallow the vertical shaft infrastructure has become increasingly remote.

The mining methods used at North-Urals underground bauxite mines comprise various conventional short-hole drilling methods that are used in different conditions, principally depending on the condition of the hanging wall rocks and the thickness of the orebody. These

methods have been adapted for the specific conditions at North Urals including the variable karsitic footwall geometry. The principal mining methods that have been used at North Urals over the last five years include; room and pillar, sub-level caving, open stoping and long-hole undercut mining techniques. Ore production from the underground operations is approximately 3 Mtpa.

The Toshimskaya open-pit bauxite operation commenced production in 2004. The operation mines bauxite at a production rate of some 200 kt per year from a number of shallow pits that are mined until the water table is intersected, at which point mining is stopped. Waste stripping is planned at some 45 thousand cubic metres per year, equivalent to a low to medium stripping ratio of some 6:1 m^3/t.

Ore and waste is mined in five metre and ten metre high benches respectively. The footwall of the open-pits follows the base of the deposit at some 30° to 45°, whilst the hanging wall slope is maintained at some 60°. The 60° slope includes the haul road which is installed at a width of 12 m and at a gradient of 10%. Dilution of some 5% is planned and this value is supported by the production history.

In addition to bauxite mining, limestone is mined at the Petropavlovsk quarry close to Severouralsk which is mined by conventional open-pit mining techniques including the use of rope shovels, 30 t off-highway haul trucks and rotary drill rigs to mine the limestone ore at a rate of some 1 Mtpa.

The surface facilities at North Urals are serviced by adequate rail and road connections at site, which link North Urals to the principal centres, including Ekaterinburg, as well as to the Bogoslovsky Refinery ("BAZ") and the Urals Refinery ("UAZ"). The surface rail system operates at North Urals between the various shaft complexes and the central blending yard as well as the Severouralsk station, approximately 7 km from the blending facility. The Severouralsk station serves as the point of export of the ore from North Urals to either the BAZ or UAZ facilities. The rail system comprises a single electrified line totalling some 132 km, which is managed centrally from the Severouralsk station.

Ore from the Petropavlovsk limestone quarry is transported to a processing plant consisting of crushing and screening to produce various size fractions for local markets predominantly for use as a flux at UC RUSAL's Bogolovsky Aluminium Plant and the Serovsky Steel Plant.

Capital Projects

North Urals has developed a number of projects at each of the four shaft sections of Cheremukhovskaya, Novo-Kalyinskaye, Kalyinskaye and Krasnaya Shapochka to extend the mining life to enable mining to continue to deeper levels. The projects involve the establishment of deeper access infrastructure through a combination of sub-decline and shaft accesses. At some shaft sections, a deeper surface shaft is planned to be commissioned although the excavations already exist to the required depth and just need to be commissioned. The current mining operations are 800 m to 1,100 m below surface and the projects would extend the lowest level of mining to some 1,220 m below surface. There is potential to mine deeper ore horizons but these have only been investigated to a scoping study level of confidence.

3.6.6 Environmental and Social Considerations

There are OVOS (similar to Environmental Impact Assessment) documents for all four SUBR underground mines as well as for the Petropavlosk quarry. It could not be established if such a document exists for the Toshimskaya open-pits. The operations also have water emission permits (PDS). The emission permit for air (PDV) and waste (PNOOLR) is currently under review.

None of the mining sites are located on, or next to any protected areas. There are a number of settlements and villages in close proximity to the mining operations that could be impacted on in terms of noise, dust, light pollution and traffic.

There is no formal environmental management system in place, however they are planning to implement OHSAS 18001 (Safety & Health Management) and ISO14001 (Environmental Management) systems in the future. The current thinking is to implement these during 2011; however, planning for the implementation of these systems has not yet started.

The hydrogeological conditions of the underground mining areas at SUBR are complex. They are characterised by high karstic content and water bearing rocks. Mining is thus accompanied by the risk of sudden water flow into the mines. The water regime is however well understood and the systems in place are well managed. However a concern has been expressed that the current budgets are insufficient to upgrade, maintain and improve the reliability of the current protection systems.

There are four mine waste water treatment facilities. The treatment plants essentially employ a first stage settling process in large surface settling dams and a second filtration step. The incoming water prior to settlement and filtration typically is not clear and has elevated chemical oxygen demand ("COD"), total suspended solids ("TSS"), sulphate, calcium, chloride and suspended oil concentrations. The filtered water is discharged into the Vagran River. Sampling is done upstream and downstream of the discharge point. The key parameters that are improved due to the water treatment process include: odour, COD, TSS and iron.

Approximately 20 old waste rock dumps exist along the length of the strike. The dumps are generally located close to the production shafts. During 2006 two waste rock dumps at Krasnaya Shapochka were rehabilitated. However, no shaping or rehabilitation of any of the other dumps is currently taking place. Some vegetation such as pine and birch trees have started to establish on some dumps, but it is not wide-spread.

The Petropavlovsk limestone quarry is located 1 km south of the town of Severouralsk. The main environmental impact when mining limestone occurs due to the release of dust to air during blasting, extraction and loading operations, stockpiling of ore and dumping of waste rock. Further dust emissions occur during rock transportation to the grinding-sorting plant. It was reported that the maximum permissible air emissions are not exceeded in the residential communities close to the quarry or at the border of the sanitary-protective area.

The Toshimskaya open-pit operation mines bauxite from a number of shallow pits. The total area of the operations is 113.7 ha. The open-pits are rehabilitated concurrently with the mining operations and the rehabilitation costs are included in the mining costs. No pit has yet been fully rehabilitated, but there is sufficient evidence from the site visit that rehabilitation of some of the mined-out pits have commenced.

Overall, the SUBR operations appear to be in material compliance with Russian Federation environmental requirements. There may be areas of non-compliance but these are not material to the outcome of this review. The SUBR operations in most respects do not comply with the Equator Principles for Financial Institutions and there are also some gaps in terms of compliance with the IFC EHS Standards. Despite these areas of non-compliance environmental practices at the SUBR operations appear to be to a high standard, especially in terms of housekeeping and general environmental practices, even though no formal Environmental Management System ("EMS") is in place.

The key environmental issues for these operations are the ongoing management, treatment and discharge of excess water and the eventual rehabilitation of the waste rock dumps and demolition of mining infrastructure. There will be a significant cost associated with the final rehabilitation

of the mining operations, which are recognised, but not currently accounted for. In terms of social issues the eventual closure of the SUBR mines may lead to liabilities not currently anticipated as the mine has communities which are largely dependent on the continuation of its operations for their sustainability.

The asset retirement obligation at 1 July 2009 has been estimated to be US$138 m. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.6.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is over 25 years for the bauxite mines, and 22 years for the limestone mine.
- The production rate 3.44 Mtpa of bauxite and 0.85 Mtpa of limestone.
- The operating costs include royalties and are to the mine gate.
- The economics have been verified based on an overall integrated flow of bauxite through to aluminium, as described in Section 2.2.5.

Table 3.14: North Urals bauxite historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	3.28	3.45	3.26	1.60
Grade	(% Al_2O_3)	41.2	41.7	42.2	42.3
Factor	($t_{bauxite}$:$t_{alumina}$)	2.37	2.37	2.39	2.34
Expenditures					
Cash operating cost	(US$m)	135.3	168.7	168.6	61.7
Cash costs per unit	(US$/t)	41.22	48.94	51.66	38.44
Capital expenditure	(US$m)	31.3	39.4	41.0	5.6

(1) Grades are given as available alumina.

Table 3.15: Petropavlovsk limestone historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt)	0.99	1.04	0.99	0.38
Grade	(% CaO)	55.0	55.1	55.2	55.2
Sales	(Mt)	0.72	0.75	n/a	n/a
Expenditures					
Cash operating cost	(US$m)	1.9	2.8	3.5	0.9
Cash costs per unit	(US$/t)	1.88	2.67	3.57	2.47
Capital expenditure	(US$m)	0.0	0.0	0.0	0.0

(1) n/a — not available

3.6.8 Material Developments

North Urals has significantly reduced its operating costs in H1 2009. SRK has not reviewed the detail behind the H1 2009 cost reductions, nor been able to assess the sustainability of such lower operating costs into the future. Similarly, the reduction in capital expenditure H1 2009 and the investment programme going forward has not been assessed by SRK as to its impact on the sustainability of the North Urals operations.

3.6.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Operating Costs** — as mining progresses deeper mining costs are likely to increase through additional access and groundhandling infrastructure required to be operated as well as longer development access to the orebody, extra travelling time to and from the work places, additional pumping costs and increased ventilation requirements. Improvements in productivity and design as well as locating access and groundhandling infrastructure closer to the orebody can mitigate this risk to a certain extent.

- **Seismic Events** — as mining progresses deeper there is a likely increase in seismicity and seismic induced falls of ground and support problems. This can be mitigated by a focus on more conservative regional and stope support design parameters.

- **Project Capital** — the continuation of mining from 2011 is based on the successful completion of major capital projects at each of the shafts. There is a risk that the projects might be delayed or require more capital expenditure to complete than currently envisaged.

Specific opportunities to the operations include:

- **Mining Methods** — an increase in mechanisation if based on an appropriate and revised mine design might lead to reduced operating costs and improved productivity and reduce the number of work places and development requirements.

- **Productivity Improvements** — productivity improvements in terms of mining and manpower efficiency, increased tonnage per development metre, concentration of workings, etc could lead to cost savings.

- **Underground Transport** — an investment in more modern and perhaps larger horizontal transport equipment focused on dedicated haulage levels would lead to lower operating costs;

- **Production Capacity** — there may be an opportunity to increase production capacity at the mine considering the volume of Ore Reserves although this is dependent on market conditions for the product.

- **Ore Reserves** — as the bauxite deposit at each of the shaft sections extends below the level defined as part of the capital projects that support the current Ore Reserves there is an opportunity to increase the reserves through investigation of additional shaft deepening projects.

3.7 Timan Bauxite Mine

3.7.1 Introduction

SRK undertook a site visit to the Timan Bauxite Mine in September 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.7.2 History and Location

The Timan Bauxite Mine is located in the Komi Republic of the Russian Federation, and is operated by Timan Bauxite and owned by UC RUSAL. It is located some 1,200 km north-east of Moscow and is approximately 200 km north-west of the city of Ukhta. The mine is accessed by both surfaced and un-surfaced road and by a purpose built railway both 150 km from the main road and the main Moscow-Vorkuta rail line.

The climate in the area is characterised by long cold winters, and short warm summers, with average temperatures ranging from -20°C in the winter to +15°C in the summer. The terrain comprises gently undulating and rolling hills, covered mainly by forests and "taiga" marshland.

The Timan bauxite deposits have been rigorously explored between 1971 and 1989 by the Ukhta Geological Survey Expedition. The Russian State Commission of Reserves (GKZ) approved their resources and reserves at various stages of the project between 1977 and 2001. The operations began at the Timan Bauxite Mine in 1998 and the open-pit mining operations commenced in 1999.

The bauxite deposits cover an area approximately 20 km long and 6 km wide, and comprise four main deposit areas: Vezhayu-Vorykvinskoye, which is currently being exploited (Central), Verkhne-Schugorskoye (North beds and South beds), Verkhne-Vorykvinskaya (West beds); and Vostochnoye (East). All of the deposits with the exception of the Vezhayu-Vorykvinskoye deposit, are fairly simple single-lense, blanket like bauxite deposits.

An overall licence covers all of the deposit areas, with a specific mining licence covering certain orebodies within the deposit area planned to be mined first. It is understood that the licence to extract bauxite will expire in 2014, however it is considered that it will be renewed upon application at the appropriate time.

The operation is currently mining bauxite at approximately 2.4 Mtpa and the bauxite is exported and sold to UC RUSAL's refineries: UAZ, BAZ alumina refineries and in recent years to the Achinsk Complex to augment the reducing Al_2O_3 grade of the Kiya Shaltyr nepheline syenite feed. These plants accept both Bayer and Sinter quality bauxite, the sinter process allowing much higher silica bauxite. SRK has reviewed these contracts and conclude that the saleable tonnages, quality, and prices are achievable from the operations and that they guarantee the sale of the bauxite for the foreseeable future at reasonable market prices.

3.7.3 Geology

The bauxites at Timan are distinctly different from the majority of the world's bauxite deposits and reserves as they formed in a karstic weathering environment, are older, more deeply buried, have an unusual mineralogy, are predominantly boehmitic and in places indicate only partial bauxitisation with multiple, stacked/overlapping bauxite lenses.

The deposits lie along the flanks of a regional scale anticlinal structure, having formed from the tropical and intensive karstic weathering of underlying Pre-Cambrian dolomitic and clay-bearing rocks. Later overlying basalts have altered the bauxite mineralogy in places. The weathering, occurring in the Devonian period resulted in the creation of a highly undulating karstic topography and removed most of the carbonate from the basement rocks, resulting in a layer rich in alumina and silica minerals. This layer was then subjected to more intense weathering with much rainfall and water table fluctuations resulting in the bauxitisation and resultant bauxite deposits.

The bauxites are overlain by mudstones and sandstones deposited at the end of the Devonian. Carboniferous and Cretaceous sediments, mainly carbonates, were then deposited and Quaternary, continental sediments, comprising river deposits only a few metres thick, were deposited over the sequence, which, by this time, had been slightly folded and faulted. The bauxites are buried by up to 400 m of cover and are exploitable by open-pits down to approximately 200 m.

The majority of the bauxites are fairly continuous undulating layers of simple structure and fairly homogenous grade, however, the Schugorskoye North beds are much more complex with multiple lenses and poorer continuity but up to 100 m thick. The highest quality bauxite is situated in the core of the bauxite layers with lower quality above and below and on the fringes. The thickness of the bauxite layer averages from 4 to 11 m for individual lenses. The deposit areas comprise up to six individual deposits averaging around 1.5 km in length along strike and approximately 0.5 km across strike.

The mineralogy is relatively unusual as monohydrate boehmite is the principle aluminous mineral with very low gibbsite, with minor diaspore and chamosite, as well as the more usual kaolinite and haematite. Boehmite is expected to dissolve completely in the Bayer processing method. Diaspore has the same composition as boehmite, but dissolves incompletely, especially when present in proportions over 5%. Kaolinite is digested in the Bayer process, but its silica and alumina react with the caustic soda forming an insoluble desilication product which goes to waste as red mud residue. Half of the chamosite is digested and half reports to the red mud. Inert quartz makes up around 0.2% and reports to the red mud. Haematite and goethite, assumed to contain no alumina, also report to the red mud.

The bauxite can be categorised into two main bauxite types for export, dependent upon the silica grade, Bayer grade being typically less than 6% SiO_2 and greater than 49% Al_2O_3 and Sinter grade greater than 6% SiO_2 and >44% Al_2O_3, but less than 12% SiO_2.

In general, with the exception of the more complex multi-lense Verkhne-Schugorskoye North beds, the geological and grade continuity is moderate-good, with typical grade continuity along strike and less so across strike. Vertically within the bauxite horizon the grade has a distinct profile with lower alumina and higher silica at the hanging wall and footwall contacts, and a high alumina and low silica central core. Within the Russian GKZ system of classification, the Verkhne-Schugorskoye North beds are categorised as Type III complexity and the other deposits Type II.Potential areas for additional Mineral Resource exist, namely the Svetlinskoye, Valodinskoye and Zaostrovskoye groups which are situated to the northwest of the Vezhayu-Vorykvinskoye group of deposits. Some of these areas have been recently explored, however are currently on hold.

3.7.4 Mineral Resources and Ore Reserves

The project area has been investigated extensively over the past 30 years resulting in a large quantity of data. Some 5,000 boreholes have been drilled, with over 63,000 samples analysed using wet chemistry techniques for oxide chemistry. Topographic surveys have been undertaken covering the whole project area to an appropriate level of detail for resource definition, and all sample locations surveyed. All data collected has been reviewed and approved by the Russian State Reserves committee.

The drill spacing across the deposits varies, but in general some 15% of the deposits are drilled at 50 x 50 m or 100 x 50 m (GKZ "B" category), some 85% of the deposits at either 142 x 142 m or 100 x 50 m or 200 x 200 m (GKZ "C1" Category) and some 5% at 200 x 200 m minimum spacing (GKZ "C2" Category).

Almost the entire drillhole and sample database was compiled historically, using single-tube conventional core drilling (89 mm core diameter), methodologies with acceptable core recovery, and has since been electronically captured and validated. Samples were historically collected using standard methodologies at 1 to 2 m intervals, and were prepared in state run facilities using appropriate techniques for splitting, crushing and milling. Three different types of analysis have been undertaken, brief chemical analysis of only the major oxides, full chemical analysis of all major oxides, and trace element analysis, all of which use wet chemistry titration methodologies.

Although SRK has not undertaken a review of the historical QAQC data, the quality of the historical laboratory assays and exploration drilling and sampling information has been checked as part of a SRK study undertaken in 2004 involving the drilling of 68 confirmatory diamond boreholes totalling 5,330 m; geological logging and sampling were supervised by SRK; and a bauxite characterisation testwork programme was carried out at CSIRO in Perth, Australia.

Different density factors are applied to the different deposit areas, ranging between 2.25 and 2.45 t/m^3 on a wet basis, with moisture contents ranging between 11% and 17%.

SRK comments that the geology and major controls of the bauxite are well understood enabling sufficient confidence in the modelling of the bauxite. The data quality and quantity is considered sufficient for classification into the Measured, Indicated and Inferred Mineral Resource categories in accordance with the JORC Code.

The Mineral Resource statements presented here have been reported from the approved GKZ estimates, with deductions for depletion of mining at the average grade, as is common practice for GKZ reserves. Estimates of tonnage and grade for each of the deposits were derived through the use of manual 'polygonal' methods. This involved the production of sectional interpretations of the bauxite horizons outlining the drillhole intersections satisfying the chemical criteria of Bayer and Sinter quality bauxite as stated above in addition to a minimum Al_2O_3 to SiO_2 ratio of 3 ("MSI"), and where bauxite thickness exceeds 1.5 m. These were then projected onto plan view where polygonal blocks were delineated. Average thickness values and length-weighted grades were then calculated and applied to each of these blocks. Blocks with greater than a 20:1 strip ratio cut-off were then subtracted from the total.

The mining operations are planned via a computerised geological modelling and mine planning package, Mineframe, in order to estimate more accurately the Mineral Resource using infill drilling data and to allow more efficient short-term mine planning.

In order to classify the Mineral Resource in accordance with the JORC Code, SRK has assessed land-ownership, exploration history, drilling density, quality of estimation and sterilisation and accepted the GKZ criteria relating to quality, minimum mining thickness and strip ratio. With the exception of the Verkhne-Schugorskoye North beds, SRK considers the B category blocks (drilled up to 100 x 50 m) and C_1 blocks (up to 200 x 200 m) to be reportable as Measured Mineral Resource, and C_2 blocks (>200 x 200 m, <400 x 400 m) as Indicated Mineral Resource according to the JORC Code. For the Verkhne-Schugorskoye North beds all of the B and C_1 blocks have been re-classified as Indicated Mineral Resource, due to the geological complexity of the bauxite.

SRK has reduced the UC RUSAL Mineral Resource and Ore Reserve by some 20 Mt wet (16 Mt Bayer, 4 Mt Sinter) to account for bauxite within the river protection zone, affecting the Vezhayu-Vorykvinskoye deposit. In addition, SRK has checked the GKZ resource estimates against the SRK Mineral Resource estimate produced using 3D software modelling approach using similar criteria, which demonstrates the GKZ estimates to be robust.

To convert the Mineral Resource into Ore Reserve, SRK has applied modifying factors supported by information reviewed, the observations of mining activities, and SRK's experience. SRK considers there to be sufficient detailed technical studies and mining operations to allow the Mineral Resource to be converted to Ore Reserve following the application of the modifying factors, with the exception of Vostochnoye bauxite at depth suitable for underground mining, which has not been planned to sufficient detail to be economic to warrant transferral.

Timan states dilution and losses to be 5% and 6% respectively, which SRK considers adequate given the geological continuity and as the hanging wall and footwall contacts are not easy to visually define and can only be defined by chemical analysis. SRK has not applied a diluting grade to the Ore Reserve.

The Mineral Resource and Ore Reserve statement has been prepared by depleting the 2008 statement by the production tonnages excavated during the 12 month period. Records obtained from UC RUSAL have presented the grades for both Bayer and Sinter bauxites but no split of tonnages. Therefore in deriving the Mineral Resource and Ore Reserve figures, SRK has adopted a conservative approach.

Table 3.16: Timan Bauxite Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5)]

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	99.7	54.8	8.3	Measured	113.1	49.4	7.4
Probable	35.4	57.1	7.2	Indicated	67.1	49.9	6.9
Total	**135.1**	**55.4**	**8.0**	**Subtotal**	**180.2**	**49.6**	**7.2**
				Inferred	0.0	0.0	0.0
				Total	**180.2**	**49.6**	**7.2**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Alumina grades are presented as available as opposed to total alumina.

(4) Silica grades are presented as reactive as opposed to total silica.

(5) Mineral Resources are inclusive of Ore Reserves.

3.7.5 Mining Operations and Infrastructure

Mining activities are currently conducted only within the Vezhayu-Vorykvinskoye deposit area, within orebodies 1, 2 and 3.

Conventional open-pit mining techniques are currently employed, with the overburden excavated in 10 m benches, and with bauxite generally mined in 5 m benches following blasting. Excavators load the waste into 40 t dump trucks that transport the material to both external and internal waste dumps. The bauxite is taken to the blending yard adjacent to the railhead, where it is homogenised and blended.

The mine is currently trialling surface mining equipment, the Wirtgen SMs, as employed in UC RUSAL's Guinea operations, in order to improve vertical selectivity of the bauxite and to reduce operating costs associated with drilling, blasting and crushing. It is envisaged that the one operating surface miner will be able to operate at 250-300 ktpa, mining 0.5 m layers within more contiguous blocks of bauxite.

There are numerous open-pits planned over the life of the mine and several of these may need to be mined concurrently to ensure a consistent feed grade. In particular, the mining may be required to be scheduled to blend the silica content of the Bayer ore from the average of the deposits of 10% SiO_2 to approximately 8.2% SiO_2. Pit depths vary from 25 m to almost 200 m. Future open-pit mining, particularly in the deeper pits will require dewatering, and as per the current operations, surface water diversion ditches required to control surface water inflows. Development of haul roads to access new mining areas is undertaken in advance of bauxite requirement.

The mining operations are planned for continuous operations, operating a 2-shift work schedule of 12 hours for 365 days per annum. The operations are affected a great deal by the very cold winters and heavy snowfall, with winter operations focussing on stripping as opposed to bauxite mining. The current mining activities and equipment are designed for an annual mining production of 2 Mtpa.

Grade control sampling is undertaken within the open-pits in the form of 25 x 25 m cored infill drilling, sampling of all blasthole cuttings from a mining block, and sampling of the stockpiles prior to loading the rail wagons. A number of stockpiles are used for blending and the material thoroughly homogenised, and partially crushed mechanically, in order to ensure export grade requirements are met. Preparation and analysis of grade control samples is undertaken in the on-site laboratory which uses appropriate methodologies and equipment.

Timan produces both Bayer and Sinter grade bauxite, generally ranging 48 to 49%, and 46 to 47% Al_2O_3 respectively, and 7.0 to 7.5% and 11.0 to 11.5% SiO_2 respectively.

The current mining plan is to continue exporting bauxite from the mine in accordance with contracts for existing UC RUSAL refineries receiving both Bayer and Sinter quality bauxite.

3.7.6 Environmental and Social Considerations

As part of the due diligence investigation undertaken for Timan, the environmental and social aspects of the mine have been assessed. This included assessment of compliance with the Equator Principles and in-country legislation, environmental management systems, and identification of material issues.

Mining currently takes place in the central area in Pits 1, 2 and 3 and this will continue for approximately the next 10 years. The maximum depth of the pits is 36 m and will not extend to below the water table. Peripheral drains collect storm water which is then drained to the environment. Dirty water in the pits is settled in a settling pond before being discharged to the marsh land.

There is an external dump which has been subject to re-vegetation trials since 1999 when mining started by the Institute of Biology of the Russian Academy of Science. The rehabilitation program has been developed as a part of overall project design and asset retirement obligation updated annually. The new-developing deposit areas are provided with the local closure plans in accordance with new procedure. All domestic and industrial waste is taken to the Polygon waste disposal facility. This comprises a double HDPE lined disposal facility, an incinerator and water treatment plant.

Timan mine is located in an unpopulated area of the Komi Republic in the Russian Federation. The area is covered by coniferous forests alternating with swamps within a harsh climatic environment with annual average temperatures of below 0°C. The Vorykva River (a tributary of the River Vym), Chernuy Stream and their tributaries form the hydrological network of the mine licence area. The rivers Vym and Vorykva and their tributaries are spawning rivers and have the highest category of importance in accordance with the Russian fishery river classification. The groundwater table is close to the ground surface in the lower lying ground but up to 50 m below surface on the higher ground.

The nearest settlements, Levkinskaya and Ust-Tzilma, are located 40 km and 120 km from the site, respectively. The economy of the region is mainly based on timber felling with some light and engineering industry. Areas beyond the existing mining operations remain in relatively pristine condition.

The Russian OVOS process was undertaken during 2006 for the proposed expansion of the mining activities. This OVOS was approved by the Pechorskiy Interregional Department of Technological and Environmental Supervision and is valid until 6 February 2012.

SRK assessed the Timan mine in terms of their compliance with the Equator Principles dated July 2006 and they are found to be compliant or partially compliant to most of the EPs.

An international ESIA process was undertaken in 2004 according to the International Finance Corporation Performance Standards and in 2006 the Russian OVOS process was undertaken for the proposed expansion of the mining activities. The recommendations of the approved OVOS of 2006 are however not yet fully being implemented in accordance with accepted international practice.

The "Komi Aluminium" environmental, health, safety and community policy was put into place in November 2005. The establishment of an EMS is one of the key issues of the policy, and this system has been put into place at the mine. Timan mine also has a programme in place to achieve accreditation on ISO9001 and ISO14001.

An Environmental and Social Due Diligence audit was conducted in 2003 as a requirement of the IFC and European Bank for Reconstruction and Development ("EBRD") prior to extending a loan for the expansion of the mine from 1.5 to 2.5 Mtpa. For a further proposed expansion to 6 Mtpa, the international ESIA process was undertaken in 2004 which included a public consultation process. In 2006 the Russian OVOS process was followed for the proposed expansion of the mining activities. SRK however understands that the proposed expansions have not yet been finalised or implemented.

Timan provides environmental monitoring in accordance with a programme designed for 2002 to 2011. Monitoring consists of several aspects which are provided by different contractors. The monitoring is extensive and comprehensive and there is a clear intention to manage these aspects of the environment. The company 'Geology1' provides surface water and groundwater monitoring. Annual monitoring reports of aquatic fauna are provided by the Institute of Biology. Although the water quality of the watercourses corresponds with Russian normative requirements

for the fishery status, recent investigations identified negative impacts of the mine on the fish population of the Vorykva River. Annual monitoring reports of terrestrial fauna and flora are also provided by the Institute of Biology which includes monitoring of landscape disturbance, soils, flora, fauna, rehabilitated areas, air emissions (snow cover sampling) and radiation levels.

Environmental measure programmes are developed annually.

Material issues identified which may pose a risk to the Timan mine include impacts on water resources and aquatic fauna; closure and rehabilitation; and environmental monitoring.

In the case of expansion of the open-pits, a significant impact may be expected on the groundwater and surface water regimes, some of which are protected. The impacts on the rivers may be caused by both changing the hydrogeological regime and discharging of mine dewatering potentially impacting the water quality and temperature regimes and consequently affecting the sensitive aquatic ecology of the area. An effective pre-dewatering system and associated water management system, permitting and discharge requirements to the Vorykva River and other catchments need to be planned and developed when mining is executed below the natural level of water. In addition, careful control of water volumes, suspended solids, water chemistry and temperature would be required to avoid environmental impacts. In this regard UC RUSAL is reportedly carrying out detailed engineering plans for the dewatering facilities to be ready in 2008.

Environmental monitoring is undertaken but requires a more integrated, systematic approach to programming of data collection, analysis, scheduling, methodology, and location of measurement points. Whilst monitoring results are reflected in high level management reports, it is not clear whether the results are acted upon in the short term by the mine staff.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$8.3 m on an attributable basis. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments.

During 2007, closure costs were determined in the mine extension project as about US$23.6 m. A more clear and strategic future plan with regards to environmental rehabilitation and retrenchment of employees at mine closure, is still required.

3.7.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is over 25 years.
- The production rate remains more or less constant over the life of mine at 2 Mtpa.
- The operating costs include royalties and are to the mine gate.
- The economics have been verified based on an overall integrated flow of bauxite through to aluminium, as described in Section 2.2.5.

Table 3.17: Timan historical production and cost statistics(1), (2)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	2.39	1.92	1.94	0.97
Grade	(% Al_2O_3)	49.3	49.2	49.1	48.9
Factor	($t_{bauxite}$:$t_{alumina}$)	3.01	3.12	3.10	3.09
Expenditures					
Cash operating cost. . . .	(US$m)	31.4	32.6	35.1	10.2
Cash costs per unit	(US$/t)	13.14	16.97	18.11	10.51
Capital expenditure	(US$m)	10.5	9.1	3.0	0.0

(1) Grades are given as available alumina.

(2) All numbers are reported on a 100% attributable basis.

3.7.8 Material Developments

The planned increase in production and the development of the Sosnogorsk Refinery has been deferred.

Timan has significantly reduced its operating costs in H1 2009. SRK has not reviewed the detail behind the H1 2009 cost reductions, nor been able to assess the sustainability of such lower operating costs into the future.

3.7.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Mining Control** — The ability to continue to differentiate and separate the high and low grade Bayer and Sinter bauxite and waste in the open-pits will require the ability to selectively mine at the hanging wall and footwall contacts and with close mining control.

- **Preferential High Grading** — The deposits are zoned with high and lower grade areas. Poor mining could result in high grade and quality bauxite being mined preferentially. If this practice is ongoing, it will impact on the overall Ore Reserve, reducing either the average grade and quality or tonnage of the remaining bauxite. This may further compromise the Ore Reserve if the economic viability is affected.

- **Winter/Summer Bauxite production difficulties** — The ability to optimise winter and summer mining production given the difficulties during both seasons and the thaw, and ability to smooth out the production programme to match consumer demand.

- **Dust Suppression** — Improvement of dust suppression during summer months.

- **Dewatering** — Effective and timely pre-mining dewatering is required to avoid large inflows and very difficult working conditions, when mining is executed below the natural level of water. In this regard UC RUSAL is carrying out detailed engineering for the dewatering facilities to be ready by 2008.

- **Personnel Issues** — Management of the loss of skilled personnel to local oil and gas industry, and keeping of experienced staff.

- **Environmental Management** — The ESIA recommendations have yet to be implemented in accordance with accepted international practice.

Future opportunities to the operations include:

- **Basalt** — A basalt deposit overlies the bauxite in a number of the proposed open-pits which could be sold into the local market. The realisation of revenue from the sale of the basalt has the potential to offset overburden stripping costs and thereby increase the economic reserves.
- **Surface Miner Equipment** — Opportunity to improve mining operations and efficiencies through a successful implementation of surface miner equipment.
- **Underground Potential** — There are bauxite deposits which have potential for underground extraction at the Vostochnoye deposit.
- **Regional Resources** — There are additional bauxite deposits in the region which could provide additional resources.

3.8 Kiya Shaltyr Nepheline (Kiya Shaltyr and Mazulsky Mines)

3.8.1 Introduction

SRK undertook a site visit to the Kiya Shaltyr Nepheline Syenite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.8.2 History, and Location

The Achinsk Alumina Refinery, near Krasnoyarsk in southern Siberia produces alumina from nepheline syenite as opposed to bauxite. The refinery is situated on the Yenisei River next to the town of Achinsk. It has been in operation since 1970.

Aluminium-rich (approximately 27% Al_2O_3) nepheline syenite is mined from the Kiya Shaltyr open-pit, located in the Kuznetsk Alatau mountain range of southern Siberia, a little over 250 km to the north of the refinery and connected to Achinsk by rail and road. Production commenced in 1963.

The process also requires limestone which is obtained from the Mazulsky open-pit that is located adjacent to the alumina refinery. The nepheline syenite ore from the Kiya Shaltyr deposit is blended with limestone obtained from the Mazulsky open-pit.

With both mines located west of Krasnoyarsk in southern Siberia, the climate is continental with hot summers and very cold winters. Kiya Shaltyr is located in mountainous terrain at the elevation above 1,000 m with a climate typical of alpine area, with long periods of snow cover. The average temperature at the Kiya Shaltyr is -2.7°C with a minimum and maximum of -52°C and 31°C respectively. Rainfall averages 930 mm and ranges on a monthly basis from 690 mm to 1,350 mm. The average number of days per year with snow on the ground is 140. Mazulsky is located on a plain at an elevation of 365 m. The average air temperature in January is -20°C and in July, 18°C.

3.8.3 Geology

The Kiya Shaltyr nepheline syenite deposit contains approximately 25% feldspar and 55% nepheline. The nepheline bearing intrusion is a wedge-shaped mass which becomes narrower as it is traced downwards and eventually pinches out. The intrusion transects and metamorphoses the sediments of Lower Cambrian and is itself Lower-Middle Devonian (388 million years) in age. It is roughly U-shaped in plan and is about 2.3 km long and 20 to 220 m wide, having an average thickness of about 120 m.

Information from sampling in the pit suggests a patchy and irregular central core to the deposit with an alumina in excess of 27.5%, surrounded by rock with grades of between 26.5% and 27.5% and near the contacts with the country rock patches of rock with an alumina content of less than 26.5%. A zonation of the deposit may therefore be present.

Dykes divide the orebody with dense grid both along the strike and transverse to it. They range in thickness from five metres or more to small swarms of thin intrusions and constitute more than 7% of the orebody. All the dykes have clear contacts with the ore, but during collective extraction it is quite difficult to distinguish the dykes from ore which leads to dilution. The variation in the grade of the ore is due almost entirely to differentiation in the deposit itself, together with contamination from dykes.

The Mazulsky limestone deposit is a fault-bounded limestone within the Lower Cambrian Usinskaya Suite of rocks. The sequence consists of a mixture of sedimentary rocks of various types together with pyroclastic deposits. The limestones which are mined are overall relatively pure, with small-scale variations which affect the extraction of low silica and sulphur limestone for the sinter process. The variation in the chemistry of the material is caused by dykes of igneous material, quartz-rich areas, karst and brecciated zones with high sulphide and iron hydroxides. Experience in the quarry has suggested that 71% of the stone is limestone with an acceptable grade. The target grade for the sintering process is limestone with a silica content of less than 2% and a SO_3 content less than 0.4%. All the zones of off-grade limestone, are very complex in shape and difficult to model hence extraction planning and the in-pit blending, is based on blasthole sampling.

3.8.4 Mineral Resources and Ore Reserves

The Kiya Shaltyr nepheline syenite deposit and Mazulsky limestone deposit Mineral Resource estimates have been completed using traditional FSU polygonal methods using plan view areas and average deposit thicknesses. SRK has reviewed these estimates and made corrections where necessary in presenting the Mineral Resource and Ore Reserve in accordance with the JORC Code below.

Table 3.18: Kiya Shaltyr Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3), (4), (5)]

	Ore Reserve				Mineral Resource		
	Tonnage	Al_2O_3	SiO_2		Tonnage	Al_2O_3	SiO_2
	(Mt Dry)	(%)	(%)		(Mt Dry)	(%)	(%)
Proved	—	—	—	Measured	—	—	—
Probable	8.7	26.3	40.2	Indicated	8.9	26.9	40.3
Total	**8.7**	**26.3**	**40.2**	**Subtotal**	**8.9**	**26.9**	**40.3**
				Inferred	54.2	27.2	40.3
				Total	**63.1**	**27.1**	**40.3**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.
(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.
(3) Alumina grades are presented as available as opposed to total alumina.
(4) Silica grades are presented as reactive as opposed to total silica.
(5) Mineral Resources are inclusive of Ore Reserves.

Due to the wide spacing of the original exploration drilling at Kiya Shaltyr SRK considers this sufficient only to support an Inferred Mineral Resource estimate. SRK has however utilised the results of the current infill and blast hole drilling and sampling to classify the material up to 30 m below the current open-pit as an Indicated Mineral Resource. The company is planning to complete an exploration programme in 2009 and 2010 at a closer drill hole spacing to improve the knowledge of the deposit at depth.

The Ore Reserves defined by SRK for the Mazulsky mine have been determined according to the quantum of Ore Reserves defined by SRK for the Kiya Shaltyr mine on a ratio of 60% limestone to 40% nepheline syenite in accordance with the process requirement of the Achinsk Refinery.

Table 3.19: Mazulsky Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3)]

	Ore Reserve				Mineral Resource		
	Tonnage	CaO	SiO_2		Tonnage	CaO	SiO_2
	(Mt)	(%)	(%)		(Mt)	(%)	(%)
Proved	—	—	—	Measured	—	—	—
Probable	12.8	53.8	1.7	Indicated	90.1	54.4	1.0
Total	**12.8**	**53.8**	**1.7**	**Subtotal**	**90.1**	**54.4**	**1.0**
				Inferred	0.0	0.0	0.0
				Total	**90.1**	**54.4**	**1.0**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code, 2004 Edition.

(2) Mineral Resources and Ore Reserves are recorded on an unattributed, or 100% basis.

(3) Mineral Resources are inclusive of Ore Reserves.

3.8.5 Mining Operations and Infrastructure

Kiya Shaltyr utilises conventional open-pit mining techniques comprising drilling and blasting followed by loading and hauling utilising excavators and rope shovels in conjunction with 90 t and 120 t haul trucks. The ore is extracted from a single open-pit and transported to the primary crusher whilst waste is taken to one of five active dumps located adjacent to the pit in the south and north. The pit bottom is currently at the 690 mL and some 310 m in depth. Pit slopes are inclined at some 65º and 52º at the east and west walls respectively. The pit is dewatered using a central sump and pumps

From blasthole sampling the ore is classified into three grade and quality categories: low grade <25% Al_2O_3, medium grade 25-27% Al_2O_3, and high grade >27% Al_2O_3 and blended during mining to maintain a planned grade of 26.6% Al_2O_3. Low grade material from dykes and from low grade zones is stockpiled separately.

The blended ore is delivered to a housed crushing and storage facility where the ore is reduced by the primary crusher to less than 300 mm and stockpiled prior to being loaded into 60 t rail wagons and transported some 265 km to Achinsk. The main line is state owned whilst two 10 km access spurs at each end are owned by a private company. Rail transport costs are a significant component of overall operating costs. Power is obtained from the regional Krasnoyarsk power utility.

The Mazulsky limestone quarry also utilises conventional open-pit mining techniques comprising drilling and blasting followed by loading and hauling utilising rope shovels in conjunction with 40 t and 55 t haul trucks. The limestone is extracted from a single open-pit and transported to the primary crusher some 5 to 6 km from the pit whilst waste is taken to adjacent dumps. The quality of the limestone is determined by blast hole sampling. Approximately 71% of the material is good quality limestone. The pit bottom is currently at the 125 mL and some 240 m in depth. Pit slopes are inclined at some 42º, 36º and 35º at the south, west and east walls respectively. The pit is dewatered using a central sump and pumps. It is intended to deepen the final open pit to the 5 mL and an exploration programme is currently being undertaken.

As Mazulsky is located adjacent to the Achinsk plant, power and services are managed as part of an integrated facility.

Processing Operations

The raw materials for the Achinsk plant are an integral part of the manufacturing process and the principal objective is to extract and blend the continuous flow of all the materials in such a manner that the chemistry of the feed to the hydro-chemical plant is uniform. The nepheline syenite produced from Kiya Shaltyr is transported to Achinsk where it is mixed with pre-blended limestone prior to comminution in a wet mill. On occasion siliceous bauxite imported from UC RUSAL's Timan mine is added in order to compensate for lower than targeted alumina content of the nepheline syenite. The pulp from the mill passes through a coal-fired sinter kiln where the intake temperature ranges from 1,500°C to 1,600°C. Reaction between the limestone and nepheline takes place at 1,300°C and the product is a sinter cake of essentially beta dicalcium silicate and sodium and potassium aluminate together with any impurities present.

The dicalcium silicate is available for manufacture into Portland cement. The cement circuit has been sold to third parties. The impure dicalcium silicate, known as belite, is currently discharged to the slimes dam.

3.8.6 Environmental and Social Considerations

The total disturbed pit and waste rock dump area at Kiya Shaltyr is 673 ha and at Mazulsky is 568 ha. There are three tailings storage facilities ("TSFs") for the refinery tailings, namely Dams 1, 2 and 3. Dam 1, the oldest has an area of 195 ha and is 98 m high and Dam 2 comprises 115 ha and will reach a final height of 68 m. Dam 3 is new and has an area of 160 ha.

The environmental performance of the Kiya Shaltyr and Mazulsky operations is regulated by both the federal and district of Krasnoyarsk governments. These operations appear to be in material compliance with Russian Federation environmental requirements. Statutory water discharge (PDS), air emission (PDV) and waste disposal (PNLOOR) permits for both operations are in place. The Mazulsky operation pays a quarterly fine for non-compliance of one of the parameters in the water discharge limit (US$20,800 for 2008 for both the refinery and the limestone mine). Environment Impact Assessments were not compiled for either operation prior to their establishment in 1963. Neither were OVOS documents compiled post the establishment of the operations. Based on current environmental laws there is little risk of closing the operation as a result of environmental non-compliance. The entire complex (refinery, Mazulsky and Kiya Shaltyr) has been certified to ISO14001:2004 by Det Norske Veritas in 2007.

Even though the waste dumps and tailings storage facilities are non-acid generating, salts and heavy metals may be an issue in the long-term. The results of background and monitoring boreholes indicate that the water in the vicinity of the dumps and tailings facilities is not drinking water quality.

All waste dumps are reclaimed progressively according to an agreed programme with the relevant authorities. At Kiya Shaltyr nearly 21 ha was rehabilitated and approved during 2007 and at Mazulsky 8 ha was rehabilitated and approved. Despite the on-going rehabilitation there are still large areas of waste rock dumps that remain un-rehabilitated.

No rehabilitation of any of the tailings dams has commenced. Tests have been conducted to determine the technical specifications for the final rehabilitation of the dams. Currently a clay layer to cover the dams is planned followed by topsoil and revegetation. It was mentioned that the rehabilitation of the current dams (1 and 2) has been estimated at US$7 m.

The Kiya Shaltyr and Mazulsky operations in some respects do not comply with the Equator Principles for Financial Institutions and there are also some gaps in terms of compliance with the IFC EHS guidelines. Despite these areas of non-compliance environmental practices at these operations appear to be to a high standard, especially in terms of rehabilitation and monitoring of impacts.

The key environmental issues for these operations are the ongoing rehabilitation of the waste rock dumps, possible ground and surface water contamination with heavy metals and salts as well as the rehabilitation of the tailings storage facilities. There will be a significant cost associated with the final rehabilitation of the mining operations. In terms of social issues the eventual closure of especially the Kiya Shaltyr operation may lead to liabilities not currently anticipated as the mine has a community which is largely dependent on the continuation of its operations for their sustainability.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$4.2 m for Kiya Shaltyr and US$1.4 m for Mazulsky. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.8.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is 2.5 years. Upgrading from Mineral Resources to Ore Reserves which can be anticipated is required on an ongoing basis, through drilling, sampling and evaluation.
- The maximum production rate is 4.5 Mtpa of nepheline syenite and 7 Mtpa of limestone.
- The operating costs include royalties and transport to the Achinsk Alumina Refinery.
- The economics have been verified based on an overall integrated flow of nepheline syenite and limestone through to aluminium, as described in Section 2.2.5.

Table 3.20: Kiya Shaltyr nepheline syenite historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt wet)	5.14	4.88	4.76	2.20
Grade	(% Al_2O_3)	26.4	26.5	26.6	26.5
Factor	(t_{ns}:$t_{alumina}$)	4.55	4.49	4.45	4.67
Expenditures					
Cash operating cost. . . .	(US$m)	48.6	61.3	68.7	22.8
Cash costs per unit	(US$/t)	9.46	12.57	14.42	10.35
Capital expenditure	(US$m)	8.1	3.3	3.8	3.9

(1) Grades are given as available alumina.

Table 3.21: Mazulsky limestone historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt)	6.93	6.91	7.42	3.07
Grade	(% CaO)	n/a	n/a	53.7	53.6
Factor	($t_{limestone}$:$t_{alumina}$)	6.43	6.01	5.94	6.29
Expenditures					
Cash operating cost	(US$m)	13.8	20.9	21.2	6.1
Cash costs per unit	(US$/t)	2.00	3.02	2.85	2.00
Capital expenditure	(US$m)	2.5	7.9	5.7	0.4

(1) n/a — not available.

3.8.8 Material Developments

The cement plant has been sold to a third party. SRK is not aware of any other material developments.

3.8.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Grade and Ore Quality** — at Kiya Shaltyr dilution from dykes and low grade ore zones may increase with depth and impact negatively on the grade and quality of the product and the likely reserves. At Mazulsky the size and quantity of high silica zones may increase and impact negatively on the grade and quality of the product or the waste stripping ratio.

- **Operating Costs** — at Kiya Shaltyr ore rail transport costs which currently comprise over 40% of total costs could increase at a rate above inflation as the facilities are owned and operated not by US RUSAL but by third parties comprising the State and a private company.

Specific opportunities to the operations include:

- **Mining Efficiency** — improvements in productivity and efficiency from the use of new and improved mining equipment as well as training programmes for personnel leading to lower mining costs.

- **Mine Design** — improvements in mine design, stripping ratios and long-term planning following from the establishment of the Surpac mining software package including computerised optimisation and mine scheduling for both ore and waste.

- **Haul Fleet** — at Mazulsky an investigation into the establishment of an in-pit crusher coupled to a conveyor for transport of ore to the refinery which could lead to a smaller fleet of trucks and lower costs.

- **Ore Reserves** — an increase in JORC Code compliant Ore Reserves at Kiya Shaltyr following completion of an exploration programme planned by the company in 2009 and 2010 that seeks to improve the confidence in the defined the resources at depth. This will likely provide a comparable increase in Ore Reserves at Mazulsky as these have been limited to that required to support the Kiya Shaltyr Ore Reserves by SRK.

3.9 Bogatyr Coal Mine

3.9.1 Introduction

SRK undertook a site visit to the Bogatyr Coal Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.9.2 History and Location

Exploration of the Ekibastuz basin commenced in 1948. The basin was divided into 12 prospecting sectors. Severny commenced operations in 1955 and Bogatyr in 1970. Between 1955 and 1998 approximately 2 billion tonnes of coal has been extracted from the area. The remaining balance of coal has been reported at some 10.7 billion tonnes. The two mines, Bogatyr and Severny are distinct production units within the same coal measures and are operated by the largest Kazakh coal mining company TOO Bogatyr Komir.

Both mines have the licence to exploit coal resources above the -200 m elevation within its coal fields.

Location

The Bogatyr and Severny open-pit coal mines are located on the southern, western and northern flanks of the Ekibastuz coal basin to the east of the town of Ekibastuz in the Pavlodar Oblast of the Republic of Kazakhstan, some 130 km south west of the oblast centre, Pavlodar. In addition to Bogatyr and Severny another mining operation, Vostochny, is currently working adjacent sectors of the Ekibastuz deposit to the northeast by open-pit methods.

The climate of the region is sharply continental with a harsh winter and hot summer. The mean temperature in the hottest month, July, and the coldest month, January, are 21.5˚C and -18.5˚C with maximum +40˚C and minimum -43˚C respectively. The snow cover lasts for 150 days. The soil freezes to a depth of 2.5 to 3.0 m. The mean annual quantity of precipitation is 220 mm. Southwest and west winds predominate, the mean annual wind speed is 4.2 m/s, with a maximum of 25 m/s.

3.9.3 Geology

The Ekibastuz coal deposit forms part of an elongated asymmetrical Basin, the long axis of which, over the coal measures, extends from the northwest to the southeast for some 12 km and reaches a maximum width of some 6.0 km. Dips are variable, being gentler, from 10º to 20º on the north west and south east limbs and steeper, from 65º to 90º on the north east and south west limbs. In the north east the basin is limited by a large fault with a throw of some 400 m. Away from the limbs towards the basin axis dips are gentle and near horizontal. The coals are hard, humic, high ash coals and are Carboniferous in age. There are four main seams in the deposit of which the upper three, seams 1, 2 and 3 are considered economic and currently worked. The three seams vary slightly in quality and it is necessary to blend them in order to meet market quality specifications. Typical analyses are shown below.

Table 3.22: Bogatyr Coal Quality

Seam	Ash content (%)		Minimum calorific value (kcal/kg)	Volatile content (%)	Sulphur content (%)	Bulk Density of ROM coal, (t/m^3)	Internal waste Ash (%)
	In situ clean coal	ROM coal product					
1	32.0	34.9	4640	27.6	0.50	1.54	64.2
2	31.6	37.0	4470	25.6	0.52	1.56	65.0
1+2.	31.8	36.3	4540	26.3	0.51	1.55	64.9
3	40.9	46.9	3600	26.5	0.47	1.69	64.0
1+2+3	36.8	42.4	3970	26.6	0.48	1.64	64.1

3.9.4 Mineral Resources and Coal Reserves

The Bogatyr Coal Mine is the world's largest coal mine. SRK considers that the Exploration of the Bogatyr and Severny sectors of the Ekibastuz basin has been extensive and thoroughly carried out by experienced geological personnel working to established procedures and standards. SRK believes that the traditional paper based modelling and resource evaluation procedures used are valid and have again been followed closely by experienced and able personnel. SRK notes however that the GKZ reserves as stated are equivalent to resources as usually understood in international standards of reporting and also notes that these GKZ reserves do not include some higher ash material which is inevitably mined along with coal and consequently there are modifying factors applied to ROM production figures in order to deplete the GKZ reserve base. SRK's Mineral Resource statement is shown in Table 3.23.

Table 3.23: Bogatyr Mineral Resource and Coal Reserve Statement (1 July 2009)[(1), (2), (3)]

	Coal Reserve		Mineral Resource
	Tonnage		Tonnage
	(Mt)		(Mt)
Proved	288	Measured.	2,276
Probable	742	Indicated	170
Total	**1,030**	**Subtotal**	**2,446**
		Inferred.	484
		Total	**2,930**

(1) All references to Mineral Resources and Coal Reserves are stated in accordance with the JORC Code, 2004 Edition.
(2) Mineral Resources and Coal Reserves are recorded on an unattributed, or 100% basis.
(3) Mineral Resources are inclusive of Coal Reserves.

The current government approved licence allows exploiting Bogatyr and Severny open-pit mines to the minus 200 m elevation pit bottom and Coal Reserve estimation is reported to that depth.

TOO Bogatyr Komir reports reserves in accordance with the GKZ classification, which do not comply with JORC classified Coal Reserves.

SRK has reviewed the production schedule along with geological cross sections, pit status maps, and the 2045 Bogatyr-Severny ultimate pit design. It has been indicated to SRK that in order to achieve the required product blend beyond 2009 further advance overburden stripping will be required. SRK agrees that the coal production plan is achievable.

There is potential to increase the current size final pit by steepening the pit walls.

The life of mine plan used to support the Coal Reserves extends to 2029, running for a period of 20 years beginning 2010.

3.9.5 Mining Operations and Infrastructure

Mining at Bogatyr and Severny is accomplished entirely with open-pit mining methods. A mix of bucket-wheel excavator ("BWE")/conveyor, shovel/truck and shovel/railway excavation and transport methods is employed in both mines. Major modernisation schemes for coal extraction were recently introduced on the sites and should be completed by 2012 in Bogatyr and 2020 in Severny. All coal on Severny and approximately 30% on Bogatyr is currently being excavated by shovel and truck and tipped in a 350,000 t blending stockpile at Severny and 2 x 350,000 t stockpiles at Bogatyr. The schemes afford the opportunity for improvements in efficiency and for a production of a cleaner more consistent product.

Both mines are mining three coal seams with a total thickness approaching 170 m including an approximately 10 m thick high ash rock parting between seam 2 and 3. Coal mining has currently progressed to the -55 m elevation in Bogatyr and -30 m elevation in Severny, although some coal remains above this elevation. The coal benches are designed at a height of 25 m and working width of 50 m for BWE and 15 m height/10 m width for shovels.

High output bucket wheel excavators were developed for coal extraction and started work during 1969 and the early 1970s. The excavators were designed with outputs of 4,500 t/hr and a working bench height of 28 m.

At Bogatyr six SRs (k) 2000 BWEs are currently employed: two for coal digging and four for coal blending and stockpile loading. One BWE is working with the inter-level SFB-R (K)-1800.25 stage loader at the coal stockpile located within the syncline axis at the south end of Coal Field 6. At Severny one BWE is utilized for coal stockpile blending/loading operations. These machines have been used to load the majority of coal until very recently. As the depth of the sites increased, the rail transport system has become very complex with numerous traffic direction changes. On Severny for example, there was 350 km of rail track with several shunting yards before the phased improvements started. Rotary excavators efficiency is limited to approximately 20% of the time due to the availability of trains. The static nature of the rail system also makes it difficult to introduce blending of the three seams.

All coal and 90% of overburden is blasted. Overburden is excavated by draglines and rope shovels loading rail wagons. The plan is to continue the current system for overburden excavation. The system is relatively inefficient and the equipment is old. Shovels load overburden onto trains for approximately 40% of available time. Internal overburden tipping is progressively being introduced onto both sites to improve efficiency with shorter haul lengths. Coal seams were sealed for conservation in preparation for internal tipping which has commenced to a limited extent. The internal dumps are temporary and will be re-lifted in the future to exploit the remaining reserves. Internal tipping will improve overburden excavation efficiency by reducing haul lengths and hence the number of trains, locomotives and length of railtrack required. It will also reduce the environmental impact of coal burning in external tips. Internal tipping will not negate the fact that substantial investment will be required for maintenance and to improve the overburden equipment currently in operation. There is a gradual increase in the ratio of waste to coal, from 0.83 m^3/t to some 1.5 m^3/t over the next 20 years, which will also require future investment.

3.9.6 Environmental and Social Considerations

The environmental review assessed material risks and determined environmental constraints and compliance issues that may impact on the current and future operation of the project. During the site visit, environmental management strategies, controls and issues were discussed with site staff, the mining operations and surrounding area was viewed, physical water management structures monitoring locations and discharge areas were visited, as were the waste rock and other disposal areas, and areas of progressive reclamation and mine closure.

The Bogatyr/Severny mine is operated by TOO Bogatyr Komir is located next to the town of Ekibastuz (east boundary of the residential area is about 800 m from Severny pit wall) in the Ekibastuz region of the Pavlodar Oblast, north-east Kazakhstan. Ekibastuz Town has a population of about 100,000 people.

The operation predates the OVOS process and consequently neither an OVOS nor any pre-mining environmental baseline data are available for the mining area. Whilst restricted to the local impacts from the change in technology, an OVOS had been prepared for the feasibility study to utilize an auto-conveyor for coal grade averaging system within the Bogatyr open-pit. That OVOS was approved by the Ministry of Energy and Mineral Resources.

Operational permits are required for activities likely to result in environmental pollution such as air emissions, water discharges and waste disposal. These permits are provided by the Environmental Authority on a regular basis, with a validity period of between 1 and 5 years. Permits are obtained by calculating the assumed air emissions, water discharges and waste production in accordance with state approved methods. These are submitted together with the application for the permissions.

Whilst the operation has all the necessary permissions to continue operating, effluent comprising mine water and treated sewage water discharged to two saline likes regularly exceed the permit limits set for discharge water quality to these lakes. Concentration limits have been (and continue to be) exceeded every reporting year since 2004 for a number of dissolved parameters including copper, nickel, molybdenum and ammonia amongst others. Water quality impacts on groundwater resources have not been defined. Mining operations have also led to air quality impacts. Most significantly dust emissions have exceeded permit levels at the protection zone boundary. In addition, spontaneous combustion of carboniferous waste and spoils represent a significant challenge at the site. Areas that are burning are being covered with soil and compacted to extinguish the fires.

In 2006 TOO Bogatyr Komir obtained ISO 14001:2004 certification and has a documented environmental management system.

In accordance with Kazakh legislation, TOO Bogatyr Komir developed a conceptual closure plan and established a closure fund (Liquidation Fund) to provide for closure and rehabilitation financing. Provisions for the closure fund are included in the mining costs at a rate of 0.1% of coal sales, which would based on current estimates amount to about US$6,8 m at the end of mining licence period (2047). SRK notes that that the mining licence specifies that, should the sum contained in the closure fund be insufficient for closure and rehabilitation, TOO Bogatyr Komir will be liable for any additional costs to complete the closure of the mine site. It is SRK's understanding that money from the closure fund is already being used to finance current rehabilitation activities which does not contradict Kazakh legislation or licence requirements as special approval from the Ministry of Energy and Mineral Resources has been granted.

The Environmental Department is responsible for the environmental monitoring and management activities and comprises seven specialists who report to the Technical Director.

Whilst current rehabilitation works began in 2003 and according to the operation is considered to be almost complete for the Severny and Zapadnuy waste rock dumps (an area of 1,930 ha in total), rehabilitation work is occurring on an ad-hoc basis with no apparent design specification. Even though these works have been accepted as complete by the authority (state commission which includes inspectors from different state authorities), large areas of these dumps remain uncovered with no growth medium to sustain vegetation. SRK estimates that the potential closure liability of the areas that have been partially rehabilitated may be in the order of US$45 m to US$55 m. Closure costs that may be associated with the remainder of the waste rock dump areas

(about 2,300 ha) is estimated to be a further US$80 m to US$90 m, whilst the mine workings, decommissioning of the mine buildings and other associated works may be in the order of about US$5 m to US$10 m, for a potential current total mine closure cost of about US$130 m to US$155 m. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments.

No asset retirement obligation as of 1 July 2009 has been estimated for Bogatyr.

3.9.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Coal Reserves:

- The life of the mine supporting the Coal Reserve is 20 years. It is anticipated that Mineral Resources will be converted to Coal Reserves on an ongoing basis.
- The production rate increases from 34 Mtpa in 2009 to 53 Mtpa in 2015, and is constant thereafter.
- The average sales price going forward decreases due to the increased portion of sales to Kazakhstan, which attract a lower price.
- Where operating costs are expected to increase over time as a result of increasing stripping ratio, the sales price of coal is assumed to increase in line with this, as these are controlled by the Kazakh Government.
- The operating costs include royalties and railway delivery.
- A cashflow model has been generated to verify the economic profitability of the Coal Reserves. SRK has verified the discounted pre-tax, pre-finance cashflow.

Table 3.24: Bogatyr historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(Mt)	41.6	38.4	46.1	14.2
Quality	(kcal/kg)	4,128	4,107	4,063	4,082
Strip ratio	(m^3/t)	0.60	0.61	0.60	0.56
Average sales price	(US$/t)	10.42	11.55	14.04	11.73
Expenditures					
Cash operating cost	(US$m)	366	380	500	134
Cash costs per unit	(US$/t)	8.78	9.89	10.83	9.42
Capital expenditure	(US$m)	20.8	26.5	23.9	4.2

(1) All numbers are reported on a 100% attributable basis.

3.9.8 Material Developments

There has been a significant decrease in production in 2009. Production is due to increase again in 2011, and then ramp up to 53 Mtpa in 2015. The maximum production historically achieved is 46 Mtpa. This increase is obtainable in SRK's opinion, dependent on the continuing capital investment which is planned.

3.9.9 Specific Risks and Future Opportunities

SRK sees no specific risks. Specific opportunities to the operations include:

- **Operating Cost** — significant investment in new equipment is expected to reduce the unit operating cost.
- **Coal Reserves** — can easily be increased over time as these are depleted, as long as the profitability of the operation continues.
- **Mineral Resources** — have the potential to increase, whilst currently limited to a depth of 200 m.

3.10 Cheremshansk Quartzite

3.10.1 Introduction

SRK undertook a site visit to the Cheremshansk Quartzite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.10.2 History and Location

The Cheremshansk Quartzite operations are situated 17 km north of the town of Tourantaevo, in the Buryat Republic of the Russian Federation in the Pribaikal region 55 km north of Ulan-Ude the capital of the Buryat Republic and the nearest airport. A railhead facility through which the ore is transported is situated at Mostovoi, 56 km by road from Tourantaevo. The facility currently processes 200 ktpa of high quality quartzite and has sales of approximately 120 ktpa of very low iron silica to UC RUSAL's ZAO Kremny Irkutsk silicon operation.

The mine area is in hilly/mountainous forested terrain at an elevation between 1,300 and 1,500 m. The current pit and plant are situated on a ridge and watershed, with the main offices in the town of Tourantaevo (pop. 10,000). The area around the town is predominantly agricultural. The climate is continental with summer and winter temperatures ranging from 35° to -45°C.

Production at the Cheremshansk deposit commenced in 1992 from Mine Sector 2 and reached a peak of 261 ktpa in 2003. Since 2004 the market for the higher iron and lower quality silica has become less viable, and the production has been reduced to approximately 200 ktpa which provides approximately 110 ktpa low iron products for the ZOA Kremny silicon smelter in Irkutsk.

3.10.3 Geology

The Cheremshansk deposit is hosted by a series of Devonian metamorphosed sandstones, with secondary silification. The sandstones are folded into a broad anticline, with a steeply dipping south east limb, and a flatter southwest limb. The southwest limb has been later intruded by granitoids. The whole structure has been displaced by later faulting, which disrupts the geological continuity of the deposit, and splits into a series of fault blocks. The sandstones are typically 30 to 50 m wide, and cover a total strike length of 10 km. The footwall country rocks are predominantly schists and the hanging wall rocks are quartzite schists overlain by dolomite.

The average grade of the deposits is 99.2% silica and less than 0.3% Fe_2O_3. Low iron material (<0.06% Fe_2O_3) is selectively mined. The iron is chemically locked within the silica and generally away from faults and other structural features. The main area for production is

associated with the upper part of the sandstone unit, in close contact with the overlying carbonate sediments. The chemical composition of the sandstones is typically high silica (98.2% to 99.8%), with variable Al_2O_3, Fe_2O_3, TiO_2 and CaO contents. The deposit is crosscut by later magmatic dykes, which are often highly altered.

3.10.4 Mineral Resources and Ore Reserves

The exploration and definition of the Cheremshansk Quartzite deposits were done by means of drilling, trenching and an underground exploration adit according to GKZ guidelines.

Exploration was undertaken between 1967 and 1971, by the Buryat District Geological Department. The most recent reserve estimate, as approved by the GKZ was undertaken in 1972.

The methodology used is consistent with other GKZ approved estimates, being based on sectional interpretations cut across the deposit, intersecting the drilling. Blocks were then defined within the sectional interpretations, and an average length weighted grade determined for each block. The block grades and tonnages are then split by classification, and summed to produce a total for the deposit. The density values used in the Mineral Reserve estimate were derived from a combination of laboratory testing and bulk density determinations. The density of the ore used is 2.6 t/m^3, and a moisture content of 0.3%.

The Cheremshansk deposit is classed as being Class 2 in terms of complexity, with the average drillhole spacings for each category being defined by the GKZ. SRK has re-classified the GKZ approved reserves in accordance with the JORC Code.

The bench plans, demonstrating the classified blocks have been reviewed by SRK.

The geology and major controls on the mineralisation appear to be well understood, aiding the ability to appropriately model the deposit. SRK considers that the data quantity and quality is sufficient for the reporting of JORC Code compliant Mineral Resources, classified in the Measured, Indicated and Inferred Mineral Resource categories.

The pit is currently planned to a depth of 60 m. Should the pit be deepened, more exploration, in the form of in-pit drilling, would need to be undertaken.

The GKZ reserve has been defined by using the method of vertical sections and areas within the defined geological model. SRK has depleted the 1 January 2009 5GR statement by the 2009 production to 30 June 2009 and presented the Mineral Resources as at 1 July 2009.

There are three mining sectors of suitable quantity. Only Sector 2 is currently in operation. Grade control, in the form of drilling, trenching and sampling is undertaken for one year's production in advance of mining. This is typically a single bench of the Sector 2 pit. SRK has classified this material as a Measured Mineral Resource. The remainder of the quartzite in Sector 2 is classified as an Indicated Mineral Resource. The additional 35.1 Mt in Sectors 1 and 4 are classified as Inferred Mineral Resources. The GKZ classified C2 material has not been classified in accordance with the JORC Code as SRK considers the drill spacing is insufficient to define the geological and grade continuity within the deposit.

The orebody is open at depth and it can be expected that similar quality and quantities of quartzite will persist to some depths below the Mineral Resource defined to date. The above material represents the total amount of silica material available for use in the glass, silicon, silicon carbide and sand moulding industries as defined by GKZ. The material suitable for silicon manufacture is only a proportion of the total Mineral Resource.

Ore Reserves

The mine's Mineral Resource statement, historic production, and product yields which SRK has used to determine modifying factors, translates the Mineral Resource into an Ore Reserve at the specific product quality. SRK has determined a modifying factor of 58% and has subsequently applied a conservative modifying factor of 50% to the Mineral Resources. Factoring the Measured and Indicated Mineral Resource gives 1.0 Mt of Proved and Probable Ore Reserves. The large quantity of Mineral Resource is however indicative of the level of robustness of feed material to the smelter. SRK considers that with appropriate additional evaluation and mine planning, additional JORC Code compliant Mineral Resources and Ore Reserves could be determined.

Table 3.25: Cheremshansk: Mineral Resource and Ore Reserve Statement (1 July 2008)[(1), (2), (3)]

	Ore Reserve				Mineral Resource		
	Tonnage	SiO_2	Fe_2O_3		Tonnage	SiO_2	Fe_2O_3
	(Mt)	(%)	(%)		(Mt)	(%)	(%)
Proved	0.2	>99	<0.05	Measured	0.4	>99	<0.05
Probable	0.8	>99	<0.05	Indicated	1.6	>99	<0.05
Total	**1.0**	**>99**	**<0.05**	**Subtotal**	**2.0**	**>99**	**<0.05**
				Inferred	35.1	>99	<0.05
				Total	**37.1**	**>99**	**<0.05**

(1) All references to Mineral Resources and Ore Reserves are stated in accordance with the JORC Code.
(2) Mineral Resources and Ore Reserves are recorded on an unattributable, or 100% basis.
(3) Mineral Resources are inclusive of Ore Reserves

3.10.5 Mining Operations and Infrastructure

The facilities at the mine include: mining and transport equipment; crushing and screening plant; maintenance buildings and machinery; and waste dumps. The main offices are situated at Tourantaevo and comprise an office block and transport yard. The railhead at Mostovoi comprises sidings and a rail loading area. Power at the mine is derived from diesel generation. The mine water supply is from a borehole.

The mining method is conventional open-pit mining utilising electric face shovels (5.6 m^3) and 30 t trucks. Drilling of the blastholes is done by the mine and the blasting is contracted out. The mine intends to undertake both drilling and blasting in the future. The equipment is mostly over 10 years old and in need of a capital replacement programme. However, the capacity of the equipment is sufficient for the current silica production requirements but the waste stripping is falling behind requirements due to a shortage of haul trucks.

Mining comprises 5 m benches in the ore and 10 m benches in the waste, and the final open-pit benches are designed at 60° with 8 m wide berms resulting in a 46° toe to crest angle. The maximum pit slope height is 100 m. The average stripping ratio is 3.3.

Production is significantly driven by the market. Since the market for the higher iron silica has been suspended in 2004, the production has been cut back to around 200 to 250 ktpa.

The mine has a current production plan of silicon metal feed of some 110kt of silicon per annum. The production is dependent on the demand from ZAO Kremny.

The continued achievement of the production targets at Cheremshansk is dependent on moderate investment in the operations. UC RUSAL has approved an amount of investment capital for 2009 in the order of US$327 only.

The overburden stripping is contained in 7 approved waste dumps on the periphery of the excavation with a total capacity sufficient for a total waste volume of 7.5 to 8 Mm^3. About 50% of the waste volume space has been used to date.

Processing operation

The processing facilities at the mine comprise crushing and screening of the various product types to achieve the required specification.

3.10.6 Environmental and Social Considerations

The mine is under the jurisdiction of the regional and national regulatory framework. Permissions are renewed annually, or longer. No specific conditions were attached other than monitoring. No non-compliances were noted.

The mine is remote from habitation with the nearest village 10 km away. The major aspect for control is silica dust which could present a health risk. The personnel are fully health screened on an annual basis. No instances of silicosis have been recorded. There is no dust monitoring but all inspections undertaken have been within limits. The mine is dry and the rainfall low and water discharge is not material.

No provision to cover the costs of closure has been made historically. A closure fund is however said to have commenced since 2005/6. There is no legal requirement for ongoing rehabilitation. Closure costs may be limited to the need to re-contour the waste dumps and remove the plant facilities.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$0.17 m to re-contour the waste dumps and remove the plant facilities. SRK has not reviewed this number. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.10.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The life of the mine supporting the Ore Reserve is 5.5 years.
- The production rate 210 ktpa.
- The average sales price going forward is RUR650/t, which equals US$20.4/t at the exchange rate of 31.9RUR:US$ as at 1 September 2009.
- The operating costs include royalties and railway delivery.
- A cashflow model has been generated to verify the economic profitability of the Ore Reserves. SRK has verified the discounted pre-tax, pre-finance cashflow.

Table 3.26: Cheremshansk historical production and cost statistics

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(kt)	208	199	230	95
Grade	(% SiO_2)	99.0	99.0	99.0	99.0
Expenditures					
Cash operating cost	(US$m)	2.6	3.9	4.1	1.7
Cash costs per unit	(US$/t)	12.64	19.44	17.83	17.72
Capital expenditure	(US$m)	0.1	0.2	0.0	0.0

3.10.8 Material Developments

SRK is not aware of any material developments.

3.10.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Silicon Metal Market** — This may be affected by the impact of low price Chinese products and the demand from ZAO Kremny.
- **High Iron Silica Sales** — The inability to sell higher iron silica may continue to impact revenues.
- **Iron Content Specification** — The tightening of iron content specification for silicon metal feed and difficulty to selectively mine this material may increase waste and operating costs.

Future opportunities to the operations include:

- **Additional Markets** — The potential to produce building sand from the quartzite fines. This will require the construction of an appropriate plant.

3.11 Glukhovsky Quartzite Mine

3.11.1 Introduction

SRK undertook a site visit to the Glukhovsky Quartzite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.11.2 History and Location

The Glukhovsky Quartzite Mine is part of the Zaporozhnye Aluminium Complex, ("ZALK"), wholly owned by UC RUSAL. The mine has been in production since 1890 when it produced gravel and aggregate for the railway and agricultural uses. High grade quartzite for use in the production of crystalline silicon began in 1971 and in 2008 was in the order of 70ktpa exploited by open-pit methods. In addition to silicon metal production the quartzite is also used in ferrosilicon production. It is one of only three significant producers of silicon metal feed sources in Russia one of the other two being Cheremshansk Silica also owned by UC RUSAL

The mine operates under Rights of Use of the Subsoil Permit 1006 granted in 1997 by Goskomtechnologie of Ukraine, valid for 20 years until 2017. The Glukhovsky quartzite mine is located in Sumy Region in north-eastern Ukraine. The operations are located at Banichi approximately 45 km from the town of Glukhov. Access to the town of Glukhov is by high quality national roads and to the deposit by good secondary roads. The deposit is served by a railhead which is connected to the national rail network via a 20 km long line.

The region is typically low lying arable farmland. The deposit is an area of higher relief rising to 50 m above the plains and approximately 150 m elevation. The climate is continental with summer and winter temperatures ranging from 35°C to -30°C. Two significant rivers are in the vicinity of the mine, namely R. Esman and R. Kleven.

Production of 20 to 90 mm lump product which is preferred by the silicon plants ranged between 40 to 70 ktpa from 2000 to 2006. In 2006 to June 2008 shipment was suspended due to cheaper silicon metal produced in China. Until early 2009 the production was at low levels and in February 2009 it was again suspended due to the closure of the ZALK silicon facility. The mine plans to secure local agreements and recommence production in 2010.

3.11.3 Geology

The Banichsky deposit, which the Glukovsky mine current exploits, was first discovered in 1890. Subsequently extensive exploration has been carried out. The first phase of exploration was undertaken in 1928. Exploration continued until 1962 when a total of 138 boreholes and 68 shafts had intersected the relevant quartzite mineralisation. In 1964, a review was undertaken by the Dnepropetrovsky Geological Mission, with quartzites being used for the production of crystalline silicon. Between 1965 and 1968, additional preliminary exploration was undertaken on the north-eastern part of the deposit, and the resource was re-estimated for crystalline silicon production. An additional 112 drillholes were drilled and 624 samples taken for chemical analyses. The reserve estimate was approved by the GKZ in 1968.

More detailed operational exploration was carried out in 1971 and 1974, for both building stone, and as a source for crystalline silica. The final phase of exploration was in 1980 to 1982, which was undertaken as part of a review of the deposit and mining operations. The most recent update of the GKZ reserve estimate was completed in 1984.

The Banichsky deposit is hosted by the Palaeogene Buchaksky Suite. The majority of the quartzites occur in the upper portion of the Lower Buchaksky Suite consisting of quartz sands, forming uneven, tabular, lens like occurrences.

The deposit is split into two distinct areas, namely the North-eastern, and the Southern. The North-eastern zone is currently the focus of production. The North-eastern area has a shallow to horizontal dip. The quartzite bearing sandstones are typically 600 m wide, and continue for a strike length in excess of 2 km. The Southern area strikes south-east also with a shallow dip. The width varies between 400 and 600 m, with a strike length of approximately 1 km.

Within the sand units, the distribution of the quartzite lenses is complex. The shape of the individual quartzite units varies from small ellipsoidal bodies through to large, tabular lens like units. The thicknesses of the individual quartzite lenses are also highly variable. Thicknesses of the quartzite units are typically between 0.3 to 0.5 m to 5 m or more, and the sands, between 0.5 to 4 m.

The contacts between the sand dominated host and quartzite lenses is very sharp. The contacts between the underlying and overlying sediments and the Buchaksky Suite are also relatively sharp, and are clearly defined during mining operations.

The mineralogy of the quartzite units is relatively consistent. There are four main "classes" of quartzite, determined by the SiO_2, Al_2O_3, Fe_2O_3 and CaO content. These are derived from chemical analyses undertaken during the exploration and later approval of the GKZ reserves. Typically, TiO_2 values are relatively constant at 0.15%.

3.11.4 Mineral Resources and Ore Reserves

The most recent reserve estimate, as approved by the GKZ was undertaken in 1984. Exploration was undertaken in a number of phases. The most recent phase, which resulted in the approval of the current estimate in 1984, was undertaken by the Southern Ukrainian Geological Survey ("Ukryuzhgeologiya"), with drilling, sampling and geological interpretation being carried out by geologists from Ukryuzhgeologiya.

The historical QAQC procedures are based on both internal and external duplicates. Internal duplicates are duplicates that were sent to the same laboratory, and external duplicates, send to a separate laboratory for a check on the accuracy of the internal laboratory.

The reserves, approved by the GKZ in 1984 uses methodology consistent with other GKZ approved estimates, being based on sectional interpretations of the amount of quartzite determined using a combination of the drillhole data, shaft data, and geological mapping on the exposed benches. The sectional interpretations are transferred onto bench plans, and the margins of the blocks determined by the drillhole spacing. The area of each block is then measured from the bench plans, and multiplied by the average thickness derived from the sectional interpretation. A constant density value of 2.5 t/m^3 based on 1980s testwork is then used to estimate the tonnage for each block.

The grade estimation is also undertaken from sectional and bench plan interpretations. The assay grades for each drillhole or shaft within each defined block are weighted by the length of the drillhole, and averaged across the block to give a global block grade.

The block grades and tonnages are then split by classification, and summed to produce a total for the deposit.

Typically, the total amount of quartzite recovered from each block of sandstone is approximately 50%. The yield of quartzite from the sandstone is also estimated for each block. UC RUSAL reports that the actual quartzite tonnage is typically within 10% of the estimated quartzite content, indicating a relatively good reconciliation between the actual and estimated tonnages.

SRK has re-classified the GKZ approved reserves in accordance with the JORC Code. The bench plans, demonstrating the classified blocks have been reviewed by SRK, and a classification of Measured, Indicated and Inferred Mineral Resources has been applied. Overall, blocks which are classified as Category B have been re-classified as Measured Mineral Resources, C1 as Indicated Mineral Resources, and C2 as Inferred Mineral Resources.

In addition to the On-Balance reserves, Glukovsky also has a small quantity of Off-Balance reserves in the southern part of the deposit. These blocks have been classified as Off-Balance as they currently lie beneath a small settlement. No grade estimates for these blocks have been provided to SRK, and so have been excluded from the Mineral Resource inventory.

The mine's Mineral Resource statements, historic production, and product yields can be used to determine modifying factors to translate the Mineral Resources into Ore Reserves at the specific product quality. However, as the ZALK facility is currently closed and until the terms of a new contract and product specification with NovoLipetsk Steel are subject to completion, it is not appropriate to state Ore Reserves.

Table 3.27: Glukhovsky Quartzite: Mineral Resource and Ore Reserve Statement (1 July 2009)(1), (2), (3)

	Ore Reserve			Mineral Resource	
	Tonnage	SiO_2		Tonnage	SiO_2
	(Mt)	(%)		(Mt)	(%)
Proved	—	—	Measured	1.1	99.0
Probable	—	—	Indicated	7.9	99.0
Total	**—**	**—**	**Subtotal**	**9.0**	**99.0**
			Inferred	0.3	99.0
			Total	**9.3**	**99.0**

(1) All references to Mineral Resources are stated in accordance with the JORC Code.

(2) Mineral Resources and Ore Reserves are recorded on an unattributable, or 100% basis.

(3) Mineral Resources are inclusive of Ore Reserves.

The grades of the Mineral Resource are indicated above. These are seen to be of average or better specification.

3.11.5 Mining Operations and Infrastructure

The facilities at the mine include: mining and transport equipment; crushing and screening plant; maintenance buildings and machinery; 20 to 90 mm sized product stockpiles and 5 to 20 mm and less than 5 mm size fraction dumps. Power at the mine is derived from the 10 kV grid and substations at Banichi. The mine water supply is from two artesian boreholes. The railhead at Banichi comprises sidings, stockpiles and a rail loading area.

The quartzite mining method is conventional open-pit mining utilising drill-blast load-haul methods. Two electro-hydraulic EO6123 loaders with 2.5m^3 buckets and one EO5221 loader with a 1.5m^3 bucket are used in conjunction with 7 30 t Belaz off-highway dump trucks. Two 14 m benches are mined.

The overburden is generally 24 m thick. Topsoil is first removed by dragline and stockpiled for subsequent restoration. Advance stripping of overburden is achieved by way of blasting to loosen the alluvial soils and removal by dozing, 5 m^3 EKG electric rope shovels, and trucks. The current annual stripping ratio is approximately 2:1 m^3/t, or approximately 6.5:1 $t_{waste}/t_{product}$ basis.

Drilling of the blastholes is done by the mine and the blasting is contracted out.

The equipment is mostly over 15 to 20 years old and in need of a capital replacement programme. However, with an estimated annual capacity of approximately 120 to 150 ktpa of 20 to 90 mm product, the equipment is entirely sufficient for the current production requirements.

A Feasibility Report has been prepared by Hypronickel of St Petersburg in 1992 and in addition a mining study was conducted by the National Mining University of Dneipropetrovsk in 2003.

Mining is planned on a 5 days per week, single shift, 251 days per year basis which allows for weather conditions.

Processing operation

The processing facilities at the mine comprise crushing and screening of the various product types to achieve the required specification. The primary crushers, CMD-111, have a 160m^3/hr capacity. Secondary and tertiary crushers have a matched capacity.

The quality of the product is dependent on the size fraction. The natural dispensation of the materials is such that the sand and finer fraction which occur naturally in the lenses, have the higher iron, CaO and alumina percentages and the hard lumpy materials are at or better than specification. Little blending is required in the pit and there is little grade control and little sampling required at the plant to ensure specification is maintained.

Rail Loadout facilities, Locomotives and Rolling Stock

The 20-90 mm product is transported by conveyor to the rail load out silos. The operation owns two TGK-2 diesel locomotives. One is used for shunting and the other for transport of the wagons to the Glukhov rail station for onward transport to customers. The wagons are average 69 t capacity.

3.11.6 Environmental and Social Considerations

The Glukhovsky Quartzite Mine is located between the villages of Banichi and Peremoga, adjacent the main road that links the two villages. Housing has developed along the main road so that the stretch of road between next to the mine is populated.

The mine site comprises an open-pit mining area, a crusher plant, a railway spur with storage silos for the crushed product and the ancillary mine offices and work shop area where the mining fleet is maintained. The open-pit mine is about 1 to 1.5 km from the road, whereas the crusher plant and rail sidings are located about 400 m from the main road.

The nearest watercourse is a major river that is about 2 km to the west of the mine site, with no direct surface connection to the mining area.

The environmental review assessed environmental liabilities and determined environmental constraints and compliance issues or risks that may impact on the current and future operation of the project, environmental management strategies, controls, monitoring, permits and environmental management procedures.

The operation has the necessary permissions to continue operating. Whilst water quality impacts on groundwater resources have not been defined, the risk of any such impacts is considered low. Mining operations cause air quality impacts. Most significantly dust emissions may exceed permissible levels within the workplace. Monitoring of dust concentrations are not being undertaken at the protection zone boundary or at the local settlements which may pose a latent risk to the operations.

The mine employs altogether about 108 employees. The employees are included in ZALK's collective employee agreement.

Fugitive dust is not being monitored at the perimeter of the buffer zone nor within the local village. Whilst it is understood that a number of people that live in these houses work at the mine, verification of fugitive dust concentrations at these locations should be established, especially during dry periods, to ensure that the public health is not at risk.

Although the operation has a positive attitude to health and safety issues, it does not fully implement or enforce measures amongst the workforce to maximise the benefits from health and safety programmes. Consequently Glukhovsky does not fully comply with international practice.

While the current rehabilitation is progressing well and the success is good, the operation has not developed a conceptual closure plan for the final landform. As such, the operation may be at risk to increased closure costs due to unsuitable final slopes and incomplete backfilling of the final void.

The asset retirement obligation at 1 July 2009 has been estimated by UC RUSAL to be US$0.5 m. SRK has not reviewed this number, and is unaware of what it includes. However it excludes terminal benefits associated with any eventual termination of employments. SRK has not seen a cost estimate for mine closure at the end of the life of the mine, including bio-physical costs and terminal benefits.

3.11.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- No Ore Reserve has been reported for Glukhovsky due to the suspension of operations. It is anticipated that Ore Reserves will be available upon undertaking the planning necessary to re-start the operations.

Table 3.28: Glukhovsky historical production and cost statistics

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(kt)	55.09	51.13	55.01	4.28
Grade	(% SiO_2)	99.0	99.0	99.0	99.0
Expenditures					
Cash operating cost	(US$m)	0.9	0.9	1.1	0.1
Cash costs per unit	(US$/t)	15.43	17.43	19.11	15.92
Capital expenditure	(US$m)	0.0	0.0	0.0	0.0

3.11.8 Material Developments

Production ceased in March 2009. Production is planned by UC RUSAL to resume in 2010, under contract which is still under negotiation.

3.11.9 Specific Risks and Future Opportunities

Specific risks to the operations include:

- **Continued closure of the ZALK facility** — and hence suspension of the mine production.
- **Delay in finalising a terms of agreement with NovoLipetsk Steel (Russia)** — and hence continued suspension of the mine production.
- **Silicon Metal Market** — Whilst the Chinese silicon metal is considered to be of inferior quality, the market may be affected by the impact of low price products.
- **Cost increases** — Power and fuel cost rises which may be anticipated would impact on the economics of the operation.
- **Raw Material Specification** — As the operation currently only beneficiates the raw materials based on size fractions, it has a limited ability to react to any tightening of raw material specification and difficulty to selectively mine this material.

Future opportunities to the operations include:

- **Ore Reserves** — Whilst no Ore Reserve has been reported, this is due to the state of suspended operation and no firm plan being in place for re-commencement of production, supported by a secured sale agreement.

- **Re-commencement of Production** — SRK highlights the following:

- **Potential to Increase Production** — The operation has the capacity to react to an increase in production with a moderate investment programme.

- **Improved Mining Techniques** — Fragmentation of the hard quartzites may be improved by varying the blast design with a consequent reduction of excavation costs, crusher power costs and wear and tear and maintenance costs on the load and haul and crushing equipment.

- **Additional Markets** — The steel market requires lower specification feed as compared to the silicon market. There is the potential to improve sales of construction materials from the quartzite fines.

3.12 Yaroslavsky Fluorite Mine

3.12.1 Introduction

SRK undertook a site visit to the Yaroslavsky Fluorite Mine in October 2008. The site visit report has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. However, SRK may not be fully informed of all changes which have taken place and hence some descriptions may be out of date.

3.12.2 History and Location

The Yaroslavsky deposit is the largest fluorite deposit in the world and OOO "RGRK" (Russian Ore Mining Company), founded in 2005, is the largest producer of fluoride in Russia. UC RUSAL is a 50% shareholder in Yaroslavsky. The management of the operation is undertaken by RGRK. UC RUSAL receives over 90% of the mine production and also participates in the profitability of RGRK by way of dividends. Concentrate production at Yaroslavsky commenced in 1964.

The Yaroslavsky operation is located in the Primorsky Krai Region of eastern Russia. It is situated some 250 km from the regional capital of Vladivostok. The complex is situated in the town of Voznesensky (pop. 9,000) which is some 50 km from the important regional city of Yussonski. The complex is accessed by national roads and has a railhead which links with the Trans-Siberian Railway System.

The region is typically low relief farmland and grassland to moderate relief rolling hills. The elevation is between 50 m and 150 m above mean sea level. The climate is temperate, continental with the temperatures ranging from +35°C in summer (June to August) to -20°C in the winter.

3.12.3 Geology

The Yaroslavsky Fluorite Mine currently exploits two separate deposits, Voznesensky and Pogranichny. The Voznesensky deposit is located within the hinge zone of an anticline, hosted by the limestones of the Volkushinskaya Suite. The total strike length for the deposit is 1,200 m, a maximum thickness of 200 m, and vertical depth of 500 m. The Pogranichny deposit is located on the north-west limb of a large syncline, striking north-west, and a 50° to 60° dip towards the south-west. The deposit is hosted by a single metasomatic unit, with a maximum thickness of 300 m, strike length of 600 m, and vertical thickness of approximately 800 m. A total of 18 individual zones within the metasomatic unit have been identified, split into two areas, by a large, diagonal fault, namely the South-Eastern and the North-Western areas.

The Voznesensky deposit also hosts a skarn type zinc deposit in the northern part of the deposit. The total strike length of the zinc mineralisation is in the region of 100 m, with thicknesses varying from 5 to 35 m dipping at 70° to 80° towards the east. The zinc mineralisation is predominantly sphalerite, and has an average grade of 6.63%. Along with the sphalerite is fluorite, with minor molybdenum, tungsten, pyrite and cassiterite.

Pogranichny also hosts tantalum and niobium mineralisation below the fluorite mineralisation. Its thickness varies from 70 to 80 m in the north, to approximately 15 m in the south. The average thickness is up to approximately 40 m, and has been intersected at 250 m below topography. The tantalum and niobium grade appears to decrease with depth.

3.12.4 Mineral Resources and Ore Reserves

The most recent reserve estimates, as approved by the GKZ were undertaken in 1985 for Voznesensky and in 2004 for Pogranichny. Exploration was undertaken between 1948 and 1985. The original resource estimate was undertaken from core drill sampling, with whole core samples taken for analysis. Current sampling methodologies are based on in-pit drilling, using a blasthole rig. Drillholes are drilled on two grid spacings, 15 x 15 m and 5 x 5 m. For 5 m sub-benches, 10 m holes are drilled, with two samples taken. If the bench is to be mined in full, i.e. 10 m high, a 20 m hole is drilled, with two samples taken. Samples are collected from the drill cone using a specially designed catcher, which placed next to the hole collar before drilling commences. After each 5 or 10 m sample, the catcher is removed, and the collected sample sent for assay. Assaying of the sample is undertaken in-house, using wet chemistry methods. A duplicate sample is retained by the on-site staff, and check assays are re-submitted to the internal laboratory, as well as being sent to an external laboratory as a further check

Reserves methodologies for the deposits are consistent with other GKZ approved estimates, being based on sectional interpretations cut across the deposit, intersecting the drilling. Blocks were then defined within the sectional interpretations, and an average length weighted grade determined for each block. The block grades and tonnages are then split by classification, and summed to produce a total for the deposit. The density values used in the GKZ reserve estimate were derived from a combination of laboratory testing and bulk density determinations.

The deposits are classed as being Class 2 in terms of complexity, with the average drillhole spacing for each category being defined by the GKZ. SRK has re-classified the GKZ approved reserves in accordance with the JORC Code. The sectional interpretations, demonstrating the classified blocks, have been reviewed by SRK, and a classification of Measured, Indicated and Inferred Mineral Resources has been applied. Overall, blocks which are classified as Category B have been re-classified as Measured Mineral Resources, C1 as Indicated Mineral Resources, and C2 as Inferred Mineral Resources.

The geology and major controls on the mineralisation appear to be well understood, aiding the ability to appropriately model the deposit. SRK considers that the data quantity and quality is sufficient for the reporting of JORC Code compliant Mineral Resources, classified in the Measured, Indicated and Inferred categories.

The fluorite Mineral Resource is presented above a cut-off grade of 20% CaF_2, in line with the GKZ reserve estimate.

The GKZ reserve estimates also include zinc, niobium and tantalum. SRK has not reviewed the geology, reserve estimation methodology, or classification for these deposits, and so has not re-classified in accordance with the JORC Code. RGRK produces zinc concentrate from the zinc

rich ores on a campaign basis and receive revenues for these products. No zinc concentrate has however been produced for the current year 2009. SRK has not reviewed the size, grade or management of the stockpiles. The stockpiles have been excluded from the Mineral Resource statement.

Ore Reserves

The Mineral Resources for the two deposits require to be evaluated separately as different conditions apply particularly regarding the current situations.

Voznesensky

The accessible ore at Voznesensky is limited to that in the bottom of the main pit and in the northern extension. To access additional ore in the main pit a major waste pushback is required. The pushback will require a significant capital investment programme or a contract for waste mining.

SRK considers that the JORC Code compliant Ore Reserves are limited to approximately 800 kt which equates to the accessible material at reasonable strip ratios.

Pogranichny

Pogranichny mineralisation is lower grade and more difficult to process. This ore is usually blended with Voznesensky ore. Deeper Pogranichny Mineral Resources require additional land acquisition and a large pushback, permitting and capital investment. In addition, the material may not achieve a 90% CaF_2 product which will put the sales at risk.

A technical-economic study is required before further Ore Reserves are stated.

Table 3.29: Yaroslavsky Mineral Resource and Ore Reserve Statement (1 July 2009)[(1), (2), (3)]

	Ore Reserve			Mineral Resource	
	Tonnage	CaF_2		Tonnage	CaF_2
	(Mt)	(%)		(Mt)	(%)
Proved			Measured		
Voznesensky	—	—	Voznesensky	1.8	56.8
Pogranichny	—	—	Pogranichny	1.5	48.0
Probable			Indicated		
Voznesensky	0.50	27.4	Voznesensky	10.3	40.2
Pogranichny	—	—	Pogranichny	6.8	32.7
Total	**0.50**	**27.4**	**Subtotal**	**20.4**	**39.7**
			Inferred		
			Voznesensky	0.8	44.2
			Pogranichny	0.7	34.9
			Total	**21.9**	**39.7**

(1) All references to Mineral Resources are stated in accordance with the JORC Code.
(2) Mineral Resources and Ore Reserves are recorded on an unattributable, or 100% basis.
(3) Mineral Resources are inclusive of Ore Reserves.

3.12.5 Mining Operations and Infrastructure

The operations at Yaroslavsky comprise: two open-pit mines, a milling and concentrating plant and tailings pond and clarifying pond; a drying plant; a power plant and workshops.

Voznesensky Open-Pit

The Voznesensky pit is mined by conventional drill and blast, truck and shovel methods using electric or diesel-hydraulic shovels and Belaz haul trucks. The current pit depth is 220 m (120 m bmsl) of a final pit depth of 240 m for the current pushback. The ultimate pit depth is estimated at 340 m (240 m bmsl).

The maximum annual ore tonnage historically mined from Voznesensky was 1.6 Mt in 1985. During its peak production period 1979 to 1991 ore tonnages averaged 1.1 Mtpa and waste stripping was 6 to 12 Mtpa. The maximum tonnage moved in a year was 13 Mt in 1988. The average stripping ratio during this period was 7.25 t/t, or 2.7 m^3/t.

The short term ore production from Voznesensky will be sourced from the 150 kt remaining at the pit bottom and some 700 kt from the northern extension. The longer term future of Voznesensky will require 2 to 4 major waste pushbacks totalling in the order of 100 Mt.

Pogranichny Open-Pit

The Pogranichny operation is also conventional drill and blast. The current pit depth is 45 m, 55 m amsl, and is planned to be excavated to 150 m bmsl. The maximum ore production at Pogranichny was reached in 2005 when 822 ktpa was mined. The Pogranichny materials encountered to date have been relatively soft rocks as compared to the hard rock at Voznesensky. Clay materials in the Pogranichny waste have an adverse impact on the process recovery.

A total of 13 discrete bodies have been defined, separated by waste. The mining therefore has to be more selective to avoid dilution and ore loss. The grade of the Pogranichny ore was seen to drop to 26.2% CaF_2 in 2007 from 36.7% CaF_2 in 2006. The grade recovered to 32.7% CaF_2 in 2008 H1.

To access the remaining 9 Mt of fluorite Mineral Resources the pit will require a major pushback in the order of over 20 Mt to expose the lower ore reserves. Some 27 local residential properties will have to be removed in this case.

Blending, Crushing and Plant Feed

The Pogranichny deposits require to be blended with those from Voznesensky for ease of processing and recovery to meet a 90% CaF_2 product. A minimum of 30% Voznesensky blend is stated as a general requirement.

Blending of the run of mine ore is done in blending beds. There are stockpiles of special ore materials which are fed to the blend. Blending is done on CaF_2 grade, $CaCO_3$ content and CaF_2:$CaCO_3$ ratio, and clay content. Multi-layer blending techniques are used. The reagent regime is selected depending on the results of tests on representative samples of the blended pile.

The ore is fed to the primary crusher installed in 1986. The crusher feeds twin stocking galleries each with a 50 kt capacity which are alternately filled and delivered to the plant.

The current production tonnage and grade is impacted on due to the lack of Voznesensky ore and the lower grade and process difficulties of the Pogranichny ore. Currently, and for the past three years, the run of mine tonnage has been augmented by ore from stockpiles.

Overall Mining and Planning

The maximum material which may be mined annually with the current equipment with general repairs and maintenance is in the order of 4 Mt. The mine has generated a capital investment plan for mining and ancillary equipment based on a steady state production of 1.25 Mtpa CaF_2. UC RUSAL does not consider that this reflects their anticipated CaF_2 requirements and would likely need to be revised unless additional offtake agreements are obtained by RGRK.

A long term mine planning exercise was carried out for the mine in 2006 and in 2003 the TEO conditions were also reported upon by NTC. NTC utilized Datamine software for the planning process. The mine has determined a long term plan based on the NTC work. This will require to be updated with current parameters.

The following is extracted from the RGRK long term plan which extends to 2026, however this plan has yet to be agreed between the owners:

- Ore production is 1 to 1.25 Mtpa, and 220 to 250 ktpa concentrate predominantly from Pogranichny until 2016, when the waste stripping has exposed more Voznesensky ore.

- The grades of CaF_2 are seen to reduce to 28 to 30%, the recovery to reduce to 54% and the quality of the CaF_2 concentrate is expected to be 88% CaF_2 (and not 90%) which has implications to the saleability of the products.

Waste dumps

Approximately 200 Mt of waste has been extracted from the pits since 1960 and has been dumped in the vicinity of the operations.

Whilst there is sufficient dump capacity for the short term more dumping facilities need to be approved for the medium to long term. These are in the order of an additional 150 Mt over the current long term plan. The requirements for the additional land allotment and the waste dump development schedule have been defined. The approvals for the land allotment need to be addressed in the short term by RGRK.

Infrastructure

The infrastructure includes the following facilities:

- Steam plant — Oil Fired: 2 x Steam boilers; 1 x DKVR 20/13 -4 units 1964/5); 1 x KE35/14 — 5 units 1975-80.

- Transformer substation (1983).

- Transport department.

- Mechanical repair and maintenance workshops.

- Electrical workshops.

- Locomotive department: including railway loadout and shipment, railway repair and maintenance, rolling equipment repair.

- Central Laboratory, Instrumentation and Systems Control.

Power for the plant and township is supplied by the Far East Energy Company.

Water for potable use and for the boilers is pumped from the River Ilistaya under permit No.25-20.03.07001-R-DZVO-C-2009-00138/00 dated 30.06.2009 at a rate of 35 m^3/hr in summer and 200 m^3/hr in winter.

Water for the plant is obtained from the clarifying pond after decantation from the tailings pond.

Processing

The processing facilities at the mine comprise of:

- Crushing and milling circuits.
- Flotation plants (two separate circuits).
- Drying plant.
- Tailings ponds and water dam.

The milling capacity is 1.5 Mtpa when all 12 mills are currently in operation. 8 mills are in operation with a capacity of 1 Mtpa. One mill has been stripped for parts. Capital investment is needed to restart the other 3 mills.

The concentrator comprises of floatation, thickening, filtering and drying.

The long term plan indicates average CaF_2 recoveries at 54% and yields of 16% depending on grade. These require to be verified before acceptance as a basis for investment. Recovery of the CaF_2 from the ore in 2009 was approximately 42.2% average. The current 2009 yield of the ore to the final FF-90 product is approximately 13% as compared to 27% in 2004.

The primary crushed ore received is washed and screened to remove clay. It is then secondary crushed to 16 to 20 mm then milled to 40 microns, then dosed with reagent.

The flotation capacity is currently 250 ktpa based on an 180 ktpa capacity in the main flotation unit (6.3 x 180 cells, 128 working) and 70 ktpa in a secondary flotation unit (3.2x128 cells; 110 working). The reagent is heated to 25°C during the winter months (October to April). The flotation has 11 cycles and concentrates the CaF_2 grade to a design grade of 90-92%. The secondary flotation unit can be switched to zinc flotation.

The product is vacuum filtered to between 10°C and 12°C then thermally dried in a kiln fuelled by residual oil products and transported pneumatically to two silos each of 8 kt capacity.

The dried products are either briquetted or loaded directly into wagons to be transported.

Waste Products

Gas Products: The residual gases from the drying process are dry gas cleaned in dust scrubbers and wet gas washed to remove the remnants of the CaF_2 concentrate and spent oil.

Tailings: The tailings are transported by hydraulic transport via a pipeline to a tailings pond of 22 Mm^3 capacity. Water from the tailings pond is decanted to a large water retention/clarification pond. Both impoundment walls are constructed of waste rockfill with clay cores. The impoundments are unlined. Raising of the tailings wall by 5 m is scheduled in 2011. The annual disposal of tailings is 575 ktpa on the basis of 1,250 ktpa ore production and a 54% recovery. The raising of the wall by 5 m thus increases the capacity by 4 Mt of tailings or 7 years. A minimum 4 m freeboard is maintained. The supernatant water is decanted via a single decant tower. An emergency spillway is present. The water is recycled for use in the processing plant.

3.12.6 Environmental and Social Considerations

The mine is under the jurisdiction of the regional and national regulatory framework. Permissions are renewed annually, or longer. No non-compliances were noted associated with the environmental permit.

Health and Safety

RGRK operates a formal health and safety management system, overseen by a designated Health and Safety manager. Internal investigations of every occupational injury, accident and incident are conducted with actions to prevent similar accidents from occurring in the future. Detailed statistics are kept for all injuries by category.

The mine currently runs on-site medical facilities for treating injuries and alleviating occupational illness symptoms.

Medical examinations of the RGRK employees are carried out on an annular basis. Two cases of fluorosis have been diagnosed in the past 3 years.

Regulatory requirements

The licences and permits cover all of the aspects of the facilities.

Environmental and Social Context

The mine is adjacent to the town of Yaroslavsky which currently has a population of approximately 12,000. The township and its services and infrastructure were developed specifically for the mineworkers and their families. All of the mineworkers reside in the town. All of the facilities are now privately owned. RGRK supports the local and regional facilities in numerous ways. Yaroslavsky is the significant employer in the local area and essentially supports the community and the local businesses.

Environmental and Social Management

The recent studies of the continuation of the operations have addressed environmental impacts and management to a significant degree within the framework of the national and regional requirements. RGRK however has yet to define and implement an integrated Environmental and Social Management Plan The formulation of objectives and the integration of the current activities into an recognised structure and framework can achieve an international standard when combined with appropriate staffing, financing and future planning.

Material Issues

The relocation or compensation for property owners of 27 houses prior to the mining of the Pogranichny is still outstanding.

An environmental and social management plan needs to be completed together with rehabilitation and closure planning.

SRK has not seen an asset retirement obligation, or mine closure estimate.

3.12.7 Technical and Economic Assessment

The following points are made in respect of the production and cost parameters in support of the Ore Reserves:

- The production is 0.5 Mt during H2 2009, at which point there are no further Ore Reserves. In order to convert Mineral Resources in to Ore Reserves, a waste pushback of the sidewall is needed to expose more ore at Voznesensky and to a lesser extent at Pogranichny.
- The average sales price for H2 2009 is US$212/t.
- The world prices of 90% CaF_2 concentrate (FF-90) over the previous 2 years are stated by UC RUSAL at US$370-450/t. Mongolian prices are stated by UC RUSAL to be US$230-290/t and Chinese at US$400/t. UC RUSAL quoted that the price paid by them in 2008 was RUR5110/t or US$186/t at an exchange rate of 27.5RUR to US$. This indicates profitability up to 2006/7 but appears insufficient to cover costs in 2008. As UC RUSAL takes some 90% of the production of RGRK, the prices agreed would require to cover the operating costs or otherwise the enterprise would be non profitable.
- A cashflow model has been generated to verify the economic profitability of the Ore Reserves. SRK has verified the discounted pre-tax, pre-finance cashflow.

Table 3.30: Yaroslavsky historical production and cost statistics(1)

Statistics	Units	2006	2007	2008	H1 2009
Production					
Tonnage	(kt)	806.8	899.1	799.3	441.3
Grade	(% CaF_2)	36	31	30	29
Concentrate sold	(kt)	184.6	141.4	121.8	58.8
Expenditures					
Cash operating cost	(US$m)	31.6	37.2	36.4	12.0
Cash costs per unit(1)	(US$/t)	171.4	263.0	299.1	203.8
Capital expenditure	(US$m)	0.4	1.0	2.8	0.0

(1) Cash costs are per tonne of fluorite concentrate

3.12.8 Material Developments

SRK is unaware of any significant changes in the operation.

3.12.9 Specific Risks and Future Opportunities

Specific risks to the RGRK operations include:

- **Fluorite Market** — The fluorite market is relatively small and competitive. Consistently high quality products particularly from Mongolia compete with the Yaroslavsky fluorite. UC RUSAL purchases from these markets in addition to Yaroslavsky.
- **Lack of Surety of production** — The CaF_2 offtake and production is driven by UC RUSAL who takes over 90% of the production. UC RUSAL's aluminium production, the quality of the Yaroslavsky products and the price of the Yaroslavsky CaF_2 will be critical. If UC RUSAL significantly reduces their purchase of CaF_2 from RGRK, the economics of the operations may need to be re-assessed.
- **Quality of Concentrate** — The non achievement of quality of the CaF_2 to a 90% grade which Yarislavsky has recently experienced is a threat to RGRK's market position.

- **Ore Grade and CaF_2 Quality** — The CaF_2 quality issues appear to relate to the ore type and lower grades from Pogranichny and the higher quantities of silica which are reporting with the ore due to dilution. Further testwork to determine the source of the deleterious minerals should enable the optimisation of the product FF-90 quality.

- **Investment** —

  - **Overburden Stripping Requirement** — Considerable investment in waste stripping is urgently required for the higher grade, good processable Voznesensky ore. The lack of overburden stripping over recent years has resulted in limiting the available ore and has impacted upon recoveries. 10s of millions of dollars of waste stripping and associated mining and hauling equipment is required in the short to medium term.

  - **Mining Equipment Investment** — The current equipment especially the electric shovels lack the flexibility for selective mining which is needed for effective mining the Pogranichny deposits.

  - **Tailings Dam Raising** — The tailings dam requires to be raised by 5 m in 3 to 5 years time.

  - **Process Equipment Investment** — Much of the process plant equipment is old and is in need of repair.

  - **Lack of Investment** — Continued lack of investment will further jeopardise the future economics of the enterprise.

- **Costs** — The processing costs per tonne of ore processed and concentrate produced has risen sharply in 2008 in Rouble terms. This needs to be assessed in more detail. The costs per tonne of CaF_2 to UC RUSAL may have to similarly increase.

- **Specific cost items** — These include: General management and tax; power, and waste stripping,

- **Environmental Costs** — Higher environmental costs are indicated for the future operations.

- **Economic Assessment** — The economics of the operations in the short, medium and long term may be doubtful and require being reviewed using updated parameters.

- **Land Acquisition** —

  - Additional land is required for the pushback of the Pogranichny pit to access the lower ore.

  - Additional dumping space is required for the future operations.

Future opportunities to the Yaroslavsky operations include:

- **Reduction of Dilution** — A reduction in dilution during the mining of the Pogranichny deposits will improve process recoveries. This could be achieved by using mining equipment better capable of selective mining.

- **New equipment** — Appropriate investment in new equipment will improve efficiencies and costs.

- **Process Improvements** — Further studies may allow improvements in process recoveries and costs.

- **Strategic Resources** — Yaroslavsky has some of the largest quantity of fluorite mineralisation worldwide. It can be considered a strategic resource which should be technically and economically assessed.

4. Alumina Division

4.1 Queensland Alumina Ltd.

4.1.1 Introduction

UC RUSAL is a minority shareholder in Queensland Alumina Ltd. (QAL). Hatch was requested by UC RUSAL not to visit the facility and to provide an assessment based only on publicly available documentation. As such this is the basis for all information presented in Section 4.1.

4.1.2 History, Location and Infrastructure

Queensland Alumina Ltd. is located at Gladstone on the east coast of Australia, approximately 450 km north of Brisbane, the Queensland state capital. Queensland Alumina Ltd. commenced operations in 1967 with a capacity of 720 ktpa. The refinery underwent three major plant expansions to reach 2.4 Mtpa of alumina capacity by 1973, followed by a productivity expansion in 1984 to reach 2.7 Mtpa. Subsequent expansions and debottlenecking have increased capacity to approximately 4.0 Mtpa in 2008.

Queensland Alumina Ltd produces alumina on a toll basis for its two shareholding companies, Rio Tinto Alcan (80 per cent share) and UC RUSAL (20 per cent share). Each supplies the refinery with bauxite from the Weipa mine in return for product alumina in proportion to their equity in the refinery. The attributable annual production for UC RUSAL was 769 kt in 2008.

The refinery covers 80 hectares of a 400-hectare site located beside the harbour on the southeast side of Gladstone. A wharf and storage facilities are adjacent to the plant on South Trees Island, connected by a causeway bridge. The city of Gladstone, with a population of approximately 30,000 people, is a major seaport handling in excess of 75 Mtpa bulk cargo, including export of 55 Mtpa of coal and import of 13 Mtpa of bauxite for Queensland Alumina Ltd. and Rio Tinto Aluminium.

4.1.3 Process Description

Design of the initial plant and expansions up to 1973 were based largely on Kaiser Aluminium Bayer process technology, including Kaiser high temperature digestion technology.

- Bauxite is shipped from the Weipa mine in North Queensland in four 70,000 DWT purpose built, coal-fired ships owned by the refinery but operated under contract by ASP Ship Management Group.

- Bauxite feed to the refinery is wet ground to the required size for digestion in combined rod/ball mills. Eight of the nine installed mills for monohydrate bauxite are operational at any one time. Ground bauxite slurry is heated to 100°C by direct steam injection and stored in mechanically agitated slurry tanks for a minimum of eight hours to achieve desilication of the slurry.

- Caustic liquor required for digestion is heated in shell and tube heat exchangers in what is known as "dual stream" digestion. Desilicated bauxite slurry, hot caustic liquor and high-pressure steam are injected into digester vessels on each digestion unit to achieve a required digestion temperature of 255°C.

- After digestion, the digested slurry is cooled in 10 flash stages to atmospheric temperature and pressure. Recovered flash steam is used to heat incoming caustic liquor. In the bauxite sweetening process installed in 1988, ground and desilicated Weipa trihydrate bauxite is added to the sixth flash stage, giving up to 25 per cent increase in production.

- Red mud in the digested slurry is separated from the pregnant liquor in five mud settlers (three operating, two spare). Underflows from mud settlers are combined and pumped to three counter-current red mud washing trains, each with five stages arranged in series, all of which are normally in operation. Following washing to recover caustic soda, red mud is reslurried with seawater and pumped to storage ponds located on Boyne Island, 10 km south of the refinery.

- Pregnant liquor overflowing mud settlers is filtered using 30-35 of 42 installed horizontal pressure "Kelly Filters" to remove fine suspended red mud residue. Pregnant liquor is then cooled to the precipitation fill temperature of 76°C by either vacuum flash cooling in shell and tube heat exchangers or in plate heat exchangers, cooling against cold spent liquor.

- The precipitation circuit consists of nine trains, each with 11 or 12 precipitators, with 106 in total. Precipitators are predominately mechanically agitated with draft tubes, while the last two precipitators in four of the trains are air agitated. Fine and coarse seed are added to the precipitators to initiate and assist hydrate precipitation. An "interstage cooling" step after the fourth precipitator in each train is used to further increase precipitation of hydrate.

- Precipitated hydrate is classified in a system of primary-secondary gravity classifiers, supplemented by hydro-cyclones, and finally by hydrate thickeners. Primary classifier overflow flows under gravity to secondary classifiers. Secondary classifier underflow is pumped via seed slurry surge tanks back into the precipitation trains. Secondary classifier overflow reports to the hydrate thickeners. Hydrate thickener underflow is pumped to the fine seed filters, washed to remove contaminants, reslurried and returned to the first precipitator tanks.

- Hydrate thickener overflow is spent liquor, which is heated against incoming pregnant liquor and returned to digestion to be concentrated in ten to eleven operating evaporators (12 units installed).

- Product hydrate is pumped through either thickening cyclones or hydrate storage tanks in the calcination area, before being pumped to the product pan filters where a further three stage counter-current wash is applied on pan filters.

- Calcination of product alumina is accomplished in four static calciners comprising one Lurgi circulating fluid bed unit and three FLS flash calciner units installed in 2002. Each calciner is fitted with baghouse dust collection systems to reduce particulate alumina emissions to less than 20 mg/Nm^3, well within environmental licence limits.

Steam for the refinery is generated in seven coal-fired pressure boilers (all of which were commissioned between 1967 and 1973) and one gas-fired boiler (commissioned in 2007). The refinery consumes around 90 MW of electrical power, of which 17 MW is typically generated internally and the remainder sourced from the Queensland state grid. New emergency diesel generators were commissioned late 2006, replacing 40-year old units to provide up to 12 MW of emergency standby power to essential services within two minutes of a grid outage.

4.1.4 Environmental

Queensland Alumina Ltd. has achieved ISO 14001 environmental management certification.

Queensland Alumina Ltd. includes two mud storage ponds. The original pond covering 350 hectares was in operation from 1967 to the 1980s upon which it was rehabilitated with grass and trees. A second 800 hectare pond commenced operation in the 1980s.

Disposal of mud within the ponds is currently being upgraded by conversion to dense stacking of red mud and using dried red mud to progressively raise embankment walls, employing upstream construction techniques. The first pond will be recommissioned as part of this upgrade to provide mud storage capacity for a further 50 years of operation of the refinery within the existing 1,150 hectare footprint of the two mud ponds.

Queensland Alumina Ltd. mud disposal operations utilise seawater to dilute mud from the washers prior to pumping to the storage ponds. This has the advantage of neutralising residual caustic soda in the mud so that mud and water within the mud pond are only slightly elevated by approximately 0.3-0.5 pH units above surrounding tidal estuaries. Any groundwater seepage into the estuarine environment has minimal impact since water quality within the ponds is similar to that in the estuary. Excess water discharged from ponds to the estuary is licensed and subject to a measurement and control program approved by the Queensland Environmental Protection Agency.

Dust generation from any areas of exposed red mud is suppressed by water spraying.

The coal-fired boilers generate around 300 kt of coal ash each year, which is reslurried with seawater and pumped to ash ponds adjacent to the refinery. Water outfall from these ponds to the harbour is licensed and subject to measurement and a control program approved by the Queensland Environmental Protection Agency.

Boreholes have been drilled around the refinery to monitor leakage of caustic soda through concrete slabs. Results show minimal ingress into the groundwater that tends to be seawater in any case. Storage tanks on South Trees Island for caustic soda and heavy fuel oil (still used in boilers and by a commercial ship bunkering service) are bunded to prevent escape of stored contents to the harbour in the advent of a tank rupture or leak. Tank walls and floors are now periodically checked for corrosion following minor leakage several years ago. Seawater reacts and neutralises any caustic soda that may leach into the ground.

A number of projects have been completed to reduce or eliminate air emissions and impacts on the Gladstone community located downwind of the refinery. The calcination section was fully converted to natural gas, eliminating sulphur emissions from the heavy fuel oil used for many years. Burnt lime supply was outsourced in 2006 and two rotary kilns used to burn limestone were demolished, eliminating a source of particulate emissions. Electrostatic precipitators on the seven coal fired boilers were replaced by baghouse dust collectors, reducing particulate emissions. Nine rotary kilns used to calcine product alumina were replaced by more energy efficient FLS static calciners and fitted with baghouse dust collectors, reducing particulate emissions. The alumina ship loader has been recently upgraded. Thermal oxidiser facilities have reduced odour emissions from the digestion area by 40 per cent. Further odour reduction projects are under investigation. A buffer zone was established between the refinery and adjacent residential areas and a program to plant 15,000 trees implemented. All boiler and calciner stacks and alumina transfer systems are licensed and subject to measurement and control programs approved by the Queensland Environmental Protection Agency.

Stormwater run off from the refinery or any process spills that overflow slabs are captured in two ponds and progressively returned to the refinery. Any excess run off due to extended heavy rain passes through two neutralising ponds where it is reacted with seawater prior to flowing to the adjacent harbour. The outfalls are licensed by the Queensland Environmental Protection Agency.

4.1.5 Specific Risks and Future Opportunities

Specific Risks

- **Asset Integrity** — Major maintenance and sustaining capital expenditure programs have been implemented to replace aging plant and equipment. The refinery has experienced a number of equipment and power failures over recent years that impacted production, for example causing the loss of around 80 kt of alumina production in 2006. These types of issues are to be expected with an aging refinery such as Queensland Alumina Ltd., but should not cause major losses provided long-term maintenance and capital replacement programs are continued. A 10-year electrical program developed as a component of a 30-year maintenance plan for the refinery is progressively replacing unreliable electrical equipment and systems.

- **Labour Supply** — Gladstone is a relatively small labour market, given the concentration of major industrial facilities that operate in the region. Ongoing growth of the regional industrial base since the 1980s has placed pressure on retention of skilled members of the workforce at the refinery. This growth is expected to continue into the foreseeable future making it essential to continue recruitment, training and development programs already in place for apprentices, trades people, plant operators, supervision and the management team.

Future Opportunities

- **Capacity Expansion** — Potential exists for further capacity expansion of the refinery to 5 Mtpa or beyond should the owners unanimously agree. At Queensland Alumina Ltd., all executive Committee decisions are required to be unanimous.

4.2 Fria Alumina Refinery

4.2.1 Introduction

Hatch undertook a site visit to Fria Alumina Refinery in October 2008. This Section 4.2 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.2.2 — Updated with data and information as of September 2009,

- Section 4.2.3 — Process Description as of October 2008,

- Section 4.2.4 — Environmental Status as of October 2008,

- Section 4.2.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 4.2.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.2.2 History, Location and Infrastructure

Fria Alumina Refinery, located at the town of Fria in the Republic of Guinea, is approximately 160 km northeast of the capital and main port Conakry. The region of Fria has a population of approximately 45,000 people and Conakry has a population of just over one million. The refinery was commissioned in 1960 by Pechiney and is serviced by road and a dedicated railway.

In 1997, Pechiney and its partners decided to leave the refinery to the Guinean government. In 2000 a group of investors leased the refinery assets from the Guinean government and controlled the operation of the refinery through Alumina Company of Guinea (ACG). In December 2002, RUSAL acquired a majority interest in ACG from these investors. In April 2006, RUSAL (prior to the formation of UC RUSAL) fully acquired ACG from the government of Guinea Republic, including the mine, refinery, railway and port.

The alumina precipitation and classification circuit at the Fria refinery was modified in the 1980s to improve product quality, and 'semi-sandy' alumina was produced at a rate of 640 ktpa. Fria production in 2004 was 778 kt although a much lower grade 'floury' alumina was produced. Plant production fell to 530 kt in 2006 reflecting a shortage of power supply after a legacy of underinvestment following the previous ownership changes. Production has recovered moderately to 593 kt in 2008.

4.2.3 Process Description

Fria Alumina Refinery uses a very simple variant of the Bayer Process. The key elements of the Bayer process as applied at Fria are the low temperature atmospheric digestion of alumina, and the two-stage, seeded precipitation of alumina. The use of atmospheric digestion limits the degree of alumina super-saturation that can be achieved in the digestion slurry and without a high degree of super-saturation, 'sandy alumina', the standard for modern refineries cannot be achieved.

The Bayer process technology as applied at Fria is described as follows:

- Bauxite is delivered from the nearby mining operations to the refinery by truck and is crushed by one double roll primary crusher. The crushed bauxite is transported by conveyor belt to either the bauxite grinding area or to the bauxite reserve stockpiles.

- Bauxite is mixed with caustic liquor and wet-ground in rod mills. There are three rod mills at the refinery. Normally two mills are in operation and open circuit grinding is used.

- The slurry from grinding is mixed with more caustic liquor and is then pumped to the digestion area. Digestion consists of two units, with each unit consisting of eight digestion tanks. Steam from the power plant is used in the first six tanks of each unit to indirectly heat the slurry close to its atmospheric boiling point of 108°C.

- The digested slurry is pumped to one hydro-separator, which removes the coarse sand fraction from the digester effluent. The sand is then washed separately in rake classifiers to recover caustic liquor and is pumped to the end of the red mud washing circuit.

- The overflow from the hydro-separator is mixed with the overflow from the first red mud washer and is pumped to the post-desilication section. Desilication is achieved in five agitated, indirectly steam heated tanks per unit. The slurry from post-desilication is pumped to the red mud settlers.

- Red mud settling and washing is achieved in two units, each consisting of four flat bottom settlers and ten washers. Synthetic flocculants are used to facilitate the separation of red mud from the supernatant pregnant liquor. The red mud is pumped to the red mud disposal area for storage.

- The liquor overflowing the red mud settlers is pumped to the red filtration area where two units of six horizontal 'Kelly' pressure leaf filters are used to remove the fine suspended solids from the liquor. This liquor is now known as pregnant liquor and is pumped to the heat interchange area.

- In the heat interchange area, the pregnant liquor is cooled from 105°C to between 65 and 70°C by indirect contact with spent liquor in heat exchangers. The cooled pregnant liquor is then pumped to the precipitation area.

- The precipitation area consists of two units, each of 14 air agitated tanks and two mechanically agitated precipitator tanks. Fine seed hydrate is added to the first precipitation tanks, known as agglomeration tanks, to initiate the hydrate precipitation process. Hydrate slurry then flows to the 'growth' precipitation tanks where coarse hydrate seed is added, and sufficient residence time allowed for more hydrate to precipitate from solution.

- Hydrate slurry from the precipitation circuit is then treated in a system of pre-classifier tanks and Turbiflux classifiers to produce fine seed, coarse seed and product hydrate. The seed and product hydrate are filtered on a combination of disc and drum vacuum filters.

- The washed product hydrate cake is calcined to form alumina in the three rotary kilns on-site.

- The spent liquor filtered from the seed and product hydrate filtrate is concentrated by evaporation and returned to the grinding and digestion stages.

- Fria Alumina Refinery has a captive power plant that supplies electricity and steam to the refinery and the town of Fria. As there is no standby power source via an external grid, the power plant is critical to the refinery and must be operational at all times. ACG is focussing on modernisation and repairs to the steam and electricity generating capacity and expansion of red mud storage capacity.

4.2.4 Environmental

Red mud is directed to a disposal area located 4.5 km to the south of the refinery. The red mud facility consists of upper and lower dams, Dam No. 1 and Dam No. 3, respectively. Dam No. 2 is now completely submerged. Dam No. 3 was constructed in 1992 using earth and rock-fill methods. Dam No. 1 was breached in 1993 and failed again at the start of the rain season in 2007 before repairs could be completed. Dam safety reviews are not routinely undertaken by ACG. Completion of Dam No. 1 repairs and a 4 m raise for Dam No. 3 will, in tandem, extend the life of the residue storage area by 9 years. Capital budget has been allocated for both the modifications to Dam No. 1 and an engineering study for Dam No. 3.

Dam No. 3 is located in a valley with an estimated catchment area of 160 hectares and it empounds 1.8 Mm^3 of water. There is no recycle of process water from the mud lake. During the wet season, fine sediment and supernatant liquor discharges over the main dam spillway, down the Dotte River and into the Konkoure River. The spillway is designed to pass the 100-year rainfall event. Effluent is monitored and tracked against internal targets of 3 g/L soda and a maximum pH of 12. Although these targets were not exceeded in the data reviewed from 2008, the environmental consequence of releasing effluent at these levels, is nonetheless, severe. There is no installed neutralization or treatment capability and the only current recourse to reduce environmental impact is to improve performance in the mud washing circuit. Fria Alumina Refinery has made advances in this area, lowering the soda content in the mud residue from 6-7 g/L in 2007 to approximately 5 g/L in 2008.

Process spills and site drainage exits the refinery in five distinct channels, reporting to a common outfall ditch which transports the wastewater, untreated, to the river. Equipment foundations are cracked in several places and do not represent a suitable barrier to minimize groundwater contamination. High pH and presence of soda has been observed at the piezometer downstream of the refinery.

Alumina dust emissions at the port are high which is an issue given the housing which surrounds the port. Replacement of the loading spout on the alumina ship loader and upgrades for the baghouses and dust capturing systems of the conveyors, completed in 2008, will remedy some of these concerns. The calciner electrostatic precipitators have also been upgraded to reduce alumina dust emissions.

Boiler operation is controlled by monitoring of combustion gases (O_2 and CO). The installed opacity instruments are not functional and there is no continuous air monitoring of the acid gas concentrations, NOx and SOx. The boilers and kilns all burn fuel oil with a typical sulphur content of 2.5 per cent (maximum permissible is 3.5 per cent). Some reduction in gas emissions has been realized by an energy efficiency initiative that uses waste heat to preheat hydrate going to two of the three kilns, lowering the fuel consumption from 98 kg/t of alumina to 92 kg/t. Boiler No. 3 was destroyed by an explosion in 2006 and will be replaced by a new boiler employing NOx abatement technologies. The refinery has no other plans to reduce NOx emissions. The most recent measurements of stack emissions from Boiler No. 1, taken in 2007 and corrected for dilution air, exceeded World Bank standards for NOx (482 mg/Nm^3 compared to 460 mg/Nm^3) and SOx (2694 mg/Nm^3 versus 2000 mg/Nm^3).

Fria Alumina Refinery is engaged in an ongoing programme to eliminate PCBs from site. In 2007, 45 tonnes of PCBs were sent from the refinery to France for utilisation at the 'Tredi' plant in Saint Vulba. Destruction of the remaining 30,000 litres of PCB contaminated transformer oil is to be completed in 2009-2010 and disposal as scrap of contaminated equipment is scheduled for 2011-2014.

4.2.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility. Production at the refinery was temporarily reduced by 50 per cent of the installed capacity in July 2009 to correct an internal UC RUSAL over supply of alumina. UC RUSAL has advised Hatch that the idled capacity was subsequently restarted in August 2009.

UC RUSAL has advised that destruction of the remaining 30,000 litres of PCB contaminated transformer oil has been postponed and is now due for completion in 2010-2011 and disposal as scrap of contaminated equipment is scheduled for 2012-2014.

4.2.6 Specific Risks and Future Opportunities

Specific Risks

- **Asset Integrity** — In recent years, the captive power plant has experienced a number of incidents resulting in power failures, which has led to damage of equipment and the loss of alumina production. The incidents have occurred as a result of operator error and the general poor condition of the power plant. To mitigate this risk, the power plant is currently undergoing a modernisation programme which is due to be completed in 2010.

- **Environmental Regulation** — The "Code Sur la Protection et la Mise en Valeur de l'Environnement" of the Republic of Guinea currently imposes no quantitative discharge criteria on the operations of the alumina refinery. Bringing the refinery in line with the standards required by the World Bank would require significant investment. In particular, acid gas emissions and caustic losses to surface and groundwater would need to be addressed.

- **Social/Labour Risk** — The refinery currently provides electricity and water to the town of Fria, a precedent established by previous owners. As the town has grown, the commitment has increased and disengagement of these services from the refinery will be very challenging. UC RUSAL continues to actively support the social infrastructure in the Fria town. Social unrest is prevalent throughout Guinea and in the locality, and there have been several work disruptions relating to labour activity in recent years.

- **Health and Safety** — The railway from the refinery to the port passes through Conakry. As the capital has grown, so has the population living alongside the railway for the first 23 km. Investment in railway improvements in recent years has included elevated pedestrian crossings, barriers at road crossings, signage and a locomotive to conduct track condition assessments. There are now 46 controlled access points along the rail line. Effort has also been expended to educate the population on the dangers associated with the railway and villagers have been appointed as local "captains" to better enforce the safety message. The number of fatalities and injuries on the railway involving the public is decreasing following these improvements.

Future Opportunities

- **Capacity Expansion** — The Fria expansion project is a brownfield expansion of Fria Alumina Refinery to 1,050 ktpa of alumina. A detailed feasibility study on the expansion/modernisation of Fria Alumina Refinery has been completed. The project is currently on hold. Key areas for development include implementation of a new red mud settling and washing system, implementation of a two-stage inter-stage cooling facility in precipitation, addition of new precipitator tanks with mechanical agitation and implementation of new equipment (such as mills, conveyor belts, pumps, calciner, bauxite storage, etc.) as necessary to handle increased material flows. A further 10 m lift of Dam No. 3 in the residue disposal area would also be required.

4.3 Aughinish Alumina

4.3.1 Introduction

Hatch undertook a site visit to Aughinish Alumina in October 2008. This Section 4.3 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.3.2 — Updated with data and information as of September 2009,

- Section 4.3.3 — Process Description as of October 2008,

- Section 4.3.4 — Environmental Status as of October 2008,

- Section 4.3.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 4.3.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.3.2 History, Location and Infrastructure

Aughinish Alumina is situated on Aughinish Island on the south side of the Shannon estuary between Askeaton and Foynes, 32 km downstream from Limerick City, Ireland. Aughinish Alumina commenced production in 1983. Aughinish Alumina is served with a captive deep-water terminal in the Shannon Estuary for the import of raw materials and export of finished product.

Aughinish Alumina had an initial rated capacity of 800 ktpa of alumina. The capacity of the refinery has since increased through a combination of continuous improvements in the installed equipment, process improvements, modifications and expansions. Production at Aughinish Alumina was 1,890 kt in 2008.

4.3.3 Process Description

Bauxite is shipped to Aughinish Alumina in bulk ore carriers from Compagnie des Bauxites de Guinea (CBG), in Guinea, and Mineracao Rio do Norte (MRN), in Brazil.

The Aughinish refinery was designed by Alcan International, using Kaiser high temperature digestion technology and Alcan technology in the remainder of the refinery. The exception is the alumina calciners which are an early model of the Alcoa Fluid Flash Calciner. In 2002, a "bauxite sweetening" process was added to the refinery to increase alumina production.

- The bauxite feed to the refinery is wet ground to the required size for digestion in combined rod/ball mills. All of the four installed mills are operated to achieve the current production rate.

- The ground bauxite slurry is heated to 100°C by direct steam injection and stored in slurry storage tanks to achieve desilication of the slurry. There are four pre-desilication tanks installed, with three used at any one time. After pre-desilication, the ground bauxite slurry is injected into the digesters.

- The caustic liquor required for digestion is heated in a series of shell and tube heat exchangers, in what is known as "dual stream" digestion. The ground bauxite slurry, hot caustic liquor and high pressure steam is injected into the digester vessels arranged in a single train to achieve the required digestion temperature of 250°C.

- After digestion, the digested slurry is cooled in 10 flash stages to atmospheric temperature and pressure. The recovered flash steam is used to heat the incoming caustic liquor.

- In the bauxite sweetening process, separately ground and desilicated MRN bauxite is added to the eighth flash stage, giving an increase in production.

- After digestion, the sand component of the red mud is separated in hydro-separators, followed by washing of the sand in screw classifiers. The remaining red mud is then separated from the pregnant liquor in two decanter units which are arranged in parallel.

- The underflow from the decanters is combined and pumped to three red mud washers arranged in series, and then to eight rotary drum filters in parallel to recover the remaining caustic liquor and provide a high solids concentration red mud for stacking in the red mud area.

- Pregnant liquor overflowing the decanters is drains through gravity sand filters to remove fine suspended red mud residue. Pregnant liquor is then cooled to the precipitation fill temperature of 85°C by vacuum flash cooling. A further stage of cooling of the pregnant liquor is achieved in plate heat exchangers against spent liquor.

- Precipitation is commenced in two units, each with three agglomerators, with the addition of fine seed. Precipitation is completed in two units, each of 12 growth precipitators, with in-tank cooling on three tanks. All precipitators are mechanically agitated.
- Precipitated hydrate is classified in a system of primary and secondary gravity classifiers, supplemented by hydro-cyclones and finally by hydrate thickeners. Underflow from two of the three installed primary classifiers is pumped to the product hydrate filtration area.
- Primary classifier overflow is pumped to the secondary classifiers. Secondary classifier underflow is pumped to coarse seed filtration and filtered on two of the three installed disc filters before being returned to the growth precipitators. Secondary classifier overflow reports to the hydrate thickeners.
- Hydrate thickener underflow is pumped to the fine seed filters and filtered on one of the two installed disc filters, reslurried and returned to the agglomerators. Hydrate thickener overflow is spent liquor, which is heated and returned to digestion and grinding.
- Product hydrate is filtered and washed in three counter-current stages ending in pan filters, to provide a low moisture hydrate cake as feed to calcination. Calcination is achieved in three Alcoa Fluid Flash Calciners which have been heavily modified from their original design.

Since mid 2007 a significant source of production "opportunity loss" in sand filtration has been removed by the implementation of successful R&D work. Eight of the sixteen installed gravity sand filters have been converted to an improved filtration media. Significant improvement in the filtration rate and online time has been achieved. A further significant improvement in the efficiency of the digestion plant has been achieved by the implementation of a process additive to reduce heat exchanger scaling. A significant reduction in steam demand and hence energy consumption has been experienced.

Aughinish Alumina now sources all its electricity and steam requirements from a gas-fired captive combined heat and power (CHP) plant which was commissioned in January 2006. The CHP plant contains two gas turbines and two waste heat recovery boilers. The plant produces 150 MW of electricity, of which approximately 40 MW is consumed by the refinery and the balance supplied to the local grid. The total 300 tph of steam produced by the CHP plant is used by the refinery.

4.3.4 Environmental

Aughinish Alumina has achieved ISO 14001 environmental management certification. In addition, Aughinish have achieved Danish Standard DS 2403 for energy management.

Regulatory approval in the form of a revised Integrated Pollution Prevention and Control licence (register number P0035-04) was granted in April 2008 for an extension to the bauxite residue disposal area. The current area (Phase 1) occupies an area of 103 hectares. The new disposal area (Phase 2) will include an extension to Phase 1 with an additional area of 78 hectares. The Phase 2 disposal area extends from Aughinish Island onto the mainland, increasing the potential for contamination of the nearby groundwater aquifer and, thus, the sensitivity to this approach. Geomembrane liner material will be employed to assure containment of caustic liquors. Additional protection will be afforded by the IPPC licence condition requiring partial neutralisation of the red mud deposited in the Phase 2 area by January 2012. Studies have also been conducted to verify that the direction of groundwater flow is inwards from neighbouring lands to the Phase 2 site. After the planned expansion is complete, sufficient red mud storage will be made available for operation until 2026, given an assumed alumina production rate of 1.95 Mtpa. Both the Phase 1 and Phase 2 areas will remain as active disposal areas. Development of the Phase 2 bauxite residue disposal area has actively commenced.

Oxalate salt cake is currently co-disposed in the bauxite residue disposal area and is covered by the environmental permit despite being classed as a hazardous waste. In the future, oxalate salt cake would continue to be disposed only in the Phase 1 disposal area.

Leakage from the bauxite residue disposal area stormwater pond has been identified by the presence of high pH water at two observation wells (OW) located on the pond's northern edge. Originally, the sides of the pond were lined with a low permeability material but the pond base was unlined, relying on compacted estuarine deposits to form a barrier. In 2007, repairs were undertaken to the damaged liner on the northern side while also extending the lining to the base of the 6.5 hectare pond. Subsequently, the pH readings at OW1 and OW2 have trended towards 9 from the measured values of 11.5 and 12.4, respectively, in 2006.

Spillage of caustic liquors has resulted in past contamination of natural soils and groundwater. Four of 14 estuarine streams that are monitored on the plant foreshore indicate a pH greater than nine. Of these, the two highest flow streams are intercepted and treated. The remaining two streams are low flow and are not expected to impact the environment. Aughinish Alumina also routinely samples groundwater from 39 plant locations, including wells at the North Pond and South Pond. The strategy to minimize further potential contamination of the groundwater aquifer includes ongoing investment in a program to line process bunds and drains with steel, while reducing incidences of tank overflows through effective controls and alarming.

Stormwater containment from the bauxite residue disposal area and plant area is to be upgraded to a 1-in-200 year design event as a condition of the new Integrated Pollution Prevention and Control (IPPC) Licence. The East Pond and West Pond which receive site drainage will overtop under the design event condition if the discharge pump systems are unavailable for any reason, representing a potential source of soil contamination.

Dust generation from the bauxite residue disposal area is suppressed by spraying. A project undertaken in 2007 addressed a significant contributor to dust emissions by replacing the conveyor belt feeder for alumina loading at the port with enclosed air slides, while simultaneously installing a high capacity ventilation fan. Continued effort in 2008 will focus on the jetty feed system from Tower 1 on the inner berth. Dust deposition rates measured at several dust gauges are well below levels predicted to cause nuisance.

Energy usage at Aughinish has been improved through the use of an antiscalant in digestion, lowering total energy consumption to a world class level of approximately 10 GJ/t. Air emissions have been significantly improved through the use of low sulphur heavy fuel oil in the three plant boilers and the installation of two CHP gas-fired turbines in 2006. Through participation in the National Emission Reduction Plan, Aughinish is exempt from more restrictive NOx emission limit values that would have otherwise applied as of January 2008. However, the successful retrofit in 2007 of one of the plant boilers with a low NOx, high combustion efficiency burner offers a proven solution if further NOx emission reductions become necessary. Aughinish has also explored emissions trading with the Electricity Supply Board, and has the opportunity to exchange SOx credits for NOx.

Plant condensate is not recovered at present and is a major contributor to the total flow of 500-600 tph of industrial effluent. Attempts to recover condensate in the past have resulted in damage to the boilers. A dissolved air flotation treatment approach has been piloted successfully but will not be implemented immediately. Ultimately, the condensate recovery project is envisioned to accomplish the secondary objective of decreasing reliance on water from the local county council, where supply restrictions can be anticipated as the local population expands. Pressure on the council water supply has temporarily abated as a result of the reduction in steam use from 550 tph to 450 tph in connection with the use of the additive in digestion.

All storage tanks are locally bunded with the exception of the diesel tanks. These tanks are double-skinned and have been accepted by the Environmental Protection Agency. The only EPA audit non-compliance since 2006 was in relation to the testing frequency for bund integrity. This is viewed to be relatively inconsequential and is being addressed.

There were 21 complaints made in relation to the Aughinish operations in 2007, most with respect to air quality and all but two were submitted by a single individual. All complaints have been duly investigated and reported to the EPA.

4.3.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Aughinish Alumina is currently operating below its full production capacity following the closure of capacity implemented in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL are currently in the process of restarting the idled capacity and expect to complete this process by end-2009.

UC RUSAL has advised that in 2008 there were six complaints made in relation to Auginish Alumina operations with respect to air quality.

4.3.6 Specific Risks and Future Opportunities

Specific Risks

- **Mineral Tailings Directive** — A Mineral Tailings Directive is being developed by the European Union which may necessitate formal, annual tailings reviews. Aughinish Alumina already operate the bauxite residue disposal area responsibly and, in the most probable outcome, should not expect much change apart from additional reporting requirements and a one-time characterization of the leaching characteristics of the red mud.

Future Opportunities

- **Production Creep** — There is potential to address areas of opportunity loss within the refinery, such as calcination capacity (Calciner 3 capacity upgrade), hydrate washing and hydrate transfer to calcination capacity. If implemented these projects may lead to overall higher refinery production.

- **R&D Programme** — Aughinish Alumina has an R&D programme which is supported by extensive links with the Irish Government, Limerick University and industry bodies. The refinery has successfully obtained external funding for a variety of research activities. The programme has led to enhancements in the operation of the refinery, especially in the areas of digestion and calcination. There is an opportunity for similar enhancements to be researched by Aughinish Alumina for implementation at other UC RUSAL alumina refineries.

- **Greenhouse Gas Emissions** — Aughinish Alumina participates in the European Union Emissions Trading Scheme and they are poised to receive emissions credits for at least the next five years. Although a national carbon tax is predicted for Ireland, Aughinish anticipate being exempt by virtue of participation in the EU program. The greenhouse gas credits have a real economic value and the refinery expects to have approximately 100 kt in credits annually.

4.4 Eurallumina

4.4.1 Introduction

Hatch undertook a site visit to Eurallumina in October 2008. This Section 4.4 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.4.2 — Updated with data and information as of September 2009,
- Section 4.4.3 — Process Description as of October 2008,
- Section 4.4.4 — Environmental Status as of October 2008,
- Section 4.4.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 4.4.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.4.2 History, Location and Infrastructure

Eurallumina is located in Portoscuso, Italy, on the southwest coast of Sardinia. The refinery commenced production in 1973.

The refinery had an initial rated capacity of 600 ktpa of alumina, but a subsequent series of modifications and improvements have lifted present production capacity to approximately 1,100 ktpa.

Eurallumina has achieved OHSAS 18001 Occupational Heath and Safety certification.

The facility is currently not operational and is under care and maintenance. Refer to Section 4.4.5.

4.4.3 Process Description

In 2008 Eurallumina will be supplied with bauxite predominantly from the Weipa mine in Australia (92 per cent), and from the Kindia mine in Guinea (eight per cent). Steam for the refinery is generated in three high sulphur fuel oil fired boilers. Sumitomo flue gas desulphurisation technology is applied to reduce emissions of sulphur oxides to below permitted levels. All electricity supply to the refinery comes from the Italian national grid.

Eurallumina currently produces alumina on a toll basis for UC RUSAL, who supplies the refinery with bauxite in return for the finished alumina product.

The digestion area of Eurallumina is based on Kaiser high temperature technology.

- The bauxite feed to the refinery is wet ground to the required size for digestion in dual chamber mills, with different sized grinding balls in each chamber.

- The ground bauxite slurry is heated to 100°C by direct steam injection, and stored in slurry storage tanks to achieve desilication of the slurry. There are four pre-desilication tanks installed, with two operational at any one time. After pre-desilication, the ground bauxite slurry is injected into the digesters.

- The caustic liquor required for digestion is heated in a series of shell and tube heat exchangers. The ground bauxite slurry, hot caustic liquor and high pressure steam is injected into the digester vessels arranged in a single train to achieve the required digestion temperature of 250°C.

- After digestion, the digested slurry is cooled in 10 flash stages to atmospheric temperature and pressure. The recovered flash steam is used to heat the incoming caustic liquor.

- After digestion, the sand component of the red mud is separated in cyclones, followed by washing of the mud in rake classifiers. The remaining red mud is then separated from the pregnant liquor in two units of settlers (three installed, with one on standby). The underflow from the settlers is combined and pumped to five red mud washers arranged in series. The red mud is then filtered on four rotary drum filters in parallel to recover the remaining caustic liquor.

- Pregnant liquor overflowing the settlers is filtered using 12 (with nine operational at any one time) horizontal pressure "Kelly Filters" to remove fine suspended red mud residue. Pregnant liquor is then cooled to the precipitation fill temperature of 74°C by vacuum flash cooling, against cold spent liquor in shell and tube heat exchangers.

- The precipitation circuit consists of three units, each with 12 precipitators. The first 10 precipitators on each unit are mechanically agitated with draft tubes, while the last two on each unit are air agitated. Fine and coarse seed are added to the precipitators to initiate and assist hydrate precipitation. After the fourth precipitator in each unit, an "interstage cooling" step is used to further increase the precipitation of hydrate.

- Precipitated hydrate is classified in a system of primary and secondary gravity classifiers, supplemented by hydro-cyclones, and finally by hydrate thickeners. Primary classifier overflow flows by gravity to the secondary classifiers. Secondary classifier underflow is pumped to one coarse seed filter on top of each precipitator unit. Secondary classifier overflow reports to the hydrate thickeners. Hydrate thickener underflow is pumped to the fine seed filters and filtered, reslurried and returned to the first precipitator tanks. Fine seed is washed to remove sodium oxalate contamination. Hydrate thickener overflow is spent liquor, which is heated and returned to digestion and grinding. Spent liquor is concentrated in two evaporator units of the three units installed. The third evaporator unit has been decommissioned.

- Product hydrate is washed in hydrate washing tanks in the classification area, before being pumped to the product pan filters where a further three stage counter-current wash is applied on the filters.

- Calcination is achieved in two FFE rotary kilns. A third rotary kiln has been modified into a gas suspension calciner for improved fuel efficiency.

4.4.4 Environmental

Eurallumina has achieved ISO 14001 environmental management certification.

Red mud was disposed at sea for a brief period at the commencement of plant operations followed by an interval (1973-1977) of disposal in the temporary "Su Stangioni" facility. The original bauxite residue disposal area at Eurallumina was commissioned in 1977 and occupies a

combined 120 hectares between Part A and Part B. Approval was granted in 2007 to expand the bauxite residue storage capacity. This will be partly achieved via a raise of the dam crest in the original disposal area from the current elevation of 25 m to an ultimate elevation of 36 m. An additional 52 hectares of land has also been allocated (Part C), with storage subdivided between northern and southern sections. Residue deposition in this area has already commenced. Future stage lifts of the dams in Parts A, B and C are planned such that new residue disposal capacity is provided shortly before it is required. The disposal capacity for bauxite residue will be exhausted by 2017 at the projected production rates. Oxalate salt cake is co-disposed with the red mud in all parts of the bauxite residue disposal areas.

The initial dam of 10 m height in the original basin was not clay lined, although subsequent lifts have incorporated clay lining of the basin walls. A compacted clay layer of 1 m thickness will also be used to seal the walls and floor of the new basin. The risk of groundwater contamination from present and future residue disposal is also limited by the permit requirement that red mud be partially neutralised to a pH of less than 11 prior to discharge to the storage basin. Roughly 45 per cent of the red mud is neutralized using the Sumitomo technology and acid is used for the remainder.

Much of the temporary Su Stangioni residue disposal area has been transferred to other tenants in the industrial complex where Eurallumina is situated. Eurallumina only retains responsibility for a small portion of the land contaminated as a result of previous actions. Commitment has been given to rehabilitate this land, converting it to a stormwater and recycle water pond. This work has not yet commenced.

Closure plans for the bauxite residue disposal area are well developed and feature a 1 m cover using blended red mud and soil underneath a 0.5 m layer of topsoil. The exterior sidewalls of the basin have been attractively revegetated, demonstrating viability of the rehabilitation methods. Mud storage has not been a source of any local complaints.

Groundwater and surficial wells at the perimeter of the bauxite residue disposal area and throughout the plant site exhibit high conductivity and pH levels in excess of nine. Wells at the boundary of the industrial estate also show metal contamination in the groundwater which is most likely traced to other occupants of the industrial estate. A coordinated remediation approach involving all industries in the Portovesme area has been defined, consisting of a hydraulic barrier formed by 84 wells at the estate perimeter and accompanied by a centralized water treatment plant. However, this awaits implementation as the plan has not yet been ratified by the local authorities. Eurallumina has advanced work on a system of 24 wells at the refinery perimeter to prevent the migration of contaminated groundwater away from the plant boundary.

There is no discharge of wastewater from the plant. Water is recycled from the bauxite residue storage area for use primarily in the wash circuit and Sumitomo air emission abatement equipment.

Air emissions from the boilerhouse and three rotary kilns are regulated for particulates, NOx and SOx. Sumitomo desulphurisation units were installed in 2000 at the combined emission points for the boilers and the kilns to address elevated sulphur oxides concentrations resulting from the burning of high sulphur fuel oil. Uptimes on the Sumitomo units are approximately 85 per cent. Since June 2007, Eurallumina has met the requirement of the regional authorities to burn low sulphur fuel oil (LSFO) during shutdowns of the Sumitomo units with the exception of July 2008 when an unplanned maintenance outage coincided with supply problems for low sulphur fuel. Final action by the regional authority in response to this violation has not yet been taken. Eurallumina are also engaged in dialogue with the authority on a point of interpretation of the permit condition and do not currently switch to LSFO when performing maintenance on the gas-gas heat exchangers that are connected to the Sumitomo units.

Data from 2008 indicates a persistent difficulty in meeting the 650 mg/Nm^3 discharge limit for NOx at the boiler stack. Eurallumina claim that the problem relates to calibration of the gas analyzers, and this explanation has been accepted thus far by the regional authority. Instrumentation capable of providing reliable stack monitoring data must be located and installed.

An asymmetric bucket telescopic chute was added in 2000 to the original air slide conveyor system for alumina loading at the port. The bauxite unloading hopper has also been fitted with an enclosure and spray system for use when handling Kindia bauxite. These measures have resolved previous issues relating to dusting, which had resulted in complaints from the neighbouring coal-fired power plant. The berth for alumina loading is now exceptionally clean.

4.4.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Eurallumina is currently not operational following the full closure of the plant implemented in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the current full plant closure as temporary and that the plant is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

4.4.6 Specific Risks and Future Opportunities

Specific Risks

- **Groundwater Alkaline Concentration** — Groundwater at the perimeter of the red mud disposal area and throughout the plant site exhibits a high pH and needs to be contained. There is a requirement for preventative action to be taken jointly by Eurallumina and other nearby industrial operations. Resolution of groundwater contamination issues requires cooperation from other local industries. UC RUSAL has advised Hatch that the local authorities have approved a hydraulic barrier strategy.

- **Future Bauxite Residue Disposal Area** — The storage capacity of the present bauxite residue storage area will be exhausted by 2017. Preliminary options for future disposal areas increase the environmental risk by either being further away from the refinery and requiring higher pumping pressure or by being closer to the sea with the associated potential for marine contamination.

Future Opportunities

- **Efficiency Upgrade** — There is potential to reduce operating costs through sourcing of alternative bauxite supplies in the future.

- **Bauxite Supply Change** — There is a strategic aim at Eurallumina to reduce the reliance on Weipa bauxite. Weipa bauxite is expensive to procure, transport and process. The plant was previously capable of processing 30 per cent Kindia bauxite, however, capital was spent in 2008 to upgrade process facilities to enable the percentage of Kindia bauxite to be increased to 40 per cent. Further engineering work is planned to examine the equipment changes needed to process an increase to 100 per cent Kindia bauxite.

- **Combined Heat and Power Plant (CHP)** — Escalating fuel oil and electricity costs are major contributors to the high unit production cost at Eurallumina. There is a conceptual plan to take advantage of Algerian natural gas, which is potentially available from 2011.

4.5 Alpart

4.5.1 Introduction

Hatch undertook a site visit to Alpart in October 2008. This Section 4.5 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.5.2 — Updated with data and information as of September 2009,

- Section 4.5.3 — Process Description as of October 2008,

- Section 4.5.4 — Environmental Status as of October 2008,

- Section 4.5.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 4.5.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.5.2 History, Location and Infrastructure

Alpart is situated in the plains of St. Elizabeth, some 5 km from the village of Nain in Jamaica. As with other refineries in Jamaica, the refinery is surrounded by agricultural activities, both small scale and large scale farming and growing residential areas. UC RUSAL currently owns 65 per cent of Alpart. The remaining 35 per cent is owned by Norsk Hydro.

Port Kaiser services Alpart for the movement of bulk materials, primarily alumina, fuel oil and caustic. A private 15 km rail line links the plant to the port. Alumina and caustic are moved by rail; whereas fuel oil is pumped to the plant.

Alumina production at the Alpart refinery commenced in 1968. Alpart initially had a nameplate capacity of 860 ktpa of alumina, which has since increased to approximately 1,650 ktpa following successive expansions. The actual production rate in 2008 (based on 100 per cent of the refinery production) was 1,652 kt.

The facility is currently not operational and is under care and maintenance. Refer to Section 4.5.5.

4.5.3 Process Description

The refinery operates the sweetening process, where bauxite rich in mono-hydrate bauxite (MGB) is digested at a high temperature (242°C) and, in the depressurising flash tank train, bauxite rich in tri-hydrate bauxite (TGB) is used to increase, hence sweeten, the alumina in solution.

Bayer process

- Bauxite is mined and transported by cable belt to the plant in campaigns of MGB and TGB, where the two grades of bauxite are kept separate as much as possible. From the covered bauxite stockpile, the MGB is pushed into hoppers. A wobbler feeder removes limestone greater than approximately six inches, prior to feeding the bauxite to a mill. TGB also passes through a wobbler feeder, feeding a rod mill. Mill oversize is removed by conveyor, the tramp iron removed by magnetic separator, the mill oversize re-slurried in spent liquor and the limestone particles rejected to ground.

- The MGB and TGB slurries are heated and pre-desilicated in separate trains of atmospheric tanks. Spent liquor is heated in 11 stages, with the last stage of heating fed by direct steam injection from the first flash tank. The heated spent liquor and the MGB bauxite slurry are combined in digesters and steam is injected to raise the temperature to 242°C, where the gibbsite and boehmite are leached from the bauxite. The MGB digested slurry is then depressurised in 11 stages of flashing, with the flash steam heating the incoming spent liquor. TGB bauxite is injected to the sixth flash tank, so that there is sufficient time to dissolve the gibbsite.

- The digested slurry is pumped through cyclones, with coarse material (sand) discharging to a sand classifier and the degritted slurry passing to the liquor decanters. The sand is washed with condensate and dumped into the waste tank. The red mud is separated from the liquor in thickeners, and the overflow liquor is pumped to the polishing filtration stage. The underflow, red mud, is washed in two trains, each of 10 counter-current washing stages. Mud from the last washing stage is pumped to the waste tank, where it is combined with sand, calcium oxalate slurry and spent acid, and is then pumped to the red mud disposal area.

- The filtrate liquor is cooled, and the alumina tri-hydrate is precipitated onto seed, which had been previously precipitated. The solids are then separated into different size fractions — product size, coarse seed, and fine seed, with the seed being returned for further precipitation. The spent liquor which has been stripped of its alumina, is heated, evaporated and returned to the digestion circuit.

- The product size alumina tri-hydrate is filtered, washed with hot water, and fed to calciners. Calcination is carried out in three rotary kilns and two newer, more efficient stationary Lurgi calciners. The alumina is stored in bins, loaded in hoppers and transported by rail to Port Kaiser.

In the dedicated co-generating powerhouse, well water is treated, and passed through heavy fuel oil-fired boilers. There are four boilers and four turbo-generators, two of which are provided with condensers to balance the swings in electrical demand. The extracted steam is exported primarily to the digestion and evaporation sections, and the condensate returned to the powerhouse. There is no connection to the national grid. Compressors provide air for general plant consumption and for instruments.

Make-up water for the plant is provided by wells, which tap the underground aquifer.

4.5.4 Environmental

Red mud has been disposed in an enclosed valley, referred to as the South Lake, since the inception of operations. The West Lake extension was constructed in 1992 to provide additional storage capacity. The total residue area now occupies a land area of 350 ha. A spillway was added in the aftermath of a dam failure suffered during Hurricane Ivan in 2004, to divert run-off from the mud lake to the environment in times of excessive rainfall. Several action items have arisen

from the 2007 dam stability assessment, including the requirement to improve the North Dam factor of safety by re-grading on the downstream side and lowering the water table to relieve high pore water pressures. Without stabilization, the potential exists for total dam failure and any seismic event would likely be catastrophic.

Operation of the residue disposal area is governed by Natural Resources Conservation Authority permit 02P95, granted in 1998. A specific requirement of the permit is for a surge basin to collect and recycle rain runoff water from the mud impoundment for a rainfall return event of fifty years. Ten environmentally reportable incidences of surge basin overflows or other liquor losses from the Residue Disposal Area (RDA) were noted in 2007, indicating the inadequacy of the currently installed containment volume. Partial improvement has been achieved in 2008 through procedural changes, resulting in only one reportable overflow as of October 2008. However, much of the reduction in frequency of environmental events is attributable to decreased severity in rainfall patterns. Investment is needed for surge basin improvements. The permit for operation of the RDA is due for re-issue and measures for better containment of alkaline water are expected to be mandated. Some gains in containment may be realized via diverting unaffected rainwater runoff away from the RDA catchment basin.

Plant drains, some of which are unsealed, are directed to unsealed collection ponds, and returned to the plant. Sealing of the plant drains and equipment foundations, focusing initially on the clarification area, is included in the capital plan. Groundwater and surface water quality is monitored in several locations surrounding the plant and red mud disposal areas. The plant wells (Nos. 1, 3 and 5) located closest to the northern edge of the refinery exhibit alkaline contamination with pH greater than 11 and sodium concentrations above 1000 mg/L. The Doncaster monitoring well on the southern boundary of South Lake has also detected caustic contamination beginning in mid-2007. Caustic contamination of the groundwater aquifer underlying the North Lake, a decommissioned mud disposal area, has steadily decreased over the past decade.

Alpart is unable to use the condensate recovered from digestion to supply make-up water to the 1500 psig boilers due to the stringent water quality demands, especially with regards to silica concentration. The condensate, flowing at approximately 2000 gpm, is currently disposed of, after a heat recovery step by injection, into fissures in the rock underlying the site. A treatability study is underway to evaluate options and costs to produce water suitable for boiler feed.

Incidents of caustic vapour emissions primarily occur from the high temperature digestion unit. These have been minimized through modifications to the vent arrangement and addition of drift eliminators to the blow-off tank on one digestion train and the installation of a control valve to dampen pressure surges in the other train.

Dust emissions from the calcination area, the powerhouse and from the mud lakes have been the cause of complaints from the community. A “marsh buggy” was purchased in 2008 to assist with dust control in the mud disposal area by keeping the surface moist. Jamaican bauxite typically contains above average mercury content, which is emitted to atmosphere during the alumina refining process. Methods to reduce the emission of mercury at Alpart are being investigated.

Dust emissions, especially during alumina ship loading, are a cause for concern, and are the source of complaints from a small fishing village to the west of the port. Severe damage to the pier was sustained in the 2005 hurricane season, which led to alumina shipments being suspended and production at the plant curtailed, until repairs to the pier were completed.

Jamaican regulations define ambient air quality standards for total suspended particulates, carbon monoxide, ozone and the acid gases (SOx and NOx). There are no ambient air quality issues at any of the monitoring stations situated at strategic locations surrounding the refinery. The only parameter with a defined limit for point source stack emissions is opacity. Alpart has

experienced intermittent compliance problems with the 20 per cent opacity limit on various stacks. A maximum sulphur content of three per cent is specified for the fuel oil. In accordance with emerging legislation, all Jamaican refineries have been required to submit applications for Air Pollutant Discharge Licences. For Alpart, it is anticipated that continuous particulate monitoring will be required for each of the nine stacks (four boilers and five calciners). Additionally, the dust emission abatement systems for the calciners and silos will require rehabilitation or upgrade and alumina losses during ship loading at the port must be addressed.

Bunds surrounding the liquid storage tanks appear to be inadequate, with visible signs of erosion in the bund floor. Surface oil is visible in the pond adjacent to the diesel storage tanks and railcar unloading area.

Asbestos has been identified in vessels and pipes. About 45 per cent of the asbestos originally identified has been bagged and stored in containers, and the containers are to be buried. The remaining asbestos in the plant is to be removed in 2009.

4.5.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the production technology and process employed at the refinery.

Alpart is currently not operational following the closure of one-half of the plant in the first quarter of 2009 and the closure of the remainder of the plant in the second quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the current full plant closure as temporary and that the plant is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

UC RUSAL has advised that Alpart has achieved ISO 14001 environmental management certification.

4.5.6 Specific Risks and Future Opportunities

Specific Risks

- **Groundwater Contamination** — The incidences of soda contamination of the surrounding groundwater may lead to more restrictions on discharges and the requirement for a sealed mud disposal area with adequate runoff containment. Renewal of the licence for the residue disposal area is expected to be granted conditionally on improvements in this regard.

- **Bauxite Quality** — Decreasing alumina content as well as increasing silica content in the bauxite feed are expected to adversely impact production in the future. An increasing amount of bauxite from Windalco may also be processed which contains a hard to settle mineral called goethite. Increasing silica content will also increase the chemical soda losses from the refinery. These issues will also tend to increase the mud factor. Projects have commenced to modify the mud washing circuit to cope with the change in bauxite quality.

- **Trade Effluent Standards** — The generic Jamaican National Trade Effluent Standards specify limits for sodium (100 mg/L) and sulphate (250 mg/L). Compliance with these limits would be onerous for the bauxite industry if these limits were enforced.

Future Opportunities

- **Capacity Expansion** — A pre-feasibility study has been completed on the Alpart Expansion project which is planned to expand refinery capacity to 1,950 ktpa. The scope of the project is focused on both increasing flow and yield through debottlenecking and including additional seed filtration.

4.6 Windalco-Ewarton Works

4.6.1 Introduction

Hatch undertook a site visit to Windalco-Ewarton in October 2008. This Section 4.6 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.6.2 — Updated with data and information as of September 2009,
- Section 4.6.3 — Process Description as of October 2008,
- Section 4.6.4 — Environmental Status as of October 2008,
- Section 4.6.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 4.6.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.6.2 History, Location and Infrastructure

The Windalco-Ewarton Works is equidistant from the capital, Kingston and a major tourist resort, Ocho Rios. The refinery is located approximately 10 km north of the market town of Linstead, and approximately 5 km south of the town of Ewarton. The refinery is surrounded by agricultural activities, both small scale and large scale farming, and growing residential areas.

Windalco have obtained the rights to use the 'bauxite corridor' of the state-owned railway line, approximately 120 km in length, which connects Ewarton Works, Port Esquivel and Kirkvine Works. The rail line is operated and maintained for Windalco's operations alone, with a fleet of locomotives and rail cars used to move alumina, caustic, fuel oil and lime between the three locations.

Windalco owns, maintains and operates Port Esquivel, which handles alumina storage and loading, and caustic and fuel oil storage and off-loading.

A major road connecting the capital to the north coast, via the Rio Cobre gorge, passes through Ewarton.

Alumina production at Windalco-Ewarton Works commenced in 1959, with the commissioning of the first digester unit. The current nominal capacity of Windalco-Ewarton Works is approximately 650 ktpa.

The facility is currently not operational and is under care and maintenance. Refer to Section 4.6.5.

4.6.3 Process Description

The refinery operates a low temperature Bayer digestion process, capable of extracting only the gibbsitic alumina from the bauxite.

Bayer process

- Bauxite is mined from the integrated Ewarton bauxite mines and transported to the plant by truck on a dedicated system of private haul roads.

- From the plant stockpile, bauxite is pushed into dedicated panfeeders, which feed five ball mills, where the bauxite is slurried with spent liquor. The bauxite slurry is heated and pre-desilicated in a series of atmospheric tanks. Bauxite slurry fed to one digestion unit of the refinery (50 per cent of the total slurry) is preheated using a system of Indirect Bauxite Slurry Heating (IBSH). This recently installed system has reduced energy consumption and caustic losses due the reduction in water input to the refinery, compared with the direct steam injection previously used on this unit.

- Spent liquor is heated in four stages of heating, with the final stage being fed with exhaust steam from the dedicated co-generating powerhouse. The heated spent liquor and the bauxite slurry are combined in digesters at 135°C, where the gibbsite is leached from the bauxite. The digested slurry is then depressurised in three stages of flashing, with the flash steam heating the incoming spent liquor.

- Red mud is separated from the solution, supersaturated in alumina, in conventional liquor decanters, and the overflow liquor is pumped to the polishing filtration stage. The underflow, red mud, is washed in a series of counter-current washing stages, consisting typically of three thickeners per stage. The last stage(s) of mud washing is accomplished in four deep thickeners, which serve to produce a mud with the consistency desired for disposal. The mud is then pumped to the red mud disposal area.

- The filtrate liquor is cooled, and the alumina tri-hydrate is precipitated onto seed, which had been previously precipitated. The solids are then separated into different size fractions — product size, coarse seed, and fine seed, with the seed being returned for further precipitation. The spent liquor, which has been stripped of its alumina, is heated, evaporated and returned to the digestion circuit.

- The product size alumina tri-hydrate is filtered, washed with hot water, and calcined to form alumina. The alumina is stored in bins, transported in rail cars to the dedicated port, and then shipped to its destination.

In the dedicated co-generating powerhouse, well water is treated, and passed through heavy fuel oil-fired boilers. The superheated steam from the boilers is then passed through turbo-generators, with extraction of steam at two intermediate pressures. A condensing turbine is provided to balance the swings in electrical demand. The extracted steam is exported primarily to the digestion and evaporation sections, and the condensate returned to the powerhouse. Stand-by power is provided by diesel generators, and there is a connection to the national grid. Compressors provide air for general plant consumption and for instruments.

Make-up water for the plant is provided by wells, which tap the underground aquifer.

4.6.4 Environmental

Windalco-Ewarton Works has achieved ISO 14001 environmental management certification.

Following the start-up of Ewarton Works, mud was originally disposed of in a natural valley, which was enclosed for this purpose. In 1976 (prior to UC RUSAL interest in the refinery), soda contamination of the surrounding groundwater streams was acknowledged by the owners. The unused mud pond, Mount Rosser, which is to be remediated by its former owners, continues to contribute to a higher than background level of soda in surrounding water streams. In 1980, the Government of Jamaica approved Mud Stacking and Drying Technology, which consisted of thickened tailings treated in the novel deep thickeners and distribution of the mud in thin layers on a gently sloped terrain to enhance solar drying. The disposal area, which was constructed at Charlemont, includes a sealed mud stack of approximately 100 hectares, collection of the effluent and rainwater run-off in a sealed holding pond and return of the pond water to the plant. The design intent of the holding pond is to provide containment of the 50-year return period rainfall event. However, effluent has overtopped the pond dams roughly at two year frequency, resulting in uncontrolled release of high pH pond water to the environment. Improved containment of pond water is required to meet the design objective and avoid environmental consequence.

Dust and odour from the mud disposal area have been the subject of complaints from the community. Sprinkler systems have been installed to reduce incidences of dusting. The active residue disposal area appears to be well managed and is monitored annually for stability and phreatic surface levels within the embankment.

Groundwater and underground water is sampled and monitored in several locations surrounding the plant and red mud disposal areas. Soda contamination at Wells 1, 2 and 3, adjacent to the plant, have shown an increase in recent years, although this increase in soda contamination has not been observed at other, more distant monitoring stations. Water from these contaminated wells is pumped to the plant or to the mud stacking site.

The majority of plant drains are directed to a small sump at the western section of the plant, and to a larger sump at the eastern section of the plant. The effluent is normally returned to the plant with a provision for neutralization in the event of overtopping. Aqueous waste streams from the powerhouse, including acidic water generated from condensate washes of the air preheater baskets, flows to the north drain and leaves the site without undergoing treatment. Redirection of the north drain to one of the sumps is needed to eliminate this routine discharge of contaminated surface water.

Calcination capacity is a bottleneck for Ewarton operations, resulting in on-site storage of hydrate and pressure on the regular maintenance schedule for the rotary kilns. In particular, the satellite cooler sections are in poor repair and are a source of significant particulate emissions.

Jamaican regulations define ambient air quality standards for total suspended particulates, carbon monoxide, ozone and the acid gases (SOx and NOx). Some particulate air quality issues have been reported at monitoring stations surrounding the refinery and the hourly target sulphur dioxide concentration was exceeded once at Orangefield in March 2008. Ambient air quality is a product of several factors, not all of which are within the control of the refinery. Ewarton has been in full and constant compliance with the limit placed on maximum sulphur content (three per cent) in the fuel oil.

The only parameter with a defined limit for point source stack emissions is opacity. All three rotary kilns met the 20 per cent opacity target for greater than 80 per cent of measurements in 2007. Some investment in the kiln emission abatement systems is needed to ensure greater

compliance with the regulations. In accordance with emerging legislation, all Jamaican refineries have been required to submit applications for Air Pollutant Discharge Licences. Initially, it is expected that additional stack monitoring equipment will be required, with other advancements to follow.

Jamaican bauxite typically contains above average mercury content, which is emitted to atmosphere during the alumina refining process. There are no programs to reduce the emission of mercury at Windalco-Ewarton, although such remedial practices can be achieved at relatively low capital expenditure. Such programmes have been successfully demonstrated at other alumina refineries.

Bunding for chemical storage tanks at Ewarton is not acceptable. The caustic and sulphuric acid storage tanks are not bunded. Fuel oil storage tanks are contained by an earthen bund with a concrete foundation but unsealed side walls.

4.6.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Windalco-Ewarton is currently not operational following the full closure of the plant implemented in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the current full plant closure as temporary and that the plant is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

Hatch was advised that work on expanding the red mud disposal area has continued throughout the closure of the refinery to ensure a smooth restart of alumina production operations in the future.

4.6.6 Specific Risks and Future Opportunities

Specific Risks

- **Groundwater Contamination** — The incidences of soda contamination of the surrounding groundwater may lead to more restrictions on discharges. In particular, there has been an upward trend in soda contamination at Wells 1, 2 and 3 (adjacent to the plant) and frequent overtopping of the stormwater pond at the RDA.

- **Bauxite Quality** — Declining alumina content in the bauxite feed and the presence of hard to process goethite in the ore, will provide challenges to any future increase in production rate.

- **Residue Disposal Area** — UC RUSAL has advised that the dam at the residue storage area is being lifted by 3m which will provide storage for an additional five years of operation. Beyond this period, a modified approach to residue storage will be required. The refinery has already identified a strategy to permit continued operation using the same RDA footprint.

- **Trade Effluent Standards** — The generic Jamaican National Trade Effluent Standards specify limits for sodium (100 mg/L) and sulphate (250 mg/L). Compliance with these limits would be onerous for the bauxite industry if these limits were enforced.

- **Safety and Housekeeping** — There is an excessive amount of redundant equipment left in place at the refinery. There is also evidence of excessive process spills, particularly in the grinding and precipitation areas. While the age of the refinery, and batch, air agitated nature of the precipitation process explain some of this spillage, the level of housekeeping and spills management observed was exceedingly poor.

Future Opportunities

- **Process Efficiency** — Indirect Bauxite Slurry Heating has been applied to one digestion unit, which processes 50 per cent of the total bauxite slurry. Application of this technology to the remaining digestion unit would give the potential to further reduce energy and caustic soda consumption.

- **Capacity Expansion** — A feasibility study has been completed to expand the refinery by 500 ktpa, although it is understood that further development work is required to be undertaken.

- **Coal fired Power Plant** — UC RUSAL are currently studying the option of constructing a coal fired heat and power plant to provide the steam and electricity requirements of the Ewarton refinery, with benefits in the reduction of alumina operating costs at the plant.

4.7 Windalco-Kirkvine Works

4.7.1 Introduction

Hatch undertook a site visit to Windalco-Kirkvine in October 2008. This Section 4.7 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.7.2 — Updated with data and information as of September 2009,

- Section 4.7.3 — Process Description as of October 2008,

- Section 4.7.4 — Environmental Status as of October 2008,

- Section 4.7.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 4.7.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.7.2 History, Location and Infrastructure

The Windalco-Kirkvine Works is situated in Jamaica, in the hilly regions of the centre of the island. The refinery is some 15 km from Mandeville, approximately 400 meters above sea level.

Windalco have obtained the rights to use the 'bauxite corridor' of the state-owned railway line, approximately 120 km in length, which connects Kirkvine Works, Port Esquivel and Ewarton Works. The rail line is operated and maintained for Windalco's operations alone, with a fleet of locomotives and rail cars used to move alumina, caustic, fuel oil and lime between the three locations.

Windalco owns, maintains and operates Port Esquivel, which handles alumina storage and loading, and caustic and fuel oil storage and off-loading. The major east-west road passes by Windalco-Kirkvine.

The Kirkvine Works started production in 1953 as a pilot plant and has gradually increased production to a nominal alumina capacity of 600 ktpa, following plant reinforcement and operational improvements since first commissioning.

The facility is currently not operational and is under care and maintenance. Refer to Section 4.7.5.

4.7.3 Process Description

The refinery operates a low temperature Bayer digestion process, capable of extracting only the gibbsitic alumina from the bauxite, and is similar to Windalco's Ewarton Works.

Bayer process

- Bauxite is mined from the integrated Kirkvine bauxite mines and transported to the plant by truck on private haul roads.

- From the plant stockpile, bauxite is pushed into dedicated panfeeders, which feed five ball mills, where the bauxite is slurried with spent liquor. The bauxite slurry is heated and pre-desilicated in a series of atmospheric tanks. Spent liquor is heated in four stages of heating, with the final stage being fed with exhaust steam from the dedicated co-generating powerhouse. The heated spent liquor and the bauxite slurry are combined in digesters at 135°C, where the gibbsite is leached from the bauxite. The digested slurry is then depressurised in three stages of flashing, with the flash steam heating the incoming spent liquor. Digested slurry is pumped through cyclones, with coarse material (sand) discharging to a sand classifier, and the degritted slurry passing to the liquor decanters. The sand is washed with condensate and trucked to an industrial disposal site.

- Red mud is separated from the solution, supersaturated in alumina, in conventional liquor decanters, and the overflow liquor is pumped to the polishing filtration stage. The underflow, red mud, is washed in a series of counter-current washing stages, consisting typically of three thickeners per stage. The last stage(s) of mud washing is accomplished in four deep thickeners, which serve to produce a mud with the consistency desired for disposal. The mud is then pumped to the red mud disposal area, using positive displacement (Geho) pumps.

- The filtrate liquor is cooled, and the alumina tri-hydrate is precipitated onto seed, which had been previously precipitated. The solids are then separated into different size fractions — product size, coarse seed, and fine seed, with the seed being returned for further precipitation. The spent liquor, which has been stripped of its alumina, is heated, evaporated and returned to the digestion circuit.

- The product size alumina tri-hydrate is filtered, washed with hot water, and calcined to form alumina in three rotary kilns, two retrofitted with cyclones. The alumina is stored in bins, transported in rail cars to the dedicated port, and then shipped to its destination.

In the dedicated co-generating powerhouse, well water is treated, and passed through heavy fuel oil-fired boilers. The superheated steam from the boilers is then passed through turbo-generators, with extraction of steam at two intermediate pressures. A condensing turbine is provided to

balance the swings in electrical demand. The extracted steam is exported primarily to the digestion and evaporation sections, and the condensate returned to the powerhouse. Stand-by power is provided by diesel generators, and there is also a connection to the national grid. Compressors provide air for general plant consumption and for instruments.

Make-up water for the plant is provided by wells, which tap the underground aquifer.

4.7.4 Environmental

Windalco-Kirkvine Works has achieved ISO 14001 environmental management certification.

At Kirkvine Works, red mud is disposed of in the Battersea Mud Lake, a previously mined out area, situated in a limestone cavity. Battersea Mud Lake is bordered by a main road to the east, steep limestone hill to the south and a limestone barrier to the north. A good portion of the west end of the depression has become a municipal dump for the city of Mandeville and surrounding areas. Therefore, the potential for expanding the Battersea Mud Lake to the west is unlikely. Additional residue storage is being provided by increasing the depth of mud deposition behind internal dykes. The mud surface is tapered from east to west, with a pervious barrier separating the 78 ha mud bed from an 18 ha effluent holding cell. The western dams are lined with geotextile. Provision is made for spraying water from the three central discharge towers for dust suppression.

There has been minimal return of water to the plant from the Battersea effluent holding cell. It is evident that infiltration of the water, which typically has a soda content of 30 g/L, must be occurring. No groundwater monitoring wells or boreholes are installed at the perimeter of the RDA, making it difficult to determine the exact direction of contaminant flow escaping from the holding cell. Recent monitoring data from the borehole at Russell Place has revealed an increasing trend in sodium concentration and pH. The government is aware of this issue and can be expected to take action.

The last dam stability assessment for Battersea was completed in 1988 but annual integrity inspections of the mud area are undertaken by an independent external consultant. The two negative findings from the last inspection concerned seepage and erosion control.

Calcium oxalate is disposed temporarily in a sealed area, and the supernatant filtered and collected in a sealed holding pond. Effluent from the pond can be returned to the plant. After the calcium oxalate has been leached free of soluble oxalate and soda, it is dug up and trucked to another sealed site, where, after testing, the rain water runoff is discharged to the environment.

Solid waste from the plant, primarily sand, and scale/mucking from vessels, is stored on an industrial dump site — a mined-out area, which had been filled with red mud. There is no provision to return rainwater run-off from the industrial dump to the plant.

Plant drains are directed to the unsealed East and West Ponds, and then to the environment. Water releases from both ponds are alkaline in nature, with a pH of greater than 10 and are of environmental consequence. Spent acids from the utilities area are also discharged to the West Pond, resulting in sulphate concentrations of nearly 350 mg/L. Reducing the pH and salt concentrations of process-affected surface water leaving the site should be a priority for the Kirkvine-Works.

The refinery has struggled to comply with regulated opacity limits for point sources, particularly at the lime kiln and calciner No. 2 stacks. As with the other Jamaican refineries, Kirkvine Works has submitted an application for an Air Pollutant Discharge Licence. Initially, the licence requirements are expected to include improved monitoring and more regular reporting without changes to gaseous emission levels.

Odour from the red mud disposal area has been the cause of a few complaints from the community and may be aggravated by the proximity of the municipal waste dump. The refinery also receives complaints from the community in relation to corrosion of roofing materials and has engaged in a program to replace galvanized sheeting with more resistant aluminium.

Bunds surrounding the liquid storage tanks at Kirkvine Works and Port Esquivel appear to be adequate and in good repair.

The conveyor belt for the alumina shiploader at Port Esquivel suffered fire damage in 2004 and has subsequently been repaired without restoring the top enclosure, which caused operating difficulties. Some fugitive dust issues remain, especially during alumina ship loading and railcar offloading in the company of high winds. The shiploader chute was replaced in 2008. Further causes of dusting are to be addressed by installing baffles or cascades at the conveyor transfer points and hopper.

4.7.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Windalco-Kirkvine is currently not operational following the full closure of the plant implemented in the second quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the current full plant closure as temporary and that the plant is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

4.7.6 Specific Risks and Future Opportunities

Specific Risks

- **Battersea Mud Lake Groundwater Contamination** — The negligible return of pond water from the mud disposal area may provoke the Government of Jamaica to mandate more stringent measures to collect and return the effluent.

- **Variable Bauxite Specification** — There have been wide variations in the processability of Blue Mountain orebody at the Kirkvine refinery, ascribed to the goethite content of the bauxite. If these variations persist, the production capability of Kirkvine Works may vary from month to month. Plant management is aware of this variability and are working with flocculant suppliers and academia to understand and mitigate the risk.

- **Bauxite Quality** — Declining alumina content in the bauxite feed and the presence of hard to process goethite in the ore, will provide challenges to any future increase in production rate.

- **Trade Effluent Standards** — The generic Jamaican National Trade Effluent Standards specify limits for sodium (100 mg/L) and sulphate (250 mg/L). Compliance with these limits would be onerous for the bauxite industry if these limits were enforced.

- **Safety and Housekeeping** — There are items of redundant equipment left in place at the refinery. There is also evidence of excessive spills in some areas. While the age of the refinery and the type of technology employed explain some of this spillage, the level of housekeeping and spills management observed was poor.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

4.8 Bogoslovsk Alumina Refinery

4.8.1 Introduction

Hatch undertook a site visit to Bogoslovsk Alumina Refinery in September 2008. This Section 4.8 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.8.2 — Updated with data and information as of September 2009,
- Section 4.8.3 — Process Description as of September 2008,
- Section 4.8.4 — Environmental Status as of September 2008,
- Section 4.8.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 4.8.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

4.8.2 History, Location and Infrastructure

The Bogoslovsk Alumina Refinery and Bogoslovsk Aluminium Smelter complex covers an area of 143 hectares and is situated to the north of the town of Krasnoturinsk, which has around 70,000 inhabitants. Krasnoturinsk is located in the Ural Mountains, approximately 370 km to the north of the major city of Ekaterinburg in the Sverdlovsk region. The complex dominates the town, both physically and economically, and it has a heavy direct influence on almost all social, cultural and recreational affairs.

Construction of the Bogoslovsk Alumina Refinery and Bogoslovsk Aluminium Smelter complex at Krasnoturinsk began in 1941, and the refinery facilities were commissioned in 1945. The Bogoslovsk Alumina Refinery was constructed to take advantage of local bauxite from the North Urals deposits, from mine works located within 40 km of the smelter site.

The Bogoslovsk complex incorporates its own railway stations. The Bogoslovsk complex owns, operates and maintains the track on-site, together with its own shunting locomotives and rolling stock.

The plant also considers that the national railway system is comfortably capable of accommodating any foreseeable increases in rail traffic movements arising from production increments at the refinery and/or smelter.

The current alumina capacity of the Bogoslovsk Alumina Refinery is approximately 1,100 ktpa.

4.8.3 Process Description

The refinery runs a mixed parallel Bayer/sinter process, sinter bauxite comprises 20 per cent of the total feed and Bayer bauxite comprises 80 per cent. Bauxite is transported by rail from the Timan and North Urals bauxite mines. The North Urals mine supplies mainly Bayer grade bauxite and the sinter grade material is selected from the non Bayer grade ore. Both Bayer and sinter feeds contain controlled amounts of Timan bauxite to optimise the overall cost.

Bayer process

The refinery uses a 235°C Bayer digestion process that accounts for 80 per cent of the alumina production.

- After unloading, Bayer grade bauxite (SUBR/Timan blend) is crushed and sorted into operating and reserve stockpiles. Blended bauxite is mixed with caustic liquor and wet-ground in ball mills. The slurry is then held for desilication of the bauxites and the alumina minerals are then leached from the milled ore in a series of pressure autoclaves using caustic liquor at a temperature of 235°C. There are 12 digestion units containing eight to nine autoclaves per unit.

- Inert minerals including iron and titanium pass through the digestion process virtually unchanged and form part of the digester residue. After depressurisation, the digested slurry is transferred to multi-chamber type mud settlers where the residual solids are separated from the alumina-rich liquor. The refinery has four settler units, each with three thickeners. The settled residue is then washed with water to recover alumina and soda values from the residue, prior to being pumped to the residue disposal area. The refinery has four mud washing lines, each containing four to five washers.

- The pregnant liquor overflowing the mud settlers contains fine residual solids that are removed from the liquor by 15 security pressure filters. The filtered pregnant liquor is then cooled and pumped to precipitation. Hydrate crystallisation occurs as the slurry overflows from tank to tank in the precipitation circuit. The precipitation area consists of seven lines containing 12 x 1,000 m^3 precipitator tanks each and another three lines containing 12 to 13 x 1,800 m^3 precipitator tanks. Hydrate solids from the final precipitation tanks are separated in multi-chamber thickeners. The hydrate is filtered using vacuum disc filters and a portion of hydrate is returned to the front end precipitators as seed.

- Bauxite from the North Urals mine contains high carbonate and high sulphate requiring that that sodium sulphate and sodium carbonate must be removed from the liquor by salting-out evaporation. Crystallised sodium sulphate is separated and sold externally while the sodium carbonate is recovered for use as an alkali source in the sinter process.

Sintering process

The sinter process operates in parallel with the Bayer process and is used to treat bauxite that has a comparatively low alumina to silica ratio. Such bauxite is not suitable for standard Bayer processing due to the high caustic soda consumption that would result from processing the high reactive silica bauxite using the Bayer hydro-metallurgical route.

- Crushed blended high silica bauxite is mixed with lime, the sodium carbonate produced in the Bayer evaporation section and fresh caustic liquor. The controlled mixture is then subjected to wet grinding in ball mills prior to feeding into six parallel sintering kilns, where a solid clinker consisting of soluble sodium aluminate and non-soluble iron, titania and silicate minerals is produced.

- The sinter clinker is first milled then leached in hot water, where the solid sodium aluminate is dissolved into solution. The aluminate slurry leachate is then desilicated. Further processing of the residue slurry is similar to the Bayer process. The sinter leach residue is separated from the pregnant liquor using multi-chamber settlers, washed with water and pumped to the residue disposal area.
- The pregnant liquor is filtered, vacuum cooled and seeded to initiate crystallisation of hydrate. Similar to the Bayer circuit, the hydrate is filtered, with the major portion of the sinter circuit cake being returned to the Bayer precipitators as seed.

Calcination and evaporation

- The hydrate produced in the Bayer and sinter processes is filtered and washed with water on vacuum drum filters in three stages. The spent liquor is concentrated by evaporation. Sodium sulphate and sodium carbonate are salted out with the carbonate being fed as the alkali source for sintering. The concentrated spent liquor is returned to the grinding and digestion stages of the Bayer process.
- The washed hydrate cake is calcined in seven rotary kilns to produce alumina.

The Bogoslovsk Alumina Refinery consumes around 40 MW of electricity from the regional grid, which is operated by Sverdloskenergo. The Bogoslovsk thermal power station is located adjacent to the Alumina and Aluminium complex in Krasnoturinsk and produces 85 MW of electrical power, plus steam and hot water for the town and the alumina refinery. The calciner and sintering kilns are fired by natural gas.

4.8.4 Environmental

Bogoslovsk Alumina Refinery has achieved ISO 14001 environmental management certification.

Atmospheric emissions from alumina calcination include alumina dust and combustion gases. A dedicated Electrostatic Precipitator (ESP) with a claimed efficiency of 98 per cent is used to remove particulate emissions from each of the six calciners. The ESP requires a significant amount of maintenance and capital investment to ensure an adequate level of performance. In an effort to improve air emissions from the refinery, various facility upgrades have been undertaken. A new 1 ktpd cyclone calciner is currently under construction to replace two of the existing rotary kilns, which should reduce particulate air emissions by approximately five per cent. Cyclones with more efficient ESPs were installed at three sinter kilns from 2001 to 2006. A project to undertake similar replacements for the remaining three kilns by 2014 has not yet been implemented.

Bauxite residue is produced as a waste product from both the Bayer Process and the sintering process at the rate of approximately 1.6 tonnes per tonne of alumina produced. The refinery is responsible for two residue disposal areas. Pond No. 1 (129 ha) was commissioned in 1953 and decommissioned in 1982. It is now partially re-vegetated and covered with a cap of waste rock. The refinery continues to monitor the area. Pond No. 2 (252 ha) was commissioned in 1982 and consists of a single active cell. It will reach capacity in 2012 and is in the process of being expanded with the addition of a new 190 ha area. Additional storage will also be provided by extending the height of the existing storage area. These expansions are expected to provide residue storage capacity until 2031. In addition, an earlier disposal area was operated from 1945 to 1953. This has subsequently been revegetated and returned to the State.

Pond No. 2 incorporates a compacted clay liner, but does not incorporate a synthetic liner or underdrainage collection system. The new area will have the same construction. This type of liner system does not meet international best practice for containment of alkaline process liquor. Shallow seepage is intercepted by a collection ditch constructed around the perimeter of the storage. Seepage water is recovered and returned to the disposal area.

Water entering Pond No. 2 is collected in two decants and discharged to a clay lined settling pond. The water is then pumped back to the plant for re-use in the refinery process circuit. A new clay lined settling pond will be constructed for use by the new Pond No. 2 area, which will operate in a similar manner.

Specialist stability reviews are conducted at quarterly intervals by an external consultant and are reported annually. Dust generation from the decommissioned Pond No. 2 is managed by the placement of a layer of rock over the surface. There is no formal dust suppression system installed on the active disposal area.

Groundwater monitoring wells are installed at 11 locations around the residue areas. Samples are analysed at regular intervals and the results are included in site environmental reports. The refinery advises that contaminant levels measured in the wells are within allowable limits.

The residue is pumped from the plant along two (one duty, one standby) above ground steel pipelines. There is a procedure for re-direction of slurry along the standby pipeline in the event of pipe failure, however there is no bunding or other provisions to prevent spillage in the case of failure. The absence of engineered spill containment for pipelines to and from the refinery has the potential to allow the uncontrolled discharge of alkaline slurry and liquor to the surrounding environment.

The plant also operates an industrial waste disposal area on the site of an old clay quarry. This area takes construction wastes and other non-domestic waste from the plant at a rate of 15 ktpa. This area has now reached capacity and funds have been allocated for rehabilitation. A new waste facility has been constructed and will be commissioned in 2009. The new facility has been constructed with a synthetic liner system to limit contamination.

Water is supplied to the plant from groundwater wells and from the Turya River. Stormwater from the refinery area and effluent discharged from the refinery are collected, neutralised with acid and sent to a settling pond before being discharged to the river. Solids from the settling pond are dredged every 10 years and disposed of in the residue storage area. Discharges to the river exceed the limits for aluminium and fluoride leading to environmental penalty payments. In 2006, a project was approved to implement a closed water circuit at the plant, however this project was suspended before completion and the funds necessary for completion are not included in the 2009 budget.

4.8.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility. Work on the Bogoslovsk Modernisation Project is reportedly currently suspended.

4.8.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Capacity Expansion** — At Bogoslovsk Alumina Refinery a project commenced to increase production to 1,300 ktpa. This is to be achieved by replacing 96 of the air agitated precipitators with 48 new higher capacity precipitators with mechanical agitators, but only six of the new precipitators were installed before the project was suspended. An opportunity exists to recommence this project.

4.9 Achinsk Alumina Refinery

4.9.1 Introduction

Hatch undertook a site visit to Achinsk Alumina Refinery in September 2008. This Section 4.9 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.9.2 — Updated with data and information as of September 2009,
- Section 4.9.3 — Process Description as of September 2008,
- Section 4.9.4 — Environmental Status as of September 2008,
- Section 4.9.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 4.9.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

4.9.2 History, Location and Infrastructure

Achinsk Alumina Refinery is located in Siberia approximately 170 km to the west of the regional capital Krasnoyarsk, adjacent to the Chulym River. The refinery commenced operation in April 1970.

The refinery was initially designed to produce 900 ktpa of alumina, with plant capacity now having risen to almost 1,100 ktpa following a series of modifications and improvements undertaken since 2000. Achinsk Alumina Refinery produced 1,069 kt in 2008. The Achinsk refinery also produces sodium carbonate, potassium carbonate and potassium sulphate as by-products.

Achinsk Alumina Refinery has achieved OHSAS 18001 Occupational Heath and Safety certification.

4.9.3 Process Description

Alumina is produced at the Achinsk refinery using nepheline ore. Nepheline is a sodium/potassium alumino-silicate. Approximately 4.2 tonnes of nepheline are sintered with six tonnes of limestone to produce one tonne of alumina. The main consumers of Achinsk alumina are Krasnoyarsk Aluminium Smelter and Bratsk Aluminium Smelter.

- Nepheline is sourced from the Kiya Shaltyr Nepheline Mine. The ore is transported 280 km by rail and is unloaded into primary ore crushers upon arrival at Achinsk. Limestone is transported to the refinery in dump trucks from the nearby Mazulsky limestone quarry

which is owned by the refinery. At current extraction rates, the limestone mine resources are expected to last until 2030. The bulk of the limestone is crushed, milled and mixed with nepheline to produce the sinter kiln feed. A smaller portion of limestone is calcined to quicklime and is then slaked to produce milk of lime for the desilication reaction.

- Nepheline ore is fed by conveyor to the medium and fine crushing facility with intermediate crushing in an open cycle, then by conveyors either to the ore storage and blending stockyard or directly to bins over the mills. Nepheline ore (four stages) and limestone (two stages) are wet ground using alkali solutions. The addition of lime binds most of the silica as dicalcium silicate in the clinker. First and third stage mills are charged with steel balls whereas second and fourth stage mills are charged with rods. The feedstock is fed after the grinding circuits. All feedstock blending, as well as receiving and blending of alkali/soda solutions and grey mud is undertaken in adjustment tanks.

- The sintering process is the main process that determines the capacity of alumina production. Nepheline-limestone-alkakli feedstock is prepared and heat-treated in sintering kilns to produce a clinker containing 15-16 per cent alumina. The sinter from the kilns is cooled and fed to fine crushing and is then transferred to five silos in the chemical hydrology shop.

- A portion of the sinter cake (60 per cent) is milled and digested (converted to sodium/potassium aluminate solution) in three rod mills followed by ten vertical agitated digesters. This digester effluent is then sent to 32 thickeners where the nepheline sludge is separated from the green liquor. The mill discharge is followed by washing in vertical separator units and in four thickener lines. Washed sludge is additionally milled in ball mills before disposal or reuse in other applications. The remaining portion of cake (40 per cent) is digested in nine tubular digesters and rod mills. The digester effluent is then sent to 22 thickeners and 13 filters where the nepheline sludge is separated from the green liquor and washed before disposal or reuse in other applications.

- Approximately 500 ktpa of the nepheline sludge waste is sold as a feedstock to the Achinsk cement plant. Approximately 100 ktpa is used by the refinery for the manufacture of bricks and a proportion is used as basecourse in road construction. Sludge is pumped to the storage facility as 20 per cent solid slurry. Supernatant water is decanted and pumped back to the refinery for reuse in the process.

- Aluminate liquor produced as a result of cake digestion is pumped to desilication, which is carried out in eight autoclave banks. Desilicated liquor is sent via thickeners to filters.

- Following thickening and filtration, the desilicated liquor is divided into two flows. Aluminate liquor of the soda branch line is carbonated by CO_2 gas from the sintering process in carboniser banks of 600 m^3 each, where alumina hydrate precipitates. After thickening, the hydrate slurry is pumped as seed to the soda-alkali branch line. The carbonate liquor is filtered and pumped to feedstock preparation and soda production. Aluminate liquor of the soda-alkali branch line undergoes partial carbonation in precipitators. The thickened hydrate slurry of the soda-alkali branch line is sent for washing in drum-type vacuum filters, whereas the soda-alkali liquor is sent to cake digestion. Washed hydrate is conveyed to calcination directly or via hydrate storage.

- The washed hydrate is fed by conveyors to four calcining kilns, where it is calcined at 1200 to 1250ºC (fuel oil firing), cooked in fluidised-bed coolers and conveyed by pneumatic transport to eight finished product silos of 2,000 tonnes each. The alumina product is loaded to hopper cars or tank cars for transport.

Calcined soda (soda ash) and mineral fertilizers (potash, potassium sulphate) are produced from the carbonate liquor for alumina production. The design capacity is approximately 595 ktpa of soda ash, 19 ktpa of potash and 26 ktpa of potassium sulphate. However, these capacities depend directly on the tonnage of alumina production.

- Carbonate liquors from alumina production undergo neutralisation of bicarbonates by caustic liquor, followed by evaporation, where monohydrate soda precipitates. Monohydrate soda is separated from its mother liquor in centrifuges, calcined in two drum dryers and then conveyed by pneumatic transport to storage silos.

- The mother liquor is pumped to double-stage vacuum crystallisation where potassium sulphate precipitates. Potassium sulphate is separated from the liquor, dried in four dryers and conveyed to the finished product silo.

- After potassium sulphate precipitates, the mother liquor is evaporated to precipitate anhydrous soda solids. After separation by centrifuges the soda is dried in drum dryers along with monohydrate soda. The mother liquor is evaporated to precipitate binary salt. Separated binary salt is returned to the monohydrate soda precipitation storage, and the purified liquor is sent for potash evaporation. The mother liquor is evaporated and sent to two-stage crystalliser for potash precipitation. Potash, after separation from the liquor in the centrifuges, is calcined in two drum dryers, packed in bags and sent to the finished product storage.

The Achinsk refinery produces 85 per cent of its required electricity from a captive thermal power plant, which also meets the refinery and the town's steam and hot water requirements. Steam is extracted at two pressure levels for refinery steam supply and at two pressure levels for heating hot water. Five of the turbines are equipped with surface condensers that receive circulating cooling water via wooden cooling towers. The power plant is now being fired with inexpensive low grade coal. The power station is ageing and requires considerable ongoing investment to maintain operations, however it has a modern and efficient control system on both boilers and turbine alternators.

The refinery also purchases power from the local grid to supplement their supply. The plant is installing a new 90 MW steam turbine to increase power generation on-site. This new steam turbine alternator (number 7) will be commissioned in 2009. This project will result in increased electric power output to meet all of the refinery's demand. Fly ash and Electrostatic Precipitator (ESP) dust is slurried and pumped to the nepheline sludge storage.

Total water intake from the river is 100 megalitres per year for the refinery. This includes the water supply for the township of around 15 megalitres per year.

4.9.4 Environmental

Achinsk Alumina Refinery has achieved ISO 14001 environmental management certification.

There are currently two nepheline sludge storage facilities at the Achinsk Alumina Refinery. Pond No. 1 and Pond No. 2 are located adjacent to each other. Pond No. 1 was commissioned in 1969 and has an area of 190 ha. The facility was constructed with a basal low permeability clay liner. Pond No. 1 has reached its design capacity and is no longer in operation. Pond No. 1 is approximately 105 m in height. Trials and investigations are currently underway to rehabilitate Pond No. 1. The topsoil from stripping of the limestone quarry would be used to rehabilitate and revegetate the storage. Apart from a small trial area, there has been no large scale rehabilitation work conducted to date, and the overall feasibility and viability of rehabilitation has not been confirmed.

Pond No. 2 was commissioned in 2004 and has an area of 115 ha. It is understood that the facility is constructed with a basal 1 mm synthetic (HDPE) liner. Pond No. 2 currently receives approximately 5.9 Mtpa of sludge (with the remaining 600 ktpa diverted for cement manufacture and other uses), as well as fly ash from the power plant and other minor blowdowns from the plant. The nepheline sludge consists mainly of dicalcium silicate hydrate and has a pH of 11. UC RUSAL advises that a sample of the sludge was sent for environmental analysis in Moscow and that the analyses concluded that the sludge is of low level hazard to humans. However, it is noted that the elevated pH would cause irritation to humans if contacted, and seepage from the storage has the potential to impact underlying ground and surface waters.

The sludge is a sandy material that becomes cemented following deposition. For this reason, dust generation from the storage is not considered to be an issue. Slurry is pumped to the storage facility via above ground pipelines. These are not bunded or otherwise contained, allowing the potential for discharge of slurry to the local environment in the case of pipeline failure.

Seepage water from both Pond No. 1 and Pond No. 2 is collected in a channel around the perimeter of the ponds and is recycled back to the process. Achinsk Refinery advises that monitoring wells around the sludge storage facilities indicate that seepage has not adversely impacted groundwater.

Supernatant water draining from the deposited sludge slurry is decanted and pumped back to the refinery for reuse in the process.

Pond No. 2 has approximately 4.5 years of storage capacity remaining and therefore, additional capacity will be required in 2013. Achinsk Refinery is currently working with VAMI on the design and location for a new sludge storage facility. It was observed that adequate land is available for expansion of the sludge storage facility and it is assumed that the new facility will also be constructed with a low permeability synthetic liner to minimise seepage.

Pond No. 3 acts as a cooling pond for the power plant. Cooling water for the power plant is taken from the Chulym River and is used once before discharging to Pond No. 3. The water is then returned to the Chulym River. Achinsk Refinery advises that the water discharged back to the river meets the required environmental standards.

Stormwater from the plant site is collected in a drainage system and is sent to Pond No. 2. This water is subsequently recycled back to the process.

At the refinery, there are 182 licensed point source air emissions locations and 30 fugitive emission sources. All 182 sources are sampled regularly.

The Achinsk refinery currently has five Unitherm units for the combustion of coal at the sintering kilns. These five units reduce coal consumption by 2.5 per cent and lower nitrogen oxide emissions by 36 per cent. The plant has the opportunity to install these units on the remaining seven sintering kilns.

A new ESP has been installed and is currently being commissioned.

Based upon the information provided, the Achinsk Refinery has received the required environmental permits for emissions to the environment. Achinsk advises that the refinery emissions comply with the permitted levels with the exception of sulphide levels within groundwater at the Mazulski limestone quarry, which exceed the allowable levels.

4.9.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the production technology and process employed at the refinery.

4.9.6 Specific Risks and Future Opportunities

Specific Risks

- **Rehabilitation of Nepheline Sludge Storage Facilities** — This is expected to require ongoing capital expenditure. However, the future action plan for rehabilitation of Pond No 1 has already been agreed with the regional environmental authorities.

Future Opportunities

- **Product Quality** — Alumina produced at Achinsk has a broad particle size distribution, which poses challenges for the aluminium smelters. Reducing the minus 45 and plus 125 micron material products to 10 per cent maximum each would greatly improve operating parameters of the reduction cells receiving Achinsk alumina. A research project involving the potential for a new hydrodynamic sizing device invented by VAMI has been initiated, which would improve the particle size distribution without compromising output production capacity.

- **By-Product Sales** — Nepheline sludge has many possible uses including; a raw material for the manufacture of Portland cement, white silicate bricks, road construction, filling of underground mines in permafrost areas and as an additive to local acidic soils for neutralisation. The Achinsk refinery is investigating the economic feasibility of these uses. At present, the refinery operates a white silicate brick plant on the site. Approximately 100 ktpa of sludge is used in brick manufacture and road construction. The previously mothballed cement plant was restarted in 2008 and by September 2008 was utilising around 500 ktpa of sludge. It is understood that the cement can be sold profitably to the construction industry within a radius of 300 km from the refinery. An increase in the re-use of the sludge will provide a number of economic benefits to the refinery, such as reduced capital and operating costs for the sludge disposal facility, as well as producing income from sales of the sludge. However, the re-use rates for the sludge will need to increase significantly above the rate of approximately 9.2 per cent in September 2008 to have a material impact.

4.10 Urals Alumina Refinery

4.10.1 Introduction

Hatch undertook a site visit to Urals Alumina Refinery in September 2008. This Section 4.10 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.10.2 — Updated with data and information as of September 2009,

- Section 4.10.3 — Process Description as of September 2008,

- Section 4.10.4 — Environmental Status as of September 2008,
- Section 4.10.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 4.10.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.10.2 History, Location and Infrastructure

The Urals Alumina Refinery is situated in the town of Kamensk-Uralsky, which has around 200,000 inhabitants. Kamensk-Uralsky is the third largest conurbation within the Sverdlovsk Region, and is located 100 km to the south-east of the major city of Ekaterinburg.

Construction of the Urals Alumina Refinery and Urals Aluminium Smelter complex at Kamensk-Uralsky began in 1931. The facilities were commissioned in 1939 and there were significant increases in production over the period 1940-1945 and in the 1960's. The Urals Alumina Refinery is one of the oldest refineries in the world still in operation.

The current alumina capacity of Urals Alumina Refinery is approximately 730 ktpa.

4.10.3 Process Description

The refinery incorporates a classic parallel Bayer/sinter process. This incorporates both a 235°C Bayer digestion process and a parallel sintering process that uses the solid phase sodium carbonate extracted from the Bayer circuit in the sinter kilns. The sinter process section of the refinery was commissioned in 1964.

Bayer process

- Bauxite is transported by rail from the Middle Timan and North Urals bauxite mines.
- Blended bauxite is mixed with caustic liquor and wet-ground in comminution mills. The alumina minerals are leached from the milled ore in a series of pressure autoclaves using caustic soda liquor at a temperature of approximately 235°C. There are nine digestion lines with each line containing eight autoclaves. The North Urals and Timan bauxites require elevated temperatures and pressures for efficient extraction of the boehmitic/diasporic minerals. The recent introduction of Timan bauxite has increased the required maintenance in digestion due to increased rates of scale formation. Plant staff indicated that autoclaves were previously in operation for six months before mechanical de-scaling was required, however, with the introduction of Timan bauxite, autoclave de-scaling is now required every three months. The autoclaves and slurry preheaters have also now been fitted with a level control and gas extraction system that vents the excessive volumes of methane and hydrogen liberated from the Timan bauxite in the autoclaves.
- Inert minerals pass through the digestion process in solid phase and form the bulk of the residue waste stream. After depressurisation, the digested slurry is diluted and transferred to multi-chamber type mud settlers where the residue solids are separated from the alumina-rich liquor by gravity sedimentation. The Urals Alumina Refinery has four settler lines, each with three thickeners per line. The settled residue is washed with water to recover alumina and soda from the residue and is then pumped to the residue disposal area. The refinery has six CCD washer units, with each unit containing four or five washers.
- The pregnant liquor overflowing the mud settlers contains fine solids that are removed from the liquor by 14 security pressure filters. Filtered pregnant liquor is then cooled and pumped to precipitation. Cooling the pregnant liquor increases its alumina supersaturation such that, when seeded with previously precipitated hydrate, it initiates the crystallisation of new hydrate from the incoming pregnant liquor.

- The precipitation facilities have been upgraded and expanded several times and there is a range of precipitation units in operation. The most recent upgrade was in 2001 when 16 mechanically agitated tanks were commissioned.

- Hydrate solids from the final precipitation tank are separated by gravity sedimentation and clusters of hydrocyclones. The hydrate is filtered using vacuum disc filters and a portion of the hydrate is returned to the precipitators as seed.

- Bauxite from the North Urals mine contains high carbonate and sulphate, which are separated from the liquor as soda salts by deep salting-out evaporation and crystallisation. The Timan bauxite also causes some contamination of the liquor with organics, which are removed with the solid phase sodium carbonate. The organics are then destroyed when the carbonate is added to the sinter kilns.

Sintering/thermal causticisation process

- The sinter process is used to treat lower grade bauxites having a low total alumina to total silica ratio. The sinter process also assists in recovering the soda values associated with the high carbonate content of the North Urals bauxite. Crushed blended bauxite is mixed with the sodium carbonate produced in the Bayer side and is then ground in ball mills. The wet blend is fed to one of three sintering kilns, where the bauxite and soda are converted at 1,200°C to a solid clinker consisting of water soluble sodium aluminate and a non-soluble residue.

- The clinker is ground and leached to solubilise the sodium aluminate. The leached slurry is then desilicated at 103 to 105°C. Further processing of the residue sinter slurry is similar to the Bayer process. Solid residue is separated from the pregnant liquor using multi-chamber settlers. The residue is then washed in several stages and pumped as slurry to the disposal area.

- The pregnant liquor overflowing the settlers is filtered and vacuum flash cooled prior to seeding and crystallisation of hydrate. The sinter derived hydrate is filtered and a portion is returned to the precipitators as seed.

Calcination and evaporation

- The hydrate produced in the Bayer process is filtered and washed on vacuum drum filters. The spent liquor filtrate is concentrated by evaporation, and sodium sulphate and sodium carbonate solids are separated from the concentrated liquor. The concentrated spent liquor is returned to the grinding and digestion stages of the Bayer process. The washed hydrate cake is calcined to alumina in six parallel rotary kilns plus the recently added stationary gas suspension calciner of around 600 tpd capacity.

The thermal energy (steam and hot water) demand of the plant is met by one external supplier, "TGK9". Electricity is supplied by the regional grid.

4.10.4 Environmental

Urals Alumina Refinery has achieved ISO 14001 environmental management certification.

The majority of operating plant buildings within Urals Alumina Refinery are constructed with concrete floors and utilise drains within the floor to capture spills and transfer them to collection sumps.

Bauxite residue is produced from the refinery as a waste product from both the Bayer process and the sintering process. The Urals Alumina Refinery has three bauxite residue disposal areas located approximately 6 km from the refinery. The oldest (Pond No. 1) was closed in 1964 and has been revegetated. Pond No. 2 and Pond No. 3 are both currently active.

Pond No. 2 is used only during the summer months as the embankment has a narrow cross section and would be subject to instability should seepage water freeze within the embankment. Pond No. 2 consists of two areas. Area 1 is currently inactive but will recommence operation in the summer of 2009 for a period of four years. During this time Area 2 will be raised by 6 m to the same height as Area 1. Area 2 is then expected to be used for an additional 20 years. The outer embankments of Pond No. 2 are being progressively rehabilitated and revegetated and it is understood that the refinery has allocated funds to continue progressive rehabilitation for another seven years.

Pond No. 3 consists of three areas. Area 1 has reached capacity and is not currently operational. Following drying and consolidation of the stored residue, the embankment will be raised and residue deposition will recommence in the future. Area 2 is active and is used for residue storage during the winter months. Area 2 is expected to reach capacity by 2013. Area 3 is currently being constructed and is expected to be commissioned in 2013. It was noted that at the time of the site visit, the floor of Area 3 was close to the natural water table.

Expressed water from the deposited residue is decanted to a secondary (unlined) settling pond which collects the decant water from Pond No. 2 and Pond No. 3. Water is subsequently pumped back to the refinery for use in the washing circuit. The refinery advised that the liquor has a pH of 11.

Both Pond No. 2 and Pond No. 3 are constructed with a liner formed of compacted residue material to reduce seepage losses, but do not incorporate a compacted clay liner, synthetic liner or underdrainage collection system in their construction. This type of liner system does not meet international best practice for containment of alkaline process liquor. Both ponds are surrounded by an unlined perimeter ditch to intercept seepage which is recovered and returned to the residue area. Monitoring wells are installed at six locations around the perimeter and are sampled monthly during the summer. The refinery advises that water sampling does not show contamination outside allowable limits.

Slurry and return water pipelines between the residue storage facility and the refinery are not bunded and no provision for containment of spills was observed. The absence of engineered spill containment for pipelines to and from the refinery has the potential to allow the uncontrolled discharge of alkaline slurry and liquor to the surrounding environment.

Other industrial wastes from the plant are either taken to a licensed waste area for disposal, are recycled back to the process (reduction plant sludges), or are sold to local recycling companies (i.e. oils).

Particulate emissions from the sintering kilns substantially exceed the permitted levels. According to environmental personnel, the plant has plans to upgrade this equipment to meet permitted discharge levels.

Much of the water used at the site is recycled, however there are two industrial discharge points to the Iset River. These discharges contain plant stormwater, ingot cooling water, sump water and cooling water from a variety of sources. Neither of the discharge points meet the permitted limits for iron and aluminium as well as various other parameters. The refinery plans to implement a

project in 2009 to divert 86 per cent of this discharge water to the residue storage facility (ultimately to be recycled back to the process). This water will replace a corresponding percentage of fresh make up water and will reduce environmental levies payable by approximately eight per cent.

4.10.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

4.10.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Sandy Alumina** — The Urals Alumina Refinery may improve the flowability and reduce the dustiness of their product by producing sandy alumina. The plant hopes to achieve this with a number of initiatives in the digestion process and by optimizing the precipitation circuit. The capital required for these proposed modifications is unknown.

- **Feedstock Management** — The proportion of Timan bauxite input has increased in recent years and additional care musk be taken with the variable zinc, sulphur and chamosite components in the Middle Timan ores. Various measures to handle additional Timan bauxite are being pursued and the refinery has the opportunity to better control impurities through the use of additives at various stages of the process and by upgrading the polishing filters.

- **Replacement of Lime Kiln** — The Urals Alumina Refinery has the opportunity to decommission the lime kiln by purchasing lime from SUBR. This will reduce operational costs and eliminate emissions from the kiln.

4.11 Boxitogorsk Alumina Refinery

4.11.1 Introduction

Hatch undertook a site visit to Boxitogorsk Alumina Refinery in October 2008. This Section 4.11 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.11.2 — Updated with data and information as of September 2009,

- Section 4.11.3 — Process Description as of October 2008,

- Section 4.11.4 — Environmental Status as of October 2008,

- Section 4.11.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 4.11.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.11.2 History, Location and Infrastructure

Boxitogorsk Alumina Refinery is located in Boxitogorsk in Leningrad Region of the Russian Federation, approximately 240 km from St. Petersburg. The local township of approximately 17,000 people exists predominantly because of the refinery, which also supplies domestic heating to the township.

Construction of the alumina refinery began in the 1930's and first alumina was produced in 1938. During World War Two the refinery equipment was removed to the Urals. The original equipment, which is still in operation today, was returned from the Urals and recommissioned at Boxitogorsk in 1954.

The entire plant site is owned by Boxitogorsk Alumina Refinery, although some areas within its boundaries have been leased to local transport companies.

Boxitogorsk Alumina Refinery produced the equivalent of 156 kt of alumina in 2008; around one-half as alumina hydrate, and the balance in speciality alumina and for fusing into corundum. Boxitogorsk Alumina Refinery supplies the majority of the corundum consumed in Russia and it also exports corundum products to other countries.

4.11.3 Process Description

Boxitogorsk Alumina Refinery originally processed bauxite from the nearby Tikhvin mine, but this supply has been exhausted. Recently, the refinery has processed bauxites from North Onega and Timan mines. Timan bauxite is expected to be the sole source of bauxite for at least the next four years.

- All raw materials arrive by rail and most products are dispatched on the same rail system. The refinery owns 52 km of rail track within its boundaries, together with a fleet of locomotives and rail wagons.

- Bauxite, limestone, coal and coke are crushed, and then milled with caustic liquor from the evaporation area.

- The milled slurry is reacted in seven sintering kilns at 1250°C. The clinker leaving the mills contains solid phase sodium aluminate, sodium ferrite and dicalcium silicate. The kilns have been retrofitted with dust collection systems (cyclones, ESPs and scrubbers).

- The clinker from sintering is sized, with finer material being processed in a vertical digester and coarser, 1.0 to 8.0 mm, material being sent to the belt percolation digester. Oversize material is returned to the crushing circuit.

- The inert material from the leach circuit is pumped to the tailings facility. The leachate is desilicated in two stages, and the desilicated liquor filtered.

- Hydrate is precipitated from the alumina-laden filtrate by sparging with the CO_2 rich off gases from four of the sinter kilns.

- Hydrate solids from the final precipitation tank are separated in thickeners. The hydrate is then filtered and a portion of hydrate is returned to the precipitators as seed.

- The remaining hydrate is separated, washed on filters, and split based on product demand.

- The three product rotary kilns have been retrofitted with dust collection systems (cyclones and ESPs).

- Seven evaporator batteries are used to concentrate the caustic liquors.

The corundum plant (built in 1961) consists of four 6.6 MW electric arc furnaces, followed by a number of stages of crushing, grinding, classification and drying processes. More than 90 different corundum products are made (ranging between 50 mm and 1 micron size). In 2007, Boxitogorsk Alumina Refinery sold 66,000 tonnes of corundum products.

A captive power plant supplies around one-half of the electricity requirements of Boxitogorsk Alumina Refinery and the full requirements of steam and heat. The balance of electricity is sourced from the local grid operated by Lenergo.

The captive power plant includes six boilers of 75 tph steam capacity and three steam turbines rated at 13 MW. No off-gas treatment equipment is installed. Prior to 1994, the boilers were fired with coal or fuel oil. Since then, natural gas has been used for power production, as well as in the sintering and calcining kilns. This has lead to a significant improvement in air quality. The winter can be very cold with temperatures down to -42°C, so the government has insisted on there always being a source of energy backup (fuel oil) to sustain the district heating requirements, in case of gas supply shortages.

4.11.4 Environmental

There have been two bauxite residue storages in operation during the operating life of the Boxitogorsk Alumina Refinery. The first (Storage No. 1), started receiving residue from the sintering process in 1954, and was subsequently revegetated and given back to the state. At the time of the visit, the majority of the residue materials from Storage No. 1 had been quarried for use in local road construction and for fill embankments along some of the refineries railway lines.

The second residue storage (Storage No. 2) was commissioned in 1968 and remains in operation today. The current crest level is some 49 m above natural surface. At the time of construction no formal liner system was installed, however site personnel indicated the presence of naturally occurring clay soils below the storage.

It is proposed to raise the facility an additional 8 m, or to a final height of 57 m above natural surface which will extend the life by approximately seven years. Supernatant water within the storage pond is led to a series of unlined perimeter channels surrounding the facility, collected in a sump and is then pumped back to the plant. The most recent specialist stability review was carried out in 2004 by the St. Petersburg Polytechnical University. The results from the analysis indicate satisfactory stability of the storage based on Russian guidelines and assuming current operations. Dusting does not seem to be a problem, possibly due to the gravely consistency of the residue materials.

The fuel oil tanks are currently lined with a natural clay seal with earthfill perimeter bunding.

Boxitogorsk Alumina Refinery has one main water discharge which is directed into the Pyardomlya River which in-turn flows to the Volozhba River. This discharge consists of plant stormwater and industrial water which is passed through three settling ponds. Hatch was advised that the discharge regularly exceeds permitted limits of aluminium, iron, suspended solids, oil and grease. The refinery is currently planning to eliminate discharge into the local river systems and recycle wastewater back to the plant. To date, capital budget allocation for this environmental project is still under consideration.

Stormwater from the bauxite, limestone, coal and the coke unloading and storage areas is collected in ditches and flows to a local creek with no treatment. This is not considered to be best practice and as a minimum, settling of solids should be provided in order to minimize the impact to the local environment.

At the refinery there are a total of 220 point source and fugitive air emission sources. The sintering kilns, calcining kilns and the power plant represent the highest emitters.

The majority of operating plant buildings within the refinery are constructed with concrete floors and utilize drains within the floor to capture spills and transfer them to collection sumps. A tour of the Boxitogorsk Alumina Refinery revealed many areas of the plant where equipment was leaking solution onto the floor. The floors and buildings appear to be in poor shape.

4.11.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

Production at the refinery was reduced by approximately 40 per cent of the installed capacity during the majority of the first half of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. UC RUSAL advised Hatch that the idled capacity was subsequently restarted in June 2009.

4.11.6 Specific Risks and Future Opportunities

Specific Risks

- **Asset Integrity/Health and Safety** — A program of equipment replacement may be needed in key areas for the refinery to operate safely and consistently into the future.

- **Environment** — Based on international standards for stability of tailings impoundments, the Boxitogorsk Storage No. 2 may require some form of stabilisation before closure and handover to the local authorities. Within the plant fence, bunding of storage tanks is inadequate, and the concrete floors may not provide an adequate seal against caustic leakage. Aqueous discharges from the industrial complex exceed permitted impurity levels.

- **Labour/Social** — The refinery is the main employer in the town, as well as supplying district heating requirements. Any disruption to employment in the refinery has a large impact on the township.

Future Opportunities

- **Sale of residue materials** — The refinery has engaged the services of VAMI to investigate the potential to sell residue materials to local cement manufacturers and as engineering fill for road construction.

- **Reorganization** — The maintenance services are presently provided by Boxitogorsk Alumina Refinery. There is a plan to outsource the maintenance services to a separate UC RUSAL owned entity.

4.12 Nikolaev Alumina Refinery

4.12.1 Introduction

Hatch undertook a site visit to Nikolaev Alumina Refinery in October 2008. This Section 4.12 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.12.2 — Updated with data and information as of September 2009,
- Section 4.12.3 — Process Description as of October 2008,
- Section 4.12.4 — Environmental Status as of October 2008,
- Section 4.12.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 4.12.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

4.12.2 History, Location and Infrastructure

Nikolaev Alumina Refinery, commissioned in 1980, is located on the Yuzny (Southern) Bug River, approximately 30 km upstream of the Black Sea coast of Ukraine. The town centre of Nikolaev is located approximately 25 km away and has a population of approximately 510,000 people.

Nikolaev Alumina Refinery had an original design capacity of 1,000 ktpa of alumina. Since RUSAL acquired ownership of the refinery in 2000, (prior to the formation of UC RUSAL), a series of upgrades and modernisations has steadily increased the alumina capacity. Nikolaev Alumina Refinery produced 1,446 kt of alumina in 2008. The refinery area covers 480 hectares and includes a hydrometallurgical facility to produce gallium metal.

Nikolaev Alumina Refinery has achieved OHSAS 18001 Occupational Heath and Safety certification.

4.12.3 Process Description

The Nikolaev Alumina Refinery incorporates Bayer process technology with high temperature digestion from Pechiney (now Rio Tinto Alcan):

- Bauxite is presently obtained from Kindia, Guyana, and Weipa. Commencing in 2010, bauxite will be sourced only from Kindia and Guyana. The ore is transported in vessels up to 50-60 kt in size, to the unloading port at the refinery site.
- The bauxite is crushed and mixed with hot caustic liquor, wet-ground in ball mills and predesilicated. Following predesilication, the bauxite slurry is digested at 210 to 230°C with caustic liquor.
- The digested slurry (blow-off slurry) is fed to mud settlers where the residue solids are separated from the alumina-rich liquor by gravity sedimentation. The mud is washed with water in a six stage counter-current decantation circuit.

- Two deep thickeners were commissioned in 2007 for pretreating the washed mud prior to disposal. Positive displacement pumps (Wirth) direct undiluted mud at 50 per cent w/w solids to the red mud disposal area for wet stacking.
- The settler overflow is filtered; the filtered pregnant liquor is cooled and pumped to precipitation. By the end of 2006, all precipitators had been converted from air agitation to mechanical agitation.
- Hydrate solids from the final precipitation tank are separated in thickeners. The hydrate is then filtered and a portion of hydrate is returned to the precipitators as seed.
- The remaining portion of hydrate is filtered, washed and calcined to form alumina. There are four 850 tpd Lurgi fluidised stationary calciners in operation. A fifth stationary calciner of 1500 tpd was commissioned in 2005. All are fired with natural gas, with heavy fuel oil as backup, and are fitted with modern dust collection systems.
- Overflow from the hydrate thickeners is evaporated and returned to the digestion area.
- Alumina product is directed to the UC RUSAL owned smelters, in particular Krasnoyarsk and Sayanogorsk Aluminium Smelters, and is typically shipped out by train in winter and by barge in summer. Nikolaev alumina meets Russian "GOST" standards, and is expected to remain compliant after the expansion to 1.7 Mtpa is completed.

Nikolaev produces 13 tonnes of high purity gallium per year in a dedicated plant, which is nearly 20 per cent of world demand. The technology for gallium production was developed in-house.

Nikolaev Alumina Refinery sources approximately two-thirds of its electricity requirements from the national grid, with the balance from the refinery's own generating facility. Under normal operating conditions, the Nikolaev Alumina Refinery's power station operates in parallel with the regional grid, supplying incremental power and acting as an emergency back-up. The power station generates all of the steam requirements for the refinery. The main fuel used by the captive power station is natural gas, with heavy fuel oil used for standby supply.

4.12.4 Environmental

Nikolaev Alumina Refinery has achieved ISO 14001 environmental management certification.

From commissioning through to late 2007, the refinery discharged bauxite residue (red mud) to a storage facility approximately 500 m south of the plant (Slurry Dam No. 1). As of November 2007, residue deposition started in a second storage facility (Residue Drying Area No. 2) some 3 km south of the plant.

Slurry Dam No. 1 is divided into two cells; Cell A has a mud surface area of approximately 54 ha, and Cell B has a mud surface area of approximately 86 ha. The southern and western perimeter walls of the dam are constrained by the banks of the Yuzny Bug River. The residue storage facility reached its final capacity of 25.3 Mm^3 in November 2007, and is no longer used for mud deposition. The perimeter embankments comprise asphaltic concrete seals. The basin floor construction utilizes a dual 0.2mm thick synthetic liner with a 0.5m thick sand underdrainage system. There are eight recovery/monitoring wells on the dam perimeter to return potentially contaminated seepage water to the system.

The latest closure plan for Slurry Dam No. 1 involves capping of Cell B using a layer of sand, clay and topsoil. Cell A will be used for process water storage from the plant and for the containment of decant, underdrainage and surface drainage from the Residue Drying Area No. 2 facility. Final closure planning is currently underway with detailed design expected to commence in 2009. Nikolaev envisage to have completed the rehabilitation work within four years of commencing construction.

Residue Drying Area No. 2 is divided into three equally sized cells with a combined mud drying area of approximately 112 ha. Containment of the slurry is achieved by a natural clay seal, dual 1 mm thick synthetic liner system with a geotextile layer. Pressure heads on the liner are controlled via a 0.5 m thick sand underdrainage layer which discharges via gravity to an external sump. When full, Residue Drying Area No. 2 will hold 27.8 Mm^3 of residue mud at a projected average solids content in excess of 70 per cent. Compared with conventional wet deposition methods, the footprint area required for storage will be reduced, and therefore exposure of groundwater to contamination and final rehabilitation costs may also be reduced. A permit for mud disposal has been obtained from the Ministry of Environmental Protection of the Nikolaev region and is renewed annually.

The capacity of the facility will be gradually increased by incorporating upstream construction methods, whereby dried mud may be harvested and used to increase the height of the perimeter embankments.

The 3.6 km residue transport pipeline is flanged and traverses property which is not owned by Nikolaev Alumina Refinery. Based on site observations the pipeline has been designed and constructed to a high standard.

In 2007, Nikolaev Alumina Refinery sold 256 kt of red mud. This material is currently quarried from Slurry Dam No. 1, Cell B.

The only recent violation of environmental permit conditions relates to airborne dust from Slurry Dam No. 1. This incident occurred in January 2006 and has been linked to specific and irregular frost conditions. Monitoring activity has been increased in the aftermath of the January 2006 incident. The design of the dust suppression system has been updated for Residue Drying Area No. 2. The probability of dust generation within the new dry stacking facility is likely to be higher than for Slurry Dam No. 1, as the residue materials are encouraged to dry and are therefore more susceptible to wind erosion. No dust suppression system was evident at the port or ore stockpile areas. In addition, the plant uses vertical type lime kilns. The kiln loading systems are unsuppressed and also prone to dust emissions.

Groundwater quality is not actively monitored within the plant footprint. Spills are effectively segregated from stormwater and returned to the process via local area sumps. However, concrete slab construction appears to have been used in several locations and it is considered unlikely that these will provide a complete seal, although the containment below the precipitator area includes a concrete slab and synthetic liner system. It is recommended that Nikolaev Alumina Refinery extend the existing groundwater monitoring programme at the plant perimeter so as to also encompass some characterization of the groundwater within the production area. Wells located at the plant perimeter are used to supply potable water to the plant site and are monitored annually for signs of contamination. Groundwater characterisation within the plant boundary is a critical early warning system and effectively reduces liability in event of potential contamination resulting from refinery operations.

With the exception of sanitary waste, which is delivered to a local treatment plant, Nikolaev Alumina Refinery operates as a zero liquid discharge system. A Sewage Treatment Plant at Nikolaev Alumina Refinery is due to commence operations in 2009.

4.12.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL advised that it has completed construction of the equipment and facilities for the expansion of plant capacity to 1.7 Mtpa. Only approximately one-third of the additional capacity is currently being utilised due reduced demand for alumina from within UC RUSAL and the global market.

4.12.6 Specific Risks and Future Opportunities

Specific Risks

- **Electricity/Natural Gas Unit Pricing** — Electrical supply is in the process of being deregulated in the Ukraine, and so there is uncertainty in the unit pricing and an inability to set up long term contracts.

- **Security of Gas Supply** — There was an interruption in the supply of natural gas in 2006 and future interruptions cannot be ruled out in the region. However, the refinery holds sufficient back-up fuel-oil storage onsite to fire the boilerhouse and calciners for around one week, which would maintain production at levels up to 1.4 Mtpa. The balance of the plant capacity of 1.7 Mtpa is potentially under threat since the boilers added in the recent expansion are not capable of being fired with fuel-oil.

Future Opportunities

- **Capacity Expansion** — The Nikolaev Alumina Refinery third phase expansion project aims to increase plant production from 1.7 Mtpa to 2.0 Mtpa. A detailed feasibility study has not yet been performed on this project and will be considered following the expansion project to 1.7 Mtpa.

4.13 Zaporozhye Alumina Refinery

4.13.1 Introduction

Hatch undertook a site visit to Zaporozhye Alumina Refinery in September 2008. This Section 4.13 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 4.13.2 — Updated with data and information as of September 2009,

- Section 4.13.3 — Process Description as of September 2008,

- Section 4.13.4 — Environmental Status as of September 2008,

- Section 4.13.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 4.13.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

4.13.2 History, Location and Infrastructure

Construction of the Zaporozhye Alumina and Aluminium complex began in 1930, with commissioning of the Zaporozhye Alumina Refinery in 1934, one year after the start of Zaporozhye Aluminium Smelter. After World War Two, the plant was virtually rebuilt in 1956.

Zaporozhye is a heavily industrialised city of approximately 850,000 people located in the south east of Ukraine, approximately 600 km south of Kiev. The city is located on the Dnieper River and is partly supplied by electricity generated from the Dneproges hydroelectric power station which dams the river at Zaporozhye.

Zaporozhye Alumina Refinery produced 227 kt of alumina in 2008.

The facility is currently not operational and is under care and maintenance. Refer to Section 4.13.5.

4.13.3 Process Description

Zaporozhye Alumina Refinery incorporates the Bayer digestion process (high and low temperature variants) in addition to a sintering process.

Bayer process

- Bauxite is currently and will continue to be predominantly supplied from Guinea (Companie des Bauxites de Kindia), and Guyana, with smaller quantities supplied from Australia, the former Yugoslavia and India. Bauxite is transported by vessels up to 50-60 kt in size to the port at Nikolaev, Ukraine and is then transhipped in 2,500 to 5,000-tonne barges via the Dnieper River and finally rail transported from the Zaporozhye port over the short distance to the plant site.

- Blended bauxite is mixed with caustic liquor and wet-ground in ball mills in a closed circuit. The alumina-bearing minerals are leached from the bauxite ore in four trains of pressure autoclaves using caustic soda liquor at elevated temperatures. There are a total of 30 autoclaves (one bank of eight, one bank of ten, and two banks normally with six autoclaves). These can be rearranged as required. Gibbsitic ores are digested at approximately 150°C. Boehmitic and diasporic ores are digested at approximately 210°C in one of the larger banks.

- After depressurisation, the digested slurry is diluted and transferred to mud settlers where the residue solids are separated from the alumina-rich liquor by gravity sedimentation. The refinery has a single washer train containing a settler and five washing stages. Burnt lime from a vertical shaft furnace is slaked and added to the overflow from the second washer (chemical causticisation) to convert sodium carbonate back to caustic.

- The pregnant liquor overflowing the mud settlers is directed to security filtration. The filtered pregnant liquor is then cooled and pumped to the precipitation area.

- Out of the 30 cone bottom precipitators, 18 have been converted from air to mechanical agitation using Russian designed agitators. Hydrate solids from the final precipitation tank are separated by gravity sedimentation and tray thickeners. The hydrate is filtered using vacuum drum filters and a portion of hydrate is returned to the agglomerators and growth precipitators.

- Some carbonate is separated as soda salts by deep evaporation and crystallisation and is sent to the sintering process for recovery of soda (thermal causticisation).

Sintering/thermal causticisation process

- The sintering process is used to treat bauxite with a low alumina-to-silica ratio. Crushed blended bauxite is mixed with soda ash, and evaporated Bayer liquor and ground in ball mills. The wet blend is fed to one of two sintering kilns, where the bauxite and soda are converted at 900°C to a solid clinker consisting of soluble sodium aluminate and non-soluble residue.

- The clinker is ground and leached to solubilise the sodium aluminate. The leach slurry is then sent to the Bayer circuit "red mud" washers, so that alumina values can be separated from the residue solids.

Calcination and evaporation

- The hydrate produced in the Bayer and sintering processes is filtered and washed using three stages of vacuum drum filters. The washed hydrate cake is calcined to form alumina in the four rotary kilns.
- Special aluminas are made just before a rotary kiln is due for maintenance, due to the hard burning required.
- Spent liquor is concentrated in five batteries of evaporators. A sodium carbonate salt is removed from the liquor with the concentrated liquor being returned to the grinding and digestion stages of the Bayer process. Evaporation accounts for 80 per cent of the refinery steam usage, and there are initiatives to reduce this consumption by upgrading the evaporators from 3-effect to 4-effect.

The thermal energy (steam and hot water) demand of Zaporozhye Alumina Refinery is met by an internal gas fired power station with back-up heavy fuel oil supply. This powerhouse also supplies a significant portion of the refinery's electrical power. Zaporozhye Alumina Refinery also supplies the heating requirements for a small residential area (approximately 200-300 citizens) and some auxiliary industrial companies.

4.13.4 Environmental

Zaporozhye Alumina Refinery has achieved ISO 14001 environmental management certification.

Until 1983, Zaporozhye Alumina Refinery disposed of bauxite residue at a storage facility located adjacent to Zaporozhstal Steel Works, approximately 1.5 km from the refinery. In the past five years, Zaporozhye has not deposited red mud into this emergency facility. Surface water from this storage facility is decanted and discharged directly to the Dnieper River, which is immediately downstream.

In 1983, Red Mud Pond No. 2, a new residue storage facility covering a total area of approximately 70 ha with an available mud drying area of 51.5 ha, providing a useful storage capacity of 8.5 Mm^3 was commissioned. Red Mud Pond No. 2 is located 42 km from the refinery. Almost 70 per cent of the pipeline is buried and it is therefore difficult to carry out routine inspections. The slurried red mud is discharged from the southern embankment, and settles rapidly after discharge, forming a gently sloping beach which confines the decant pond to the northern sector of the storage. The deposition methods adopted by Zaporozhye ensure good decant management while reducing the potential for contaminant seepage through the embankment and improving embankment stability.

It is considered that the design of Red Mud Pond No. 2 meets international standards for containment of alkaline liquor. The effluent storage adjacent to Red Mud Pond No. 2 operated by the steel works may not be built to the same standards and could be responsible for groundwater contamination requiring Zaporozhye Alumina Refinery to demonstrate to regulatory authorities that their facility is not responsible. Comprehensive monitoring undertaken by Zaporozhye Alumina Refinery should serve to reduce this risk.

Based on forecast alumina production rates, it is expected that Red Mud Pond No. 2 will reach full capacity in 2014. A number of options are being considered to provide residue storage beyond 2014. These include raising the dam crest of Red Mud Pond No. 2 by between 3 m to 8 m to extend the facility life by up to 12 years or adapting a mined out quarry approximately 20 km from the plant to receive the residue material.

A small scale study to evaluate the use of red mud in the cement and steel industries has been completed. This study is on-going and if successful could lead to the sale of up to 150 kt of mud per annum.

Wastewater characteristics are regulated at the point of discharge from Zaporozhye Alumina Refinery. Treatment for oil and sediment removal is conducted by the neighbouring Ukrgraphite plant before final discharge to the Dnieper River.

All buildings associated with production are covered, simplifying the segregation of stormwater from process affected waters. A total of 22 wells are installed throughout the plant area and these are sampled regularly to assess the impact of operations on groundwater quality. Contamination has been detected at some well locations although the source has not been identified.

The refinery boilers are not equipped with any additional emission abatement systems. ESP's are installed on the sintering and alumina kilns.

Plant instrumentation and control systems are extremely outdated and are not linked to a central DCS system. This compromises the ability to detect environmental excursions and evolving unsafe situations. This lack of appropriate alarm functionality jeopardises the ongoing incident-free operation of the facility.

4.13.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Zaporozhye Alumina Refinery is currently not operational following the full closure of the plant implemented in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for alumina from its aluminium smelters and the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the current full plant closure as temporary and that the plant is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

4.13.6 Specific Risks and Future Opportunities

Specific Risks

- **Location of Red Mud Pond** — Red Mud Pond No. 2 is located 42 km away from the plant and there is a risk that pipeline damage along the transfer route may result in an environmentally significant contamination.

- **Reliance on Third Parties** — Wastewater is discharged for treatment at the Ukrgraphite and Zaporozhye Ferroalloy plants.

Future Opportunities

- **Product/Market Opportunities** — Zaporozhye Alumina Refinery has the opportunity to thicken or filter some of the red mud generated in the refinery, before sale to the cement, iron and steel industries.

5. Aluminium Division

5.1 Bratsk Aluminium Smelter

5.1.1 Introduction

Hatch undertook a site visit to Bratsk Aluminium Smelter in September 2008. This Section 5.1 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.1.2 — Updated with data and information as of September 2009,
- Section 5.1.3 — Process Description as of September 2008,
- Section 5.1.4 — Environmental Status as of September 2008,
- Section 5.1.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.1.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.1.2 History, Location and Infrastructure

Bratsk Aluminium Smelter is located approximately 15 km by road from the town of Bratsk in Irkutsk Region. Chekanovsky, a small village of approximately 1,425 inhabitants, is located close to the smelter and under a federal plan the residents will be relocated to a residential area to be built by the smelter, near Bratsk for health and safety reasons. This residential area is currently being designed and is scheduled for completion by 2012.

Bratsk is a town of approximately 260,000 people, and has several other heavy industries including a pulp and cardboard mill and the hydroelectric power station from which the smelter sources its power. Bratsk has a domestic airport with scheduled flights to other major cities in the Russian Federation. The smelter has direct rail links to the nearby trans-Siberian rail system, providing excellent means for materials transportation.

The smelter site covers 465 hectares and adjoins a ferro alloy production plant which until April 2004 was also part of the Bratsk Aluminium Smelter complex but is now a separate legal entity not linked to UC RUSAL.

Bratsk Aluminium Smelter commenced operations in 1966 and is the largest capacity smelter in the world, producing 1,002 kt of saleable aluminium in 2008.

Bratsk Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

5.1.3 Process Description

Bratsk Aluminium Smelter comprises 13 potlines, configured as 25 potrooms, 24 of which are very similar in type. Potroom 25 was constructed in 1999 to fit within an existing building, previously used for production of high purity aluminium. The average line current across the smelter is 164 kA. The potlines are summarised as follows:

- Potlines 1 to 12 are each configured as two potrooms (Potrooms 1 to 24) with each potroom containing either 90 or 94 cells laid in an end-to-end arrangement, operating at approximately 168 to 170 kA; and

- Potline 25 is configured as a single potroom containing 142 cells laid in an end-to-end arrangement, operating at approximately 110 kA. The cells in Potroom 25 are smaller in size than those of the other potrooms.

The smelter site is divided into three reduction 'plants' for administrative and operational purposes. Potrooms 1 to 8 form Plant No. 1, Potrooms 9 to 16 form Plant No. 2, and Potrooms 17 to 25 form Plant No. 3. All cells are of VAMI VSS design and the potrooms are of two-storey, single bay construction.

Cells within Potrooms 1 to 8 and Potrooms 13 to 24 are tended via gantry-mounted equipment which straddle cells and run along the length of the potrooms on rails to perform crust breaking and alumina feeding operations. Alumina is fed to the gantry daybin via silos external to the potrooms. In the remaining potrooms, alumina is fed using wheeled vehicles charged from filling stations located in the central passageways. Bath material is fed to the pots using mobile vehicles. Overhead process cranes are used in all potrooms to pull and reset the studs.

The anode paste production facilities include four coke calciners and six processing lines each incorporating hammer mills, roll crushers, ball mills, pre-heaters, proportioners, paste mixers and pelletising baths.

The smelter has three casthouses, one for each reduction plant. Hot metal is siphoned from the cells and transported to the casthouses in 5-tonne ladles. The casthouses specialise in the following products:

- Casthouse 1 produces 15 kg ingots (un-alloyed), electrical wire rod (9.5-33 mm diameter), wire rod (11.5 to 14.5 mm), T-bars (750 kg), and small quantities of strip for cathode flexible connections. A new container-loading terminal within an annex to the casthouse was commissioned in July 2006.

- Casthouse 2 produces 15 kg ingots (un-alloyed and A380.1), T-bars (750 kg), and anode stud conductors for the smelter's own use.

- Casthouse 3 produces T-bars (750 kg) and slabs/rolling block (3000, 5000 and 8000 series). Casthouse 3 is the largest of the casthouses at the smelter and has the most modern casting equipment, with a new 80 t furnace and Vertical Direct Chill (VDC) caster being commissioned in May 2007 from a reputable Western supplier.

All process raw materials are received by rail. The smelter is located on the BAM-Baikalo-Amurskay railway. Alumina is sourced from within UC RUSAL from a variety of refineries, namely Achinsk Alumina Refinery, Fria Alumina Refinery, Nikolaev Alumina Refinery and Queensland Alumina Ltd. and is also procured externally from Pavlodar Alumina Refinery in Kazakhstan. Approximately 80 to 85 per cent of alumina is imported from the overseas refineries.

Green petroleum coke is supplied from oil refineries at Angarsk and Perm within the Russian Federation, and also from China.

Coal-tar pitch is received in solid granulated form in one-tonne bags and in liquid form in heated rail tankers, predominantly from Russia and Ukraine. All of the high temperature pitch is sourced from Magnitogorsk. Cathode blocks are sourced from China, internally from Lingshi Cathode Plant and also from Elkem China.

At Bratsk Aluminium Smelter there is no spare calcination capacity. Therefore, when any of the calciners are shut down for maintenance, Bratsk Aluminium Smelter has an internal contract for periodic delivery of calcined coke from Krasnoyarsk Aluminium Smelter.

Bratsk Aluminium Smelter receives power directly from the Bratsk hydroelectric power station (operated by Irkutskenergo), which is connected to the Irkutsk grid. The smelter receives power through nine of 12 dedicated 220 kV transmission lines, hence there is redundant capacity that could be utilised in the future. In addition, there are two 500 kV power lines to the smelter directly from the main Bratsk switch station that can also be used for provision of energy supply. The Bratsk hydroelectric power station operates at below full capacity and it is claimed there is approximately 12 million MWh of spare power generating capacity in the region. The Bratsk Aluminium Smelter consumes approximately 75 per cent of the power generated from the power station and is thus a principal customer of the facility.

Originally the potlines were equipped with 8 x 22 kA rectifiers, with the exception of Potroom 25 which is equipped with 5 x 22 kA units with additional support through a connection to Potroom 24. The rectifier transformers were rated to 450 V in Potrooms 13 to 16, 750 V in Potroom 25 and 850 V in the remainder of the potlines. However, the smelter has since made a number of replacements and 24 of the original rectifiers have been replaced with larger 32 kA units to support a general line current increase to 175 kA. There are 48 main step-down transformers and three spares. Substantial rectifier and electrical equipment upgrades will occur in the potrooms as part of the Bratsk Modernisation Programme.

The senior management at Bratsk Aluminium Smelter are in the process of implementing a new management structure and business system to improve the plant efficiency and working conditions of all employees. The changes involve a reduction in the number of intermediate managers/supervisors, worker training programmes, changes in shift patterns, greater mechanisation and improved salary conditions for the remaining workforce. It is expected that the changes will result in an increase in aluminium production efficiency to 250 t per person by 2010.

5.1.4 Environmental

Bratsk Aluminium Smelter has achieved ISO 14001 environmental management certification.

There have been several environmental upgrades implemented at Bratsk Aluminium Smelter in recent times. The plant has been fully converted to dry anode paste resulting in a decrease in emissions of benzapyrene and tars. Additionally, improvements have been made to the fume combustion systems on the cells. Stud-hole plugs have been tested as part of the modernisation project. They will be introduced throughout the plant in 2009. This activity will lead to a reduction in emissions of anode gas into the potroom vents.

Gases from all potrooms, except for one-half of Potrooms 7 and 8, are first treated by Electrostatic Precipitators (ESP), or a wet form of ESP scrubbing, to remove particulates followed by a series of wet scrubbers (two operating and one on stand-by) connected to a stack of 80 m height. The Bratsk Aluminium Smelter has plans to install 25 new dry scrubbers as part of the Bratsk Modernisation Programme, and a decision whether to continue the use of the existing wet scrubber systems in addition to the dry systems will be made shortly.

The majority of solid waste produced by the plant is in the form of Spent Pot Lining (SPL). This is sent to special disposal areas located 5 km outside of the plant boundaries, with the exception of some of the carboniferous material which is crushed, graded and sold to steel industries mainly in the Urals region. The disposal areas are lined with clay to form a semi-impervious barrier and thus there will be some seepage of effluent into local groundwater. It is predicted that the existing waste disposal areas can continue to operate until 2013, at which time they will be full. However, within the Bratsk Modernisation Programme, it is proposed to construct a new waste disposal area which will give Bratsk Aluminium Smelter the opportunity to operate a disposal area in line with current industry practice.

The tails from the wet scrubbing systems discharge into settlement ponds to remove the solids from the liquor. There are currently two such ponds offsite which are clay lined and therefore semi-impervious to their contents. An early settlement pond was recultivated and returned to the city in July 2005. The volume of the two existing ponds is expected to be sufficient to meet the plant requirements for the next four years, however the forthcoming Bratsk Modernisation Programme, with the installation of dry scrubbers, will limit the volume of tails discharge and there may be sufficient capacity in the existing systems.

Although the potroom environment was reasonable in all potrooms, a reduction in dust levels is expected upon conversion of all potlines to point-feeding, to be carried out as part of the forthcoming Bratsk Modernisation Programme. At present only cells in Potroom 20 and Potroom 25 are equipped with alumina point feeders.

5.1.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

In January 2009 UC RUSAL took the decision to reduce operating costs at the facility by not relining reduction cells as they approached the end of their life or failed. This approach resulted in marginally lower production in the first half of 2009 compared with expected production had the cell relining schedule been followed.

UC RUSAL advised Hatch that by May 2009 all failed cells had been relined and were operational and that the facility was restored to full operational level.

Hatch has been advised that the Bratsk Modernisation Programme has been temporarily suspended. Instead UC Rusal has begun implementation of a Continuous Production Improvement Programme at the smelter. UC Rusal advised that this programme is aimed at achieving similar environmental goals as the suspended Bratsk Modernisation Programme, in particular, it intends to decrease potroom roof emissions and the amount of anode effects. However, this programme does not include installation of new dry scrubbing Gas Treatment Centres, and therefore in Hatch's opinion is unlikely to result in similar environmental benefits to the Bratsk Modernisation Programme.

UC RUSAL has advised that Bratsk Aluminium Smelter has recalculated the volume of SPL currently stored in the disposal area and now believes that the existing waste disposal area can continue to operate until 2012.

5.1.6 Specific Risks and Future Opportunities

Specific Risks

- **Asset Integrity** — The Bratsk Modernisation Programme does not include the likely requirement to replace many of the stud pulling cranes over the next few years. Of the 101 cranes installed in the plant (four in each of Potrooms 1 to 24 and five in Potroom 25) only six have been replaced (three in both 1999 and 2004). With completion of the construction of the smelter in 1976, this means that more than 90 of the cranes are at least 30 years old.

- **Environmental Penalties** — Bratsk Aluminium Smelter is located to the North of the Lake Baikal and is included in the area of high environmental sensitivity, which results in higher penalties compared with UC RUSAL aluminium smelters. The Bratsk Modernisation Programme is planned to decrease smelter fluoride emissions through installation of new dry scrubbing Gas Treatment Centres. The temporary suspension of this programme may potentially result in increased environmental fines for air contamination. UC RUSAL has advised the local and regional environmental administration of the temporary suspension of the Modernisation Programme.

Future Opportunities

- **Modernisation Programme (1)** — The Bratsk Modernisation Programme can be resumed following the current temporary suspension. The opportunity exists in restarting The Bratsk Modernisation programme which is proposed to decrease emissions to State agreed levels (excluding fluoride and benzyprene). The plans for a significant upgrade of the smelter under the Modernisation Programme are similar to that implemented at Krasnoyarsk Aluminium Smelter. Bratsk Aluminium Smelter and Krasnoyarsk Aluminium Smelter are similar in terms of layout and potroom design, and both were constructed as a single project with a five-year delay. The scope of the Bratsk modernisation programme includes the addition of 64 new cells within the existing potrooms, upgrading electrical equipment to increase the line current and the construction of dry scrubbers and point feeders on all potlines. An opportunity has been identified to increase the plant capacity at Bratsk Aluminium Smelter as a result of the modernisation. This would offset some of the costs of the necessary environmental improvements. The additional creep is scheduled to be progressively realised in the in five years after commencement of the Bratsk Modernisation Programme.

- **Modernisation Programme (2)** — Stage 2 of the Bratsk Modernisation Programme is proposed to further improve the technological process and decrease all emissions to State agreed levels (Clean Söderberg Technology). The second stage of the modernisation programme will comprise secondary hoods for all cells, colloidal anodes for all potlines and an extraction system for gas tar emissions during stud changing operation for all cells.

5.2 Krasnoyarsk Aluminium Smelter

5.2.1 Introduction

Hatch undertook a site visit to Krasnoyarsk Aluminium Smelter in September 2008. This Section 5.2 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.2.2 — Updated with data and information as of September 2009,

- Section 5.2.3 — Process Description as of September 2008,
- Section 5.2.4 — Environmental Status as of September 2008,
- Section 5.2.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.2.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.2.2 History, Location and Infrastructure

Krasnoyarsk Aluminium Smelter is located on the outskirts of the city of Krasnoyarsk and was commissioned in 1964. Krasnoyarsk is a major city in Siberia with well-developed infrastructure and a population of around 1,000,000. The town is located on the trans-Siberian railway and other major rail routes, providing good rail access for the supply of raw materials and delivery of finished products.

Krasnoyarsk Aluminium Smelter produced 1,000 ktpa of saleable aluminium in 2008, and is currently the second largest aluminium smelter in the world.

Krasnoyarsk Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

5.2.3 Process Description

Krasnoyarsk Aluminium Smelter is currently in the final stages of a large scale Modernisation Programme, the scope of which included significant environmental upgrades including alumina point feeding, construction of new dry-scrubbing GTCs and conversion of the Söderberg cells to dry anode technology. The environmental expenditure is recovered through increased metal production from the installation of 72 additional cells, plus an increase in potline current. The Modernisation Programme is now substantially complete with only a few projects extending into 2009.

The smelter comprises 15 reduction potlines configured in the form of 24 separate potrooms. The smelter employs mainly Söderberg technology, with a total of 1,954 cells of VSS design in 21 potrooms. All the VSS cells are type C-8BM (VAMI design) configured in an end-to-end arrangement with two facing rows of pots in each potroom.

The smelter also has 279 PFPB cells (VAMI design) in three potrooms, configured in an end-to-end arrangement, with 94 C160M4 cells and 184 C125/C120 cells. There are also 75 pre-bake 'refining' cells of a different design producing high-purity metal (>99.97 per cent Al). The Söderberg cells operate at an average of 175 kA and the pre-bake cells at an average of 157 kA. All Söderberg cells at the plant have now been retro-fitted with point-feeders.

Organisationally, the reduction lines are divided into three production "areas":

- Production Area 1 contains VSS Potrooms 1 to 6, PFPB potrooms 7, 8 and 26 and the refining cells;
- Production Area 2 contains VSS Potrooms 9 to 16; and
- Production Area 3 contains VSS Potrooms 17 to 23.

A single paste plant located on-site produces the anode paste requirement for the VSS cells. All paste lines have been modernised and converted to dry anode technology. The anodes for the pre-bake cells are purchased from Chinese suppliers, and will be supplemented by up to 50,000 tpa (approximately 10 per cent) from Sayanogorsk Aluminium Smelter following the rebuild of the SAZ No. 1 baking furnace next year. The pre-bake anodes are rodded at the Krasnoyarsk Aluminium smelter and the anode butts are returned either to Sayanogorsk Aluminium Smelter for reprocessing or sold to local metallurgical plants as a process raw material.

Krasnoyarsk Aluminium Smelter has three casthouses which service the three production areas. The vast majority of the metal produced at the smelter is T-bar, with ingot, slab and alloys also produced. The casthouse equipment consists of a range of furnaces with capacities ranging from 10-tonne to 100-tonne, VDC casters for the production of T-Bar and slab (with slab saws), ingot casters and re-melt furnaces. Casthouse No. 3 has recently undergone a modernisation programme to align the product mix to the marketing strategy and install higher capacity equipment to manage the increased metal production. The most recent equipment added is a large modern VDC casting centre capable of producing rolling slab in lengths of up to 11.5m, which was commissioned in December 2007.

All raw materials are received by rail via the trans-Siberian rail network. Krasnoyarsk Aluminium Smelter receives its alumina by rail from various refineries, namely the Achinsk Alumina Refinery, Bogoslovsk Alumina Refinery and Pavlodar Alumina Refinery. Additionally, minor quantities of alumina are sourced from the RUSAL refineries in Europe and the West Indies. Pitch and coke is delivered by rail from a variety of sources within the Russian Federation and China.

Electric power for the Krasnoyarsk smelter is provided from the OAO Krasnoyarskenergo grid. The grid supply includes the Krasnoyarskaya hydroelectric power station, situated on the Yenisei River approximately 45 km from the plant, plus other coal-fired power stations in the region.

The current power requirement of the smelter is 1,986 MW. The total installed capacity of the Krasnoyarsk hydroelectric power station is 6,000 MW consisting of 12 turbines rated at 500 MW each. The capacity of the power station is well in excess of local requirements and normally only six or seven of the turbines are in operation depending on demand and the water level in the dam. If required, Krasnoyarskenergo is able to import energy via the interconnected Siberian 500 kV distribution grid. There is also the coal-fired power station 'Krasnoyarsk-500' located within one kilometre of the smelter boundary.

The smelter is connected to an adjacent grid substation. The substation is connected by four 220 kV lines direct from the hydroelectric power station. These transmission lines are routed separately; two are carried along the north bank of the river and two on the south bank.

In addition there are a further three 220 kV lines which connect to the Siberian 500 kV grid. The grid provides a robust interconnection with the Krasnoyarskaya and Bratsk power stations providing a high degree of security of supply.

All power to the plant is provided at 10 kV through 16 step-down transformers. The 10 kV is distributed throughout the plant by a complex series of busbars to the potroom transformer/rectifier substations. The scope of the Modernisation Programme included the replacement of many transformers and rectifiers to facilitate the increase in line current.

5.2.4 Environmental

Krasnoyarsk Aluminium Smelter has achieved ISO 14001 environmental management certification.

Management at Krasnoyarsk Aluminium Smelter has a clearly defined strategy for significantly reducing the environmental emissions of the smelter through the Modernisation Programme. The location of the smelter on the outskirts of the city of Krasnoyarsk dictates stringent environmental requirements and monitoring, which are being addressed as part of the Modernisation Programme.

The scope of the Modernisation Programme included the installation of 23 dry scrubbers to replace low-efficiency electrostatic precipitators. The existing wet scrubbers continue to be used on the dry scrubber exhaust gases for polishing and SO2 removal. The dry scrubbers have been progressively installed and this process is expected to be completed in early 2009. To date, all of the new scrubbers have been commissioned and 21 are now fully operational. The modernised GTCs provide sufficient redundancy, with the fluorinated alumina obtained re-used in the potrooms thus reducing overall fluorides consumption. The design and technology for the dry scrubbers was provided by an experienced European company.

In the potrooms, the VSS pots are all now equipped with alumina point feeding systems. This will lead to improved air quality in the potrooms and reduce the dust and fluoride emissions from the VSS pots.

In principle, all water from the wet scrubbing systems and storm water ponds is collected and re-used in the plant. The only discharge is sanitary waste water that is treated by the municipal systems. The tailing ponds for the wet scrubbers are being lined with both clay and an impermeable membrane including a programme to address previously unlined ponds from early smelter operations.

Spent Pot Lining (SPL) is stored in a specially designed landfill 15 km east of the smelter in accordance with Russian Federation regulations.

5.2.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility, with the exception of the equipment/plant upgraded and/or modernised as part of the Krasnoyarsk Modernisation Programme, which was completed in September 2009. The environmental scope of the Modernisation Programme included the conversion to dry anode technology, installation of dry scrubbers, modifications to the burners and installation of point feeding on all cells. The production creep associated with the Modernisation Programme has been realised through the installation of additional cells and increasing line current. UC RUSAL has advised that all GTCs have been commissioned and are currently in operation.

In January 2009 UC RUSAL took the decision to reduce operating costs at the facility by not relining reduction cells as they approached the end of their life or failed. This approach resulted in marginally lower production in the first half of 2009 compared with expected production had the cell relining schedule been followed.

UC RUSAL advised Hatch that it has formed plans to recommence the relining of cells.

Hatch has been advised that trials of the Clean Söderberg Technology on five cells in Potroom 5 have been successfully implemented, and that the technology was introduced to all Söderberg cells of Potroom 5 as of the beginning of 2009.

5.2.6 Specific Risks and Future Opportunities

Specific Risks

- **Third-party Power Equipment** — The smelter power is received directly from the local grid switchyard, which is located immediately adjacent to the smelter. Although there have been no significant power outages, there is some concern by smelter personnel over the condition of the equipment in this substation. The local grid provider has developed a modernisation programme for the substation, including the erection of another two 185 MW transmission lines from the nearby Krasnoyarsk-500 power station, but this is not expected to be implemented for another three to five years.

Future Opportunities

- **Clean Söderberg Technology** — A potential opportunity exists to implement the Clean Söderberg Technology programme at Krasnoyarsk Aluminium Smelter, to further reduce potroom emissions. This relates to the use of 'colloidal' anode paste (with lower pitch content) within the Söderberg reduction cells. Potroom 5 is currently using this technology, and if successful it could be extended to all other Söderberg cells at KrAZ and also at other RUSAL smelters with Söderberg potlines.

5.3 Sayanogorsk Aluminium Smelter

5.3.1 Introduction

Hatch undertook a site visit to Sayanogorsk Aluminium Smelter in September 2008. This Section 5.3 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.3.2 — Updated with data and information as of September 2009,
- Section 5.3.3 — Process Description as of September 2008,
- Section 5.3.4 — Environmental Status as of September 2008,
- Section 5.3.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.3.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.3.2 History, Location and Infrastructure

Sayanogorsk Aluminium Smelter is located on the outskirts of the town of Sayanogorsk, Khakasia Republic in southern Siberia, approximately 75 km south of the regional capital city of Abakan. Sayanogorsk has a population of approximately 60,000 and is located next to the Yenesei River. The town has good rail access for the supply of raw materials and delivery of finished products.

The smelter produced first metal in 1985 and subsequent modernisations and expansions have lifted present production capacity to approximately 537 ktpa of saleable aluminium in 2008.

Sayanogorsk Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

5.3.3 Process Description

The smelter is a relatively modern aluminium production facility, which utilises pre-baked anode technology throughout. Sayanogorsk Aluminium Smelter is currently in the final stages of a large scale Modernisation Programme which commenced in 2004. The scope of the Modernisation Programme included; significant modernisation of the casting equipment, trial sections of new RUSAL Aluminium (RA) smelting technology cells, compensating busbar, modifications to the anode length, increasing the anode stud diameter, control systems and replacing transformer rectifiers. The Modernisation Programme is scheduled for completion in 2009.

The Sayanogorsk smelter comprises four reduction potlines configured in the form of eight separate potrooms and a small pilot potroom. The smelter uses Point Feed Pre Bake (PFPB) technology supplied by VAMI and additional tests cells of RA smelting technology. The smelting process characteristics are summarised below:

- Potline 1 comprises 204 cells, with 102 cells each in Potrooms 1 and 2. Potroom 1 contains 99 type C-175 cells plus three type C-190 cells, all arranged end-to-end. Potroom 2 is similar to Potroom 1, but contains 58 type C-175 and 44 type C-190 cells. The C-190 cells in both potrooms operate with the assistance of a booster rectifier;

- Potline 2 contains 204 cells, with 102 cells each in Potrooms 3 and 4. All cells in Potline 2 are of type C-175 arranged end-to-end;

- Potline 3 contains 164 cells, with 82 cells each in Potrooms 5 and 6. All cells in Potline 3 are type C-255 arranged side-by-side;

- Potline 4 contains 179 cells, with 89 cells in Potroom 7 and 90 cells in Potroom 8. All cells in Potline 4 are type C-255 arranged side-by-side with the exception of a test section of five cells in Potroom 8 of RA-320 and four cells of C-280 technology; and

- The pilot potroom contains 16 cells of RA-400 design and seven cells of C-255 design. At the time of the site visit, eight of the RA-400 cells were in operation and the remaining eight cells were under construction. These latest eight cells are configured to the exact design as will be used for the new Taishet smelter. It is intended to replace the C-255 cells in this experimental room with a trial section of RUSAL's latest technology development, the RA-500 cell, in 2009.

The C-175, C-190 and C-255 cells were initially designed to operate at 175 kA, 190 kA and 255 kA, respectively. At present the cells are operating at 207 kA (C-175), 219 kA(C-190), and between 296 kA and 306 kA (C-255). The plant management has increased the potline current and hence Sayanogorsk smelter production over recent years.

All potrooms have four cranes with three in operation and one on standby or in planned maintenance. The cranes are used in all potlines to tap liquid metal, change anodes, side break cells where required and distribute anode cover material.

Sayanogorsk Aluminium Smelter has one casthouse. Metal is produced as ingot, T-bar, rolling slab and extrusion billet. In addition, liquid aluminium is transferred to SAYANAL, which is located adjacent to the Sayanogorsk smelter. The casthouse has been significantly modernised over recent years to produce valued added products aligned to RUSAL's marketing strategy.

Sayanogorsk Aluminium Smelter is supplied alumina from Nikolaev Alumina Refinery. Alumina is received at the site in two rail handling units and then transported to potroom storage silos through a pneumatic transport system.

The Sayanogorsk smelter has its own carbon facilities including a recently constructed baking furnace (No. 3) for Khakas Aluminium Smelter. The expanded carbon plant produces sufficient quantities of anodes to meet the requirements of Sayanogorsk Aluminium Smelter, Khakas Aluminium Smelter and also the pre-bake potlines of the Krasnoyarsk Aluminium Smelter. The green anode plant consists of three paste production lines of around 120 ktpa nominal capacity each. Anode baking is performed in three furnaces which are located side-by-side.

The smelter receives the required pitch from suppliers within the Russian Federation and coke from a variety of suppliers in the Russian Federation and China.

Electric power for Sayanogorsk Aluminium Smelter is provided via the Khakassenergo grid from the Sayano-Shushenskaya hydroelectric power station, situated on the Yenisei River approximately 50 km from the plant. The Sayanogorsk smelter purchases electrical energy from Khakasenergo, the regional power supply company.

The power requirement of the smelter at current production levels is 1,023 MW. The total installed capacity of the power station is 6,400 MW. The capacity of the power station significantly exceeds local requirements and only a portion of the turbines are used during normal operation, depending on demand and the water level in the dam.

The smelter is fed by 220 kV lines direct from the hydroelectric power station. This provides a robust interconnection with the Khakassenergo grid ensuring a high degree of security of supply.

All power to the plant is provided at 20 kV and is distributed throughout the plant by a series of busbars to the transformer/rectifier substations. As part of the Sayanogorsk Modernisation Programme the transfer rectifiers have been upgraded to support the line current increases which have occurred over recent years.

5.3.4 Environmental

Sayanogorsk Aluminium Smelter has achieved ISO 14001 environmental management certification.

All the potrooms at Sayanogorsk Aluminium Smelter have dry scrubbers and the performance of the environmental systems is good.

The two baking furnaces No. 1 & 2 at SAZ are equipped with wet-scrubbing Fume Treatment Centres (FTCs). A complex comprising three adjacent FTCs was initially constructed at the head of BFs 1 & 2, with one section deliberately left incomplete, since the intention at that time was to add a future third baking furnace of a similar design. However, the No. 3 baking furnace recently added under the Khakas Smelter project is of a more modern design with its own dry-scrubbing FTC, and therefore the ducts from BFs 1 & 2 have now been combined to provide additional standby capacity within the wet-scrubbing FTCs.

As part of the Sayanogorsk Modernisation Programme, the process control equipment of the dry scrubbers was replaced by a new modern fluoride emissions monitoring system. The reliability of the gas cleaning centre has been improved and this is expected to ensure the smelter's good environmental performance can be maintained in the future.

5.3.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

In August 2009, a major accident occurred at the Sayano-Shushenskaya HPP in Siberia, which was the main supplier of electricity to Sayanogorsk Aluminium Smelter and resulted in the temporary loss of power to the smelter. Hatch understands that production at the smelter was not materially affected in the immediate aftermath of the accident as alternative sources of power were quickly identified. Hatch understands that Sayanogorsk Aluminium Smelter is currently receiving power from the regional grid ("Siberian Power Pool") and in particular the regions of Krasnoyarsk and Kemerovo which form part of the Siberian Power Pool. UC RUSAL has stated that it does not expect aluminium production at Sayanogorsk Aluminium Smelter to be affected during the reconstruction of Sayano-Shushenskaya HPP, which the owners, RusHydro, expect to last for four years.

5.3.6 Specific Risks and Future Opportunities

Specific Risks

- **Power Supply** — UC Rusal has advised that the accident at Sayano-Shushenskaya HPP in August 2009 will not affect future production and that alternative sources of power supply have been secured. However, Hatch was not provided with details of the new power arrangements and thus can not confirm their validity.

Future Opportunities

- **Modernisation Programme** — Management at the Sayanogorsk Aluminium Smelter are implementing a clearly defined strategy for improving the financial and non-financial key performance indicators of the smelter, which commenced in 2004 and will continue until 2009. The scope of modernisation works was related to increased metal production, reduction in emissions, reduction in unit consumption of raw materials and increased capacity and flexibility of the casthouse.

5.4 Novokuznetsk Aluminium Smelter

5.4.1 Introduction

Hatch undertook a site visit to Novokuznetsk Aluminium Smelter in September 2008. This Section 5.4 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.4.2 — Updated with data and information as of September 2009,
- Section 5.4.3 — Process Description as of September 2008,
- Section 5.4.4 — Environmental Status as of September 2008,

- Section 5.4.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 5.4.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.4.2 History, Location and Infrastructure

Novokuznetsk Aluminium Smelter is located in Novokuznetsk, which is a major city in central southern Siberia with a population of approximately 630,000 people. The city is situated in the Kemerovo Region and stands on the Tom River.

Novokuznetsk Aluminium Smelter comprises two separate and relatively independent smelter sites, although for management, sales and accounting purposes the sites are considered to be one integrated smelter operation. Construction of Site 1 of the Novokuznetsk smelter (hereinafter referred to as NkAZ-1) commenced in 1939 and first metal was produced in January 1943. Completion of the construction of all facilities of NkAZ-1, together with full metal production, was achieved in 1957. Site 2 of the Novokuznetsk smelter (hereinafter referred to as NkAZ-2), which is located approximately 1.6 km from NkAZ-1, produced its first metal in 1959. Completion of all facilities of NkAZ-2 and full metal production was achieved in 1966.

NkAZ-1 and NkAZ-2 produce approximately 102 ktpa and 218 ktpa (total 320 ktpa), respectively, of saleable aluminium. Novokuznetsk Aluminium Smelter produced 320 kt of saleable aluminium in 2008.

Novokuznetsk Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

NkAZ-1 is currently not operational and is under care and maintenance. Refer to Section 5.4.5.

5.4.3 Process Description

Each of the two smelter sites has its own anode paste production facility. Calcined coke for the two paste plants is delivered by rail directly into the coke storage buildings. Historically, suppliers within the Russian Federation and China have been used, but the plant is currently procuring all its coke from the USA, India and Argentina. Pitch is delivered from the West-Siberian Metallurgy Plant located in Novokuznetsk and it is shipped to the smelter via railway in a liquid form.

Each of the two production sites at Novokuznetsk Aluminium Smelter has a dedicated casthouse; Casthouse 1 at NkAZ-1 and Casthouse 2 at NkAZ-2. Casthouse 1 can produce ingots, billets and simple alloys. Most alloyed products from Novokuznetsk Aluminium Smelter are produced in Casthouse 2 at NkAZ-2 which has recently been modernised.

Until early 2008, NkAZ was supplied with alumina exclusively from the Pavlodar Alumina Refinery. However, NkAZ now receives 48 per cent of its alumina requirements from the UC RUSAL Urals refinery at Kamensk-Uralsky, and the balance from Pavlodar.

The main smelter management and administration offices are all located at the NkAZ-1 site.

Annual energy consumption for the smelter (NkAZ-1 and NkAZ-2) at the present time is approximately 5,381 GWh, at an average power requirement of 614 MW for the combined smelting facilities.

The main differences between the NkAZ-1 and NkAZ-2 sites are detailed below.

Site NkAZ-1

NkAZ-1 comprises Potlines 2, 4 and 5 of Novokuznetsk Aluminium Smelter (five potrooms in total). All cells of NkAZ-1 employ VAMI HSS technology. The smelting process characteristics are summarised below:

- Potline 2 comprises a single potroom (Potroom 2) of 76 cells. Potroom 1 used to form part of an electrical circuit with Potroom 2, but was permanently decommissioned in 1993 for environmental reasons. Potroom 2 employs an early variant of VAMI HSS technology termed BT-82 which was initially designed to operate at 82 kA, but is currently operating at approximately 88 kA; and

- Potline 4 (Potrooms 3 and 4) and Potline 5 (Potrooms 5 and 6) comprise 168 and 160 cells respectively, all of VAMI HSS BT-87 technology. The BT-87 cell was initially designed to operate at 87 kA, but is currently operating at approximately 104 kA. All cells of Potline 5 are equipped with an automatic alumina distribution system with point feeders.

Pot relining operations are carried out in-situ in all potrooms.

Casthouse 1 can produce only simple 1XXX series alloys, mainly in the form of 15 kg ingots, 750 kg T-bars, round billets up to 248 mm diameters and 100x100 mm square bars.

NkAZ-1 is connected to the power grid through four independent high voltage lines at 110 kV, all of which are used under normal operation and any three of which are required to maintain the smelter's full production.

Site NkAZ-2

NkAZ-2 comprises Potlines 6, 7 and 8 of Novokuznetsk Aluminium Smelter (six potrooms in total). All 531 cells of NkAZ-2 employ VAMI VSS technology, arranged end-to-end. The smelting process characteristics are summarised below:

- Potline 6 (Potrooms 7 & 8) comprises 168 VAMI VSS C-2 cells operating at approximately 143 kA.

- Potline 7 (Potrooms 9 & 10) comprises 183 VAMI VSS C-3 cells operating at approximately 142 kA.

- Potline 8 (Potrooms 11 & 12) comprises 180 VAMI VSS C-8BM cells operating at approximately 173 kA.

Digout of failed cells is carried out in-situ, and then the empty shell is removed by overhead crane and immediately replaced by a spare (repaired) shell, before being re-lined in-situ. The overhead crane and building structure are of insufficient load capacity to remove or replace a lined pot.

Within Casthouse 2, there are two rail-loading terminals for product export; one for normal wagons and the other for freight containers. Casthouse 2 has recently been modernised including a Brochot automated line for the production of 15 kg and 22.5 kg ingots, plus a Wagstaff VDC casting machine for billet, incorporating in-line metal treatment facilities plus a Hertwich continuous homogenising and sawing plant for extrusion billet of 6XXX series alloys. The new

Wagstaff equipment can produce billets up to 7.5 m in length. The new ingot line reached its design capacity in early 2007 after a nine-month development period. The new VDC caster and homogeniser were commissioned in December 2007, and are currently operating close to their nameplate capacities.

At the present time, alloy production at NkAZ-2 is approximately 53 ktpa.

The anode paste facility at NkAZ-2 consists of three lines and makes several grades of paste for use within all NkAZ-2 potlines. The paste plant produces these paste grades utilising low temperature pitch. Stud paste is not produced at the plant, but is procured from the Krasnoyarsk Aluminium smelter.

NkAZ-2 is connected to the power grid through eight independent high voltage lines at 10 kV, seven of which are used any one time and six of which are need to support smelter full production. The power grid is connected to several power plants, providing further reliability of power supply.

5.4.4 Environmental

Novokuznetsk Aluminium Smelter has achieved ISO 14001 environmental management certification.

Site NkAZ-1

Potroom 2 currently has no off-gas treatment facilities. Fume is drawn off, ducted under the cells and vented to atmosphere via a 120 m high stack. The construction of a new wet scrubbing system for this potroom is in progress and completion is scheduled for 2009.

Potrooms 3, 4 and 5 of Potlines 4 and 5 are all connected to wet-scrubbing facilities, via ductwork drawing fumes off the top of the cells.

It is several years since any coke calcination has been carried out at NkAZ-1, since all petroleum coke is now received in the pre-calcined condition. The calcined coke reclaimed from storage is dried before reaching the paste mixers, using a hot-air generator in a rotary oven. The drying system is provided with cyclonic dust control which removes around 80 per cent of particulates.

There are no plans to decommission the calciner stream, since the entire NkAZ-1 paste plant must be decommissioned before 2010 to comply with the agreed environmental programme. The paste requirements of the NKAZ-1 smelter must then be accommodated by the NkAZ-2 paste plant, which should be possible as the NkAZ-2 potlines will commence conversion to pre-bake anodes in the same timeframe. It is understood that the NkAZ-2 pre-bake anode requirements will be outsourced.

Site NkAZ-2

Potlines 6, 7 and 8 are fitted with gas treatment facilities using four wet scrubbers per potline and Potline 8 incorporates an additional electrostatic precipitator for particulates. In Potlines 6 and 7, the gas offtake is via ductwork at the top of the cells, while Potline 8 has fume extraction ducted down to the basement of the cells.

All scrubbers employ a counter-flow arrangement. Scrubbers are bypassed during maintenance and the fumes are directly discharged into the atmosphere. This situation is currently being remedied by the installation of additional standby equipment, to permit fume scrubbing to continue when the main facilities are shut down for maintenance.

According to the approved environmental programme, the NkAZ-2 plant is obliged to decommission all of its existing (Söderberg) capacity by 2014, and to have fully converted all potlines to pre-bake anode technology by that date.

The coke calcination kiln in the anode paste plant at NkAZ-2 was decommissioned in 2007, and all coke delivered to the site is pre-calcined. A new hot-gas generator is now used with the old rotary cooler to remove moisture from the calcined coke ahead of process mixing in the paste plant. The gases are cleaned of particulates by passage through an electrostatic precipitator. However, there are no scrubbing facilities to remove noxious chemicals from the paste fumes or the liquid pitch circuit.

5.4.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Novokuznetsk Aluminium Smelter is currently operating below its full production capacity following the full closure of the NkAZ-1 production facilities in April 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the closure of NkAZ-1 as temporary and that facility is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

In December 2008 UC RUSAL took the decision to delay relining 15 reduction cells that had failed. This approach resulted in marginally lower production in the first half of 2009 at NkAZ-2 compared with expected production had the cell relining schedule been followed. UC RUSAL advised Hatch that these 15 cells had subsequently been relined during the second quarter of 2009, and that all cells had returned to operation by the end of the quarter.

5.4.6 Specific Risks and Future Opportunities

Specific Risks

- **Environmental Constraints** — The environmental improvement programme as agreed between the Novokuznetsk Aluminium Smelter and the local environmental agency requires that the majority of the existing operational process equipment, particularly at NkAZ-1, be totally decommissioned before 2014. A long-term plan for the upgrade of the entire smelter must therefore be fully approved and implemented as soon as possible.

Future Opportunities

- **Clean Söderberg Technology** — A potential opportunity exists to implement RUSAL's Clean Söderberg Technology programme at Novokuznetsk Aluminium Smelter, on the C-8BM VSS cells of Potline 8 at NkAZ-2. This technology is currently being trialled at the Krasnoyarsk Aluminium smelter.

- **Prebake Conversion** — It is intended to convert five cells within the east side of Potroom 10 (of Potline 7 at NkAZ-2) to pre-bake anode technology, as a pilot for a potential future full-scale conversion. The project includes a new pot control system, alumina feed system and dry-scrubber GTC section. UC RUSAL expect the new pre-bake cells to operate at 167 kA, compared with the 142 kA of the existing C-3 cells, and therefore a 25 per cent increase in metal production per cell is expected if a full-scale implementation project was to proceed.

- **Increased Alloy Production** — With the recent commissioning of new casthouse equipment at NkAZ-2, it is intended to increase the production of alloys in future years.

5.5 Irkutsk Aluminium Smelter

5.5.1 Introduction

Hatch undertook a site visit to Irkutsk Aluminium Smelter in September 2008. This Section 5.5 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.5.2 — Updated with data and information as of September 2009,

- Section 5.5.3 — Process Description as of September 2008,

- Section 5.5.4 — Environmental Status as of September 2008,

- Section 5.5.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 5.5.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.5.2 History, Location and Infrastructure

Irkutsk Aluminium Smelter is situated 3 km from the town of Shelekhov, approximately 22 km to the north-west of the city of Irkutsk. Shelekhov has a population of just 57,000 people, but Irkutsk is a major city with around 635,000 inhabitants and many other large industrial facilities. The city of Irkutsk is located on the Angara River at the southern end of Lake Baikal, an area of world environmental significance.

The total area of the smelter site is 236 hectares. The trans-Siberian railway runs 2 km east of the facility, providing excellent transport links for all the material flows to and from the plant. The smelter is located adjacent to a metals powder plant, a silicon plant and a cable factory (aluminium and copper).

Irkutsk Aluminium Smelter commenced operations in 1962 and has undergone a series of modifications, expansions and capacity creep since that time. The original ‘nameplate’ capacity was 247 ktpa, however Irkutsk Aluminium Smelter produced 358 ktpa of saleable aluminium in 2008.

5.5.3 Process Description

The existing smelting facilities comprise five potlines of two potrooms each (ten potrooms in total). Potline 2 is the oldest and is of "single storey" design. The other potlines are of basement design with the operating floor approximately four metres above local grade level. VSS technology of VAMI design is used for Potrooms 1-8 of the smelter, except for Potroom 4 (Potline 2) which also houses a pilot section of 13 pre-bake cells. Pre-baked anode technology of SibVAMI design is used for Potrooms 9 and 10. Potline 5 was started-up at the end of 2007. The smelting process characteristics are summarised below:

- Potrooms 1, 2 and 8 are equipped with VAMI C-8B type cells with composite steel-and-aluminium studs and operate at approximately 164 kA;

- Potrooms 3 and 4 are equipped with VAMI C-2 and C-3 cells using cylindrical steel studs with copper shells operating at 135 kA. The 13 SibVAMI pre-bake cells in Potroom 4 operate in a booster section at 140 kA, complete with autonomous gas scrubber. Anodes for the pre-bake cells are imported from China;

- Potrooms 5, 6, 7 are equipped with VAMI C-8B-M cells with composite steel-and-aluminium studs and operate at approximately 164 kA. Potroom 6 also contains a block of six test cells with point feeders operating at 170 kA.

- Potrooms 9 and 10 are equipped with SibVAMI OA-300M2 pre-baked anode cells and at the time of the site visit, 101 cells were in operation at 300 kA. The potroom buildings have been substantially completed and all cells and busbars have been installed. The potline contains a total of 200 modern pre-baked centre-feed cells in two parallel potrooms of 100 cells each. Initially the cells will operate at 300 kA although it is expected that 330 kA will be achievable after a short period (this was achieved on a pilot plant at Urals Aluminium Smelter). At 300 kA, the IrkAZ-5 potline is expected to produce around 169 ktpa. The Potline is equipped with Pot Tending Machines by ISL for maintenance and Metal Tapping Cranes. Other associated project facilities include a new rodding shop and additional casting facilities, i.e. the installation of four 60-tonne holding furnaces and two ingot casting lines within existing plant buildings.

Around 100 of the total of 705 Söderberg cells are currently equipped with plant-designed point feeders. Although a certain number of unresolved issues remain, for instance the difficulty of handling floury alumina, these cells operate with higher current efficiency and lower emissions of dust and fluorides.

All routine cell maintenance activities of Söderberg Potlines are manual operations and relatively labour intensive. Crust breaking and alumina feeding operations are carried out using bespoke vehicles. Anode studs are serviced from above using overhead cranes, which are also employed to charge the continuous anodes with fresh paste via bins lifted from the operating floor and suspended on the crane hooks. Fourteen anode stud cranes at the end of their service life are currently scheduled for replacement.

A single paste plant located on-site produces most of the anode material required for the smelter. However, due to capacity limitations of the on-site paste production facilities, some additional anode paste is imported from the Bogoslovsk Aluminium Smelter.

There are two casthouses on-site; the "Casting Rolling Shop" and the "Electrical Cast House". The "Electrical Cast House" is the smaller of the two on-site cast houses and is dedicated to ingot production, cooling and storage. Alloys are produced within this shop. The "Casting Rolling Shop" is made up of several bays and annexes and contains equipment for wire rod production, ingot casting, strip casting and VDC billet and busbar products. The busbar for the Irkutsk

Aluminium Smelter Potline 5 was cast in this shop. Additionally, this shop contains an annex for servicing the wire rod production machinery and for ladle maintenance. Much of this area is designated for use in the construction of new casting facilities to receive metal from Potline 5.

Irkutsk Aluminium Smelter receives its alumina by rail from Achinsk, Pavlodar and Bogoslovsk Alumina Refineries. Previously, alumina was also received from Urals Alumina Refinery. Pitch and coke is supplied by rail from a variety of sources within the Russian Federation. Baked anode blocks for the new Potline 5 are supplied from China and delivered to the smelter by rail.

Irkutsk Aluminium Smelter is currently served by two load/unload railway stations located adjacent to the production facilities (Zavodskaya and Goncharovo). In addition, a new container terminal was commissioned in 2005 enabling the smelter to increase container shipping from 134 per month to 730 per month. The trans-Siberian railway is currently under-utilised and can comfortably accommodate any foreseen increase in rail traffic movements arising from an increase in production at Irkutsk Aluminium Smelter.

Electrical power for the smelter is provided from three primary sources: the Irkutsk hydroelectric plant, the Novo-Irkutskaya thermal coal plant located adjacent to the smelter and the 500 kV Irkutskenergo grid. The grid is supplied by three primary hydroelectric plants at Irkutsk, Bratsk and Ustilimsk and supplemented by a series of smaller hydroelectric and thermal power stations located around the province.

Irkutsk Aluminium Smelter is connected at three points on the Irkutskenergo grid system, via the Shelekhovo substation:

- 110 kV transmission lines directly from the Irkutsk Hydro (Angara) hydroelectric plant located on the outskirts of Irkutsk around 18 km east of the plant;
- 220 kV transmission lines directly from the Novo-Irkutsk thermoelectric power station located around 16 km east of the plant; and
- 220 kV transmission lines from the Ustilimsk-Bratsk-Angarsk 500 kV main grid line via the 500/220 kV switchyard at Angarsk, around 40 km to the west of the plant.

The electrical transmission lines for power supply to Potline 5 have been upgraded.

5.5.4 Environmental

Irkutsk Aluminium Smelter has achieved ISO 14001 environmental management certification.

Environmental monitoring is performed on-site and in the local community (Shelekhov) by both the plant and other environmental agencies. The staff and community in the region are aware that they are close to the ecologically significant area around Lake Baikal and as a result need to perform to stringent environmental standards.

The pot gases from Potlines 1, 3 and 4 are all processed through wet scrubbers and electrostatic precipitators. Potline 2 off-gases are treated via a wet scrubbing system, reducing the emissions of fluorides, SO_2, benzopyrene compounds and dust. Over recent years, the wet scrubbers and electrostatic precipitators have been upgraded. Potline 5 is a pre-baked potline and is being constructed with modern dry scrubbing gas treatment.

Replacement of the gas burners and installation of secondary hoods for Potlines 1, 3 and 4 is proposed during the period 2009 to 2012. Conversion of the wet scrubbers to a dry scrubber system for these Potlines is also proposed from 2011 to 2013. UC RUSAL are planning to convert Potline 2 into a modern high amperage PFPB technology using dry scrubbing gas treatment in 2011.

In the medium to long-term, the opportunity exists to further reduce fluoride and PFC emissions from the Söderberg cells by completing the installation of point feeders. Potroom 4 of Potline 2 has been equipped with an alumina point feeder system. Potroom 3 of Potline 2 will be equipped with a point feeder system during the period 2009 to 2010. Existing Potlines 1, 3 and 4 are planned to be equipped with point feeder systems from 2010 to 2012.

Spent electrolyte is recycled and used to line new cells while spent carbon-based and reacted materials are sent to landfill in a site with a water-tight barrier. Tailings from the GTC web scrubbers are first processed to extract cryolite, and are then sent to Waste Area No 2. Waste Area No. 2 is expected to reach its capacity in 2010. A new waste storage area (Area No. 3) is planned and construction will be completed in 2010. This is expected to provide an additional 350,000m^3 of storage capacity.

5.5.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility. with the exception of the equipment/plant forming the IrkAZ-5 project. Hatch was advised that 154 cells of IrkAZ-5 are currently operational, with the remaining 46 cells of the projected planned to be commissioned by the end of 2009.

Irkutsk Aluminium Smelter is currently operating below its full production capacity following the closure of Potline 2 in February 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the closure of Potline 2 as temporary and that the potline is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

5.5.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Clean Söderberg Technology** — A potential opportunity exists to implement the Clean Söderberg Technology programme at Irkutsk Aluminium Smelter (e.g. use of point feeders).

- **Efficiency Upgrade** — The operations team at Irkutsk Aluminium Smelter are focused on strategic initiatives to increase line current and cell life of the existing Söderberg potlines. The approved investment programme includes expenditure to upgrade rectifiers for Potlines 1, 3 and 4 to facilitate the line current increase. Calculations performed by SibVAMI indicate that line current can be increased with changes to cathode lining, anode casing, modification to the bath chemistry and implementation of dry colloidal anode paste. Over the past 10 years, a systematic programme was carried out to investigate unexpected pot failures. Design changes were made, improvements to quality control of the pot construction were implemented and start-up procedures were modernised, resulting in a significant decrease of early pot failures and an increase in average pot life.

5.6 Khakas Aluminium Smelter

5.6.1 Introduction

Hatch undertook a site visit to Khakas Aluminium Smelter in July 2009. This Section 5.6 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.6.2 — Updated with data and information as of September 2009,
- Section 5.6.3 — Process Description as of July 2009,
- Section 5.6.4 — Environmental Status as of July 2009,
- Section 5.6.5 — Material Developments at the facility between July 2009 and September 2009, and
- Section 5.6.6 — All previous Specific Risks and Opportunities noted in July 2009 together with any changes following new data and information provision.

5.6.2 History, Location and Infrastructure

Khakas Aluminium Smelter is located within the site boundaries of the Sayanogorsk Aluminium Smelter. In substance the Khakas Aluminium Smelter could be regarded as an expansion of the Sayanogorsk smelter, but it has been structured as a stand-alone legal entity for project financing purposes. The operations and management personnel at the smelter are the same, however for accounting purposes both operations report their costs separately.

The project was implemented as an Engineering, Procurement and Construction Management (EPCM) contract between RUSAL (prior to the formation of UC RUSAL) and its own Engineering and Construction Company (ECC).

Construction of the Khakas Aluminium Smelter began in March 2005. Preheating of the first pot began in late-November 2006, and the last pot was started up in October 2007. The potline reached full capacity in February 2008 and produced 297 kt during 2008.

The Khakas smelter uses RUSAL's RA-300 cell technology. The Khakas smelter project included a new casthouse dedicated to the solidification of metal from the Khakas potline. The third baking furnace on the site was also constructed as part of the Khakas smelter project. However, all green anode production and anode rodding operations are carried out within the existing Sayanogorsk smelter facilities.

Khakas Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

5.6.3 Process Description

The smelter consists of one potline (with two potrooms of 168 cells each) with a total of 336 installed RA-300 cells, currently operating at 320 kA. Each potroom includes 11 Pot Tending Assemblies (10 for normal operation and one spare), one transfer gantry, one cathode removal crane and utilises 10-tonne metal tapping ladles. The potrooms are connected via three passageways permitting the early start-up of first metal. The smelter sources its alumina from Queensland Alumina Ltd.

The Khakas smelter has a single anode baking furnace which, combined with the two existing furnaces and green anode plant at Sayanogorsk Aluminium Smelter, is sufficient to meet the requirements of the smelter and provide sufficient redundancy for future modernisation works.

Khakas Aluminium Smelter has a single casthouse and all the casting equipment is new. The casthouse can currently produce standard unalloyed aluminium as 22.5 kg ingots, from two casting lines, plus T-bars from a horizontal direct-chill (HDC) casting machine. The HDC casting centre is the only such machine within Russia, and if it were equipped with appropriate tooling it would have considerable flexibility to produce several other products, such as long lengths of busbars.

Khakas Aluminium Smelter has a total electrical loading of 522 MW at full capacity. Electricity for the smelter is generated by the Sayano-Shushenskaya hydroelectric plant (owned independently of UC Rusal), some 67 km from the smelter. Two 35 km-long 500kV transmission lines feed the SAZ off-site substation "Oznachennoe-500" from the hydroelectric power station and a single 500kV transmission line continues a further 32km to "Alyuminievaya", a new off-site substation that was constructed to feed KhAZ. A single 500kV transmission line of 55 km also connects "Alyuminievaya" to the "Abakan-500" substation which is linked to the regional transmission grid.

The smelter is supplied with electricity via four 220 kV power lines from Alyuminievaya. An additional 220 kV link line interconnects the Khakas Aluminium Smelter and Sayanogorsk Aluminium Smelter supply lines, a further measure aimed at ensuring continuity of supply in case of disruption to either plant. It is understood that the transmission lines bringing electrical energy from the Sayano-Shushenskaya hydroelectric plant to KhAZ, and its own electrical switchyard, are relatively independent of SAZ's similar equipment.

The smelter potline is fed via a series of five transformer-rectifiers, each with a design rating of 80 kA and 1,500 V. Although all five are normally in constant operation, at below their rated capacity, any four transformer-rectifiers could handle the full potline demand in the event of a failure of one unit. The transformer-rectifiers are made by AREVA and plant personnel have indicated that they are generally performing well.

5.6.4 Environmental

Khakas Aluminium Smelter has achieved ISO 14001environmental management certification.

Khakas Aluminium Smelter is a modern facility employing pre-bake technology and excellent environmental control.

Two GTCs collect and treat off-gas from the potrooms and discharge the cleaned gas to atmosphere. As with most modern pre-bake smelters, the GTCs use the dry alumina scrubbing process that has high removal efficiencies for both gaseous and particulate fluorides and other particulates.

A single FTC treats the off-gas from the anode baking furnace No. 3 and discharges the cleaned gas to the atmosphere. Similar to the GTCs, the FTC uses a dry alumina scrubbing process which has high removal efficiencies of fluorides and particulates. The furnace fumes first pass through a cooler to condense tar, which is also removed by the FTC bags.

The GTCs provided on the potline and the FTC of the new baking furnace No. 3 at Khakas Aluminium Smelter represent the best technology (currently available) for smelter gaseous emissions control.

5.6.5 Material Developments

This section presents material changes to the facility since the last site visit was undertaken in July 2009. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

In August 2009, a major accident occurred at the Sayano-Shushenskaya HPP in Siberia, which was the main supplier of electricity to Khakas Aluminium Smelter and resulted in the temporary loss of power to the smelter. Hatch understands that production at the smelter was not materially affected in the immediate aftermath of the accident as alternative sources of power were quickly identified. Hatch understands that Khakas Aluminium Smelter is currently receiving power from the regional grid ("Siberian Power Pool") and in particular the regions of Krasnoyarsk and Kemerovo which form part of the Siberian Power Pool. UC RUSAL has stated that it does not expect aluminium production at Khakas Aluminium Smelter to be affected during the reconstruction of Sayano-Shushenskaya HPP, which the owners, RusHydro, expect to last for four years.

5.6.6 Specific Risks and Future Opportunities

Specific Risks

- **Reduction Technology Risk** — Khakas Aluminium Smelter is a new facility and is the first smelter to enter full commercial production using UC RUSAL RA-300 technology. However, the RA-300 development is a direct descendant of the VAMI C-255 cell design as has been used within two potlines (334 cells) at the adjacent Sayanogorsk smelter since the mid 1990s. The C-255 cells at Sayanogorsk are currently operating at over 300 kA. The development of the RA-300 technology over a comparatively short period of time can be considered impressive. However, the technology, especially for operation at 320 kA, cannot yet be considered "mature" (see Section 2.3.2.1). Pot life has only been extrapolated from a few autopsies of voluntarily cut out cells. There is a risk that with a sample of 336 cells, undetected or underestimated problems may surface. Additionally, independently of the cell amperage, the hardware components of the RA-300 cell have not been proven for long-term operation. This can have an impact on maintenance costs. However, it should be noted that the first KhAZ cells have now been in operation for almost three years, operations are reportedly stable and there have been no cell failures.

- **Power Supply** — UC Rusal has advised that an accident at the Sayano-Shushenskaya Hydro Power Plant will not affect smelter production and that alternative sources of power supply have been secured. However, Hatch was not provided with details of the new power arrangements and thus can not confirm their validity.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

5.7 Bogoslovsk Aluminium Smelter

5.7.1 Introduction

Hatch undertook a site visit to Bogoslovsk Aluminium Smelter in September 2008. This Section 5.7 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.7.2 — Updated with data and information as of September 2009,
- Section 5.7.3 — Process Description as of September 2008,
- Section 5.7.4 — Environmental Status as of September 2008,
- Section 5.7.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.7.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.7.2 History, Location and Infrastructure

The Bogoslovsk Alumina Refinery and Bogoslovsk Aluminium Smelter complex covers an area of 143 hectares and is situated to the north of the town of Krasnoturinsk, which has around 70,000 inhabitants. Krasnoturinsk is located in the Ural Mountains, approximately 370 km to the north of the major city of Ekaterinburg in the Sverdlovsk region. The complex dominates the town, both physically and economically, and it has a heavy direct influence on almost all social, cultural and recreational affairs.

Construction of the Bogoslovsk Alumina Refinery and Bogoslovsk Aluminium Smelter complex at Krasnoturinsk began in 1941, and the smelting facilities were commissioned in May 1945. The Bogoslovsk Alumina Refinery was constructed to take advantage of local bauxite from the North Urals deposits, from mine works located within 40 km of the smelter site.

The Bogoslovsk complex incorporates its own railway stations. The Bogoslovsk complex owns, operates and maintains the track on-site, together with its own shunting locomotives and rolling stock.

Aluminium production at Bogoslovsk Aluminium Smelter has increased by around 25 per cent between 1997 and 2002, with a steady annual growth rate during that period. The 'nameplate' capacity of Bogoslovsk Aluminium Smelter was 153 ktpa, however the smelter produced 186 kt of saleable aluminium in 2008 and has been producing at around this level since 2002. However, the limits of production increase as a result of capacity creep have been reached and it is accepted that any further growth in production may only be achievable with major capital expenditure.

5.7.3 Process Description

The smelting facilities consist of five potlines. Potlines 1 to 4 are very similar, arranged parallel to each other, with Casthouse No. 1 located centrally between Potlines 2 and 3. The fifth potline contains more cells than the others and was built in 1955. It is generally referred to as Potline 6, and is therefore designated as such within this report. It is located in another plant area, remote from the other potlines and has its own dedicated Casthouse, No. 2.

All five potlines employ VAMI HSS reduction technology. Potlines 1 to 4 are similar in design and each comprises 160 cells arranged end-to-end in a single potroom of four rows of cells and operates at approximately 80 kA. Potline 6, currently operating at 95 kA, comprises 184 cells arranged end-to-end within two parallel potroom buildings of two rows of cells each. All cells within Potlines 1 to 4 are linked to a modern computerised control system ('Elektra 160') within a centralised control room. An identical control system is also provided for the remote Potline 6.

In 2006, 172 out of the total of 824 cells at the smelter were relined by a sub-contractor operating on-site. The average cell life is currently estimated at around 64 months. The Bogoslovsk Aluminium Smelter is aiming for a cell life of 75 months and claim they would already be very close to achieving this value, but for problems encountered with batches of poor quality cathode and sidewall blocks supplied to the plant for relining operations in 2004. As a result of these problems, many of the cells which were rebuilt in 2004 and 2005 have since been rebuilt again, some lasting less than one year in service, and this factor is blamed for the relatively high number of cell rebuilds necessary in 2006 and 2007. However, Bogoslovsk Aluminium Smelter has advised that all quality problems with cathode blocks received from the Chelyabinsk plant have now been resolved.

Four cells in each of Potlines 3 and 4 were equipped with alumina point feeders in 2007. However, this trial has since been stopped and the alumina feeding returned to manual operations for these cells since point feeding of the "floury" alumina supplied to the smelter led to reduced current efficiency.

Alumina and anode paste blocks are loaded to the cells using overhead cranes. Several cranes have recently been replaced under a development programme, and no further replacements are planned at the present time. Pulling and re-setting of the horizontal studs is carried out by pneumatically operated wheeled vehicles.

The anode paste production facilities (dating from 1953) at Bogoslovsk Aluminium Smelter have a nameplate capacity of around 150 ktpa, however the smelter plans to produce 135 kt of paste in 2008. Anode paste used within the potroom cells is cast in the form of 1,350 kg blocks. Approximately, 1,500 t/month of surplus anode paste is exported to Irkutsk Aluminium Smelter and 2,200 t/month is exported to Urals Aluminium Smelter.

The two casthouses at the facility produce 600 kg T-bar sections in 600 mm lengths, 15 kg ingot using semi-automated chain casters, sacrificial anodes (Al-Mg-Zn alloy) for steelwork protection in the oil/gas, offshore and marine industries, and lengths of busbar for the smelter's own use. Casthouse No. 1 produces ingots from both primary aluminium and around eight per cent of total production from an Al-Si alloy, for automotive castings. T-bar sections are cast on VDC machines — although the regular T-bar products are only 600 mm in length, the machines have the capacity to produce cast lengths up to 2,500 mm. Casthouse No. 2 is much smaller and produces only primary aluminium in 15 kg ingot form. Approximately 800 t/month of aluminium in the form of 15 kg ingots is transported to the Bogoslovsk Aluminium Powder Plant, a distance of 2.5 km away.

Bogoslovsk Aluminium Smelter receives its pitch and coke by rail. The plant consumes liquid and solid pitch in roughly equal quantities. Around 70 per cent of the coke used in the plant is supplied in the calcined condition, but the balance is supplied 'green' and is calcined on-site in the smelter's two rotary kilns. Liquid pitch and green coke are supplied from Chelyabinsk, Magnitogorsk and Zaporozhye. Calcined coke is supplied by Severstal (Chelyabinsk) and Zaporozhye. High-temperature solid pitch is received in granular form from sources within China.

Alumina from the adjacent Bogoslovsk Alumina Refinery is used within the smelter, and therefore there is no need for major infrastructure to support transportation and offloading operations, or for separate large alumina storage facilities. This provides a major positive effect on the transfer cost of alumina to the smelter.

Bogoslovsk Aluminium Smelter is currently supplied with approximately 453 MW from the regional grid through a number of contracts with independent generating companies. Around 360 MW is used directly in the potlines.

The four main substations within the Bogoslovsk complex are fed at 110 kV from the Krasnoturinsk switchyard located at a distance of 3.2 km from the plant. This switchyard is supplied from the regional grid system. There are five main power stations supplying the grid, one of which (Serov) is a direct connection to the Krasnoturinsk switchyard at 110 kV.

Much of the electrical equipment at the Bogoslovsk Aluminium Smelter is aging, and therefore there is an on-going programme to replace several potline rectifiers between 2007 and 2009.

5.7.4 Environmental

Bogoslovsk Aluminium Smelter has achieved ISO 14001 environmental management certification.

Potlines 1, 2 and 6 are currently the only Potlines equipped with GTCs. Potlines 1 and 2 are ventilated through a wet scrubbing system installed between the two buildings. Soda ash solution is used as a scrubbing agent. Potline 6 has its own dry scrubbing system, designed by VAMI and commissioned in 2004 using alumina as a dry-scrubbing agent. Fluorinated alumina obtained in the dry scrubber provides 100 per cent of the feed to the cells of Potline 6.

All cells are provided with roller-shutter doors on all four sides, which partially aids the containment of fume emissions. Potlines 3 and 4 are currently ventilated with the gases drawn down from the cells to a central collection ductwork system below the potroom operating floor level, but these collected gases are not scrubbed or treated in any way. The air quality in all the potlines is extremely poor indicating insufficient building ventilation and unsatisfactory gas collection from the operating HSS cells. The ventilation supplied to the pots is inadequate due to the outdated Potroom design, resulting in a dusty and fume-laden working environment.

Most of the spent pot lining materials is recycled to the alumina production process. Some residues classified as moderately hazardous are disposed of in an approved landfill site.

The environmental sanitary zone between the site boundary and the town of Krasnoturinsk was established in accordance with the sanitary norms prevailing during the 1970s, which is still the basis of the plant's compliance. Current sanitary norms would require an increased distance between the site and town boundaries, but it is recognised this is not practical for Bogoslovsky.

5.7.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Bogoslovsk Aluminium Smelter is currently operating below its full production capacity following the closure of Potline 6 in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the closure of Potline 6 as temporary and that the potline is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

In the first half of 2009 UC RUSAL took the decision to reduce operating costs at the facility by not relining reduction cells as they approached the end of their life or failed. This approach resulted in marginally lower production in the first half of 2009 compared with expected production had the cell relining schedule been followed. UC RUSAL advised Hatch that it has formed plans to recommence the relining of cells.

5.7.6 Specific Risks and Future Opportunities

Specific Risks

- **Flooding** — From several previous audits of the Bogoslovsky facility, before it was acquired by UC Rusal, Hatch was informed of instances of flooding at the plant in the 1980s/1990s. However, the plant's safety 'passport' as approved in 2006 by the Ministry of Emergency of Russia specifically states the site to be free from risk of flooding.

- **Long Term Operation of Potlines 3 and 4** — It has previously been demonstrated that an increase in the Potroom ventilation rates and the installation of an additional gas treatment system on Potlines 3 and 4 is not feasible. As a consequence, the smelter is currently expected to cease production completely from Potlines 3 and 4 in 2013. This date is a concession by the regulators, recently granted to extend the 2009 date originally imposed for ceasing production from Potlines 3 and 4. The decommissioning of Potlines 3 and 4 would decrease the total smelter aluminium production by approximately 68 ktpa, with a corresponding decrease in sales revenues. Similarly, the smelter is expected to decommission its entire anode paste production facilities in 2013, and this is likely to increase the operating costs of the smelter since anode materials for the remaining potlines would then have to be imported. Closure of the paste plant would also result in a decrease in the Bogoslovksy smelter revenues since its excess paste production is currently sold to other smelters.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

5.8 Volgograd Aluminium Smelter

5.8.1 Introduction

Hatch undertook a site visit to Volgograd Aluminium Smelter in September 2008. This Section 5.8 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.8.2 — Updated with data and information as of September 2009,

- Section 5.8.3 — Process Description as of September 2008,

- Section 5.8.4 — Environmental Status as of September 2008,

- Section 5.8.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 5.8.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.8.2 History, Location and Infrastructure

Volgograd Aluminium Smelter is located on the outskirts of the city of Volgograd. The city has well developed infrastructure and a population of around one million inhabitants. In addition to Volgograd Aluminium Smelter, Volgograd supports many other large industrial facilities, including machine building, shipbuilding, metallurgical, petrochemical and chemical industries.

Construction of the smelter began in 1955 and first production was achieved in 1959.

Plant capacity at Volgograd Aluminium Smelter has increased progressively in recent years and the facility produced 166 ktpa of saleable aluminium in 2008.

5.8.3 Process Description

Volgograd Aluminium Smelter comprises three potlines configured in the form of five separate potrooms, numbers 2 to 6. Potroom 1 was closed in 1990 and is now used as a general warehouse. The smelter employs a total of 414 cells of VSS design. Potline 1 (82 cells) are of cell type C-2 operating at around 141 kA while the cells of Potline 2 (164 cells) are of type C-3 and are operating at around 141 kA. The operating level of these potrooms is at floor level and forced air cooling of the cathode shell and busbar is provided by a system of ventilation ducts and channels. The ventilation fans and cooling ducts on Potline 1 have recently been modernised and there is an on-going programme to modernise the ventilation fans and cooling ducts on Potline 2.

Potline 3 (168 cells) is of cell type C8B-M operating at 167 kA. The operating level of these potrooms is around four meters above ground, providing natural ventilation to the pots and the working environment inside the potroom.

All cells at the smelter are equipped with Toxsoft computerised process control (TROLL). The smelter has also been trialing an automated alumina point feeding system provided by Toxsoft. There are currently 25 cells operating with the point feeder system which have been in operation since 2001.

The existing counterforce clamp cathode shells at Volgograd Aluminium Smelter are being progressively replaced by a stronger monocoque ribbed cathode shell. A programme to increase the height of the anode and anode stud and also conversion to a dryer anode paste has recently been completed, which has resulted in reduced emissions of volatile hydrocarbons from the anode paste. The busbars in Potline 3 are currently being upgraded to facilitate an increase in line current.

The smelter has an anode paste plant designed by VAMI which was commissioned in 1964. In 1992 the paste plant was reconstructed by a Finnish company. The smelter previously sourced green coke for calcination in the paste plant area, however, the calciners were permanently closed in 1998 and since then the smelter has exclusively purchased calcined petroleum coke. After drying, the coke is crushed and graded into five fractions. The coke is preheated and mixed in one of two independent paste lines. The pre-heater and paste mixer have been converted to operation using a hot temperature medium. The paste production is operated in a batch process

to produce three different paste types. The paste plant has a capacity of 80 ktpa of anode paste which is sufficient to meet the current requirements of the smelter. Calcined petroleum coke has historically been sourced from suppliers in China, Libya, Kazakhstan and Romania, while pitch is procured from a Ukrainian supplier.

Volgograd Aluminium Smelter has two casthouses which service the potrooms. The metal cast is in the form of extrusion billet, T-bar, ingot and alloys.

Volgograd Aluminium Smelter receives its alumina from Nikolayev Alumina Refinery by rail, with occasional shipments by water. The smelter has ten alumina silos, with a combined maximum storage capacity of 22,000 tonnes of alumina, equivalent to approximately 25 days of production. Alumina is received at the site in a rail handling unit and is then transported to potroom storage silos through a pneumatic transport system. The alumina is then delivered to cells using wheel mounted transport vehicles.

Volgograd Aluminium Smelter currently consumes around 314 MW of electricity. The smelter sources electricity from the federal wholesale energy market through a number of contracts with individual generating companies and through spot purchases. The major source of electricity generation in the region is Volzhskaya hydroelectric power station, located around 7 km from the smelter on the Volga River.

The smelter is connected to the Aliuminievaya substation of the Federal Grid Company which operates and maintains the transmission lines in the region. The substation is connected to the Volzhskaya hydro-electric power station by three 220 kV lines and the Gumrak substation via two 220 kV lines. The connection between the substation and the smelter is via eight 10 kV busbars, which is operated by Volgograd Energo who lease the connection from the Federal Grid Company.

5.8.4 Environmental

Volgograd Aluminium Smelter has achieved ISO 14001 environmental management certification.

The prevailing winds are from the North East, parallel to the orientation of the potrooms and would direct a relatively concentrated emission plume across the city to the South West. The smelter has an area of 190 ha and a 2,000 m regulated buffer zone within a total area of 22,341 ha. Significant efforts to establish a forest on the grasslands has been achieved with 80 per cent of the area planted with trees. Due to occasional exceedences of ground level concentration in the regulated zone, an environmental improvement plan was agreed with regional authorities. Since the commissioning of the first VAMI designed alumina dry scrubber in June 2008, a significant reduction in fluoride has been achieved and together with a wet system for sulphur dioxide, the smelter is currently within compliance. A review of the Environmental Permit will be conducted by government agencies in 2009. In this regard, the current budget data for compliance beyond 2008 is not valid.

In 2001, Volgograd Aluminium Smelter developed and partially implemented a programme of modernising its obsolete and low capture efficiency environmental facilities. Under the scope of this programme two main stacks of the existing gas treatment facilities were replaced, forced ventilation stations were installed on Potline 1 and new UV decomposers for benzopyrene compounds were tested successfully.

In order to further reduce pollutant emissions and increase the efficiency of the existing gas treatment facilities a programme is underway to install forced ventilation for Potline 2 and equip all the gas discharge ducting with UV decomposers for benzopyrene compounds.

In addition, the completed conversion to dryer anode paste and the implementation of alumina point feeders is expected to reduce electrolytic cell air emissions.

Spent potlining is disposed offsite approximately 10 km from the smelter. The site consists of a series of shallow ravines and has been used over the duration of the smelter life. The current dumps are progressively covered with soil and grassed. Monitoring bores are installed and monitored for fluoride but not cyanide. The disposal site will be returned to the local authority after rehabilitation. No data exists on groundwater flows.

The site maintains a well equipped environmental laboratory that is certified and accredited.

5.8.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

In the first quarter of 2009 UC RUSAL took the decision to reduce operating costs at the facility by not relining reduction cells as they approached the end of their life or failed. This approach resulted in marginally lower production in the first half of 2009 compared with expected production had the cell relining schedule been followed. UC RUSAL advised Hatch that it has formed plans to recommence the relining of cells.

UC RUSAL has advised that Volgograd Aluminium Smelter has successfully obtained a permit for air emissions which is valid until June 1 2010.

5.8.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Modernisation Programme** — Volgograd Aluminium Smelter has the opportunity to complete the upgrade of all 414 cells to point-feeding technology and to upgrade to centralised alumina distribution. A successful implementation of this programme could reduce the manual labour input required, increase current efficiency and allow for an increase in potline amperage. The anode effect rate would also be expected to decrease, which will reduce PFC emissions. Dust and fluoride emissions would also be expected to decrease due to a reduction of manual interventions on the cells.

- **Product/Market Opportunities** — Volgograd Aluminium Smelter has the opportunity to increase production of value-added products such as extrusion billets. This can be implemented through installation of a second homogenization furnace and a second billet-cutting line. The opportunity also exists to take advantage of the under-used secondary aluminium processing capacity existing in the former Potroom 8.

- **Clean Söderberg Technology** — A potential opportunity exists to implement the Clean Söderberg Technology programme at Volgograd Aluminium Smelter.

- **Outsourcing** — The smelter is located in an area with developed outsource services providing the opportunity to outsource the electrical, mechanical, civil and structural workshops at the smelter. For example, relining activities are currently being divested to a subsidiary.

5.9 Urals Aluminium Smelter

5.9.1 Introduction

Hatch undertook a site visit to Urals Aluminium Smelter in September 2008. This Section 5.9 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.9.2 — Updated with data and information as of September 2009,
- Section 5.9.3 — Process Description as of September 2008,
- Section 5.9.4 — Environmental Status as of September 2008,
- Section 5.9.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.9.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.9.2 History, Location and Infrastructure

The Urals Aluminium Smelter is situated in the town of Kamensk-Uralsky, which has around 200,000 inhabitants. Kamensk-Uralsky is the third largest conurbation within the Sverdlovsk Region, and is located 100 km to the south-east of the major city of Ekaterinburg.

Construction of the Urals Alumina Refinery and Urals Aluminium Smelter complex at Kamensk-Uralsky commenced in 1931, and the facilities were commissioned in 1939.

The Urals Aluminium Smelter is currently served by two load/unload railway stations, which are understood to be readily capable of handling increased supplies and deliveries as a result of any plant expansion. The plant owns, operates and maintains around 86 km of its own track together with its own shunting locomotives and rolling stock.

Plant capacity has increased progressively since start-up and the facility produced 134 ktpa of saleable aluminium in 2008.

5.9.3 Process Description

The Urals Aluminium Smelter was initially constructed with four Söderberg Potlines. The original Potlines 1 and 4 have now been demolished and a new potline constructed using pre-bake technology, designated as the new Potline 1. Potline 1 demolition and construction works commenced in 1987 and the first 40 cells of the potline were commissioned in 1994. The smelting process characteristics are summarised below:

- Potline 1 contains 162 cells (84 in Potroom 1 and 78 in Potroom 2. The pre-bake reduction technology employed is VAMI OA160 with a nominal design current of 160 kA, although the line is now operating at 169 kA. A total of 58 cells were equipped with point feeder systems in Potroom 2. However, only 20 are currently in operation since point feeding of the “floury” alumina processed the smelter led to reduced current efficiency.

- Potlines 2 and 3 are older and both utilise 1930's VAMI HSS technology, operating at approximately 77 kA. Potline 2 comprises 128 cells arranged end-to-end in two potrooms, each with four rows of 16 cells in two-bay buildings. Potline 3 is similar in layout but each potroom contains four rows of 18 cells for a total of 144 cells in the Potline.

Cell tending operations are predominantly manual, special alumina vehicles are used for loading alumina into the cells within the potroom. Anode changing is carried out using overhead process cranes.

There is no cathode repair shop provided at the smelter and therefore spent cells are not removed from the potrooms. During rebuild operations in the pre-bake Potline 1, the spent cell is lifted from its position by the cathode removal crane and taken to one end of the potroom building, where the cell lining is demolished and rebuilt before the fresh cell is returned to its location. Within the HSS Potlines 2 and 3, cells are demolished and rebuilt in-situ at their location in the potrooms. Average cell life across the plant appears to be relatively low, at 49 months for the pre-bake and 52 months for the HSS cells. Cathode blocks are currently procured from the carbon factory at Ukrgraphite, Zaporozhye (Ukraine).

Urals Aluminium Smelter also hosts a pilot potroom with six modern high-amperage SibVAMI designed cells arranged side-by-side in a single row. These test cells have been operating since April 2005, in a modern purpose-built building of around 80 m in length. Designated as OA300, and initially designed for operation at 300 kA, the test cells have been operating at 336 kA since April 2008. These are the same cells which are installed in the new Potline 5 at the Irkutsk Aluminium Smelter (IrkAZ-5). The pilot plant has its own dry scrubber system and a centralised low-velocity pneumatic alumina distribution system. Cells are tended by a single modern overhead pot tending machine from the Czech Republic, which is itself being trialled within the plant. The pilot facility is the R&D centre for the evolution of this new pot technology, and new transformers are being installed at the present time to further increase the cell amperage to 350 kA. This is expected to be achieved by Stage 9 of the amperage creep project, however there is no fixed date for achieving this cell amperage as yet.

There is no anode paste or pre-bake anode production facilities at Urals Aluminium Smelter. The old anode paste plant was decommissioned in the early 1990s as part of a series of environmental control measures. Söderberg anode paste was previously supplied from China but is now procured from Bogoslovsk Aluminium Smelter.

Pre-bake anodes are imported from China (from up to four different plants) and rodded on-site in one of the old paste plant buildings, which is also used for the construction of cathode block assemblies used for cell rebuilding. Two 2.5-tonne capacity induction furnaces melt the cast-iron required for both anode rodding and cathode sealing operations. An oven is provided to preheat anode and cathode blocks, and also the steel collector bars required for cathode block assembly. Spent anodes returned from the potroom are processed within the same shop, where butt and thimble stripping presses are provided for recycling of the anode rods. The anode rodding and recycling facilities can process 45 units per eight hour shift.

The Urals Aluminium Smelter has two casthouses, the first is situated to the south of the new Potline 1 and the second is located between Potlines 2 and 3. Casthouse No. 1 is the older of the two and casts the metal from Potroom 1 of Potline 1, all four potrooms of Potlines 2 and 3 and also from the pilot plant. Casthouse No. 1 produces A356 alloy ingots from four casting conveyor lines, each coupled to its own electrically-heated tilting furnace of around 10-tonne capacity, and primary T-bar sections cast in VDC machines fed from a single stationary 18-tonne electric holding furnace.

Casthouse No. 2 is dedicated to servicing Potroom 2 of Potline 1 and produces metal in ingot and slab form, in addition to delivering 1,200 tonnes of liquid aluminium per month to the nearby Kamensk-Uralsky Metallurgical plant. Rolling slab of 1,270 x 350 mm cross-section is produced from twin VDC casters, with the maximum slab length limited by the overhead crane lifting capacity of 3,500 kg. The VDC casters are fed from a 20-tonne stationary furnace. Ingots of alloys A5 and A85 are produced from three casting conveyors coupled to three holding furnaces, two stationary of 12-tonne capacity and one tilting of 9-tonne capacity.

Alumina is sourced from the adjacent Urals Alumina Refinery and stored in relatively small silos located between the Potrooms. Larger storage facilities are not required due to the close proximity of the supply. This integrated alumina supply gives a security to both physical provision of alumina and to cost implications. Surplus alumina is transported to a number of UC RUSAL smelter plants in Siberia.

Urals Aluminium Smelter is currently supplied with approximately 325 MW from the local grid, which was previously operated by Sverdloskenergo, and is fed from a high-capacity switchyard located around 2 km from the complex. This switchyard is a node point on the grid system connecting several supply lines with regional thermal and nuclear power plants.

5.9.4 Environmental

Urals Aluminium Smelter has achieved ISO 14001 environmental management certification.

Urals Aluminium Smelter completed the commissioning of the new pre-bake Potline 1 in December 2003, which replaced the old HSS Potlines 1 and 4. One-half of the new potline is equipped with a dry scrubber and the other half with both dry and wet scrubbing. The new GTCs reduce the fluorides released to the atmosphere and result in a decrease of fresh fluoride salts required in the pots.

Off-gas from Potrooms 3 and 4 (Potline 2) is currently drawn off the pots and discharged to a 120 m high stack, although the collected gases are not scrubbed or treated in any way. A wet scrubbing system is installed on Potrooms 5 and 6 (Potline 3), however only 50 per cent of cells in these Potrooms are treated as the wet scrubber for the remaining cells is in poor condition and cannot be used. The scrubber effluent is treated and thickened and the collected material is recycled to the smelting cells to minimise fresh cryolite requirements.

Potrooms 5 and 6 have no ventilation grating at floor level and the air quality is poor, although not noticeably different from that of Potrooms 3 and 4 which have a forced ventilation system which aims to improve air quality in the Potrooms.

SPL generated by the smelter is stored in an approved designated site outside Kamensk-Uralsky.

Studies are currently being undertaken into the best available scrubbing mechanisms for the treatment of cell off-gases.

5.9.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility, with the exception of the following.

Urals Aluminium Smelter is currently operating below its full production capacity following the closure of Potline 2 and Potline 3 in the second quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the closure of these potlines as permanent and the process of dismantling the cells will begin shortly.

The operating capacity of Urals Aluminium Smelter is now approximately 69 ktpa following the permanent closure of Potline 2 and Potline 3.

5.9.6 Specific Risks and Future Opportunities

Specific Risks

- **Energy Costs** — Energy costs within the Urals region are significantly higher than energy from hydropower as used by many of the UC RUSAL Siberian smelters. Full de-regulation of the Federal energy sector is expected to take place by 2011.

Future Opportunities

- **Technology Development** — Six cells in the OA300 pilot plant have been operating satisfactorily since April 2005. At that time, the test potline was started at 300 kA, however since April 2008 the cells have been operating at 336 kA. New transformers are being commissioned at the present time and should shortly permit the line current of these pilot cells to be increased to 350 kA. A cell autopsy on one of the units was completed in 2008 and satisfactory results were obtained concerning the performance of the lining.

- **Efficiency Upgrade (1)** — Operating experience has shown that pots of the pre-bake Potline 1 are at their limits of magnetic stability and heat balance. However, calculations performed by SibVAMI indicate that the line current could be increased if modifications to the busbar system and the lining design are implemented. Urals Aluminium Smelter has therefore developed a project to redesign the cell lining to incorporate graphitised cathodes, fit a new design of point feeder, modernise the pot control system and hence increase the line current to 175 kA on approximately 100 cells. Additional benefits would be an increased cell life (from three to five years) and reduced energy consumption. This project has no fixed implementation programme and if this work is to go ahead, it would take approximately 3-4 years to make the necessary pot design modifications and is expected to result in an additional 4.3 ktpa of metal production.

- **Efficiency Upgrade (2)** — It is likely that cell life across the plant can be increased in the future by the use of higher quality pot lining materials and improved cell repair and start-up procedures.

5.10 Nadvoitsy Aluminium Smelter

5.10.1 Introduction

Hatch undertook a site visit to Nadvoitsy Aluminium Smelter in September 2008. This Section 5.10 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.10.2 — Updated with data and information as of September 2009,

- Section 5.10.3 — Process Description as of September 2008,
- Section 5.10.4 — Environmental Status as of September 2008,
- Section 5.10.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.10.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.10.2 History, Location and Infrastructure

Nadvoitsy Aluminium Smelter is located in Nadvoitsy, a small and relatively remote town with a total population of around 8,000 people. Nadvoitsy is situated in the Segezha Region of the Republic of Karelia and is approximately midway between St. Petersburg and Murmansk.

The project plan for the smelter construction was developed in 1948, first metal from the plant was produced in 1954 and full commissioning of the facility was completed in 1964.

Alumina, baked anodes, anode paste and other raw materials and feedstock are delivered to the Nadvoitsy aluminium smelter by rail. The rail link is robust allowing supply from either north or south and has reportedly never been a cause for delay in the history of the plant. The Nadvoitsy Aluminium Smelter owns, operates and maintains the entire railway track on-site, together with the 1.2 km feeder section to the mainline. The plant owns its own shunting locomotives but no rolling stock. Trains are received and dispatched to and from the national rail system at the battery limits of the smelter's track length.

In the summer months some of the metal product is trucked to a nearby canal port for export to St. Petersburg, Murmansk or the hinterland. The inland waters are navigable via the Belamor Baltic canal as far as the Caspian and Black Seas. In the winter months, the canals are frozen and product is exported by rail only.

Nadvoitsy Aluminium Smelter had an original design capacity of 60 ktpa with operation at a line current of 64 kA. A series of process improvements resulted in the plant producing 81 kt of saleable aluminium product in 2008.

5.10.3 Process Description

There are two potlines at Nadvoitsy Aluminium Smelter. Initially, both of the lines housed VAMI HSS technology, however some of the cells in Potline 2 have now been converted to pre-bake technology.

- Potline 1 (Potrooms 1 and 2) contains 178 cells of VAMI HSS technology, operating at 83 kA. Toxsoft point-feeders and a centralised alumina distribution system have been installed on 19 trial HSS cells. Nadvoitsy Aluminium Smelter has an approved budget for expanding the trial section to 35 cells.
- Potline 2 (Potrooms 3 and 4) contains 180 cells, 98 of which have been converted to pre-bake cells of Kaiser design, which are fully automated with point feeding for both alumina and fluoride. The 98 pre-bake cells are currently operating at 90 kA while the remaining 82 HSS cells are operating at 83 kA. In addition, 16 of the pre-bake cells operate with a centralised alumina distribution system using a low pressure air slide.

Alumina, delivered by bottom dump rail cars, is stored in four 2,000-tonne capacity silos providing 16 operating days of buffer capacity. The smelter's alumina requirements are met from Bogoslovsk Alumina Refinery, Aughinish Alumina and Alpart.

There are comprehensive repair and manufacturing facilities at the plant. Nadvoitsy Aluminium Smelter has its own small iron foundry on-site, located in the disused aluminium powder manufacturing building, and at present the pre-bake anode blocks are rodded in this building using molten cast-iron. Cathode blocks for both pre-bake and HSS cells are also sealed using cast-iron. This facility would require expansion when the remainder of the cells are converted to pre-bake design.

There are no anode paste or block production facilities at the smelter, and instead paste materials for the Söderberg cells are sourced from Chinese and Norwegian sources. Anodes for the pre-bake cells are procured from Chinese suppliers.

All HSS cathode shells at Nadvoitsy Aluminium Smelter have been converted from the counterforce design to a stronger monocoque shell. The benefits of this decision are manifested in the shorter cell turnaround times, lower relining costs and increased cell life.

The smelter has a single casthouse which includes facilities for the production of commercial purity and foundry alloy ingot and more recently foundry alloy T-bar. The 2005 casthouse upgrade project installed a modern VDC casting station for the production of foundry alloy T-Bar. The new VDC facilities include two magnetically stirred furnaces for efficient alloy preparation. The majority of production is commercial purity ingot (74,300 tpa). A small proportion of alloy ingot (6,400 tpa) is also produced, and the balance of production is alloyed T-bar (200 tpa).

Nadvoitsy Aluminium Smelter takes 170 MW of electrical energy from the regional grid, which is operated by Karelenergo. All power is received at the plant via four 110 kV lines from the nearby Karelenergo switchyard, located at Kamenniy Bor approximately 6.3 km from the plant.

The smelter is strategically located to take advantage of the hydroelectric plants located on the Vyg River system. The five hydroelectric plants have an installed capacity of 243 MW and form part of the Karelenergo grid. The Karelenergo grid includes additional hydroelectric stations and a thermal power plant. However, due to high energy demand within the Karelenergo grid, approximately 40 per cent of the energy is imported from the adjacent Kolenergo grid.

5.10.4 Environmental

Nadvoitsy Aluminium Smelter has achieved ISO 14001 environmental management certification. The smelter currently operates under a "Temporarily Approved Emissions Permit" on an annual basis.

Potline 1 previously had a GTC which employed wet-scrubbing, but the equipment was problematic and emitted vapours which were considered to be more damaging to the environment than having no fume treatment facility at all. The GTC was demolished in the mid 1980s, and at that time it was intended to replace it with a facility of a modified design. However, although construction work was started, it was abandoned shortly afterwards and since that time there has been no environmental control of Potline 1. All pot off-gases are simply drawn off and emitted to atmosphere via a 120-metre stack.

Gas treatment of Potline 2 comprised a wet scrubbing facility, however due to maintenance and operational limitations it was shut down in 2007. The UV benzopyrene decomposition units remain installed and are in operation downstream of the wet scrubber. The decision has been made to build a dry scrubbing system, and nearly one-half the duct work has been completed. The current schedule for the project estimates that commissioning will occur in 2014. After demolition of the wet scrubber and until start up of the new dry scrubber, Potline 2 will have only the UV units for gas cleaning.

Nadvoitsy Aluminium Smelter has agreed with the local environmental agency that the on-going modernisation of the potrooms ventilation and ducting systems, construction of the dry scrubbing facility on Potline 2 and continued operation of UV units for benzopyrene emissions decomposition will continue. The smelter considers that the use of Elkem's high-temperature anode paste significantly reduces hydrocarbon emissions from the HSS cells, and this is reflected in the environmental agency's approach.

Spent pot lining is stored on-site in a dedicated dump area which has been operated since 1987. Monitoring of fluoride levels in groundwater over the past five years has shown increasing contamination levels, up from 0.58 to 12 mg/l, however there is no data on groundwater flows to assess the potential impact of seepage. In addition, cyanide levels are not monitored so the full risk of the spent potlining leachate cannot be assessed. The facility will reach its approved height and volume within the next two years. A second area is partly excavated, however the proposed design of the liner system will need to be externally approved.

5.10.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Nadvoitsy Aluminium Smelter is currently operating below its full production capacity following the closure of all 98 pre-bake cells of Potline 4 in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the capacity closure as temporary and that the cells are the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

In the first half of 2009 UC RUSAL took the decision to reduce operating costs at the facility by not relining reduction cells as they approached the end of their life or failed. This approach resulted in marginally lower production in the first half of 2009 compared with expected production had the cell relining schedule been followed. UC RUSAL advised Hatch that it has formed plans to recommence the relining of cells.

5.10.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Modernisation Programme** — Nadvoitsy Aluminium Smelter has the opportunity to convert the remaining HSS cells to pre-bake technology, although economic viability of such a project has yet to be studied. Alternatively, converting the remainder of the HSS cells to point-feeding will potentially reduce emissions and increase production.

- **Product/Market Opportunities** — Nadvoitsy Aluminium Smelter casthouse facilities include modern facilities for the production of foundry alloy T-bar, a value added product. The inherent value in the installed facilities could be unlocked if marketing contracts for this product were established.

- **Outsourcing** — In an attempt to reduce employee numbers and operating costs, plant management at Nadvoitsy Aluminium Smelter are exploring plans to outsource several non-production functions at the smelter, including pot relining, mechanical equipment maintenance and buildings maintenance.

5.11 Kandalaksha Aluminium Smelter

5.11.1 Introduction

Hatch undertook a site visit to Kandalaksha Aluminium Smelter in September 2008. This Section 5.11 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.11.2 — Updated with data and information as of September 2009,

- Section 5.11.3 — Process Description as of September 2008,

- Section 5.11.4 — Environmental Status as of September 2008,

- Section 5.11.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 5.11.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.11.2 History, Location and Infrastructure

Kandalaksha Aluminium Smelter is located at the town and seaport of Kandalaksha. The town is situated at the top of Kandalaksha Bay within the White Sea, inside the Arctic Circle and some 250 km south (overland) from the major city and seaport of Murmansk on the Barents Sea. Despite its latitude, due to the gulf stream flow across the North Atlantic and into the Barents Sea, Murmansk is accessible to all types of vessels at all times of the year.

The plant is located at the edge of the town of Kandalaksha, which has witnessed a decline in population from 75,000 inhabitants ten years ago to around 37,000 currently. For its output and compared to modern smelters, Kandalaksha Aluminium Smelter has a large workforce and is actively engaged in employee training and community development programmes.

Initial construction works began at the smelter site in 1939, but were postponed during the wartime years (1941 to 1945). The plant was eventually completed and commissioned in 1951.

The Kandalaksha Aluminium Smelter receives all raw materials and operating supplies via the rail line which extends north to the port of Murmansk and south to St. Petersburg. The smelter incorporates its own railway stations, which are readily capable of handling increased supplies and deliveries as a result of any future plant expansion, with only minor additions to track length and layout. The plant owns, operates and maintains around 1.7 km of track on-site, together with its own shunting locomotives. The rail system has a long track record of reliably servicing the smelter and even with the occurrence of a derailment or similar event, the smelter could immediately access supplies from either north or south, whichever was unaffected by the incident.

Kandalaksha is also a large seaport, but the bay enclosed by the mainland and the Kola Peninsula is usually completely frozen from December to March, and therefore year-round access is only possible if icebreaker vessels are employed during the winter months.

Kandalaksha Aluminium Smelter had an initial design capacity of 54 ktpa of primary aluminium. Plant capacity has increased progressively since start-up and the facility produced 75 kt of saleable aluminium in 2008. Other than ongoing incremental improvement, no immediate plans for capacity growth are proposed.

5.11.3 Process Description

The smelter contains two potlines, both employing VAMI HSS technology. Potline 1 comprises 168 cells in side-by-side design, while Potline 2 houses 162 cells in an end-to-end arrangement. The operating characteristics of the two potlines are similar despite the different pot arrangements. All 330 cells operate at approximately 86 kA.

In the late 1990s, the smelter designed a plan to convert all cells to pre-bake technology operating at line amperage of 110 kA. As a trial, five cells in Potroom 2 were converted to pre-bake cells of VAMI design in 2000, operating at approximately 95 kA. However, the project was suspended on economic grounds, and instead, these five cells were closed in 2005 and converted back to the original HSS cell design.

In 2005 all cathode shells at Kandalaksha Aluminium Smelter were converted from the counterforce design to a stronger monocoque shell also increasing the size of both the anode and cathode. The benefits of this decision are manifested in the shorter cell turnaround times, lower relining costs, increased cell life, increased amperage and hence higher production rates.

Kandalaksha Aluminium Smelter has developed its own prototype crust breaker and point feeder design for the HSS cells, and this equipment has been fitted to 35 cells in Potline 2. Although there is potential in the future to install point feeders on all pots, this project has not progressed. The main benefit would be tighter control of bath chemistry with potential improvements in current efficiency, but also lower emissions and improved workplace conditions due to reduced fugitive emissions.

Kandalaksha Aluminium Smelter receives alumina supplies from the Bogoslovsk Alumina Refinery, Aughinish Alumina and Alpart. Anode paste briquettes are sourced from a Chinese supplier and Elkem (shipped from Norway). Paste is imported by rail in bags and is stored on-site in the open, with stocks kept above the minimum defined level. While the Norwegian paste offers improvements in specific energy consumption and paste consumption, the higher cost has seen Kandalaksha increasingly move towards the Chinese material.

The smelter has a single casthouse capable of producing T-bar, billet and wire rod. T-bar forms the bulk of production, with billet and wire rod forming the balance. Modern Air Slip casting tooling is used for billet production but the remainder of the equipment is of a dated design with the exception of the wire casting facility.

Kandalaksha Aluminium Smelter has a requirement for 150 MW of power, which is fed via four transmission lines feeding the smelter. Two of these are 10 kV busbars directly from the NIVA GES-3 hydroelectric power station, located around 1.4 km from the smelter. These busbars are fully enclosed within a brick structure between the smelter and the power station. The other two lines are connected directly to the Kolenergo grid and supply power at 110 kV. Kolenergo generates most of its electricity from the Kolskaya nuclear power station and a number of hydroelectric plants, augmented by a small amount of thermal generation.

Kandalaksha Aluminium Smelter can maintain normal operations when taking power from three transmission lines only. Given the secure nature of the busbar between the smelter and NIVA GES-3, it is unlikely that adverse weather conditions (e.g. high winds) will compromise the security of this supply which can provide up to 80 per cent of the smelter power requirement in the event that the remaining two transmission lines are interrupted. The substation is being upgraded with modern gas switches to replace the original oil switches posing fire hazards. Air cooling has been implemented in the substation to reduce water consumption.

5.11.4 Environmental

Kandalaksha Aluminium Smelter has achieved ISO 14001 environmental management certification.

The smelter site covers an area of approximately 38 hectares and has been designed to contain all surface water flows via an underground drainage system to a sump and settling prior to discharge to a creek. A regulated buffer zone of 1000 m radius from the site centre is monitored for environmental impact reporting. Five houses are within this zone. The smelter is proposing to reduce this zone (to 850 m) due to the improvements in emission control.

Kandalaksha Aluminium Smelter has completed a two stage programme on modernising its gas treatment facilities in 2002 and 2005. The scope of this programme included the installation of ductwork to exhaust fumes from the all the electrolytic cells and connection to pulsed air baghouse dry gas scrubbing systems using alumina as the adsorbent for fluoride gas. Equipping the building with sidewall ventilation increased air circulation and improved working conditions in the potline building. The dry scrubbing units are estimated to reduce the gaseous fluoride released to the atmosphere by more than 98 per cent, as well as providing a reduction in the emission of tars, PAHs and anode dust.

In order to further reduce the dust emissions in the potrooms and fluoride pollutants released to the atmosphere, Kandalaksha Aluminium Smelter is currently conducting a study on implementing alumina point-feeders and a centralised alumina distribution system throughout the potrooms.

Spent pot lining, cathode carbon, bricks, and anode carbon butts together with other contaminated Class 3 and Class 4 wastes are currently disposed under contract at an offsite facility owned and managed by the municipal government. It is proposed to reduce dependency on this facility in the future, with a plan to send the carbonaceous waste to a steelworks. The refractory bricks will continue to be placed in the municipal dump. Other smelter waste is also sent to a separate municipal dump.

5.11.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Kandalaksha Aluminium Smelter is currently operating below its full production capacity following the closure of 72 cells in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as

part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the capacity closure as temporary and that the cells are the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

5.11.6 Specific Risks and Future Opportunities

Specific Risks

- **Emission Targets** — Since the commissioning of the fume treatment plants, the mass emission of gaseous fluoride has been reduced to the current level, ranging between 70 to 80 tonnes per annum in 2007 and 2008. Since only 15 per cent of the mass emission is captured by the scrubber units, the challenge remains to reduce the fugitive emissions from pots exiting the potroom roof. The target mass emission set for the smelter in the next budget period to 2012 is 44.4 tonnes per annum gaseous HF. To achieve this target, the improvement will need to come from the fugitive emission sources. The necessary 50 per cent reduction in the fugitive emission rate from the potroom can not be achieved without significant changes to the pot technology. It is assumed that installing point feeders would contribute to this reduction in emissions, however the design of the fume extraction system and shutters on the pots would also need reviewing to minimise both fugitive gas and dust emissions.

- **Dumpsite Liability** — Although the municipal government currently "owns" the spent pot lining dumpsite, there may be a future need for the smelter to assist in managing the potential impact on local groundwater through leaching of soluble fluoride and cyanide from the dump. Therefore, the future liability for the dumpsite needs to be considered.

Future Opportunities

- **Buffer Zone Area** — At present, the Kandalaksha Aluminium Smelter observes a regulated buffer zone of 1000 m radius around the plant which includes five residences which are considered "at risk" of impact. Since the zone of impact of emissions has now been reduced with a ten fold reduction in fluoride, there is an opportunity to reduce this designated buffer zone area.

5.12 Volkhov Aluminium Smelter

5.12.1 Introduction

Hatch undertook a site visit to Volkhov Aluminium Smelter in September 2008. This Section 5.12 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.12.2 — Updated with data and information as of September 2009,

- Section 5.12.3 — Process Description as of September 2008,

- Section 5.12.4 — Environmental Status as of September 2008,

- Section 5.12.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 5.12.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.12.2 History, Location and Infrastructure

The Volkhov Aluminium Smelter and the town of Volkhov are located on the Volkhov River in Leningrad Region, approximately 125 km east of St. Petersburg. The city of Volkhov has approximately 48,600 inhabitants.

Construction of the Volkhov Alumina and Aluminium complex, the first aluminium production facility in the former USSR, began in 1931, with the smelting facilities commissioned in May 1932. The smelter was built to take advantage of the first hydroelectric power station in the former Soviet Union. This hydroelectric facility was built on the Volkhov River and dates back to 1926.

Volkhov Alumina Refinery has been closed for more than a decade, while other facilities producing a variety of chemical products, were sold by SUAL (prior to the formation of UC RUSAL) to Metakhim in October 2004. Volkhov Aluminium Smelter and Metakhim's assets are located on the same site, with common access and shared facilities. Volkhov Aluminium Smelter sources a number of services from Metakhim, including repairs of major equipment, road and rail maintenance within the site boundary, laboratory services, water and compressed air provision, fire protection, canteen facilities, administration offices and waste services (including disposal of spent pot lining).

Volkhov Aluminium Smelter produced 24 ktpa of saleable aluminium in 2008.

5.12.3 Process Description

The smelter is comprised of one potline. Cells are located in two identical potrooms with 80 cells per potroom. The potline presently operates at approximately 56 kA. Originally based on a Pechiney pre-bake design, the cells underwent modernisation in 1998. All routine cell maintenance activities are manual operations and are labour intensive. Crust breaking and alumina feeding operations are carried out using specially designed vehicles manufactured in the 1960s.

Forty cells were equipped with Toxsoft centralised alumina distribution and computerised process control (TROLL) during 2006 and 2007, with four of the cells further equipped with alumina point-feeders. A plan was formulated to convert all cells to computer control, centralised alumina distribution and point-feeding, however, this has yet to be implemented.

Volkhov Aluminium Smelter operates a rodding shop to assemble and dissemble the pre-bake anode assemblies. Pre-baked anode blocks are supplied from UC RUSAL's carbon anode production facilities in China; Lingshi Cathode Plant and Taigu Cathode Plant. The smelter typically keeps sufficient stocks of anode blocks to sustain aluminium production at current levels for two months. Levels of mechanisation in the anode rodding shop are relatively low with many operations carried out manually or using basic tools and equipment.

Volkhov Aluminium Smelter is midway through a programme of modifying anode design, which will result in a reduction in anodes per cell from 14 to eight. The modification results in lower anode current density which allows for an increase in current amperage, and therefore moderately higher aluminium production per cell.

The smelter has a single casthouse with an overall capacity of 58 ktpa, which is significantly in excess of current potline capacity. The casthouse can produce 2.5-metre long rolling slab, 750-1,000 kg T-bar sections, 175 and 205 mm diameter round billets and 15 kg ingots. Current production is exclusively in the form of 750 kg T-bars.

The smelter previously received all alumina by rail from Pikalyovo Alumina Refinery. Supplies from Pikalyovo Alumina Refinery terminated in August 2008 following the sale of the refinery by UC RUSAL. Since August 2008 the Volkhov Aluminium Smelter has received all alumina by rail from Urals Alumina Refinery, located approximately 2,000 km south-east of the smelter. The smelter has two alumina storage silos, which have a combined capacity sufficient to sustain aluminium production at current levels for 15 days.

Volkhov Aluminium Smelter currently consumes around 45 MW of electricity, which is supplied by Petersburg Sales Company (PSK) via two 110 kV power lines (Volkhov 4 and Volkhov 8) and four 10 kV cable lines (Volkhov 1, Volkhov 2, Volkhov 3 and Volkhov 4) from the regional grid. The 110 kV lines are connected to the main step-down substation. Cable lines Volkhov 1 and Volkhov 2 are connected to the rectifier substation switchyard. Lines Volkhov 3 and Volkhov 4 (10 kV) are connected to the main plant feeder distribution substation. The potline power supply is provided via lines Volkhov 1 and Volkhov 2, although if required power can also be provided from the other four lines. The potline is fed by eight transformer/rectifiers each rated at 10 kA, of which seven are used for normal operation and one is held in reserve.

5.12.4 Environmental

Volkhov Aluminium Smelter has achieved ISO 14001 environmental management certification.

Volkhov Aluminium Smelter is surrounded by residential areas and businesses, and as a result, special attention is paid to monitoring of plant emissions. The Volkhov smelter contracts an external specialist organisation to conduct air monitoring in residential areas within 500 m of the plant. Dispersion modelling is carried out by the government to establish compliance within the buffer zone.

The potline has used pre-bake anode technology since its inception, and the pots are generally well hooded with particulate and fluoride control on the collected gas stream. Volkhov Aluminium Smelter is currently constructing a dry gas scrubber system of proven SibVAMI design which is scheduled to be commissioned in 2010. This will be installed in place of the existing electrostatic precipitators and wet scrubbers that were commissioned in the 1970's and are not capable of keeping emissions within target limits.

Waste materials, excluding anode butts, are disposed of at facilities owned and operated by Metakhim under a contract arrangement. Uncleaned anode butts are sold to other metallurgical industries. Ownership and maintenance of other waste disposal facilities, including the original alumina refinery bauxite residue disposal has also been transferred to Metakhim. Spent potlining is also disposed at a Metakhim site by smelter dump trucks under contract.

The site is drained via underground pipes and directed to a wastewater treatment settling pond at Metakhim. The smelter has a contract stating the volume and quality of wastewater received. Similarly, process and cooling water is supplied by Metakhim under contract. Sewage is discharged separately to a common system.

5.12.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Volkhov Aluminium Smelter is currently operating below its full production capacity following the closure of 80 cells in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the capacity closure as temporary and that the cells are the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

UC RUSAL advised that it had negotiated a favourable energy tariff for the smelter for the second half of 2009. However, Hatch has not been provided with any details on how Volkhov Aluminium Smelter has achieved favourable energy tariffs, and therefore we can not confirm this statement.

5.12.6 Specific Risks and Future Opportunities

Specific Risks

- **Labour Risk** — Volkhov Aluminium Smelter has historically experienced a shortage of skilled labour supply. The smelter operates in a region where there is significant competition for labour resources, from both other industrial facilities in the Leningrad region and the employment opportunities in the nearby city of St. Petersburg. Although the labour market is currently depressed, the smelter may face pressure to retain its current cost base with respect to labour should the economic situation improve.

Future Opportunities

- **Modernisation Programme (1)** — Volkhov Aluminium Smelter has the opportunity to increase cell amperage from 56 kA to at least 75 kA by undertaking a modernisation of the cell design, increasing anode size and raising current efficiency. If realised, this programme would increase smelter production by around one-third, reduce specific power consumption and reduce labour requirements.

- **Modernisation Programme (2)** — Volkhov Aluminium Smelter has the opportunity to complete the upgrade of all 160 cells to computer control, centralised alumina distribution and point-feeding. A successful implementation of this programme could reduce the manual labour input required, increase current efficiency and allow for an increase in potline amperage. The anode effect rate would also be expected to decrease, which will reduce PFC emissions. Dust and fluoride emissions would also be expected to decrease due to a reduction of manual interventions on the cells.

5.13 Alukom Taishet Aluminium Smelter

5.13.1 Introduction

Hatch undertook a site visit to Alukom Taishet Aluminium Smelter in September 2008. This Section 5.13 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.13.2 — Updated with data and information as of September 2009,

- Section 5.13.3 — Process Description as of September 2008,

- Section 5.13.4 — Environmental Status as of September 2008,

- Section 5.13.5 — Material Developments at the facility between September 2008 and September 2009, and

- Section 5.13.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.13.2 History, Location and Infrastructure

Alukom Taishet Aluminium Smelter is a relatively small smelter operation, located on the outskirts of Taishet in the Irkutsk region of the Russian Federation, situated approximately midway between Bratsk and Krasnoyarsk. Taishet is a town of approximately 45,000 people.

Taishet stands on the trans-Siberian rail route and is a major maintenance centre for the state railway company, with large locomotive and wagon repair facilities. Taishet also stands at the head of the Siberia-Pacific oil pipeline currently under construction, and is expected to host a large pumping station. Other important local industries are timber processing and a bread factory. Unemployment levels in the town are reportedly high.

The plant was constructed by Alukom Invest between 2000 and 2002, and commenced metal production in early 2003. The intention of the original investors was to establish a pilot plant ahead of constructing a full-scale aluminium smelter on a nearby site. The pilot plant was erected with several main aims; to prove the pre-bake reduction technology to be employed in the smelter, to train local people in aluminium smelter operations, to manufacture the busbar for the construction of the full-scale smelter, and to provide the bath necessary to start-up the full-scale smelter.

RUSAL (prior to the formation of UC RUSAL) first acquired an interest in the Alukom smelter in April 2003, and in June 2006 RUSAL secured 100 per cent ownership of the plant. Formally known as the Aluminium Company of Taishet, the plant is still commonly referred to as Alukom Taishet. The plant is now operated as an affiliate company of the much larger Bratsk Aluminium Smelter.

The design production capacity of the smelter is 11.4 ktpa of saleable aluminium, and the plant produced 10 kt of saleable aluminium in 2008.

Alukom Taishet Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

The facility is currently not operational and is under care and maintenance. Refer to Section 5.13.5.

5.13.3 Process Description

Alukom Taishet Aluminium Smelter is constructed entirely within a suite of older buildings remaining from a previous enterprise that operated on the site, which is understood to have been a manufacturing facility for the fabrication of concrete railway sleepers and other pre-cast concrete structures and components.

The single Alukom Taishet smelter potline comprises 32 cells laid end-to-end in two rows of 16, housed within a single potroom building and utilising pre-bake technology designed by AlkoRus (understood to be a spin-off company of VAMI in St Petersburg) for operations at 130 kA. The potline currently operates at 135 kA and is equipped with an automatic cell control system, designed by AvTek in Krasnoyarsk.

Cell tending operations for alumina charging, application of anode cover material, formation of tapping holes and crust-breaking around the anode prior to removal, are all carried out by specialist wheeled vehicles. Overhead cranes are used to remove the anodes during changing operations and also to handle the 5-tonne tapping crucibles for siphoning of liquid metal.

The anode change cranes in the potroom are multi-functional and are rated for a maximum capacity of 24 tonnes. During cell capital repairs, the pot contents of the spent cell are dug-out in-situ, the potshell removed by the crane and then immediately replaced with a spare empty shell. Pot re-lining is then carried out in-situ in the potrooms and the removed shell is cleaned and repaired in an area external to the potroom ready for the next pot failure. The cycle time from cell switch-off to switch-on is 20 to 22 days. In the five years of operations to date, Hatch was informed that nine of the 32 cells have been relined. At the time of the site visit, a further two of the 32 cells were not operating and undergoing reline works.

Pre-baked anode blocks are sourced from China, and the butts are currently treated as waste with no residual value, although it is intended to sell this material to nearby enterprises in the future as a low-grade fuel. Stocks of around 800 anode blocks, sufficient for more than two months operation, are held at the smelter. Anode rodding facilities provided on-site include a hydraulic butt stripping press, hydraulic thimble stripping press, 2 x 250 kg cast-iron induction furnaces and eight double-assembly mating fixtures for manual rodding of up to 16 anodes at a time.

The casthouse contains a single eight-tonne electrically-fired furnace, a semi-automatic chain caster for 15 kg ingot and a second-hand VDC machine (from Bratsk Aluminium Smelter), which was originally intended to produce the busbar materials for the full-scale smelter but has never been commissioned. Ingots of A7, A7A and A8 grade material are produced for sale within the UC RUSAL trading group.

Alumina is currently sourced from the Pavlodar Alumina Refinery in Kazakhstan, although there are recognised problems with the material's suitability for the Taishet cells due to it being too floury. Last year, sandy alumina from Queensland Alumina Ltd was used which resulted in improved operational performance, but as the alumina supply chain is the responsibility of RUSAL's centralised procurement group, the very small Taishet smelter has little influence over its raw material source. There is 2,000 tonnes of alumina storage on-site (4 x 500-tonne silos), and Hatch was informed that stock levels are always maintained at a minimum of 800 tonnes, sufficient for around 20 days operation.

A bath crushing plant is provided on-site, in which bath from the potrooms and bath removed from the anode butts is crushed and milled for re-use in the reduction process.

Laboratory facilities are provided at the smelter site to analyse bath chemistry and metal composition. Anode quality testing is performed at Krasnoyarsk.

5.13.4 Environmental

Alukom Taishet Aluminium Smelter has achieved ISO 14001 environmental management certification.

Alukom Taishet operates its own laboratory, which includes equipment for the monitoring of the gas from the dry scrubber stack, and is also equipped with hand-held analysers for measuring potroom and local air quality. The smelter also operates a mobile laboratory, which is used to verify emissions compliance at various locations throughout the town in conjunction with the local environmental agency.

All cells are equipped with point feeders and are fully-hooded to decrease potroom emissions. The pot off-gas is treated in a dry scrubber GTC of SibVAMI design. The treated gases are emitted to the atmosphere via a single stack of 60 m height. During the site visit, no visible fume was being emitted from the GTC stack.

The plant has no facilities for solid waste disposal on-site. SPL carbonaceous and refractory materials are both treated as landfill in the municipal waste disposal area.

Dross from ladle and furnace skimming is recycled back to the reduction cells. Crust bath removed from spent anodes is crushed and milled in the smelter's own bath treatment facility, and recycled back to the process. Anode butts are consumed as fuel in local ferrous metallurgy plants. Cast iron thimbles from the spent anode butts are stripped by the press and remelted in the induction furnace for re-use.

5.13.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Alukom Taishet Aluminium Smelter is currently not operational following the full closure of the plant implemented in April 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the plant closure as temporary and that the facility is the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

5.13.6 Specific Risks and Future Opportunities

Specific Risks

- **Lack of Rectifier Redundancy** — There are four rectifier transformers installed for the potline, and all four are required to be operating simultaneously to maintain the smelter's metal output at full capacity. During routine maintenance of a rectifier unit, potline power is therefore significantly reduced, although this event is manageable for short periods. However, should a rectifier unit develop a major fault, then metal output would be reduced and the reduction cells exposed to a low-power regime for a long period, which could adversely affect the cell life.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

5.14 Taishet Aluminium Smelter Project

5.14.1 Introduction

Hatch undertook a site visit to Taishet Aluminium Smelter Project in September 2008. This Section 5.14 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.14.2 — History, Location and Infrastructure as of September 2008,
- Section 5.14.3 — Process Description as of September 2008,
- Section 5.14.4 — Environmental Status as of September 2008,
- Section 5.14.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.14.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.14.2 History, Location and Infrastructure

The new Taishet Aluminium Smelter (TaAZ) is an active project currently being implemented around 8 km from the centre of the town of Taishet in the Irkutsk Region of the Russian Federation. Taishet is also home to the existing UC RUSAL Alukom Taishet Aluminium Smelter, described in section 5.13 of this report. Although this operational facility is much smaller than the new Taishet Aluminium Smelter under construction, its presence can be considered of value to the new smelter, both in terms of local smelter operating experience and also to provide liquid electrolyte and liquid aluminium metal to assist with starting up the first cells of the new smelter.

Taishet stands on the trans-Siberian rail route and as part of the Taishet Aluminium project a branch interconnection with the existing main railway line will be constructed for transport of all incoming raw materials and outgoing casthouse products by rail.

The forecast metal production from the smelter, which is being constructed as a single-phase project, is in excess of 750 ktpa, which represents a significant capital investment and thus its timely construction within budget holds many challenges. First hot metal from the Taishet Aluminium Smelter is now forecast for December 2011, with all cells started-up by the end of 2013 and full smelter production reached during the first quarter of 2014. The smelter is expected to employ around 3,200 personnel when fully operational.

The project is being implemented by UC RUSAL's own engineering and construction company, which is executing the project on an EPCM basis. There are no turnkey packages on the project, with all construction and erection works carried out under the direct control of the EPCM contractor, although many sub-contractors will provide the necessary specialist process design and equipment for the smelter.

Out of the total of approximately 360 UC RUSAL EPCM staff who will be engaged on the project, Hatch was advised that around 260 have previously been involved with the construction of the recent Khakas Aluminium Smelter project, and hence UC RUSAL considers they have sufficient relevant experience to successfully implement this much larger greenfield project.

Preliminary groundworks commenced at the Taishet Aluminium Smelter site in April 2007, and construction of the smelter was well under way when the review visit was undertaken in September 2008, at which time the following progress had been made:

- Eight out of the 13 modules comprising the construction camp had been erected. Each module contains accommodation and messing facilities for up to 248 people.
- There are currently around 2,000 construction workers on the site, 1,600 of them on regular dayshifts and the balance working during the night. Work is continuing seven days per week. The number of workers on-site will peak at around 5,200 during the summer of 2009.

- There are two concrete batching plants on-site producing a total of 130 m^3/hr of all grades of concrete. Pre-cast elements are widely used in the construction of the smelter buildings, but are not cast at the project site. Over 40,000 m^3 of concrete has already been placed, and the project is forecasting 10-12,000 m^3 per month for the foreseeable future.

- Steelwork erection for all four potroom buildings had commenced, and around 20 columns for each room had been erected, with several roof truss sections also erected at Potroom 2.

- The casthouse steelwork and cladding was substantially complete, as was the rodded anode storage building and the two main storage warehouses (one heated and one unheated building). Foundations were being prepared for the first of the casthouse furnaces.

- Piles were being sunk for the rectifier transformer bays.

- The ground was being prepared for the baking furnaces and other anode production facilities.

- The permanent smelter boundary walls were being erected, from pre-cast concrete elements.

- One of the two administration buildings to be provided at the site is substantially complete, and is expected to be functional at the end of 2008.

- Contracts have already been awarded for all major process equipment, including rectifiers, GTCs, potshells, superstructures and busbars.

- Offsite, electricity pylons had been erected to within a few kilometres of the smelter boundaries.

- Also off-site, a branch line from the railway mainline had been connected, and some construction supplies have already been delivered to the site by rail.

Hatch personnel had previously made a visit to the Taishet Aluminium Smelter project site in April 2007, at the time of the preliminary earthworks, and the project progress made since that time can be considered as very impressive.

However, at the time of the Hatch visit, the new smelter had been expected to start-up during the spring of 2010, and so the dates quoted above represent a delay of around 18 months from the initial expectations. Current world economic and market conditions are blamed for this delay in project implementation, which was announced in October 2008, after the time of the Hatch visit.

5.14.3 Process Description

The new Taishet Aluminium Smelter will comprise two potlines, each with two potrooms containing 168 cells (a total 672 cells) of UC RUSAL's RA-400 design. Four GTCs of modern design will be provided to treat the pot off-gases.

The smelter will produce its own baked anodes on-site, from a single green anode plant and three anode baking furnaces. Each baking furnace will comprise 64 sections of eight pits, with 18 anode blocks per pit, and will run four fires. The design of the bake furnaces is based upon that recently built at the Khakas Aluminium Smelter, but with an additional pit per section. It is intended that the smelter will be started-up using imported anodes until such time as its own anode production facilities will be commissioned.

When operational, the Taishet Aluminium Smelter carbon production facilities will have the capacity to produce 630 ktpa of baked anodes. The Taishet smelter will require 450 ktpa for its own aluminium production, and the balance of 180 ktpa will supply anodes for the pre-bake potlines of the Irkutsk and Krasnoyarsk Aluminium Smelters.

Electrical energy for the smelter will be provided from a new Irkutskenergo substation located adjacent to the project site. Power will be received at this local plant substation from an existing major switchyard located some 10 km away, via 4 x 500kV new transmission lines carried by two sets of pylons. Irkutskenergo is contracted to provide the first block of permanent smelter power in December 2009. Power will be fed to each potline via 6 x 85 kA rectifier-transformers rated at 1,575 V, with five rectifier units in service at any time, plus one on standby.

The casthouse equipment for metal solidification will include three ingot casting lines and two vertical direct-chill (VDC) casting centres. Liquid metal will be held and prepared in 10 x 65 tonne and 4 x 85 tonne tilting furnaces.

The anode baking and casthouse metal furnaces will both be fired by heavy fuel oil.

The Taishet Aluminium Smelter project also includes construction of;

- an anode rodding shop, capital repair shops, bath recycling plant, raw materials offloading and storage facilities, plus other ancillary shops;
- four residential apartment blocks, each of 15,000 m^2 living area, in a nearby development to house some of the operating personnel;
- tens of kilometres of railway track around the smelter site, plus a branch interconnection with the existing main railway line for transport of raw materials and products by rail; and
- new wells sunk within the smelter boundaries to source the smelter's water requirements, and a self-contained sewage treatment plant.

5.14.4 Environmental

When completed, Taishet Aluminium Smelter will be a modern facility employing pre-bake technology and excellent environmental control. All four Potrooms at Taishet will have a GTC installed to collect and treat off-gas from the potrooms and discharge the cleaned gas to atmosphere. All GTCs will be provided by Solios Environmental and are of dry scrubber technology.

In addition, a single FTC will be constructed to treat the off-gas from the three anode baking furnaces.

5.14.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UCR advised of no material changes to the planned smelter technology as described in Section 5.18.3.

Refer to Section 2.3.7.2 for the current status of the Taishet Aluminium Smelter project.

5.14.6 Specific Risks and Future Opportunities

Specific Risks

- **Asset Integrity** — The Taishet Aluminium Smelter is a new greenfield facility under construction and will be the first smelter to enter full commercial production using UC RUSAL's RA-400 technology. The development of the RA-series technology over a comparatively short period of time can be considered impressive. However, the technology cannot yet be considered proven, and even the RA-300 cells at the Khakas Aluminium Smelter have not been in operation long. At present, the only operational cells using RA-400 technology are the 16 units on test within the experimental potroom at the Sayanogorsk Aluminium Smelter. The oldest cell was started up in December 2005, and most cells are considerably younger. Additionally, independently of the cell amperage, the hardware components of the RA-400 cell have not been proven for commercial operations. This could have an impact on maintenance costs.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

5.15 Kubikenborg Aluminium

5.15.1 Introduction

Hatch undertook a site visit to Kubikenborg Aluminium Smelter in October 2008. This Section 5.15 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.15.2 — Updated with data and information as of September 2009,
- Section 5.15.3 — Process Description as of October 2008,
- Section 5.15.4 — Environmental Status as of October 2008,
- Section 5.15.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 5.15.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

5.15.2 History, Location and Infrastructure

Kubikenborg Aluminium is located within a sheltered inlet on the eastern coast of the Gulf of Bothnia, approximately 400 km north of Stockholm in Sweden. The plant is only a few kilometres from the centre of the town of Sundsvall, a conurbation of around 100,000 inhabitants.

Sundsvall is the largest cultural and economic centre in its region, has good road, rail and air links with the Swedish capital Stockholm, and contains several other significant manufacturing facilities including an industrial chemicals complex and three paper mills.

Kubikenborg Aluminium first produced aluminium in 1942 from a 1.6 ktpa capacity pre-baked technology plant, however, this was plant was subsequently closed in 1946. A second-hand, 14 ktpa HSS technology smelter was subsequently acquired from Canada and shipped to Kubikenborg Aluminium in 1947 which later became known as Plant 1. In the 1960's, Plant 2 was constructed consisting of Alusuisse VSS technology. In 1986, Plant 1 was converted to Kaiser P86 technology.

Alumina, and until recently calcined coke and granulated solid pitch, is imported via the smelter's own dedicated berth, which includes a travelling vacuum ship unloader capable of unloading at around 140 tph from supply vessels up to 25-kt deadweight. Conveyor belts transfer the imported materials to on-site storage facilities.

Finished metal leaves the smelter either by truck or rail.

Kubikenborg Aluminium had capacity to produce around 104 ktpa of liquid aluminium prior to the onset of the pot conversion programme (described below). Additionally the smelter processes around 20 ktpa of remelt ingot imported from UC RUSAL smelters in Russia, resulting in total saleable aluminium capacity of around 124 ktpa.

5.15.3 Process Description

The smelter comprises two plant areas. Plant 1 contains a single potline (Potline 1) with 56 cells arranged side-by-side in two parallel potrooms of 28 cells each, utilising pre-bake technology of a modified Kaiser P86 design and operating at 152 kA. This potline produces around 24 ktpa of liquid aluminium.

Plant 2 contains two potlines (Potlines 2A and 2B). Kubikenborg Aluminium is currently implementing a major modernisation project in Plant 2. Potline 2A contains 120 cells in a single potroom. Potline 2B is slightly larger and contains 142 cells in a single potroom. Previously the cells in Potline 2A and 2B were of Alusuisse VSS design arranged end-to-end and operating at 118 kA, with total capacity of the potline around 80 ktpa. The modernisation project involves converting all the VSS cells to pre-bake technology. The new cells will be virtually identical to the Kaiser P86 cells used in Potline 1, but arranged end-to-end to minimise reconstruction works and facilitate easier installation as the Söderberg cells are removed. Other principal components of the modernisation project include an upgrade to the anode rodding shop, installation of both new (three) and refurbished rectifier transformers and the erection of a modern dry gas scrubber GTC from a reputable Western supplier. The modernisation project is being managed by an Icelandic engineering company, which has experience with previous capital projects at aluminium smelters in Iceland.

The VSS cells in Potline 2A have been completely removed and the new pre-bake cells are being installed. In June 2008 the first 20 converted cells in Potline 2A were commissioned and have exceeded expected operating performance to date. The smelter planned to commission a further 20 cells in September/October 2008, however only 12 of these cells were commissioned due to an incident resulting in the complete loss of a new rectifier transformer. The rectifier transformer will be sent back to the manufacturer's (Areva) facility in Germany for examination and repair. Thus, at the time of the Hatch visit (October 2008), 32 converted cells in Potline 2A were in operation, while all 142 VSS cells in Potline 2B remain operational prior to the cell conversion process beginning in this potline.

The temporary loss of one of the new rectifier transformers is unlikely to impact on the current plan to complete the modernisation programme, including the conversion of all 262 cells in Potlines 2A and 2B by June 2009. The start-up of these cells is planned for late 2009.

When complete, the modernisation project is expected to result in the liquid aluminium capacity of Potlines 2A and 2B increasing from a combined 80 ktpa to 120 ktpa, and total plant liquid aluminium capacity rising to 144 ktpa. With the addition of remelt ingot, the plant will have capacity to produce around 160 ktpa of saleable aluminium product.

The smelter has a single casthouse that produces value-added products sold mainly to Western European customers. The casthouse is equipped with five holding/melting furnaces, three VDC casting stations, two continuous homogenising furnaces and three batch homogenising furnaces. Around 80 per cent of casthouse production is in the form of extrusion billet, up to 9m in length, with rolling slab making up the remainder. Alloying materials are combined with the liquid aluminium produced at the smelter and remelt ingot, to produce a number of specialist alloy compositions within the casthouse. All production is in the form of value added products for sale to the European market.

Kubikenborg Aluminium currently procures pre-baked anodes from a single supplier in China. These are shipped from China to Tunadal port, located approximately 15 km from the smelter, and then transported by road to the smelter site. These anodes are rodded at the smelter in the rodding shop, which is being upgraded as part of the current modernisation project. Anode paste for the HSS cells was produced at the smelter until immediately prior to the Hatch visit. Plant management had determined that sufficient stocks of anode paste had accumulated at the smelter for the remaining requirements of the HSS cells and as a consequence, the anode paste production facility was permanently closed in October 2008.

Alumina is principally sourced from Aughinish Alumina, which is augmented by occasional deliveries from UC RUSAL's alumina refineries in Jamaica. The plant has six alumina storage silos with a combined capacity of almost 100 kt, allowing alumina from different sources to be stored separately. Normally a minimum of 22 kt of alumina stock is maintained, equivalent to around 40 days worth of consumption.

Kubikenborg Aluminium consumes around 205-220 MW of electricity. The smelter is connected to the regional electricity grid, which is operated by E.on, with sufficient redundancy to maintain full metal production should any of the transmission lines to the smelter fail. Electrical energy in Sweden is generated from nuclear and hydroelectric power plants, with an approximate equal split. Kubikenborg Aluminium buys power from Vattenfall, one of three major generating companies in Sweden. The power contract is for the period 2008 to 2016, and is conditional on the pre-bake conversion project being completed. The previous contract between Kubikenborg Aluminium and Vattenfall related electricity prices to LME aluminium prices. The current contract is based on a fixed price during the contractual period with defined escalation factors not related to aluminium prices.

5.15.4 Environmental

Kubikenborg Aluminium has achieved ISO 14001 environmental management certification.

In recent years, environmental pressures upon Söderberg smelters operating in Western Europe have forced many to be closed or converted to cleaner technology. Kubikenborg Aluminium has therefore been pressured into converting its Söderberg technology in Plant 2 to pre-bake anode technology. The current environmental permit is contingent upon this project being completed by the end of 2009 and this is considered achievable, with current completion of construction scheduled for mid-2009.

Plant 1 has dry scrubber GTC's and also a wet scrubber fitted for sulphur dioxide removal. Plant 2 has a recently commissioned dry and wet scrubber combination provided as part of the conversion project described above.

All wet scrubbers employed at the smelter utilise seawater as the scrubbing medium, operating on a one-pass total loss basis and with no subsequent filtration or water treatment. A total of around 6,500 cubic metres per hour of seawater is pumped through the scrubbers and then discharged back to the sea. Once the Söderberg technology is fully decommissioned, there will be almost no sediment produced, composed of alumina and tars, which is currently removed from the lagoons on a weekly basis and sent to a local waste facility.

The local waste facility is part owned by Kubikenborg Aluminium, along with two other local industrial waste producers. The permit allows for the smelter to dispose of up to 10 kt per annum of hazardous waste, including SPL, and up to 25 kt per annum of non-hazardous waste. However, new European Regulations concerning fluorides effectively mean that as of the end of 2008, SPL will no longer be allowed to be disposed of in the facility. Kubikenborg Aluminium has therefore agreed a long-term contract with a company based in Norway for the receipt, reprocessing and safe disposal of their SPL waste from the end of 2008.

The anode paste plant has now been fully decommissioned as part of the modernisation project and therefore emission control of the volatile gases produced as part of the paste production process is no longer required. If paste production was ever to continue at Kubikenborg Aluminium, it is considered that additional capital investment will be required in further environmental control measures.

5.15.5 *Material Developments*

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility, with the exception of the plant/equipment connected to the pot conversion programme.

Hatch was advised that the pot conversion programme has continued, with all cells in Potline 2A now converted to pre-bake technology. The conversion process in Potline 2B began in August 2009, and is currently planned to be completed by the end of 2009.

5.15.6 *Specific Risks and Future Opportunities*

Specific Risks

- **Casting Capacity** — The Kubikenborg Aluminium casthouse, although very effective and efficient in terms of value added metal production, is relatively small and has an inefficient metal flow configuration and limited spare capacity for both planned and unplanned stoppages. Upon completion of the pre-baked cell conversion project, the plant production will be equivalent to the total theoretical casthouse capacity leaving no spare capacity for stoppages. Although it will always be possible to solidify metal in an emergency situation manually (using various moulds), this contingency plan is not recommended for such a critical activity, and does not normally result in a readily saleable product. The plant and UC RUSAL are aware of this problem and are exploring ways of mitigating this risk.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

5.16 Zaporozhye Aluminium Smelter

5.16.1 Introduction

Hatch undertook a site visit to Zaporozhye Aluminium Smelter in September 2008. This Section 5.16 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.16.2 — Updated with data and information as of September 2009,
- Section 5.16.3 — Process Description as of September 2008,
- Section 5.16.4 — Environmental Status as of September 2008,
- Section 5.16.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 5.16.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

5.16.2 History, Location and Infrastructure

Construction of the Zaporozhye Alumina and Aluminium complex began in 1930, with commissioning of the aluminium smelting facilities in 1933. Zaporozhye Alumina and Aluminium also comprises alumina refining and silicon metal production facilities. The complex location was chosen to take advantage of the Dneproges hydroelectric power station, which is located near to the smelter on the Dnieper River.

The Zaporozhye Alumina and Aluminium complex is situated in the city of Zaporozhye, located in the south east of Ukraine, approximately 600 km south-east of Kiev. Although today it is considered undesirable to locate a smelter within a city, there are other examples where this has been done and once established, local residents and authorities learn to live with the plant's existence. The city, which has approximately 850,000 inhabitants, is heavily industrialised and home to several other metallurgical operations in addition to Zaporozhye Alumina and Aluminium, including a number of steel facilities.

Zaporozhye came under heavy attack during World War Two, and many of the facilities at the complex were relocated to the Urals region and subsequently used in the construction of other plants. The building structures and facilities that were not removed were severely damaged, necessitating major reconstruction work. The reconstructed Zaporozhye Aluminium Smelter reopened in 1949.

Zaporozhye Aluminium Smelter currently has a capacity of 114 ktpa of casthouse products including aluminium alloys.

Zaporozhye Aluminium Smelter has achieved OHSAS 18001 Occupational Heath and Safety certification.

5.16.3 Process Description

The smelter comprises four potlines, with two potrooms in each. Each potline contains 152 cells of VAMI HSS technology operating at approximately 72-73 kA. The cells are in end-to-end arrangement. Between 2003 and 2005 Potlines 1 and 4 had the Toxsoft TROLL process control system installed. Plans to retrofit this system to Potlines 2 and 3 were postponed due to a lack of finance, although the plant intends to complete this project as soon as possible.

In 2005 Zaporozhye Aluminium Smelter began a programme of converting all pots shells from the counterforce design to a stronger monocoque rib-type shell. Each pot is upgraded after being taken out of service. As of September 2008 the smelter had converted 409 of the 608 cells. The benefits of this decision should be manifested in shorter cell turnaround times, lower relining costs, increased cell life and a lower required metal pad in each cell. A natural gas system is being installed progressively to the potlines in order to have computer-controlled pre-heating of the cathodes upon start-up in order to increase their operating life. Gas lines have been installed on five potrooms (Potrooms 1-5) and installation in the remaining potrooms is on-going.

Alumina from the adjacent refinery is used within the smelter, and therefore there is no need for major infrastructure to support transportation and offloading operations, or for separate large alumina storage facilities. This provides a major positive effect on the transfer cost of alumina to the smelter.

Anode paste is procured under an annually renewed contract with Ukrgraphite, an independent company located adjacent to the Zaporozhye Alumina and Aluminium complex. The anode paste facilities initially belonged to the smelter, but were sold off in the 1960s. The anode paste is delivered by rail to a warehouse at Zaporozhye Aluminium Smelter and then transported by truck to the potlines. The smelter has maximum storage capacity of anode paste of 2,200 tonnes, equivalent to around 13 days worth of consumption.

The smelter has three casthouses. Primary ingot forms the bulk of production, with aluminium alloys, wire rod, billet and T-bar also produced. Casthouse 1 produces primary ingot, billet and T-bar. Casthouse 2 produces aluminium alloy in the form 600 kg T-bars and 15 kg ingot. Casthouse 3 was commissioned in 1999 and houses a modern continuous wire-rod caster of Italian design. The capacities of the casthouse are more than sufficient to cater for redundancy of equipment whilst solidifying the product from the smelting areas.

The Zaporozhye Alumina and Aluminium complex owns, operates and maintains around 27.2 km of railway track on-site, together with seven shunting locomotives and 142 units of rolling stock (dump cars, open cars, cement cars, flat cars and hopper cars).

Maximum power demand for the Zaporozhye Alumina and Aluminium complex reaches approximately 280 MW, of which 240 MW is used directly by the smelting facilities. The complex is supplied electricity through contracts with Zaporozhye Oblenergo. The complex is connected to the Aliuminievaya substation, which is fed by two 154 kV transmission lines directly from the Dniproges 2 hydroelectric power station and two 154 kV lines from the Zaporozhye municipality substation, which also supplies other electricity consumers in Zaporozhye. These transmission lines and substations are owned by Zaporozhye Oblenergo. The Zaporozhye substation is connected to the Ukraine national grid.

The Dniproges 2 power station, owned by Dneperenergo, only operates at periods of peak electricity demand and therefore the smelter is supplied electricity predominantly from the national gird via the Zaporozhye substation. Thermal and nuclear power form the bulk of generation in Ukraine, with a small contribution from hydro and wind power. Power supply to the smelter is secure due to redundancy of supply in the transmission system.

5.16.4 Environmental

Zaporozhye Aluminium Smelter has achieved ISO 14001 environmental management certification.

All potlines currently employ wet GTCs whereby the fumes are ducted beneath the potroom floor and directed to a facility where soda ash solution is used as the scrubbing agent. The resulting slimes are discharged through an open channel into an 80 ha slime deposition pond belonging to

a steelworks and a fee is paid for this facility. The gas treatment equipment is properly maintained; however there is no equipment redundancy available, except at Potline 3, which results in the by-passing of the wet scrubbers during the maintenance period and discharging the untreated off-gases through the 120 m stacks.

A pilot type dry GTC was commissioned in 1996 whereby the fumes from 20 cells from Potroom 1 are ducted from the top of the cells to an adjacent dry scrubbing facility utilising alumina as the scrubbing agent. This facility is effective for emission control however the attrition rate on the alumina presents dusting issues within the potroom.

Fluoride emissions to air of Zaporozhye Aluminium Smelter are above those specified by both International and Ukrainian National standards. However Zaporozhye Aluminium Smelter has agreed with local authorities that by 2011 it will be in compliance, although currently the smelter is re-negotiating long-term environmental compliance to 2017.

Zaporozhye Aluminium Smelter has two options to reduce the emissions to acceptable levels and achieve compliance. The shorter time frame option is to upgrade the fume collection and wet scrubbing facilities, including fluoride recovery. The second, longer term option is to continue to develop an alumina dry gas scrubbing system and significantly improve gas collection from pots together with alumina point-feeders.

These projects are not currently in UC RUSAL's expenditure plans, although a feasibility study on the wet scrubber retrofit with improved sprayers, addition of flocculants, and recovering activated alumina from the sludge is in advanced design stages and could be commenced within the required time frame.

Air quality within the potrooms is currently poor indicating insufficient building ventilation and unsatisfactory hooding efficiency of the operating HSS cells. Upgrades to the cathode shell and anode casing are being implemented through the capital repair program. This will improve the gas collection efficiency of the cells.

Spent pot lining is deposited in the local municipal dump. Previous arrangements with local industries to accept the carbon have stopped as the material was found to be unacceptable.

5.16.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Zaporozhye Aluminium Smelter is currently operating below its full production capacity following the closure of Potline 1, Potline 2 and Potline 3 in the second quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for aluminium from the global market and as part of a programme to reduce consolidated operating expenditure. Hatch was advised that UC RUSAL view the closure of these potlines as temporary and that the potlines are the subject of continuous review and monitoring to determine an optimal time for restart. The idled production capacity is currently under care and maintenance.

5.16.6 Specific Risks and Future Opportunities

Specific Risks

- **Electricity Prices** — Electrical energy pricing within Ukraine is not beneficial to the aluminium industry. Until 2005, the local Government provided an LME aluminium price-linked power contract, however this no longer applies and the power cost for Zaporozhye Aluminium Smelter is significantly higher when compared with the global aluminium industry. Unless more favourable power tariffs are secured and plant optimisation and high value products are pursued, it is unlikely that the facility will become profitable as a stand alone entity.

Future Opportunities

- **Efficiency Upgrade (1)** — Zaporozhye Aluminium Smelter is currently using relatively low quality supplies of alumina and anode paste. In addition, cathode blocks used for lining the cells are of lower grade than optimal for use at the smelter. An improvement in the quality of alumina and anode paste, and/or optimisation of cathode block design, could result in improved current efficiency, lower energy consumption and increased metal production.

- **Efficiency Upgrade (2)** — Zaporozhye Aluminium Smelter has the opportunity to reduce energy consumption by undertaking a programme to retrofit cell design to reduce electrical resistance.

- **Product/Market Opportunities** — In 1993 a project was conceived to equip the plant with foil production facilities, covering the complete technology cycle of foil production from the melting and casting of aluminium strip, through to final foil production. However, only the first phase of the plant — the aluminium strip production facility with capacity of 30.0 ktpa — was completed. This facility was commissioned in 2000, but only produced for a short period of time and has remained idled ever since. All equipment for the second phase of development of the foil plant, namely electric annealing, slitting and cold rolling facilities of 27.6 ktpa capacity, and for the third phase, namely two foil rolling mills with a combined capacity of 9.6 ktpa of foil, were delivered to the smelter site in 1997/1998 but have remained boxed-up and unassembled. Fata Hunter, the equipment supplier, have visited the smelter and confirmed that all equipment required for foil production is at the smelter and appears in good condition. The buildings of the foil plant belong to the smelter, however all equipment is owned by the Ukraine government. UC RUSAL has held negotiations with the Ukrainian government to purchase the equipment, however the situation remains unresolved due to frequent changes of government in Ukraine and high power prices paid by the smelter. There is an opportunity to complete assembly of the foil production facilities to supply foil to the Ukrainian and international markets should these outstanding issues be resolved.

5.17 ALSCON

5.17.1 Introduction

Hatch undertook a site visit to ALSCON Aluminium Smelter in October 2008. This Section 5.17 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.17.2 — Updated with data and information as of September 2009,

- Section 5.17.3 — Process Description as of October 2008,
- Section 5.17.4 — Environmental Status as of October 2008,
- Section 5.17.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 5.17.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

5.17.2 *History, Location and Infrastructure*

The ALSCON smelter is located in Ikot Abasi in the Akwa Ibom State of Nigeria and is referred to as ALSCON (Aluminium Smelter Company of Nigeria). The ALSCON project was conceived in 1981 by the Federal Government of Nigeria, to be built in the south east region of Nigeria to take advantage of the abundant gas reserves, which were otherwise being flared to atmosphere. Construction work commenced in April 1990, on a turnkey basis by Ferrostaal A G of Germany, with Reynolds International of the USA as technology provider.

ALSCON consists of an aluminium smelter with an integrated carbon anode manufacturing plant, casthouse, gas-fired power station, navigable channel, harbour facility, laboratory, maintenance workshops, warehouse and four villages in which to house the workforce.

ALSCON produced first metal in October 1997, however, in June 1999, with only 25 per cent of the plant started up and 45 kt of aluminium produced, a decision was taken to shut down the smelter for lack of working capital. ALSCON remained shutdown (although maintained) until being restarted in February 2008.

In February 2007, RUSAL (prior to the formation of UC RUSAL) acquired shares in ALSCON with other minority shareholders remaining, namely the Nigerian Government and Ferrostaal. UC RUSAL has purchased the outstanding equipment, namely potshells, busbar, superstructures and pot tending assemblies, to complete the two Potlines and has modernised the pots with a newly designed cell lining, which is understood to be capable of operating at 200 kA with a larger anode.

The first of the newly designed cells was brought into operation in February 2008 and by August 2008 there were 52 cells in operation. At this time there was a major incident in the power plant, which resulted in 48 cells being shut down. Currently there are 54 cells in operation at the smelter.

The Imo River requires dredging, along with the removal of numerous large sunken items and all raw materials are being imported through a private dock at Port Harcourt in large bags. A permit has now been issued by the appropriate authority to dredge the channel, so as to accept 20 to 25-kt alumina vessels.

ALSCON has a design capacity of 197 ktpa at 168 kA operation.

5.17.3 *Process Description*

The plant, which previously used Reynolds P20S PFPB anode reduction technology, operating at 168 kA, consists of:

- Two Potlines each having 216 pots with attendant anode manufacturing and metal casting facilities;

- 540 MW gas-fired power plant, comprising of six gas turbines each with a nominal capacity of 90 MW;
- Harbour, on the Imo River, with ship unloading facilities for alumina, petroleum coke, and general cargo, storage silos for coke and alumina together with warehousing facilities for finished product prior to shipment; and
- Four villages with schooling and medical facilities to accommodate the workforce.

The pots are fully enclosed PFPB cells with each group of 108 cells being exhausted to an ABB/Flakt GTC utilising alumina as the scrubbing agent. The cells are serviced by six NOELL Pot Tending Machines which carry out anode changing and tapping, and two pot removal cranes which traverse each end of the four Potrooms. Each cell is controlled by a micro processor which caries out numerous functions including alumina feed control and cell voltage control. Failed cells are de-lined and relined in a purpose built facility on-site and the spent potlining material is temporally stored in a site warehouse. As a result of numerous early cell failures the warehouse is now full and failed cells are being stored in Potline 2 until a permit is issued to use a fit-for-purpose landfill site approximately 25 km away from the smelter site. The permit is being progressed.

The anode manufacturing and rodding facility was built by KHD of Germany. Both of these facilities are capable of producing 150 per cent of the plant's requirements, as is the anode baking facility which consists of two closed top Reidhammer furnaces. At the time of the site visit, only the anode rodding facility was operational and baked anodes were being purchased (15,000) from China for operation and start-up. The anode plant appears to be well maintained and ready for operation.

The casthouse consists of three 20 tph ingot casting lines with 30-tonne capacity attendant furnaces, and is capable of handling 420 ktpa, twice the present plant capacity. A VDC casting machine supported by two 40-tonne furnaces and a continuous homogenising furnace is also available but only the casting furnaces have been installed and the civil work completed. A sow casting line is also available for emergencies, with a capacity of 200 tpd. Only one ingot casting line is required at the present production level and the other two are being maintained in a stand-by operational mode.

The smelter has a full fleet of mobile equipment to transport rodded anodes, butts, liquid and solid metal and raw materials. It also has servicing facilities and a fully equipped machine shop and laboratory.

Potline power is provided by four 55 kA transformer/rectifiers, only three of which are required to provide the full Potline load. Alstom has recently carried out a full evaluation of the condition of the gas turbines (GT) and a maintenance contract is being progressed with them. At the time of the site visit, one GT was in operation, minor maintenance is required on three GT's and major maintenance on two GT's. UC RUSAL are presently negotiating with ABB for a maintenance contract to cover the whole power area, but there are some security issues.

ALSCON power is supplied by six ABB 13D gas turbines each capable of producing 90 MW. With the smelter fully operational, four units will be required with one on stand-by and one in maintenance. The burners are dual fuel and can be fired on gas or oil or a mixture, and there is oil storage capacity for 10 to 12 days operation in the event of an interruption in the gas supply. Since the plant has restarted, there has only been one interruption, which was for a period of three days. There are at present three million litres of diesel in storage with a maximum storage capacity of 20 million litres or 12 days at full operation. The plant is also provided with a cold start diesel generator.

The harbour facilities, approximately 5 km from the smelter, are complete and connected by private road to the smelter site. After dredging, the Imo River was thought to be capable of accommodating 20 to 25-kt vessels, however a bathymetric survey carried out one year after dredging showed that further dredging was required, along with the removal of numerous large sunken objects. A single conveyor runs from the port to the smelter site and is used to transport both coke and alumina to their respective on-site storage silos. In the event of a prolonged breakdown of the conveyor, provision has been made at the port and smelter site to handle the transfer of these materials by road tanker and a number of such tankers are available on-site. Additional alumina and coke silos are located at the smelter site along with warehousing for solid pitch. This facility appears to be well maintained and ready for operation.

5.17.4 Environmental

The environmental regulation in Nigeria is to the highest international standards reflecting the influence of the international oil companies operating in the region. As per Nigerian legislation, every two years enterprises must undergo environmental audits implemented by the Ministry of Environment which issues a general environmental permit for operations. Following the environmental audit in February 2008, ALSCON holds a permit for both the smelter site and townships. Following requirements of a provisional environmental permit, an independent base line audit was implemented in October 2007 to allow dredging works of the Imo River.

SPL from previous operations is currently stored in several warehouses on-site, one of which is full. The feasibility study and the EIA for the landfill project where the SPL will be stored have commenced, and at the moment public consultations are being held. Due to the most favourable groundwater conditions, the sanitary landfill will be located 26 km from the smelter site and will also comprise sections for disposal of other industrial and household wastes. SPL will be transported to the specially engineered landfill after each wet season.

The environmental controls and design of the smelter are modern, reflecting the recent design and construction of the smelter by Ferostaal and Reynolds. The smelter includes four modern dry-scrubbing GTCs of ABB/ALSTOM design, commissioned in 1997, and baghouses and electrostatic precipitators as required. To meet production rates, only one GTC is currently in operation. The other GTCs are currently being inspected before they are introduced into operation. It is considered that the smelter would further benefit from continuous monitoring devices installed on the emission stacks and a modern FTP on the bake furnace.

Aluminium dross, used oil and batteries are sold externally. Crushed bath and pig iron from anode studs are reused in the production process.

5.17.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

As of September 2009, 54 cells are reportedly operating at ALSCON. UC RUSAL plan to commission a further 54 cells by end-2010, to make a total of 108 cells operational. The whole plant, 432 cells, is planned to be fully operational by 2013.

5.17.6 Specific Risks and Future Opportunities

Specific Risks

- **Social/Labour Risk (1)** — ALSCON is located in Aqua Ibom state, which together with the Bayelsa, Delta and Rivers states forms the Niger River estuary. In recent years there have been many incidents of kidnapping of expatriates in these states and theft of oil cargos. On June 3 2007, a group of militants attacked a residential community of UC RUSAL's employees in the southern part of Ikot Abasi. Six people were kidnapped, while the driver, who worked for ALSCON, was shot dead. Additionally, on 20 December 2008, two UC RUSAL employees were abducted from the site. Whilst the majority recognise the importance of the smelter operation to their economic development, there is a sustained high risk of kidnapping and theft of aluminium by minority groups. The personnel security issue presents a significant risk to attracting and retaining skilled expatriate personnel and hence to future smelter operations.

- **Social/Labour Risk (2)** — Host communities in the region have high expectations from the smelter. ALSCON will be a major employer for local communities where unemployment levels are high. The key development issues to be addressed are the provision of electricity, water and social projects including employment, supporting local contractors and social infrastructure projects. In December 2006, there was a strike by local communities in relation to the provision of electricity, which prevented access to the smelter. Addressing the concerns of local communities is essential for the future operation of ALSCON.

- **Reliability of Gas Supply** — It is essential for the success of this plant that it receives gas supplies without interruption and that these gas supplies are available for the next 20 years or more. The limit of the current gas supply contract will allow the operation of only 54 cells out of the total of 432 at the smelter. In addition, the plant continues to experience gas outages of varying duration. Clearly the smelter requires gas supplies to be without interruption except in the most exceptional circumstances. It is recommend that assurances are sought from NGC that they have sufficient gas supplies connected to the transmission system to ensure stable and continuous gas supplies. However, UC RUSAL has advised Hatch that the terms of the gas supply agreement with NGC provides for a ramp-up in gas availability sufficient to allow the smelter to reach full production in 2011.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

5.18 Boguchansky Smelter Project

5.18.1 Introduction

Hatch undertook a site visit to Boguchansky Smelter Project in October 2008. This Section 5.18 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 5.18.2 — History, Location and Infrastructure as of October 2008,

- Section 5.18.3 — Process Description as of October 2008,

- Section 5.18.4 — Environmental Status as of October 2008,

- Section 5.18.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 5.18.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

5.18.2 History, Location and Infrastructure

The Boguchansky Aluminium Smelter project involves the construction of a 588 ktpa greenfield aluminium smelter on a 230 hectare site, located approximately 8 km to the south-east of the settlement of Tayozhny in the Krasnoyarsk Region, and approximately 160 km (212 km by road) from the new Boguchanskaya hydroelectric power plant (HPP).

When operational, the electrical energy requirements of the smelter will be supplied from the Boguchanskaya HPP, which is also under construction at the present time. The smelter and HPP (described in Section 9) are linked UC RUSAL projects and are sometimes collectively referred to as the Boguchanskoye Energy & Metallurgy Combine (BEMO) Project.

The project is being implemented as an equal-share joint venture between RAO EES (Hydro-OGK) and UC RUSAL, and therefore UC RUSAL's share of the production capacity will be 294 ktpa.

The aluminium smelter is around 12 km from the railway station and terminal at Karabula, near Tayozhny, which has road and rail links (both passenger and freight trains) to the major Siberian city of Krasnoyarsk. The Boguchansky region currently has a total population of around 50,000.

Two 160 km long 500 kV high voltage (HV) transmission lines will connect the 500 kV Boguchanskaya HPP switchyard to the Angara 500/220 kV sub-station located near Boguchansky Aluminium Smelter. Five 220 kV lines will connect the Angara 500/220 kV sub-station to the smelter.

UC RUSAL has signed an agreement for the infrastructure requirements of the project (including power transmission lines, road construction and bridges) to be financed by the Investment Fund of the Russian Federation.

The smelter will be serviced by a new railway station, 'Zavodskaya', for which site clearing has commenced.

The project will be executed under an EPCM arrangement, with UC RUSAL's own engineering and construction divisions carrying out the works. The total number of workers during construction is estimated at 3,460, of which 170 people are currently working in the EPCM group. Up to 2,000 workers will be housed in a construction camp to be built as part of the project.

Basic engineering for the project started at the end of 2006 and on May 15, 2007, the Governor of Krasnoyarsk placed the foundation "first stone" for the project. The Boguchansky Aluminium Smelter project construction timeline is scheduled from 2007 to 2012. The first pots are scheduled for start-up in December 2010 with project completion in October 2012, although full production from the smelter will not be achieved until 2013.

During construction, power will be provided from a 10 kV overhead transmission line from Karabula. The electrical energy demand during construction and commissioning is approximately 14 MW.

5.18.3 Process Description

The new Boguchansky Aluminium Smelter project will comprise two potlines each of 336 cells, and each potline consisting of two parallel potrooms containing 168 cells. The length of each potroom will be approximately1.2 km.

The potline will utilise UC RUSAL's own RA-300 prebake reduction technology, initially operating at 320 kA. The technology and potroom configuration will be very similar to that of the Khakas smelter which recently reached full production at Sayanogorsk.

Potline gases will be dry scrubbed in modern gas treatment centres (GTCs) with the main technological and process components provided by Solios Environmental of France.

The smelter casthouse will contain nine holding furnaces with capacities of between 60 and 85 tonnes, servicing 3 x 25 tph ingot chain caster machines and two vertical direct chill (VDC) casting machines each of 29 tph capacity. The forecast production mix from the casthouse is approximately 45 per cent T-bar and 55 per cent of 22.5 kg ingot.

Carbon anodes will be produced on site within an anode paste plant comprising two paste lines each of 30 tph throughput. Green anodes from the paste plant will be baked in two open-top type furnaces each of 64 sections and operating with four fires. Fume treatment facilities will be provided for the furnaces.

A rodding shop will be provided to assemble fresh anodes, disassemble spent anodes and to crush and grade the recovered electrolyte and carbon materials for recycling in the reduction process.

Carbon area storage facilities will be provided for process raw materials, including coal-tar pitch in both liquid and solid forms. Covered storage will also be provided for green, baked and rodded anodes.

The project also includes the construction of a housing complex, comprising an area of 146,000 m^2, which comprises living accommodation, a school, sport complex and associated infrastructure.

5.18.4 Environmental

All permits and approvals have been secured. No environmental problems are foreseen at this stage.

When completed, the Boguchansky Aluminium Smelter will be a modern facility employing pre-bake technology and excellent environmental control. All four Potrooms at Boguchansky will have a GTC installed to collect and treat off-gas from the potrooms and discharge the cleaned gas to atmosphere. All GTCs will be provided by Solios Environmental and are of dry scrubber technology.

In addition, a single FTC will be constructed to treat the off-gas from the three anode baking furnaces.

5.18.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UCR advised of no material changes to the planned smelter technology as described in Section 5.18.3, with the exception of the following. The project scope has been amended and no longer includes plans to construct a carbon anode plant at the smelter facility. It is currently planned to import all required carbon anodes for the smelter from china.

Refer to Section 2.3.7.2 for the current status of the Boguchansky Aluminium Smelter project.

5.18.6 Specific Risks and Future Opportunities

Specific Risks

- **Project Schedule** — Delays in the erection and commissioning of the 500 kV transmission lines from the Boguchanskaya HPP would affect the delivery of power to the Boguchansky Aluminium Smelter, and hence delay the smelter start-up and operations. Progress on these third-party works must be carefully monitored, since these construction activities are outside of the direct control of UC RUSAL's project management.

- **Asset Integrity** — The Boguchansky Aluminium Smelter will be only the second smelter to enter full commercial production using RA-300 technology, the first being the Khakas Aluminium Smelter and which reached full production levels as recently as February 2008. The development of the RA-300 technology over a comparatively short period of time can be considered impressive. However, the technology, especially for operation at 320 kA, cannot yet be considered "mature" (see Section 2.3.2.1). Pot life has only been extrapolated from a few autopsies of voluntarily cut-out cells. There is a risk that with a sample of 336 cells, undetected or underestimated problems may surface. Additionally, independently of the cell amperage, the hardware components of the RA-300 cell have not been proven for long-term operation. This can have an impact on maintenance costs. However, it should be noted that the first Khakas Aluminium Smelter RA-300 cells have now been in operation for almost three years, operations are reportedly stable and there have been no cell failures.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

6. Powder, Silicon, Secondary Aluminium and Raw Materials Facilities

6.1 Krasnoturyinsk Powder Metallurgy

6.1.1 Introduction

Hatch undertook a site visit to Krasnoruryinsk Powder Metallurgy in September 2008. This Section 6.1 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.1.2 — Updated with data and information as of September 2009,
- Section 6.1.3 — Process Description as of September 2008,
- Section 6.1.4 — Environmental Status as of September 2008,
- Section 6.1.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.1.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.1.2 History and Location

Krasnoturyinsk Powder Metallurgy (SUAL-PM Ltd Branch SUAL-PM-Krasnoturinsk) is located near the Bogoslovsk Alumina Refinery and Bogoslovsk Aluminium Smelter complex in Krasnoturyinsk, approximately 370 km from Ekaterinburg. The plant was commissioned in 1958 and has operated as a separate entity to Bogoslovsk Alumina and Aluminium since 2005. Krasnoturyinsk Powder Metallurgy has a nameplate capacity of 19.5 ktpa. The plant produced 8.3 kt of aluminium powder in 2008.

6.1.3 Plant Description

The plant comprises three main production areas, namely;

- Aluminium powder and paste production,
- Air separation unit (nitrogen and oxygen production), and;
- Metal packaging manufacturing for finished products (50 litres)

Primary aluminium is supplied to the plant from the Bogoslovsk Aluminium Smelter. Electricity is also supplied from the smelter site. Approximately 10 per cent of secondary aluminium is used in the manufacturing process with the secondary aluminium being imported from sources outside Krasnoturyinsk.

The powder plant comprises a total of four spray plants with reverberatory furnaces (bath capacity of 9 tonnes each), housed in a two-storey building. The kilns are located on the second floor and the powder bagging area on the first floor. Off-gases are passed through a cyclone, multicyclone and an oil filter before being discharged to atmosphere. At present, two furnaces are in daily operation. One furnace is used as a stand-by and the remaining furnace is under repair.

Aluminium ingots, of 15 kg size are fed into the kiln and nitrogen and oxygen are injected into the molten metal to atomise the aluminium. The atomised aluminium is then sprayed into a discharge chamber were it cools and settles into the collection cone. The powder is then sieved. At this point some of the product is packaged as a finished product, while the remainder is transported to the ball mill area for grinding to powders and pastes, or to the sieve section for producing powders of the correct grain size. The plant has a total of 15 ball mills. The powder is packed into sealed 50 litre drums, Flexible Intermediate Bulk Containers (FIBCs, commonly known as 'big-bags') or 200 litre drums prior to shipment. The plant produces its own 50 litre drums for storing the finished product. Up to 15,000 drums per month are produced by the plant.

The plant produces its own nitrogen gas by separating air into nitrogen and oxygen. The nitrogen is returned to the process and the oxygen is sold locally.

Krasnoturyinsk Powder Metallurgy advised that the plant complies with all environment permits for emissions and waste disposal. The majority of waste from the plant is recycled and/or sold.

Although the process involves highly explosive materials handling, due to the high standards of health and safety, the last major incident occurred at this facility back in 1978.

6.1.4 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.2 Shelekhov Powder Metallurgy

6.2.1 Introduction

Hatch undertook a site visit to Shelekhov Powder Metallurgy in September 2008. This Section 6.2 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.2.2 — Updated with data and information as of September 2009,
- Section 6.2.3 — Process Description as of September 2008,
- Section 6.2.4 — Environmental Status as of September 2008,
- Section 6.2.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.2.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.2.2 History and Location

The Shelekhov Powder Metallurgy plant is situated in the town of Shelekhov, around 22 km to the south-west of the city of Irkutsk. Established in 1976 as Department of Powder Metallurgy of Irkutsk Aluminium Smelter, the facility was re-organised into a separate company in December 1998.

The trans-Siberian railway runs 2 km east of the site, providing good transport links for the import of necessary materials and supplies and the export of products. The main raw material input though is in the form of liquid aluminium sourced from the nearby Irkutsk Aluminium Smelter.

Shelekhov Powder Metallurgy produced 4.7 kt of aluminium powder in 2008. There are no large scale expansion plans for the Shelekhov Powder Metallurgy plant. At present, the plant operates at 60 per cent of its production capacity.

6.2.3 Plant Description

The plant produces up to two dozen products, primarily for the export market. Powdered aluminium is used by a number of different industries including ferrous metallurgy, refractory, paints, chemical, oil, rubber, construction and military.

Liquid (primary) aluminium is delivered from Irkutsk smelter in 4-tonne ladles and loaded into kilns. Five kilns are installed, four are operational and one is under repair. To produce doped aluminium powders, the aluminium is pre-alloyed with silicon and/or titanium and sprayed into a water-cooled dust settling chamber. Nitrogen is injected into the molten metal to atomise the aluminium. The aluminium powder is then collected at the base of the settling chamber and classified by screens. The grain size of the aluminium powder is controlled by the aperture opening of the nitrogen injection nozzle, the pressure of the nitrogen and the metal temperature. The dispersibility of the aluminium powder is controlled by several parameters, including the pressure and temperature of the nitrogen, the metal temperature, the nozzle design etc. The finished product is then stored in 50 or 200 litre cylindrical drums, or FIBCs (big-bags)

Spherical, tear-shaped, lamellar and flat (flakes) powder are produced by the plant. Flat powder is mechanically crushed by a ball rolling mill. This produces a “sticky” powder that is used in the construction industry as a concrete admixture. To produce the aluminium powder, the crude product is milled with hydrocarbon additives, to form a powder product which is used as a gasifier in cell concrete production. The plant has its own laboratory which carries tests for particle size distribution, granular structure chemical composition and other product parameters.

Shelekhov Powder Metallurgy has achieved ISO 14001 environmental management certification.

The plant produces very little waste products. Approximately 30 tonnes of dross is produced annually, which is either sold and/or recycled within UC RUSAL.

Power for the plant is provided from the Irkutsk Aluminium Smelter site.

6.2.4 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.3 Volgograd Powder Metallurgy

6.3.1 Introduction

Hatch undertook a site visit to Volgograd Powder Metallurgy in September 2008. This Section 6.3 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.3.2 — Updated with data and information as of September 2009,
- Section 6.3.3 — Process Description as of September 2008,
- Section 6.3.4 — Environmental Status as of September 2008,
- Section 6.3.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.3.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.3.2 History and Location

The Volgograd Powder Metallurgy facility is situated together with the UC RUSAL Volgograd Aluminium Smelter, on the outskirts of the city of Volgograd. The plant began operations in 1961.

Volgograd Powder Metallurgy produced 5.7 kt of aluminium powder in 2008. The facility sources its aluminium raw material from Volgograd Aluminium Smelter in ingot form. Volgograd Powder Metallurgy produces aluminium powders, different grain size and chemistry powders, powders and granules of high purity.

6.3.3 Plant Description

Powdered aluminium is used by a number by different industries including chemical, oil, rubber, construction and military. At present the plant produces up to 30 types of powders.

In recent years, the facility has been the only plant in Russia producing complex powders from Al-based alloys (Al-Ti, Al-Mo-Zr-Ni, Al-Mg, Al-Si-Ni, Al-Zn).

Finished product is packed into steel drums or FIBCs (big-bags). The plant manufactures its only packaging drums.

The plant produces powders in a nitrogen environment generated from its own air separation unit. This also produces oxygen which is then sold locally.

The plant has its own laboratory which carries out tests for particle size distribution, granular structure and chemical composition.

6.3.4 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.4 Irkutsk Silicon

6.4.1 Introduction

Hatch undertook a site visit to Irkutsk Silicon in September 2008. This Section 6.4 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.4.2 — Updated with data and information as of September 2009,
- Section 6.4.3 — Process Description as of September 2008,
- Section 6.4.4 — Environmental Status as of September 2008,
- Section 6.4.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.4.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.4.2 History and Location

The Irkutsk Silicon plant is located adjacent to the Irkutsk Aluminium Smelter in the town of Shelekhov.

Irkutsk Silicon is the largest silicon production facility in the Russian Federation and has been in operation since 1981. The silicon plant was formerly under the management of Irkutsk Aluminium Smelter, but was incorporated as an independent entity in August 1998. The maximum production capacity of the plant with all furnaces operational is reported to be 42 ktpa of silicon metal, although production in 2008 only reached 32.7 kt. Of the total production in 2008, approximately 6 ktpa was consumed in the production of high silicon aluminium alloys by Russian aluminium smelters.

6.4.3 Plant Description

The plant produces both metallurgical and chemical grades of silicon. Metallurgical grade silicon is predominantly used for alloying of aluminium. Chemical grade material is more pure and is used as a process ingredient in various industries, including micro-electronics. Irkutsk Silicon is the only plant in the Russian Federation producing chemical grade silicon, which commands a higher price than metallurgical metal and therefore the future company strategy is to increase production of chemical grade silicon.

Irkutsk Silicon owns and operates its own quartzite mine at Cheremshansk, located 500 km to the east of the plant, from where it receives the quartzite required for its entire production.

The Irkutsk Silicon plant comprises two independent streams (lines) for silicon production, each with its own materials import and storage, blending, electric-arc furnaces, casting, crushing, screening and bagging facilities. Line 1 comprises four 16.5 MVA electric-arc furnaces (numbered 1 to 4), commissioned in 1981. Currently all four furnaces are operational. Line 2 comprises two 25 MVA electric-arc furnaces (numbered 5 and 6), commissioned in 1988. At present only furnace No. 6 is operational. Furnace No. 5 requires a major overhaul and approval of the capital programme to carry out the necessary repairs is awaited from UC RUSAL.

Silicon production is a continuous process in which raw materials, blended with reducing agents, are fed into the top of the furnace and the molten product is tapped from the bottom. At the Irkutsk Silicon plant, the furnace tapping temperature is approximately 1,750°C.

Refining of the silicon metal is carried out within the tapping crucibles by introducing oxygen via nozzles at the bottom of the crucible, to oxidise entrained aluminium and calcium and form a slag. The capacity of each tapping crucible is approximately 3.5-tonnes.

The contents of the crucibles are poured into flat, open moulds of 300 kg capacity to form a silicon slab approximately 150 mm thick. Prior to pouring, the surfaces of the mould are coated with silicon fines from the crusher, which acts as a mould release agent. After being allowed to cool naturally, the moulds are emptied using cranes which tip the moulds into large bins. The silicon slab is subsequently fed into a jaw crusher located below ground level. After crushing, product is conveyed to the screening and bagging station where it is graded and bagged for shipment in Flexible Intermediate Bulk Containers (FIBCs, commonly known as 'big-bags').

Including all equipment and ancillaries, the total electrical power demand of the plant is 60 MW. Electrical power is supplied from the Irkutskenergo grid system, with connection via the Irkutsk Aluminium Smelter switchyard.

All furnaces are hooded and off-gases directed to one of the three wet scrubbers using soda ash as the scrubbing agent. The pregnant scrubbing liquor is pumped to a storage facility, where clarified water is returned to the scrubber in a closed system. Whilst effective at reducing emissions of sulphur dioxide and silicon oxide dust, the wet scrubbers are very energy intensive and hence operating costs are higher than if a dry scrubbing system was utilised. A feasibility study is currently being performed to replace the wet scrubbers with a dry scrubber system. It is proposed to introduce dry scrubbers for furnaces 5 and 6 by 2010. Following successful commissioning, dry scrubbers will be introduced for furnaces 1, 2, 3 and 4. The dry scrubber system would allow the silicon dust to be recovered and sold as a by-product.

A new waste area within the plant boundaries has recently been added for the disposal of slag from the refining process.

The silicon plant is equipped with a laboratory which carries out analysis of acidity levels, together with the content of iron, chlorides, nitrates, nitrites, sulphates, fluoride in solutions and also silicon oxide in dust.

Irkutsk Silicon has obtained the required environmental permit for air emissions and transportation and storage of dangerous waste products. Irkutsk Silicon plant management advised that all emissions comply with the permitted limits.

6.4.4 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Irkutsk Silicon is currently producing below recent historical levels following the closure of Furnace 1 in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for silicon. Hatch was advised that UC RUSAL view the closure of Furnace 1 as temporary and that facility is the subject of continuous review and monitoring to determine an optimal time for restart.

6.5 Urals Silicon

6.5.1 Introduction

Hatch undertook a site visit to Urals Silicon in September 2008. This Section 6.5 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.5.2 — Updated with data and information as of September 2009,
- Section 6.5.3 — Process Description as of September 2008,
- Section 6.5.4 — Environmental Status as of September 2008,
- Section 6.5.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.5.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.5.2 History and Location

Urals Silicon is located at the Urals Alumina Refinery and Urals Aluminium Smelter complex in Kamensk-Uralsky, approximately 100 km from Ekaterinburg. The original works were constructed in 1941; however, this part of the plant is no longer used. The current silicon plant comprises six electric-arc furnaces, four of which were constructed in 1958 and a further two furnaces were added between 1958 and 1968. The silicon plant was formerly under the management of Urals Alumina and Aluminium but was incorporated as an independent entity in August 1998, prior to being purchased by UC RUSAL.

Urals Silicon produces only metallurgical grades of silicon which are predominantly used in the alloying of aluminium for the engineering and aviation end-use markets. No additional refining equipment has been installed to produce chemical grades of silicon.

The plant has a maximum installed production capacity of approximately 28 ktpa. The Urals Silicon plant produced 23.9 kt in 2008. The facility procures the required quartzite raw material from the PervoUralsk mine, located near to Ekaterinburg. This mine is independently owned and operated, and is not a UC RUSAL asset. The mine only supplies quartzite to the Urals Silicon plant.

All other raw materials necessary for production are supplied from sources within a few hundred kilometres of the plant. Charcoal is received from two major and three minor suppliers, as the plant wishes to support small local producers. Coal is imported from Kazakhstan and petroleum coke from the Perm region of the Russian Federation. Furnace electrodes are manufactured at the Novocherkask electrode plant.

The facility is currently not operational. Refer to Section 6.5.5.

6.5.3 Plant Description

The Urals Silicon plant comprises a single production line for silicon production, with six 6.5 MVA electric-arc furnaces. The plant is the oldest in the Russian Federation. At the time of the site visit all six furnaces were in operation. Each furnace is given a major overhaul once every four years, which takes approximately one month to complete.

Silicon production is a continuous process in which the blended raw materials are fed into the top of the furnace and the molten product is tapped from the bottom. Automatic control of material blending was introduced in 2005 to improve the quality and efficiency of the process. The furnace tapping temperature at the Urals Silicon plant is in the region of 1,500°C.

Molten metal from the furnaces is discharged directly into open moulds of 1,500 kg capacity to form a silicon slab approximately 500 mm thick. Three moulds are cast per furnace per shift. Prior to pouring, the surfaces of the mould are coated with silicon fines from the crusher, which acts as a mould release agent. After being allowed to cool naturally, the moulds are emptied and the silicon slab is subsequently fed into a jaw crusher. After crushing, the product is conveyed to the screening and bagging station where it is graded and bagged for shipment.

Urals Silicon secures all electrical power via the Urals Alumina Refinery and Aluminium Smelter complex.

Off-gases are collected from the open-furnace area and vented to atmosphere via six chimneys (ranging in height from 45 to 50 m) without treatment. A wet scrubber system was installed at the site in 1968, however, this system was used for less than a year as the waste slime was difficult to treat and dispose-of. There are currently no gas treatment facilities at the plant, although a gas cleaning project has been approved within the company and is being reviewed by the State environment department. The gas cleaning facility will consist of two dry scrubbers (three furnaces per scrubber) with the equipment supplied by a Chinese company and is expected to reduce emissions of silicon oxide dust and other particulates. The gas treatment facility is planned to be commissioned by 2010.

There are no laboratory facilities at the Urals Silicon site. Samples are taken daily and tested at the laboratory facilities located at the Urals Aluminium Smelter plant site.

6.5.4 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Urals Silicon is currently not operational following the full closure of the plant implemented in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for silicon. Hatch was advised that UC RUSAL view the closure of the facility as temporary and that the facility is the subject of continuous review and monitoring to determine an optimal time for restart.

6.6 Zaporozhye Silicon

6.6.1 Introduction

Hatch undertook a site visit to Zaporozhye Silicon in September 2008. This Section 6.6 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.6.2 — Updated with data and information as of September 2009,
- Section 6.6.3 — Process Description as of September 2008,
- Section 6.6.4 — Environmental Status as of September 2008,
- Section 6.6.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.6.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.6.2 History and Location

The Zaporozhye Silicon plant is located at the Zaporozhye Alumina and Aluminium complex in the city of Zaporozhye, located in the south east of Ukraine, approximately 600 km south of Kiev.

The Zaporozhye Silicon facility was commissioned in 1938, but was closed following Zaporozhye coming under heavy attack during World War Two. Many of the facilities at Zaporozhye Silicon were relocated to the Urals region and subsequently used in the construction of other plants. The building structures and facilities that were not removed were severely damaged, necessitating major reconstruction work. The reconstructed Zaporozhye Silicon facility reopened in 1958.

Zaporozhye Silicon plant produced 1.3 kt of silicon in 2008.

The facility is currently not operational. Refer to Section 6.5.5.

6.6.3 Plant Description

Zaporozhye Silicon can produce metallurgical grades of silicon. No additional refining equipment has been installed to produce chemical grades of silicon.

Silicon production is a continuous process in which raw materials, blended with reducing agents, are fed into the top of the furnace and the molten product is tapped from the bottom. At Zaporozhye Silicon plant, furnace tapping temperature is in the order of 2,000°C.

The facility comprises six electric-arc furnaces for silicon production. Furnaces 1 and 2 are rated at 6.5 MW, while Furnaces 3 to 6 are rated at 16.5 MW. Furnaces 3 to 6 have been mothballed for an extended period. Furnaces 1 and 2 were closed in 2007, before Furnace 1 was recommissioned in September 2008. Furnace 2 is currently undergoing repairs in preparation for a planned restart in October 2008. There are no current plans to restart Furnaces 3 to 6.

A dry scrubber for Furnaces 1 and 2 is under construction and is due to be operational from November 2009. This facility includes cyclonic separators and a baghouse that will allow recovery of ultrafine silicon powders as a value added product. Furnaces 3 and 4 are equipped with wet scrubbers to treat the off-gasses, with an additional step of dust removal using a baghouse. Furnaces 5 and 6 are connected to a wet scrubber only. When the furnaces are operational the wet scrubber wastewaters are discharged through an open channel to a settling pond at the adjacent steelworks.

Electrodes for silicon production are procured from Ukrgraphite, an independent company located adjacent to the Zaporozhye Alumina and Aluminium complex.

The silicon facility secures all electrical power via the Zaporozhye Alumina and Aluminium complex with two dedicated transformers.

6.6.4 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Zaporozhye Silicon is currently not operational following the full closure of the plant implemented in December 2008. UC RUSAL attributed the closure to a strategic decision based on reduced demand for silicon. Hatch was advised that UC RUSAL view the closure of the facility as temporary and that the facility is the subject of continuous review and monitoring to determine an optimal time for restart.

6.7 Resal

6.7.1 Introduction

Hatch undertook a site visit to Resal in October 2008. This Section 6.7 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.7.2 — Updated with data and information as of September 2009,
- Section 6.7.3 — Process Description as of October 2008,
- Section 6.7.4 — Environmental Status as of October 2008,
- Section 6.7.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 6.7.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

6.7.2 History, Location and Infrastructure

Resal is located in the town of Novosemeykino in the Krasnoyarsk district of Samara region, approximately 35 km northeast of Samara.

The facility is housed on the site of a former sulphur plant where sulphur powder and sulphuric acid were manufactured from 1961 until closure in 1994. The Resal plant is also responsible for a solid waste dump in a neighbouring district. This dump, the original mine site for the sulphur plant, has been prepared to accept exhausted dross salts until recycling facilities and processing plant is available to process these solid materials. The Resal aluminium recycling facility started in 1994 when the then owners, a local company with a Spanish partner, installed equipment for a dross and scrap reprocessing plant.

Resal recycles scrap aluminium and dross from the UC RUSAL group and other third parties into aluminium sows of 550 kg each. Resal production in 2008 was 14.2 kt.

6.7.3 Process Description

The plant site consists of a scrap receiving area, open and undercover scrap storage areas, two meltshops, a dross concentrator and crusher, maintenance workshops, office block, laboratory, finished goods warehouse and intermediate solid waste dump. The scrap receiving area is adjacent to the local railway network that services the plant and this is the primary delivery route for materials to the plant site. Only scrap which is certified free from contaminants such as radiation and explosive residues is accepted for processing. When received on-site, the scrap is segregated and stored according to its type, either undercover in the case of salt dross, machined chips, swarf, foil, used beverage cans and press off cuts or in the open storage area for further processing as is the case for large boulders of high metal content dross. Modern mobile equipment is used to transport materials on-site.

Of the two meltshops at Resal, the first handles scrap metallic aluminium swarf, foils and press off cuts and consists of one gas fired remelt rotary furnace of 25-tonne capacity serviced by a receiving hopper with inclined loading conveyer and vibratory feed chute to load the charge. The liquid aluminium produced is cast into sows of approximately 550 kg in a semi automatic mould station under the furnace. The furnace and associated support equipment is in reasonable order. Regular replacement of refractory linings is undertaken and preventative maintenance of high wearing areas is conducted during a monthly downtime campaign with annual re-bricking of the furnace barrel. The gas treatment plant for this furnace is relatively modern and complies with local standards, however the plant may not be adequate for higher production levels and may need an overhaul.

The second meltshop handles heavier metallic dross and concentrated salt dross in a 12-tonne capacity gas fired Altek tilting barrel furnace. A removable vibratory charging conveyor services the furnace and the melt is poured into sows of approximately 550 kg arranged in a manual casting station around an exit trough. The Altek furnace and support equipment is in reasonable order. Regular replacement of the castable refractory is undertaken and preventative maintenance in high wear areas is conducted during the monthly downtime campaign and annual reline of the furnace barrel. Production and ergonomic improvements are planned for this casting station to make it semi-automatic and increase capacity. The gas treatment plant for the Altek furnace is known by site management to be sub standard and its replacement is also proposed to reduce emissions and improve furnace performance.

The ventilation of the building interior in both meltshops is poor. UC RUSAL is aware of this situation and is preparing cost estimates for an appropriate ventilation system.

Salt dross from other UC RUSAL operations is received on-site and this material is processed in the concentrator/crusher to increase the aluminium content of the charge prior to processing in the Altek furnace. Residual salt slag that cannot be further concentrated in the existing plant is disposed of as a solid waste in the offsite dump, but is stored with a view to processing the material in the future. A preliminary feasibility has been undertaken to develop further capabilities in processing salt dross materials for UC RUSAL and external clients from this site.

Aluminium ingots produced by Resal are coded for sale according to metal purity and heat numbers have traceability. Spectrometer testing is performed in the plant laboratory on regularly calibrated equipment that is in good order but not of latest generation.

6.7.4 Environmental

A German "DISA" gas treatment system is used to process the exhaust fumes from the remelt furnace to prevent air pollution and the collected baghouse residue is disposed offsite in the solid waste dump. The Altek furnace has a gas treatment system of local design that is not adequate for purpose and its replacement has been identified by Resal management. The site complies with local environmental regulations.

The plant site is aging and has been used for chemical processing for over 30 years. The type of former chemical operations on this site is usually associated with serious pollutants and hazardous materials. Several of the buildings on-site are degraded, not suitable or in a dangerous condition due to previous activities and it is intended for them to be demolished. The space freed up will allow expansion of scrap holding areas which have been identified as needing expansion to allow for any increase in production.

The previous mine site that supported the processing plant is now used as the waste dump for exhausted salt slag. The dump area has been prepared with a clay barrier and watercourse and is monitored for ammonia emissions as part of the site permits for operation. Adjacent to the Resal plant, but not part of it, is a boiler plant. Several main lines from this plant pass through Resal and have degraded lagging. Some repairs have been completed recently but further improvements are expected to be completed by the owner of the adjacent facility.

6.7.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.7.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Product/Market Opportunities** — The Resal site is well suited to expansion of the reprocessing and recycling facility for aluminium dross and slag from the rotary kilns, other UC RUSAL plants and external third party clients, by replacing the existing concentrator/crusher with one of modern design, greater throughput and a scrubber and

salt-reduction system for future recycling. An expansion of the existing product range to include high purity premium value alloys and small ingots to service known markets can be undertaken with the purchase of a degasser, filter, mixing furnace and continuous caster. The proposed upgrade of the furnace gas treatment systems should include allowances for a scrap drying and pre-heating stations that would use waste heat from the furnace exhaust, to reduce the energy input of the transformation process and increase operator safety during loading operations. Improved troughing systems between furnaces would further reduce process heat losses, lower energy inputs and improve operator safety. The consolidation of the scrap market in the Russian Federation should provide additional opportunity for this plant. Another significant opportunity for Resal is the potential to build up the ability to recycle exhausted salts both internally generated and as supplied by others. This activity is well suited to the site and is a complimentary activity to the extraction of the remaining metal from low grade feedstocks such as dross and slag.

6.8 Belis

6.8.1 Introduction

Hatch undertook a site visit to Belis in October 2008. This Section 6.8 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.8.2 — Updated with data and information as of September 2009,
- Section 6.8.3 — Process Description as of October 2008,
- Section 6.8.4 — Environmental Status as of October 2008,
- Section 6.8.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 6.8.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

6.8.2 History, Location and Infrastructure

Belis is located in the town of Belaya Kalitva in Rostov region, approximately 160 km northeast of Rostov. The plant is housed on a greenfield site that was built as a scrap reprocessing facility in post Soviet times. RUSAL (prior to the formation of UC RUSAL) took ownership of this facility in late 2006.

Belis is serviced by good federal roads.

Belis reprocesses prime scrap from automotive, used beverage cans, compacted foil mill wastes, aluminium butts and domestic waste from third parties and small ingots (7 to 15 kg) from UC RUSAL smelters into graded alloy ingots of 7 to 15 kg, lower purity non alloyed sows of approximately 550 kg each and cast alloy billets for the extrusion industry. The alloy billets are only made from prime material from UC RUSAL smelters. Belis produced 11.5 kt of product in 2007.

6.8.3 Process Description

Belis consists of a scrap receiving area alongside the main entry to the plant, one meltshop with two barrel furnaces, three hearth furnaces, one homogenizing furnace, one cooling furnace and one direct chill casting station, a dross sieve, warehouse, laboratory and offices. Testing for radiation is carried out on the weighbridge for each load delivered using calibrated equipment.

Scrap certified free from contaminants such as radiation and explosive residues is accepted for processing. When received on-site, scrap is segregated outdoors then stored according to type in an undercover bunkered storage area. The scrap handling process at Belis has been recently improved with hardstand expansion, bunker construction, plant roof and weighbridge repairs. The furnace charge is transferred from the undercover area to a holding area adjacent to the furnace to dry before use. Modern mobile equipment is used to transport materials on-site.

The meltshop has two main areas. The first area processes scrap feedstock with a high metallic percentage and consists of two melting furnaces of 10-tonne capacity each serviced by charge cars and overhead cranes, one rotary furnace, two mixers and two casting stations. The liquid aluminium produced is fed via refractory lined troughs into either one of two manual casting stations to produce alloyed ingots of 7 to 15 kg or 550 kg sows. The equipment in this meltshop is in reasonable order and housekeeping is good. A comprehensive preventative maintenance program is in place, including monthly downtime for minor work, and less frequent outages for major refractory re-bricking. Remnants of the original building ventilation system are still evident, however more effective fume extraction for the furnaces is planned and equipment is on-site for this project. There is a relatively modern gas treatment plant with wet scrubber of unknown make connected to the furnaces in this building. Emissions from this treatment plant comply with local regulations.

The second meltshop area handles lower grade materials such as heavier metallic dross and some salt dross in a 5-tonne capacity tilting barrel furnace. The furnace is serviced by a manually loaded, removable vibratory charging car and the melt is poured into 550 kg moulds arranged in a manual casting station around an exit trough. The furnace and support equipment is in reasonable order and regular replacement of the refractory, along with preventative maintenance is completed through monthly downtime and an annual shutdown. Improvements are planned for the casting station to make it semi-automatic and improve throughput. Improvements to the building ventilation in this area of the Belis plant will be actioned when proposed upgrades to the furnace exhaust system prior to the scrubber and gas treatment system are carried out.

Adjacent to the meltshop area is the direct chill casting station for production of extrusion billets. The melting furnace for the casting station is loaded with high purity primary aluminium ingot butt ends from UC RUSAL smelters. Alloying is undertaken in the furnace and the material is degassed and filtered in new equipment. An upgrade of the metal filtering and degassing units has recently been completed. The casting station features a rope controlled casting platen and improvements to the winching system are proposed to address quality issues. A water purification unit to improve cast quality, reduce water usage and bacterial bloom in warmer months is planned. Changes to thermocouples, their arrangement and the furnace control system for both the homogenizing furnace and cooling furnace is also planned to improve quality. Both furnaces are stated to have good heat distribution qualities and no significant distortions were noticed. An automated billet cut off saw, marking and banding machine with ultrasonic porosity detection is planned for the area to improve workflow in the billet casting plant. The saw blades have been upgraded to improve output.

The products processed at this site are coded according to alloy and purity. All heat numbers are tested in the on-site laboratory. The laboratory equipment is latest generation, near new, in good order and regularly calibrated.

6.8.4 Environmental

All environmental permits and the monitoring of them comply with local requirements. The Belis facility is relatively new and has no known legacy conditions. Waste materials such as salt dross is disposed of in a separate waste facility 17 km from the plant. This three-hectare site is under the control of the Belis plant and has an exploitation permit with a 49-year validity. An external inspection every three months verifies that the waste disposal site conforms to the local regulations.

6.8.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.8.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Efficiency Upgrade** — The site is further extending the material receipt and holding areas. Automated charge loading equipment is proposed to improve operator safety and capacity. Exhaust systems improvements will allow production increases and improve operator conditions.

- **Product/Market Opportunities (1)** — The addition of a modern mixing furnace, degasser, metal filtration and continuous caster at Belis would expand the product range to high purity alloys which may attract a selling premium.

- **Product/Market Opportunities (2)** — The development of the scrap market in the Russian Federation should provide opportunity for Belis.

6.9 Zvetmetobrabotka

6.9.1 Introduction

Hatch undertook a site visit to Zvetmetobrabotka in October 2008. This Section 6.9 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.9.2 — Updated with data and information as of September 2009,

- Section 6.9.3 — Process Description as of October 2008,

- Section 6.9.4 — Environmental Status as of October 2008,

- Section 6.9.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 6.9.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

6.9.2 History, Location and Infrastructure

Zvetmetobrabotka is located in the town of Goratkiniel in the Alexievka district of Samara region, approximately 30 km northeast of Samara. The plant is housed on a greenfield site that was built as a scrap reprocessing facility 10 years ago. All management of this facility is based at the neighbouring Resal plant. RUSAL (prior to the formation of UC RUSAL) took ownership of this facility in late 2006.

A small road connects Zvetmetobrabotka to the main federal road. This road is single carriageway and in poor condition but is typical of secondary roads in the region.

Zvetmetobrabotka reprocesses prime scrap from automotive, architectural panelling, extrusion wastes and other sources into both graded alloy ingots of 5 to 7 kg and into lower purity non alloyed sows of approximately 550 kg each. Some dross and slag is processed at the facility. Zvetmetobrabotka produced 16 kt of product in 2007.

6.9.3 Process Description

The plant consists of a scrap receiving area adjacent to the main plant entry, two meltshops, a crusher/magnetic separator, administration offices and a finished goods warehouse. Testing for radiation is carried out on the weighbridge for each load delivered using calibrated equipment. Only scrap certified free from contaminants such as radiation and explosive residues is accepted for processing. After receipt, the scrap is segregated and stored undercover according to type. Some low grade scrap is processed through a magnetic separator and a crusher to remove ferrous materials. When required, the charge is transferred from the storage area to holding areas adjacent to the furnaces to dry. Modern mobile equipment is used to transport materials on-site.

Of the two meltshops on-site, the first handles scrap feedstock with a high metallic percentage and consists of three melting furnaces of 10-tonne capacity each serviced by charge cars and overhead cranes. The stationary furnaces are charged through hearths with doors and each charge is approximately 1.5 tonnes. Liquid aluminium is fed via refractory lined troughs into one of two continuous casters to produce alloyed ingots of 5 to 7 kg or into a mixing furnace which is used when complex alloys are produced. The mixing furnace in turn feeds a continuous caster. All furnaces and associated support equipment in this meltshop are in reasonable order, and a comprehensive preventative maintenance program is in place including monthly downtime for minor repairs and less frequent longer outages for such things as major refractory repair. Building ventilation is poor and is made worse by the ineffective fume extraction for the furnaces. The gas treatment plant is not suitable. UC RUSAL is aware of this situation and is preparing cost estimates for an appropriate system and while current emissions comply with local regulations, increased production levels or improved emissions will not be possible until the gas treatment plant is replaced.

The second meltshop handles lower grade materials such as lumpy metallic dross and some salt dross in a 5-tonne capacity tilting barrel furnace. The furnace is serviced by a travelling vibratory charging car. Liquid aluminium is poured into sows of approximately 550 kg in a manual casting station around an exit trough from the furnace. The furnace and support equipment is in reasonable order and a comprehensive preventative maintenance program is in place including monthly downtime for minor repairs and less frequent longer outages for such things as major refractory repair. Improvements are planned for the casting station to make it semi-automatic and increase throughput. Building ventilation in this plant is sub standard and furnace exhaust fumes are not effectively captured, scrubbed or treated. Local management are aware of these issues and are submitting cost estimates to UC RUSAL for projects to install appropriate building ventilation and furnace gas treatment systems.

Ingots produced at this site are coded according to alloy and purity. Production is tested on regularly calibrated laboratory equipment that is in good order and of latest generation.

6.9.4 Environmental

All environmental permits and the monitoring of them comply with local requirements.

The Zvetmetobrabotka plant site is 10 years old and has no known legacy condition. Waste materials such as salt dross are disposed of in the Resal waste facility approximately 10 km away. The gas treatment systems for the plant are not adequate and need replacement.

6.9.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.9.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Efficiency Upgrade** — Improved troughing systems between furnaces will reduce process heat loss, lower energy inputs and improve operator safety. The new gas treatment systems should consider including scrap preheating and drying stations to further reduce energy inputs.

- **Product/Market Opportunities (1)** — The addition of a mixing furnace, degasser and metal filtration system at Zvetmetobrabotka would expand the product range to higher purity alloys which may attract a selling premium.

- **Product/Market Opportunities (2)** — The development of the scrap market in the Russian Federation should provide opportunity for Zvetmetobrabotka.

6.10 Polevskoy Cryolite Plant

6.10.1 Introduction

Hatch undertook a site visit to Polevskoy Cryolite Plant in September 2008. This Section 6.10 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.10.2 — Updated with data and information as of September 2009,

- Section 6.10.3 — Process Description as of September 2008,

- Section 6.10.4 — Environmental Status as of September 2008,

- Section 6.10.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.10.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.10.2 History, Location and Infrastructure

The Polevskoy Cryolite Plant is situated just south of Polevskoy, 80 km south of Ekaterinburg in the Sverdlovsk region of the Urals. The original plant was built in 1906 to produce sulphuric acid. The first cryolite was produced in 1933 following the rebuilding of the plant. A further facilities rebuild, virtually from scratch, was undertaken in 1974 to produce cryolite and aluminium fluoride for aluminium smelters. This latest rebuild forms the basis of the current facilities.

The main products of Polevskoy Cryolite Plant are cryolite and aluminium fluoride (AlF3), while additional products include hydrofluoric acid, sodium fluoride and aluminium sulphate. The plant produces all its chemical products from externally sourced raw materials and all processes are conducted on the one production site. The main aluminium fluoride process is an equivalent version of the wet process used at the South Urals Cryolite facility.

Polevskoy Cryolite Plant produced 36.3 kt of aluminium fluoride and 4 kt of cryolite in 2008.

6.10.3 Process Description

The major raw materials involved in the production of aluminium fluoride are fluorspar concentrate (CaF_2), sulphuric acid, aluminium hydroxide and sodium carbonate.

The fluorspar concentrate is purchased from RGRK (Russian Ore Mining Company), where it is mined in the far east of Russia. RGRK is partially owned by UC RUSAL. The quality of the concentrate from RGRK has decreased over the past 10 years and in 2006 and 2007 the RGRK concentrate was supplemented with higher grade fluorspar concentrate from Mongolia. This raised the average grade to 92.6 per cent CaF_2 in both of those years. UC RUSAL conducted a detailed study to determine the optimal use of the higher grade and higher priced Mongolian material and concluded that the most favourable outcome was to direct all of the Mongolian concentrate to the South Urals plant, requiring Polevskoy to revert to processing only the lower grade RGRK concentrate, currently at 87.9 per cent CaF_2.

The plant has six rotary kilns, three for the fluorspar reaction with sulphuric acid and three drying kilns for cryolite and aluminium fluoride products. Only two kilns of each type are required for current production rates. Therefore, one kiln in each of the acid and fluoride sections has been semi-permanently mothballed as a result.

The acid kilns and AlF_3 dryers, plus the grinding mills, extraction fans and vacuum filters, were purchased from outside companies. The balance of the plant was fabricated and constructed in-house by the internal workshops. This includes all the reaction columns, absorption columns, mixing vessels, storage vessels, silos and associated pipework. Most of the equipment is of straight forward construction using mild steel shells with rubber linings and supplemented with carbon blocks to contain the acidic solutions.

While of somewhat smaller scale, the process and the equipment in which it is conducted are essentially identical to those of the South Urals works.

6.10.4 Environmental

The plant has a gas cleaning system to treat the off gases from the process. The plant holds environmental permits and advises that air emissions fall within the permissible levels. Environmental penalties for emissions from the plant may increase in the future due to more stringent regulations and revised measurement procedures.

In general, the plant is in poor condition and many of the pipelines and storage tanks show evidence of structural deterioration. In particular, the two operational hydrofluoric acid storage tanks are not adequately bunded, potentially allowing the release of acid to the surrounding area in the case of failure. The refinery advises that another four hydrofluoric acid tanks have previously been decommissioned due to past failures. Many of the surfaces within the plant are unsealed or have broken pavements, providing pathways to the underlying soil and groundwater in the event of spillage of hazardous liquids. Some of these issues are being addressed within the current upgrade project as described below.

The Polevskoy Cryolite plant produces calcium sulphate sludge as a waste product. The waste is discharged as slurry to storage facilities located adjacent to the plant. The plant has two sludge storages; Pond No. 1 and Pond No. 2. Pond No. 1 has reached its maximum design height and is being progressively rehabilitated. Some sludge will continue to be discharged into Pond No. 1 as part of the rehabilitation works, however the majority of current and future sludge storage will be within Pond No. 2. Water discharged to the pond is recovered and returned to the plant for reuse in the process. The recovered water contains high levels of fluoride, but has a pH of approximately 6.5-7.0 (essentially neutral). Both sludge storages are equipped with seepage interception and recovery systems as well as groundwater monitoring wells. The plant is implementing a project to improve the water recovery and management system at the storages through upgrading and modification of the existing system. This will reduce the potential for seepage of contamination to groundwater and adjacent surface water bodies.

Acid effluent from the plant is collected and neutralised with lime before being discharged to an unlined settling pond. It is understood that seepage from the settling pond is impacting on ground and surface water. For this reason, the plant implemented a project in 2006 to relocate and upgrade the neutralisation plant, and following this, to decommission and rehabilitate the settling pond. The project is scheduled for completion in 2015. This project will serve to reduce the overall environmental impact of the plant.

6.10.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Polevskoy Cryolite Plant is currently producing below recent historical levels following the closure of two kilns in the first quarter of 2009. UC RUSAL attributed the closure to a strategic decision based on reduced demand for cryolite and aluminium fluoride. Hatch was advised that UC RUSAL view the closure of the kilns as temporary and that the kilns are the subject of continuous review and monitoring to determine an optimal time for restart.

6.10.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Drying Oven Upgrade** — A retrofit program is underway to protect against pyrohydrolysis of the product at the hot end of the kiln. As demonstrated at the South Urals plant and at one Polevskoy oven that has been retrofitted, the reversion of AlF_3 to alumina and HF can be dramatically reduced. This will reduce the alumina impurity in the product and can result in a slight reduction in the consumption of raw materials per tonne of AlF_3 produced.

6.11 South Urals Cryolite Plant

6.11.1 Introduction

Hatch undertook a site visit to South Urals Cryolite Plant in September 2008. This Section 6.11 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.11.2 — Updated with data and information as of September 2009,
- Section 6.11.3 — Process Description as of September 2008,
- Section 6.11.4 — Environmental Status as of September 2008,
- Section 6.11.5 — Material Developments at the facility between September 2008 and September 2009, and
- Section 6.11.6 — All previous Specific Risks and Opportunities noted in September 2008 together with any changes following new data and information provision.

6.11.2 History, Location and Infrastructure

The South Urals Cryolite Plant is situated in the town of Kuvandyk, 200km south-east of Orenburg in the Orenburg region of the Russian Federation. The plant was commissioned in November 1954 to produce both cryolite and boric acid. In 2004, the boric acid plant was decommissioned. The boric acid plant buildings and equipment remain and are available for use as storage or for future plant installations.

The South Urals Cryolite Plant produces two main products, cryolite and aluminium fluoride (AlF_3). Sodium fluoride may also be produced as required. The majority of the aluminium fluoride produced is transferred to aluminium smelters within the UC RUSAL network as make-up for bath volume and chemistry control. Aluminium fluoride is produced at 96 per cent purity, which is a high quality by world standards. It surpasses the purity of aluminium fluoride produced by the Davy dry process.

The demand for cryolite has decreased in recent years and this has resulted in a major change in production levels. In 2008 the South Urals Cryolite plant produced 6.4 kt of cryolite and 56.7 kt of aluminium fluoride.

It should be noted that the kilns were down for major maintenance work during the 2008 site visit and therefore, the plant operations were not observed.

6.11.3 Process Description

The major raw materials involved in the production process at South Urals Cryolite Plant are fluorspar, sulphuric acid, sodium carbonate, calcium carbonate and aluminium hydroxide. Fluorspar is purchased from long-time supplier RGRK (Russian Ore Mining Company) and since

2007, from a Mongolian supplier of higher grade fluorspar (95 per cent CaF_2). The decreasing quality of the RGRK fluorspar had resulted in increased reagent usage and increased operating cost. The current feed at South Urals is a 50/50 by weight blend of RGRK and Mongolian fluorspar flotation concentrate, having an average grade of 91.6 per cent CaF_2.

South Urals Cryolite Plant has four rotating kilns, two for the fluorspar reaction with sulphuric acid and two drying kilns for cryolite and aluminium fluoride. The sulphuric acid reaction kilns were shipped to the plant from Germany as part of the World War Two reparations. Only minor upgrades have been undertaken on these furnaces and the current controls system dates back to the 1950's. Very little of the processing equipment was purchased externally and most of the plant was designed, fabricated and erected in-house by the internal workshops at Kuvandyk. The plant is of simple construction, with mild steel shells lined with elastomer products for vessels, tanks and piping containing acidic gases and solutions.

The initial reaction is performed in rotating kilns, with fluorspar and sulphuric acid being mixed in the presence of natural gas. The kilns are lined with refractory brick and carbon plates, to prevent heat losses and internal corrosion. The reaction is exothermic and hydrofluoric acid comes off as a gas, which is captured in absorption columns and stored for the next operation.

Cryolite and aluminium fluoride are produced from the 26 per cent aqueous hydrofluoric acid (HF) in agitated reaction vessels. The resulting sludge is filtered through vacuum filters to separate out the product. The aluminium fluoride slurry is dried in rotating kilns from which a 95 per cent pure AlF_3 results.

Cryolite is produced by neutralising flurosilicic acid (H_2SiF_6) with a solution containing sodium carbonate and aluminium hydroxide. The neutralised solution is evaporated and solid phase cryolite is crystallised out. A thickener yields a cryolite paste in the underflow and a cryolite spent liquor in the overflow. The paste is dried in a hollow drying system to reduce free moisture only.

Products are either packed into bags or loaded into bulk tankers for transportation, depending on customer requirements.

6.11.4 Environmental

South Urals Cryolite Plant operates under the philosophy of zero liquid discharge. Water discharged to the calcium sulphate slurry storage is recovered and returned to the plant for re-slurrying of the gypsum waste, milk of lime preparation, floor washing, etc. Data provided by the plant indicated that there are high levels of fluoride in captured stormwater and water returned from the gypsum slurry storage. Data on sulphide levels in the water was not provided, however the water has a pH of around 6.8, and is therefore essentially neutral.

The plant has a gas cleaning plant to treat the off gases from the process. The plant holds environmental permits and advised that air emissions fall within the permissible levels. The plant proposes to upgrade the current foam gas cleaning plant to further reduce emissions. However, newer technology would be required to meet world best practice for the reduction of emissions.

There is one active calcium sulphate sludge storage located at the site (Pond No. 2) and an older, currently inactive storage (Pond No. 1). In addition there are three decommissioned slurry storages that were used for the boric acid plant and operation prior to 1971. These storages have been covered and revegetated.

Pond No. 1 (114 ha) and Pond No. 2 (78 ha) are located 1.5 km north-west and 2.5 km north of the plant respectively. Pond No. 1 was commissioned in 1971 and has reached capacity. It is currently used to collect stormwater runoff from the plant site and to provide additional surface

area for evaporation. Evaporative sprays are used on both storages during the summer months to evaporate excess stormwater generated during the spring thaw runoff. Pond No. 2 was commissioned in 1987 and is expected to reach the capacity of the current embankment in late 2011. Capital works for 2009 include the commencement of the construction of a 2 m embankment lift to Pond No 2, which will extend the service life of the facility to 2014-2015. Pond No.1 could be similarly extended to provide additional capacity, dependent on confirmation of geotechnical stability.

A key issue for the plant is that due to the large surface area and valley catchments, considerable management and expense is required to prevent a net accumulation of water within the storages, particularly during the spring thaw. This reduces the storage area available for solid waste and increases the overall cost of waste disposal. The plant is currently preparing an application to the authorities for the treatment (reduction in fluoride and sulphide levels until fish-breeding norms are achieved) and discharge of surplus water from the site during the spring thaw. If successful, it would improve the overall water balance at the site and therefore the efficiency of the sludge storage. It is understood that there is no current budget provision for closure and rehabilitation of the sludge storages.

Both ponds have seepage collection drains which intercept and return water back to the sludge storage and groundwater quality is regularly sampled and tested from downstream monitoring wells. It is understood that both Ponds No. 1 and No. 2 are inspected bi-annually by the authorities in the Russian Federation.

Hatch was not provided with information on the mothballed boric acid plant and therefore an environmental assessment of this facility is not possible.

6.11.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in September 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

6.11.6 Specific Risks and Future Opportunities

Specific Risks

- **Acid Storage** — The plant currently has many old acid storage tanks containing sulphuric and hydrofluoric acid. The hydrofluoric acid tanks have no secondary containment and the sulphuric acid tanks have only containment for small spill volumes. Given the corrosive nature of these acids and the potential environmental liability if a tank were to leak, secondary containment of these tanks is recommended.

- **Rehabilitation of Sludge Storages** — The plant has not commenced progressive rehabilitation of the sludge storages, but preparations are currently in progress. As the sludge and associated liquor has a high fluoride content, extensive rehabilitation work will ultimately be required to ensure that the storages do not provide an ongoing source of surface and groundwater contamination.

Future Opportunities

- **Sludge Storage Water** — If the plant is successful in its application for the treatment and release of surplus water from the sludge storages, the overall plant water balance will be improved and the storages will operate more efficiently, with a corresponding reduction in final rehabilitation costs.

- **Sulphuric Acid Production** — South Urals are planning the installation of their own sulphuric acid plant to fully supply both the South Urals and Polevskoy plants. Sulphur would be sourced from local oil and gas or non-ferrous processing facilities. The acid plant would also generate 6.6 MW of electricity and sufficient thermal energy to provide the energy requirements for the plant. The project has not yet been approved.

6.12 Lingshi Cathode Plant

6.12.1 Introduction

Hatch undertook a site visit to Lingshi Cathode Plant in October 2008. This Section 6.12 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.12.2 — Updated with data and information as of September 2009,

- Section 6.12.3 — Process Description as of October 2008,

- Section 6.12.4 — Environmental Status as of October 2008,

- Section 6.12.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 6.12.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

6.12.2 History, Location and Infrastructure

The Lingshi cathode plant of the Shanxi RUSAL Cathode Co. Ltd. is located in the county of Lingshi, 160 km south of the Shanxi province capital city of Taiyuan, China. The population of Lingshi is approximately 200,000 people and is located at the heart of a region rich in coal resources, including coking facilities and power plants. The area is next to a major highway, part of a large array of modern and high-quality roads, and is also serviced by rail.

The Lingshi cathode facility is completely enclosed by other facilities on three sides and by a river on the fourth side, so there is no room for expansion. Future growth can only be achieved through acquisition of other local plants.

The Lingshi cathode facility was wholly acquired by Rusal China Limited (prior to the formation of UC RUSAL) from a Chinese company in August of 2005. The plant and its equipment were new in 2002 and operated for two years under its previous owners.

Both Lingshi and the nearby Taigu plant (120 km away) share common management, including industrial relations, raw material procurement and sales to internal UC RUSAL plants of the finished goods.

Lingshi is dedicated to the manufacture of aluminium reduction cell lining and cathode blocks. The Lingshi facility has a capacity of 15 ktpa, with 72 per cent of production for cathode blocks and 28 per cent of production for side and corner blocks. All the production is semi-graphitic, with a nominal graphite content of 30 per cent and is manufactured for internal use by UC RUSAL aluminium smelters in the Russian Federation and Ukraine.

6.12.3 Process Description

Raw materials for both the Lingshi and Taigu plants are procured under common contracts. The key product ingredients are coal, graphite and liquid pitch.

- Coal is procured in 50kg bags from the Taixi Coal Plant in Ningxia Province under a contract that is renewed monthly due to fluctuating prices.

- Graphite arrives monthly in 35kg bags from five small suppliers located in Henan and Hebei Provinces.

- Pitch is procured locally from the Jinyuan Company and delivered to each facility by tank truck in liquid form.

Given the high availability of these materials in the region, raw materials shortages are unlikely. All raw materials are subject to quality inspection and testing, both at the manufacturers and the UC RUSAL plants to ensure specification compliance.

The plant uses coke gas for both the baking furnace and the oil heating system. The coke gas is procured under contract from a coking facility located next to the plant. This contract has been in place for approximately two years and is a significant improvement over the previous on-site generation of gas from coal as the contract ensures lower cost and higher reliability tied with penalties for supply interruptions. However, the on-site facilities are still operable.

In the dry material processing area, dry mix composed of coal, graphite, and recycled scrap is made using eight dry fractions of different sizing, manufactured through a set of screens and crushers. A dry batch is initiated by filling a hopper with the desired quantity of each dry fraction, with each fraction weight being controlled to an accuracy of 0.1 per cent by the use of load cells. Proper sizing and proportion is controlled through test sampling of each fraction once per shift. The basic dry mix recipe is 45 per cent coal, 29.3 per cent graphite, and 25.7 per cent baked scrap material. For certain batches, an additional 10 to 12 per cent unbaked scrap material may be added.

Two shops, (numbers 1 and 2) are used to produce the final block paste mixture and formed blocks. These two shops have a total of nine 2,000 kg batch mixers and two similar formers. Each former uses an excentrics system to induce a vertical vibration and a cover weight attached to two large hydraulic cylinders to apply pressure on the carbon paste while vibrating.

Area number 1 is next to the dry mix area and has a total of five batch paste mixers. A hopper is used to transport the dry mix into the batch mixers where it is preheated. Following this step, 20 per cent pitch at a minimum temperature of 165°C is added with mixing continuing at a final minimum mix temperature of 155°C. Area 1 has a single paste cooler and former. Typically, four mixers are operated with one kept in reserve. The area 1 mix cooling and forming produces blocks measuring 585mm x 445mm x 3.6m.

Area number 2 is remote from the dry mix area, so the dry mix is transported by mobile equipment. This area has four batch mixers and a single paste cooler and former, operating at the same parameters as area 1. Typically, three mixers are operated with one kept in reserve. The area 2 mix forming produces longer blocks measuring 585mm x 445mm x 4.2m. Each forming area has a local block cooling pond.

An 18-section, open top type furnace is used to calcine the unbaked blocks. Each section has five pits which can be loaded with 13 green cathode blocks. Coke is used as the pit packing material. Total fire time for the blocks is 480 hours, consisting of 404 hours of controlled ramp up from ambient to 1000°C and 76 hours soak time at 1050°C. Additionally, there are 270 hours of controlled cool down to ambient. The plant is developing a means to lower the furnace fire cycle time, thereby increasing on-site block calcining capacity by up to 25 per cent.

The present baking furnace capacity is 12.2 ktpa. For the current plant finished output of 13 ktpa, the total requirement for baked cathodes is 20.5 ktpa (before machining and finishing); therefore, the Lingshi cathode facility sub-contracts the baking of up to 8.3 ktpa to nearby calcining companies. These contractors are under a quality-driven contract that ensures the Lingshi cathode facility will have full control over the quality of the baked cathode blocks they are provided.

The machine shop area contains equipment used to machine the cathode side and corner blocks and bottom blocks to the precise dimensions required. Fifteen of these machines were already installed when Rusal China Limited acquired the plant, with two more purchased and installed in 2006 as part of the capital expenditure program intended at improving the plant's efficiency. The machine shop capacity is 17.5 ktpa.

Quality testing of raw materials, intermediate process steps, and most finished product tests of critical criteria are performed at the on-site laboratory. All finished products are tested for physical and chemical properties and dimensional adherence to the sizing specifications after machining. The Zhen Zhou Light Metal Institute laboratory facility is contracted to perform the analysis of those properties for which the plants laboratory is not equipped. Following final quality testing and packaging, all products are trucked to a rail load out 5 km from the plant, for transport to UC RUSAL smelters in Russia and Ukraine.

6.12.4 Environmental

Shanxi RUSAL Cathode Co. Ltd. Cathode Plant has achieved ISO 14001 environmental management certification.

The Lingshi cathode facility is permitted for air emissions, water pollution and noise and currently conforms to all Chinese and provincial regulations. The main air pollution source is from the bake furnace exhaust gas. A modern electrostatic precipitator was installed in 2004 after mandatory requirement from the government authorities. A second electrostatic precipitator was recently added to further improve the scrubbing efficiency. An ash monitoring station is located on the exhaust stack. A series of collection hoods and ducts capture the pitch fume emissions at various process locations and transport the fumes to the electrostatic precipitator inlet for scrubbing.

By the very nature of the process, carbon dust generation is very high at the cathode machining shop. Each machine is equipped with dust collection ducts which perform well, and capture the majority of the dust.

6.12.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Hatch was advised that Shanxi RUSAL Cathode Co. Ltd. was ordered by the environmental protection bureau of Lingshi County to rectify the non-stack discharge of dust and benzopyrene from the facility. UC RUSAL confirmed that the required equipment for compliance to be achieved will be installed by 20 December 2009 as requested by the Lingshi County authorities.

UC RUSAL has advised that Shanxi RUSAL Cathode Co. Ltd. is obliged to remove its baking furnaces to an alternative location out of Lingshi County before 31 October 2010. The request, Lingshi County Government, it due to the launch of the Government Programme 'Blue Sky — Blue Water' aimed at improving environmental conditions in the local region. UC RUSAL has advised that plant management is considering moving baking furnaces to Boguan plant, also owned by UC RUSAL.

6.12.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Raw Material Supply** — The current nature of raw material procurement at Lingshi is typical in China, with short-term contracts being renegotiated with the same supplier. UC RUSAL acknowledge that this is a significant opportunity to reduce the cost of raw materials and has plans to raise competition among multiple suppliers and negotiate lower prices through long-term contracts.

- **Production Opportunities** — There is potential to produce cathode blocks with higher per cent graphite composition. A programme exists to test preliminary groove formation prior to baking, which could reduce waste and save on machining time. The faster furnace firing time tests could also increase production for the plant since this is an area restricting total plant output.

- **Removal of Baking Furnaces** — The Lingshi County Government has launched the programme 'Blue Sky — Blue Water' aimed at improving environmental conditions in the local region. As part of this programme, Lingshi Cathode Plant is obliged to remove baking furnaces outside of the Lingshi County before 31 October 2010. This may potential result in a suspension of cathode production at the plant.

6.13 Taigu Cathode Plant

6.13.1 Introduction

Hatch undertook a site visit to Taigu Cathode Plant in October 2008. This Section 6.13 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 6.13.2 — Updated with data and information as of September 2009,
- Section 6.13.3 — Process Description as of October 2008,
- Section 6.13.4 — Environmental Status as of October 2008,
- Section 6.13.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 6.13.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

6.13.2 History, Location and Infrastructure

The Taigu cathode facility of the Shanxi RUSAL Cathode Company is located in the county of Taigu, 80 km from the Shanxi province capital city of Taiyuan, China. The population of Taigu County is approximately 280,000 people. The county is near to a major highway and is also serviced by rail.

The Taigu plant is approximately 120 km from Lingshi, another Shanxi RUSAL Cathode Co., Ltd. plant.

The Taigu facilities were constructed in 2001 and were acquired by Shanxi RUSAL Cathode Co. Ltd. from a Chinese company in August 2008. The plant is in the process of modernizing the block machining and packaging area, with completion scheduled for November 2008. The Taigu facilities are adjacent to farmland, offering room for expansion. All material transport into and out of the plant is by truck.

Taigu is dedicated to the manufacture of aluminium reduction cell lining and cathode blocks. Total plant capacity is 9.6 ktpa with 75 per cent of production for cathode blocks and 25 per cent of production for side blocks. All the production is semi-graphitic, with a nominal graphite content of 30 per cent and is manufactured for internal use by UC RUSAL aluminium smelters in the Russian Federation and Ukraine.

6.13.3 Process Description

Raw material storage at Taigu includes two 15-tonne pitch tanks, and a dry storage area where the bags of coal and graphite are stored at an average quantity of 200 tonnes each. Although more area is available for the bagged material, it is not required at current production levels and is not a limiting production factor.

Taigu has a single dry paste ingredient mixer, where sized and weight-proportioned coal, graphite, and unbaked and baked scrap are pre-mixed. This step is followed by transport to the six batch mixers. In the batch mixers, pitch is added and the material is mixed at a temperature of 130°C to 140°C.

After mixing, the green paste is dumped in a transport hopper and carried by the overhead crane to an elevated mixer/cooler unit. Here the hot paste is further mixed and cooled to 100°C, which is the desired forming temperature. Once the cooling step is complete, the paste is dumped onto a belt conveyor and delivered to a nearby vibrating press block former. The plant has one former press in operation. A second former is available if needed, but will require some rework. After being formed and cooled in the water pond, the blocks are stored on the shop floor prior to transport to the bake area. The total capacity of the mixing/forming area is 32 ktpa, which assumes the second former is made operational.

The Taigu plant has two open-top type bake furnaces, numbers 1 and 2. Furnace No. 1 is a 14 section furnace with 4 pits per section. Each pit can pack 10 blocks. The capacity of this furnace is approximately 7 ktpa. Furnace No. 2 can produce an additional 8 ktpa and has a pit capable of holding 9 blocks, with 10 sections and 9 pits per section. Furnaces 1 and 2 therefore have a total baking capacity of approximately 15 ktpa of baked blocks. Each furnace uses coal gas from its adjacent coal gas generation station for fuel, as no natural gas is available at the plant site. Total fire time for the blocks is 508 hours, consisting of 460 hours of controlled ramp up from ambient to 1000°C and 48 hours soak time at 1000°C. Additionally, there are 144 hours of controlled cool down to ambient.

The machining operation generates approximately 36.5 per cent waste to scrap generation from the milling/cutting process. The shop has five 5-tonne overhead bridge cranes for product handling and equipment maintenance. The new machining area will have 11 pieces of new equipment plus 4 pieces of original equipment dedicated to this operation. Total capacity of the new machining area is 18 ktpa of finished product, but is currently operating at about 9.6 ktpa due to the 15 ktpa capacity limits of the baking operation.

Quality testing of raw materials, intermediate process steps, and most finished product tests of critical criteria are performed at the on-site laboratory. All finished products are tested for physical and chemical properties and dimensional adherence to the sizing specifications after machining. The Zhen Zhou Light Metal Institute laboratory facility is contracted to perform the analysis of those properties for which the plants laboratory is not equipped. Following final quality testing and packaging, all products are trucked to a rail load out 20 km from the plant, for transport to UC RUSAL smelters in Russia and Ukraine.

6.13.4 Environmental

The Taigu facility is permitted for air emissions, water pollution and noise and currently conforms to all Chinese and provincial regulations. Auditing is performed annually. The main air pollution source is from the bake furnace exhaust gases.

By the very nature of the process, carbon dust generation is very high in a cathode machining shop. Each machine in the rebuilt shop is equipped with dust collection ducts and hoods connected to local dust collectors and separators.

6.13.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Hatch was advised that Taigu Cathode Plant has not yet received the approved environmental impact assessment required for the completed modernisation project. We understand that the environmental impact assessment report has been prepared and already approved by Taigu County and Zhen Zhou town and is now pending approval by the Shanxi authorities.

6.13.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified.

Future Opportunities

- **Raw Material Supply** — The current nature of raw material procurement at Taigu is typical in China, with short-term contracts being renegotiated with the same supplier. UC RUSAL acknowledge that this is a significant opportunity to reduce the cost of raw materials and has plans to raise competition among multiple suppliers and negotiate lower prices through long-term contracts.

- **Furnace Capacity** — The bake furnace capacity is currently the limiting production factor for Taigu. The addition of three furnaces and air control may potentially allow plant capacity to increase to 20 ktpa.

7. Packaging Division

7.1 ARMENAL

7.1.1 Introduction

Hatch undertook a site visit to ARMENAL in October 2008. This Section 7.1 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 7.1.2 — Updated with data and information as of September 2009,

- Section 7.1.3 — Process Description as of October 2008,

- Section 7.1.4 — Environmental Status as of October 2008,

- Section 7.1.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 7.1.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

7.1.2 History, Location and Infrastructure

The ARMENAL foil mill located in the city of Yerevan, in the Republic of Armenia, is one of the largest manufacturing enterprises in Armenia. Yerevan has a population of approximately 1.3 million people. The plant is located adjacent to the city and is surrounded by light industry and residential areas.

ARMENAL is situated on the site of the former Kanakersk Aluminium Smelter which was constructed in 1944 and was commissioned in 1950. The smelter was closed in the 1970's for environmental considerations, while the Kanaker Foil Mill, which commenced production on a portion of the smelter site in 1957, continued to operate and grew into one of the largest industrial facilities in Armenia. However, the Kanaker mill was forced to close down due to the economic depression following the break up of the former Soviet Union.

ARMENAL commenced production in July 2000, just two months after RUSAL's partial acquisition of the plant (prior to the formation of UC RUSAL). The mill incurred production problems and high costs early in its operation; and in January 2003 the government of Armenia and RUSAL signed an agreement of cooperation where RUSAL eventually became the sole owner of ARMENAL and also guaranteed to undertake an extensive retrofit of the plant.

In 2003, RUSAL engaged German mill engineering firm Achenbach to undertake the ARMENAL retrofitting programme and the first stage was completed in December 2005. The final stage, completed in October 2006, has resulted in the installation of continuous casting machines and full retrofitting of the breakdown mill. The foil rolling mills have also been equipped with modern monitoring tools and latest generation process control systems.

In 2008 ARMENAL produced 13 kt of product in 2008.

7.1.3 Process Description

ARMENAL processes primary aluminium ingots from Bratsk Aluminium Smelter and Novokuznetsk Aluminium Smelter and alloying elements from other UC RUSAL facilities and third party suppliers. The facility consists of a meltshop, casting area and breakdown mill shop, foil mill area, roll grinding workshop and general workshop, splitting and slitting area, packaging area, administrative offices and finished goods warehouse.

Ingot and compacted process scrap is melted in one of eight induction furnaces of 6-tonne capacity each. The induction furnaces are not of recent design and do not have fume extraction fitted even though it is shown as part of the furnace design. Liquid aluminium is transferred by tractor and ladle car from the separate meltshop to one of three receiving furnaces in the caster area before being distributed to one of the three mixing/holding furnaces for alloy refinement. From the holding furnaces, the melt passes through degassing and metal filtration units before entering one of two horizontal "Super-Caster" machines or a vertical "Super-Caster" machine to produce a blank 6.5 mm thick and 1540 to 1670 mm wide. All three "Super-Caster" machines on-site are operational. The third vertical caster was commissioned in August 2007 and all machines feature the latest generation of process control upgrades.

The cooled coils of cast blank are transferred to a breakdown mill, which was constructed in the Soviet Union in the 1970's and subsequently rebuilt by Achenbach in 2004, where they are reduced in gauge during multiple passes. The breakdown mill has a nameplate capacity of 75 ktpa. A kerosene based oil rolling emulsion is used and the emulsion is processed in a closed loop via a new Schneider paper filter. Coolant condition is monitored daily and when exhausted, is recycled offsite by a third party. The mill has latest generation shape and gauge control, side trimming and semi-automatic threading equipment. Sundry spool and coil handling equipment, including the overhead building crane that services this mill, are modern and in excellent near-new condition. The entry despooler is new, has side shifting capabilities and is due for commissioning in 2008. An intermediate annealing station consisting of five controlled atmosphere electric furnaces with a cross travel coil car and handling equipment complements the breakdown process. The control systems for these furnaces have been rebuilt and are of latest design.

There are six Achenbach foil mills at ARMENAL and they are roughing (two), universal (two) or finishing mills (two). During 2004 these mills were completely mechanically rebuilt and fitted with Achenbach shape and gauge control systems. All mills have automated roll changing equipment, are fitted with automatic CO_2 fire safety systems and are connected to a common exhaust fume system with scrubber. Trimmings from the finishing foil mills are collected by a pneumatic conveying system and are compacted in a modern automated scrap press. The roughing mills are supplemented by a new scrap press which is loaded manually. There are two doubling machines in the foil area and one finishing mill is fitted with twin entry mandrels. The

foil mills have a common lubricant system, which is kerosene based and is filtered in a closed system with an automatic CO_2 fire protection system. Finished foil product thickness of 6 to 9 microns is produced at ARMENAL. The mill equipment remains in near-new condition and is maintained by UC RUSAL and Achenbach technicians. The other mill support plant is maintained by UC RUSAL technicians and offsite third party contractors.

The finishing area consists of three separating and splitting lines that are serviced by an automatic loading and unloading gantry with spool collection station. Adjacent to this, are six cutting and slitting lines which are well laid out and serviced by an overhead crane. All cranes in the finishing area are being upgraded to remove the cabin and incorporate pendant controls. This project is partially complete. Installation of a new separating/slitting line has been completed. Alongside this equipment is the final heat treatment area for the foil. There are a total of seven nitrogen atmosphere foil furnaces of modern design with current process control equipment and of these, two are not normally used but are capable of running when production levels rise. The furnaces are serviced by coil cars and overhead cranes. The packing area is fed from the finishing area and all goods are securely packed in wooden crates for markets that are accessed by both road and rail. A semi-automated weighing and labelling system has been installed in a prepared area near the finishing line. The current packing area will just be able to support the plant until the nameplate capacity is reached.

7.1.4 Environmental

The Yerevan area has been inhabited for over 2,000 years and sits in a valley surrounded by mountains and any effect on the population from pollution is significant. For this reason, ARMENAL has a management-enforced ecological passport for the site to preserve the environment around Yerevan. Water quality monitoring has resumed after the reconstruction of the mill and is conducted regularly. Recently, workplace testing of building air quality, noise and task lighting levels has commenced and the first set of results were recorded. Air emissions are controlled at the breakdown and foil mills by new scrubbers of modern design installed during the mill upgrades. It is planned to record air emissions when the appropriate testing equipment is delivered. There are long term plans to raise the level of compliance from local to international requirements. The plant complies with all Armenian environmental legislation and regulations.

7.1.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility, with the exception that the modernisation programme at ARMENAL has now been completed with the plant's capacity expanded to 25 ktpa. UC RUSAL has also stated that a bottleneck at the breakdown mill has been eliminated.

ARMENAL operated below full capacity during the first half of 2009 due to the weak environment and reduced demand for its product. Hatch was advised that full capacity production levels were restored in June 2009.

7.1.6 Specific Risks and Future Opportunities

Specific Risks

- **Labour Risk** —The operating staff at ARMENAL are young and relatively inexperienced following their recruitment over the previous three years. However, it should be noted that they are well supported by technical staff from machine suppliers and key personnel have had extended training at other UC RUSAL foil mills. Training programs and the attention to specific quality problems are being addressed by the plant and UC RUSAL.

- **Logistics** — Restricted transport through Georgia and some of the Russian ports is a problem acknowledged by the government. Improvements have been addressed at the highest level and now a number of ports and links are used through Iran and Turkey to good effect. Transport via rail and road with containerised deliveries has evolved as the most successful method.

Future Opportunities

- **Efficiency Upgrade** — Improving the existing induction furnace process control system may reduce energy consumption, as would attention to heat loss areas during melt transfer to the receiving furnaces in the casting area. Efforts are also underway to improve overall plant yield and UC RUSAL is dedicating specialist resources to drive this necessary improvement.

- **Product/Market Opportunities (1)** — The ARMENAL mill is currently producing 6 to 9 micron foil. Technical competence is also being gained in heavier 38-micron foils which are popular with yogurt manufacturers and this market will provide opportunity for ARMENAL.

- **Product/Market Opportunities (2)** — Some markets are open to ARMENAL that are closed to its competitors, such as the near eastern markets of Iran and Kazakhstan, and therefore provide opportunity that competing producers may not be able to access.

7.2 SAYANAL

7.2.1 Introduction

Hatch undertook a site visit to SAYANAL in October 2008. This Section 7.2 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 7.2.2 — Updated with data and information as of September 2009,

- Section 7.2.3 — Process Description as of October 2008,

- Section 7.2.4 — Environmental Status as of October 2008,

- Section 7.2.5 — Material Developments at the facility between October 2008 and September 2009, and

- Section 7.2.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

7.2.2 History, Location and Infrastructure

SAYANAL is located in Sayanogorsk, in Khakasia Republic of southern Siberia, approximately 75 km south of the regional capital city of Abakan. Sayanogorsk has a population of around 60,000 and is located next to the Yenesei River.

SAYANAL (formerly known as Sayansk Foil Mill) was commissioned in 1995, has a nameplate capacity of 40 ktpa and is the largest producer of foil and foil-based packing materials in the Russian Federation. The plant was built according to an agreement between Sayanogorsk Aluminium Smelter, Italian machinery manufacturer FATA Hunter and Reynolds Metals Company (USA).

7.2.3 Process Description

The SAYANAL meltshop uses molten aluminium as the initial raw material for foil production, which is delivered from the adjacent Sayanogorsk Aluminium Smelter, as well as recycling uncoated scrap from its own production. Additional melting of primary ingot is undertaken but no external secondary recycled material is used in the process. The melt is prepared in one of three melting furnaces and undergoes refining by degassing and filtration before the addition of alloying elements. The material is then transferred to one of three holding furnaces until use. From the holding furnaces, the melt then transfers to one of three horizontal "Super-Caster" machines for production of a blank 6 to 10 mm thick and 1300 to 1650 mm wide which is rolled into coils. Two of these machines are equipped with latest generation control systems implemented during an upgrade in 2005/2006. The third caster had a similar upgrade of its control system in 2007. The casting area is currently operating at full capacity.

In the preparation area, cooled coils are transferred to a FATA Hunter breakdown mill where they are reduced in gauge during multiple passes. The breakdown mill has an early generation gauge measurement and shape control system which is now obsolete. Replacement will be required to improve productivity and prevent an emergency situation since spares are not available. An oil emulsion is used for lubrication and cooling, the fluid is processed in a closed loop via a Schneider paper filter. The coolant condition is monitored daily on all mills to maintain correct operational properties. An intermediate annealing station consisting of three controlled atmosphere furnaces and handling equipment compliments the breakdown process. One of the furnaces is new and was commissioned in 2007.

In the foil mill area, material is further processed in one of four FATA Hunter foil mills. The mills are either roughing (one), universal (one) or finishing (two) and are equipped with shape and gauge control. Two mills will eventually require gauge control upgrades as the system installed is not current and any spares required are not readily available. One mill has a later generation Achenbach shape and gauge control system installed during an upgrade in 2004. The foil mills use a kerosene-based lubricant which is filtered in a closed system. The coolant condition is monitored daily to maintain correct operational properties. All mills are fitted with CO_2 fire safety systems and are connected to an exhaust fume system fitted with scrubbers. Finished product thicknesses of 0.006 to 0.6 mm are produced from the mills. The mill equipment is in good condition and is well maintained by specialists. The mill plant is adequately maintained by technicians using well-equipped workshops on-site.

The finishing area adjacent to the foil mills consists of 12 annealing furnaces with handling equipment, separation, cutting and slitting lines and rewind machinery. All equipment is in good order and one separation/slitting machine was fully refurbished during 2007. The foil in this area is either prepared to customer specified dimensions for uncoated product or into sizes to suit the equipment in the converting area where further processing takes place.

The converting area consists of machinery that performs the following operations on foil and foil-based combined packaging materials: backing, lamination, gravure printing, japanning, painting, and embossing. The printing equipment consists of a six-colour machine and an eight-colour machine. All printing and embossing rolls are prepared on-site with sophisticated equipment of recent design. The chrome plating tanks were replaced in 2007 and are of latest design. All equipment in the converting area is protected by a CO_2 fire suppression system. The area is well ventilated and lit. The machinery is comprehensively serviced by exhaust ducting that is adequate for purpose.

7.2.4 Environmental

SAYANAL has achieved ISO 14001 environmental management certification.

SAYANAL uses some potential pollutants such as rolling oil Kerosene emulsion, lacquering products and chemicals necessary for printing. The solid and liquid wastes are well isolated and stored in dedicated areas. Permits were granted for atmospheric emission, waste disposal, solid and liquid, and for handling dangerous waste. A solid and liquid waste handling improvement and control plan is in place. The plant has been accredited to internally manage kerosene disposal.

The emissions to atmosphere are monitored and controlled to comply with regulations. The plant is equipped with modern mechanisms for collection and treatment of harmful gases, as well as local treatment facilities for purification and processing of water.

Coated scrap created during processing is transferred to other UC RUSAL sites that have the equipment to reclaim materials safely.

7.2.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

SAYANAL operated below full capacity during the first half of 2009 due to the weak environment and reduced demand for its product. Hatch was advised that full capacity production levels were restored in June 2009.

7.2.6 Specific Risks and Future Opportunities

Specific Risks

No specific risks material to the future operation of this facility have been identified other than the need to ensure the remaining control systems are updated in an appropriate timeframe and that critical spares procurement is completed as part of the capital plan.

Future Opportunities

- **Capacity Expansion** — SAYANAL is a well established business with significant market presence. Effort is being made to increase the nameplate capacity by modernising the process control of several machines and preserving the condition of others. Latest technology has been incorporated into the recent rebuild of the third caster and similar improvements are planned for the other two casters. These improvements will increase the casting capacity of SAYANAL significantly.

- **Product/Market Opportunities** — The development of the domestic market in the Russian Federation should provide opportunity for this plant and recent markets such as 38-micron foil to service yogurt manufacturers have been penetrated using the existing equipment at SAYANAL which is capable of producing this thickness. Market size is expected to grow in the Russian Federation and other CIS states and at present approximately 40 per cent of foil consumed in the Russian Federation is imported.

7.3 Urals Foil

7.3.1 Introduction

Hatch undertook a site visit to Urals Foil in October 2008. This Section 7.3 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 7.3.2 — Updated with data and information as of September 2009,
- Section 7.3.3 — Process Description as of October 2008,
- Section 7.3.4 — Environmental Status as of October 2008,
- Section 7.3.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 7.3.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

7.3.2 History, Location and Infrastructure

Urals Foil is situated within a larger site at Mikhailovsk in Sverdlovsk region, 120 km southwest of Ekaterinburg. The site has been used since 1808 when it was started as a family business producing non-ferrous alloys. In the 1930's, the plant was changed to encompass non-ferrous rolling and was further expanded during the Second World War, when some equipment was relocated to the Urals. At this stage it was reoriented towards aluminium rolling.

The aluminium foil plant (plant "No. 5") is the most recent area of the total site, with the equipment being installed in the early 1980s. After bankruptcy problems which resulted in the plant being closed for a few months in 1999, plant No. 5 was started up again in 2000 but underwent a subsequent bankruptcy in 2003 before being acquired by SUAL in 2003 (prior to the formation of UC RUSAL). Foil plant No. 5 is the only major plant currently operating on the original industrial site — some minor enterprises are present but are unrelated to the Urals Foil organisation. The services required for the operation of plant No. 5 such as heating, compressed air, water etc. are still used and the portion of the original industrial site that houses the foil rolling facility and this associated infrastructure is owned by UC RUSAL.

There has been a strong increase in production at Urals Foil since the late 1990s, with output rising from 368 tonnes in 1999 to 15 kt in 2008. This is considered to be the current maximum capacity of Urals Foil. Under the current product mix, maximum capacity is defined by the limits of strip caster production and the foil annealing furnace capacity.

7.3.3 Process Description

The Urals Foil plant covers the complete technology cycle of foil production from the melting and casting of aluminium strip, through to final foil production. Until 2006, aluminium supply was mostly from Urals Aluminium Smelter, in the form of primary ingots augmented with a small volume of aluminium alloy. Since 2007 aluminium has been supplied predominantly by Irkutsk Aluminium Smelter and Bogoslovsk Aluminium Smelter. It is intended to limit the portion of aluminium supplied from the Bogoslovsk smelter to approximately 30 per cent due to production requirements and chemical composition. Some secondary aluminium is purchased from outside the UC RUSAL group. A wide number of secondary aluminium suppliers are available to UC RUSAL, and thus no raw material supply problems are foreseen.

Urals Foil specialises in the production of technical foil (for heat exchangers, cable sheath and construction) and packaging foil (for packaging and storage of food, confectionery and disposable food containers).

The main areas of the plant are the meltshop, preparation area and foil rolling area. The meltshop has two main casting lines, each served by two 6-tonne induction furnaces and two 16-tonne mixers or holding furnaces. Another induction furnace is used for remelting internal scrap. Aside from aluminium ingots, other raw materials used include aluminium alloys with silicon and titanium-boride. There are currently two remaining operational vertical thin strip casters (of the three originally installed and commissioned in 1984). These casters are inefficient when compared with modern horizontal drum-type aluminium strip casters and currently limit output from the facility. Adjacent to the two operational furnaces the third casting line has undergone mechanical refurbishment to increase casting capacity. The electrical control system is non existent and the funds required to complete this project have not yet been approved by UC RUSAL. The casting area is currently running at full capacity.

The preparation area has a breakdown mill of Soviet design which was built in 1977 in Ukraine. Cast coils are cold rolled to 0.3 to 0.6 mm on this mill, ready for foil rolling. The mill is run at low speeds, has manual strip threading and is not equipped with modern shape control capabilities. The breakdown mill accounts for approximately one-half of all non-conforming material processed, with mechanical damage, lubricant type and controls cited as issues affecting productivity and quality. The rolling coolant is regularly contaminated with fluids and greases which leak from the hydraulic equipment overhead and management of the condition of the coolant is difficult. The rolling process also creates condensation that builds up within the mill and the current fume hooding to remove condensation and prevent surface stains needs improvement. The breakdown mill is in need of refurbishment. Depending on alloy, coils may require annealing prior to rolling in the breakdown mill. Other equipment in the area includes a continuous annealing line with side trimming and slitting capabilities. A partially installed but never commissioned cut-to-length line, also in the preparation area, is not suited to the current product mix and Urals Foil management team do not believe they can competitively produce products from it. Removal of the unused equipment is planned should funds become available for this purpose.

The foil rolling area has five Achenbach foil rolling mills. Four are currently in operation, with one mill having undergone a complete electrical modernisation with a new ABB control system. A shape meter and automatic shape control system was also installed on this mill. The fifth mill is not required at present and would require repair and modernisation before operation could commence as it has been used as a source of spare parts. The foil mills are connected to a common fume exhaust system with scrubber and there is a CO_2 fire suppression system in the foil mill area. Double foil winding equipment, slitting and rewinding equipment as well as Ebner annealing furnaces and packaging facilities are housed adjacent to the foil mills. The equipment in this part of the plant is of good quality and appears to be capable of producing the necessary

product quality but is expected to require increasing maintenance to sustain its condition. A modernization program for the electrics and controls of the foil mills would be required to prevent emergency repairs, as many of the components on the mill for process control, gauge and shape control are no longer available.

The main buildings housing the core facilities are in reasonable condition and the roof was repaired in 2007 to maintain integrity against the elements particularly above the casthouse. Insulation in the main plant basement has also been improved. A refurbishment of the office and plant would be required to bring it to the standard of other UC RUSAL sites. The surrounding buildings, which are remnants of the previous industrial complex and are now owned by others, are largely in a derelict state.

7.3.4 Environmental

Urals Foil uses very few potential pollutants, with the rolling oil emulsions being the worst. The water-based oil emulsion from the breakdown mill is cleaned in a dedicated filter system. Correct operational properties for the emulsion are maintained by regular monitoring and the system is topped up to account for process loss, but is generally considered to be a closed loop operation. The foil mills use a kerosene-based oil emulsion which is also housed in a closed loop. A French "Air-Pure" system is used to clean the fumes from the foil mills to prevent air pollution and the collected residue is disposed offsite. The mixing furnaces have a ventilation system that is manually started and automatically stopped when required for process operations.

The overall site is aging and has been used for metal processing for almost 200 years. However, the type of former operations in this plant is not usually associated with major serious pollutants other than hazardous construction materials such as asbestos etc. which were commonly used in the past. An expansion of the monitoring system for air emissions is planned during 2009. Generally, the licences necessary to operate the site are current, with one outstanding which has been preliminarily approved by the regulators.

7.3.5 Material Developments

This section presents material changes to the facility since the site visit was undertaken in October 2008. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of developments at the facility.

UC RUSAL has advised that there have been no material changes to the physical equipment/plant at the facility.

Urals Foil operated below full capacity during the first half of 2009 due to the weak environment and reduced demand for its product. Hatch was advised that full capacity production levels were restored in May 2009.

7.3.6 Specific Risks and Future Opportunities

Specific Risks

- **Asset Integrity** — A significant risk for Urals Foil is that insufficient sustaining capital is allocated to maintain the current state. Insufficient funding would limit the plants ability to maintain quality and throughput. There are several partially executed projects which require funds to allow their completion including the third caster, upgraded dispatch area crane and additional annealing furnaces. The breakdown mill requires refurbishment and this should be included in future capital investment projects.

Future Opportunities

- **Capacity Expansion** — The plant is at full capacity and a project to increase the total output of the plant to 25 ktpa has been developed. This development opportunity will be considered through UC RUSAL's investment appraisal process and the total scope would include the completion of a third caster, two foil furnaces, breakdown mill upgrade and slitting line upgrade. The plant is limited by the process control systems and would also require upgrades to these. The mechanical strip handling and coolant system of the breakdown mill limit throughput and an upgrade is recommended, as the breakdown mill will become the limiting factor once a third caster is operational.

8. Boguchanskaya HPP Project

8.1 Boguchanskaya HPP

8.1.1 Introduction

Hatch undertook a site visit to Boguchanskaya HPP in October 2008. This Section 8.1 has subsequently been revised and updated based upon data and information from UC RUSAL and discussions held with senior management in September 2009. With reference to the following sections, please note;

- Section 8.1.2 — Updated with data and information as of September 2009,
- Section 8.1.3 — Process Description as of October 2008,
- Section 8.1.4 — Environmental Status as of October 2008,
- Section 8.1.5 — Material Developments at the facility between October 2008 and September 2009, and
- Section 9.1.6 — All previous Specific Risks and Opportunities noted in October 2008 together with any changes following new data and information provision.

8.1.2 History, Location and Infrastructure

The Boguchanskaya hydroelectric power plant (HPP) is the fourth and the last downstream HPP on the Angara River which drains Lake Baikal in Central Siberia. The upstream HPPs (already in operation) include: Irkutsk (660 MW — commissioned in 1959), Bratsk (4,500 MW — commissioned in 1967) and Ust-Ilimsk (3,840 MW — commissioned in 1980). The plants are on a cascade type hydroelectric power system.

Design studies for the Boguchanskaya HPP were performed by USSR state institutes during the 1960s. The project was approved in 1979 and construction started in 1980. In 1987, the Angara River was diverted with the construction of a cofferdam and main spillway. In 1992, construction stopped due to lack of funds. Between 2005 and 2006, a Detailed Feasibility Study was conducted by Coyne et Bellier for the preferred project alternative. Construction restarted in 2006 and it is anticipated that the first three turbines will be on line in December 2010, the second three turbines will be on line during 2011 and the remaining three turbines are expected to be commissioned in late 2012.

8.1.3 Process Description

Boguchanskaya HPP, looking downstream (from left to right banks), consists of a concrete gravity dam, 756 m long and 90 m high (maximum), including a non-overflow section 154 m long, a nine-bay water intake structure 270 m long, a 10-opening spillway 200 m long, a 22 m wide lock section and a 110 m long transition (concrete/rockfill) section. The total concrete volume of the dam is 2.84x106 m^3, of which 2x106 m^3 is already in place and the remaining volume of 0.84x106 m^3 is required to complete the structure at crest elevation 214 m in 2012.

There is also a rockfill dam, approximately 1,900 m long and 79 m high (maximum). The core of the rockfill dam is made of a compacted asphalt-concrete diaphragm surrounded by transition and filter materials. The dam crest is 15 m wide. The drainage and grouting gallery is located at the downstream side of the central core. The total material volume of the dam is 22.4x106 m^3, of which 15x106 m^3 is already in place and the remaining volume of 7.4x106 m^3 is required to complete the structure at crest elevation 212 m in 2011.

The powerhouse with an installed capacity of 3,000 MW will be located at the toe of the dam. The powerhouse consists of nine (340 MW capacity each) Francis vertical hydraulic turbines coupled to umbrella type, salient pole hydro generators. Eight spiral cases (600 tonnes each) are installed of which six are encased with concrete (6000 m^3 of concrete per spiral case encasement).

The water intake to each of the turbine units will be through a sliding intake gate, one per unit (two openings per unit) and steel penstocks of 10 m diameter and 90 m long. The civil works for the intake gates, emergency drop gates and second spillway gates are currently in progress.

The turbine runner and turbine shaft for the first unit, weighing 160 tonnes and 82.5 tonnes respectively, were delivered to site in August 2008, after being shipped from the LMZ plant in St. Petersburg. Each turbine runner carries 11 blades and is designed to operate at a peak efficiency of 96.2 per cent at a net head of 62.5 m. Model tests have been carried out in the LMZ laboratories and absolute efficiency tests are scheduled during the commissioning of Units 1, 2 and 3. Guarantees against cavitation for the turbine runner have also been provided at the following specific net heads:

- 40 m, low elevation of 147 m at 162 MW turbine output for a maximum period of 20 days
- 65 m, intermediate elevation of 185 m at 162 MW turbine output
- 65.5 m normal elevation of 65.6 m at 340 MW turbine output.

Turbine auxiliary systems will be self-lubricating type using PTFE grade separator films in bushings. Turbine bearings will be of babbit oil filled type. Detailed engineering for these components is in progress and was reported as 60 per cent complete.

Generators rated at 340 MW, 0.9 pf, 50 Hz, 15.75 kV, will be supplied by the Electrosilla plant in St. Petersburg. The generator housing will be supplied to site in sections. Stator cores and windings will be installed in situ. Generator rotor rims will be assembled on-site and poles will be mounted over the rotor rim in a special installation area in the erection bay of the powerhouse. While an assembled stator will weigh 476 tonnes, the total weight of the assembled rotor will be 957 tonnes and therefore will be the largest single heavy piece of equipment installed as part of the project. Evaluations are underway for the procurement of the generator exciters from perspective suppliers such as Basler, ABB etc and a decision on the selected supplier is expected shortly. Detailed engineering for the above components is in progress and was reported as 60 per cent complete.

A 2x500 tonne electrical overhead travelling crane with two main 500-tonne hoists and 10-tonne auxiliary hoists will be provided at the powerhouse. In addition, intake and draft tube cranes will be provided. The overhead and gantry cranes are due to arrive on-site by the end of 2008. Civil work required for installation of these cranes is in the design and implementation stage.

The station services will consist of electrical and mechanical services suitably rated for a typical modern hydroelectric plant. The engineering department has decided to procure a 220 Vdc, 400 APh battery bank and charger system to supply sufficient power for one hour to start any unit in a complete shutdown (black start) of the plant. Other options such as the installation of suitably rated diesel generators to provide black start capability could be assessed, knowing the remoteness of the Boguchanskaya HPP and the requirement for reliability of power to the Boguchansky Aluminium Smelter. Detailed engineering for the electrical and mechanical services was reported as 55-60 per cent complete.

The unit transformers have been ordered from the Zabaroski Transformer plant in Ukraine. The transformers will be installed in outdoor recesses along the upstream side of the powerhouse. No spare transformer is proposed. The first three phase transformer is expected to be delivered to site in December 2008.

The 500 kV and 220 kV switchyards will be located on the east bank of the river, up-stream of the powerhouse. The updated single line diagram indicates that the 500 kV switchyard is designed with a circuit breaker busbar switching scheme. This will facilitate switching of Units 1 to 6 powerhouse generators and three transmission lines, with Units 1 to 4 and Units 5 to 6 connected in a breaker and a third, and a breaker and a half, switching schemes respectively. The 220 kV switchyard is designed with a breaker and a half scheme to facilitate switching of Units 7 to 9 powerhouse generators. The switchyard also contains four transmission lines, two auto transformer feeders for interconnection with the 500 kV switchyard and two bus-tie breakers. The 500 kV and 220 kV switchyards will be built with sulphur hexafluoride gas (SF_6) insulated switchgear (GIS) and will include 500 kV gas insulated bus ducts to connect the GIS yard to the bushing of the aerial lines and the 500/220 kV auto-transformers. Detailed engineering for the 500 kV and 220 kV switchyards was reported as 55-60 per cent complete.

Two 160 km 500 kV high voltage (HV) transmission lines will connect the 500 kV Boguchanskaya HPP switchyard to the Angara 500/220 kV sub-station located near Boguchansky Aluminium Smelter. The Angara 500/220 kV sub-station will be built near Tayozhny settlement in the region of Krasnoyarsk. The lines are expected to be commissioned between August and September 2010. However, the project has no jurisdiction over this completion schedule. A third 500 kV HV transmission line, of 380 km length, is scheduled to be commissioned in 2012, connecting the 500 kV Boguchanskaya HPP switchyard to the existing 500 kV Siberian power grid, at Taishet 500 kV sub-station. In addition, to ensure reliability of supply to the Boguchansky Aluminium Smelter, two 500 kV HV transmission lines are scheduled for completion in 2010 connecting the Angara 500 kV sub-station to the existing sub-station located at Kamala-1 (350 km long).

There was no evidence of installation works for the transmission lines during the site visit.

Five new 220 kV, HV transmission lines will connect the Angara 500/220 kV sub-station to the proposed Boguchansky Aluminium Smelter switchyard (3 km long).

8.1.4 Environmental

A Social and Environmental Impact Assessment (SEIA) was completed in 2007 for an upstream reservoir water level at elevation 185 m. This SEIA is currently being expanded to include a reservoir water level up to elevation 208 m. Completion of the expanded SEIA is planned for the end of 2009. It was also reported that all resettlement issues are being addressed and that approximately 4,500 people living in the upstream region will be relocated due to flooding of the Boguchanskaya HPP reservoir. All permits and approvals are secured and no environmental problems are foreseen.

8.1.5 Material Developments

This section presents an update on construction progress. The updated information was presented to Hatch through meetings with UC RUSAL in Moscow and has not been validated through an additional site visit. We have no reason to believe that the information provided is not a true and fair reflection of recent developments.

UC RUSAL advised that the project works have continued throughout the economic downturn in the first half of 2009 and have now accelerated partially to replace the loss of electricity supply from Sayano-Shushenskaya HPP due to the accident at this facility in August 2009.

Hatch has been advised that most long-term contracts with the vendors have been awarded. In addition, engineering design of the construction equipment is now complete, concrete dam design is 85 per cent complete, rockfill dam design is 95 per cent complete and powerhouse design is 70 per cent complete.

As confirmed by UC RUSAL, since the last site visit the following material changes have taken place:

- Average level of the concrete dam is currently 196 m, in some places up to 208 m;
- Average level of rockfill dam is currently 190 m;
- The installation of the last spiral case is planned to start in September 2009;
- The detailed engineering of the turbine auxiliary systems and turbine bearings is completed;
- The procurement contract for generator exciters has been signed with ABB, detailed engineering of these components is about 70 per cent complete;
- A 2x525 tonne electrical overhead travelling crane with two main 525-tonne hoists and 10-tonne auxiliary hoists for the powerhouse have been delivered to the site. The gantry and overhead cranes are already on site, and the preparation for their installation is under way;
- Three step-up transformers and four phases of autotransformer have already been delivered to the site;
- Detailed engineering for the 500 kV and 220 kV switchyards is 80-90 per cent complete;
- The 160 km 500 kV high voltage (HV) transmission lines are scheduled to be commissioned between August and September 2010. Even though the Boguchanskaya HPP project has no jurisdiction over this completion schedule, the state has guaranteed that these works will be completed on time. Currently one of 550 kV HV transmission lines is 55 per cent complete, and the Angara 500/220 kV sub-station is 30 per cent complete;

- The powerhouse building structural components are on site and partially installed.

Hatch has not been able to verify these developments and as such we can not reconfirm their validity.

8.1.6 Specific Risks and Future Opportunities

Specific Risks

- **Project Schedule** — The process of engineering and construction operating in parallel could lead to rework and result in delays. Delays in the award of equipment procurement contracts could delay commissioning of the first three units currently scheduled for December 2010.

Future Opportunities

No specific opportunities material to the future operation of this facility have been identified.

9. Conclusions

Hatch Declaration

We are responsible for this report relating to the scope of work shown in Appendix B and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import.

Yours Faithfully
Hatch Associates Limited

SRK Declaration

We are responsible for this report relating to the scope of work shown in Appendix B and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import.

Yours Faithfully
SRK Consulting (UK) Limited

Annex A
Qualifications of Consultants

HATCH

Julian Clark — Regional Director Light Metals, Hatch and Director, Hatch Consulting — Bachelor of Engineering (Mech Eng, Hons), Chartered Engineer (UK), Member of the Institution of Mechanical Engineers (UK).

Julian is a Chartered mechanical engineer with approximately 17 years experience in large-scale international project development and construction including alumina refineries and aluminium smelters. He has considerable experience in high level project reviews, due diligence assignments and competent person's reports involving an array of mining and metallurgical industries, in addition to detailed knowledge of metallurgical markets and financial modelling and transactions.

For this report, Julian was the project director and reviewer, in addition to leading several of the site visits to Russian aluminium plants.

David Morton — Senior Consultant, Hatch Light Metals Europe — Bachelor of Engineering (Mech Eng, First Class Hons), Chartered Engineer (UK), Member of the Institution of Engineering Designers (UK).

David is a Chartered mechanical engineer with 25 years experience in the design and project management of industrial plant and equipment. He has been involved in numerous aluminium smelter construction, development and study projects and has worked extensively in Russia including the modernisation and upgrade projects for Söderberg and pre-bake smelter projects. Recently he has worked on the development of both greenfield and brownfield smelter projects in Africa, the Middle East and Iceland.

James Salter — Senior Economist, Hatch Light Metals Europe — Bachelor of Science (Economics, Hons), Master of Science (Economics).

James has over 10 years experience as a senior metals economist. James has extensive knowledge of all economic aspects of the alumina/aluminium industries, earned during his time at Hatch and previous employment at industry research houses, CRU and MBR. James has recently been involved in the appraisal of a number of smelters and refineries across the globe for financing purposes in a project manager capacity.

Richard Black — HNC Chemistry, HNC Chemical Engineering

Richard has 40 years experience in the primary sector of the aluminium industry, in positions ranging from process Engineer to Operations Director, working on three continents. He has been involved in three greenfield plant start ups, two of which he was project manager of and in addition he was the Project Development Manager of the Sohar Smelter Project in the Sultanate of Oman which is currently under construction. He is at present a member of the project steering committee for the Sohar Smelter Project. Richard has also worked as an independent consultant on technology evaluation, smelter due diligence and trouble shooting around the world, namely in Russia, China, Nigeria, Bahrain, India, Ghana and Europe.

David Walker — Senior Alumina Consultant, Hatch Light Metals Australia — Bachelor of Engineering (Chem Eng).

David has 40 years experience in the bauxite and alumina industry with particular emphasis on Bayer technology including process optimisations, troubleshooting and refinery design. He has worked with several major alumina producers and has been involved in process engineering of alumina refineries for the past 20 years.

Vyacheslav Vesselkov — Chief Project Engineer Hatch Russia - Graduate Diploma (Mechanical) (Irkutsk Politechnical Institute, 1974), Actual member (academician) of International Academy of Ecology and Life Protection Sciences.

Vyacheslav has more than 35 years experience in the scientific-research, design, engineering, construction and operation of aluminium and silicon processing facilities. He has extensive experience in engineering design and construction of industrial projects in Russia and in other countries (aluminium smelters, silicon plants, productions of prebaked anodes). Vyacheslav worked for SibVami for 37 years, in particular, in the position of its Managing Director from 1994 to 2007. In recent years Vyacheslav has managed the process design and construction of a number of aluminium smelters in Russia, Ukraine, and Kazakhstan. These include the modernisation of Bratsk Aluminium Smelter, expansion of Urals and Irkutsk aluminium smelters, and the feasibility study for Ekibastus aluminium smelter.

Donald Gibson — President, Gibson Engineering & Technology, Incorporated; Bachelor of Mechanical Engineering; Master of Business Administration

Don has 34 years experience in the aluminium industry. Prior to forming a company specializing in the feasibility review, planning and construction administration of major capital projects for the aluminium industry, he was the Engineering Manager for Kaiser Aluminum International. His experience includes staff engineering management, project management of major smelter expansions and team leader of reduction cell development, including the cell design implemented for the Söderberg to Prebake conversion at RUSAL's Nadvoitsy smelter. He holds two patents on technology currently in use for the improvement of the anode bake process.

Kishen Bhan — Project Manager and Senior Electrical Engineer — Bachelor of Electrical Engineering (Hons), Member of Professional Engineers of Ontario and Institute of Electrical and Electronics Engineers (IEEE)

Kishen is an electrical engineer with over 32 years of experience, including the last 18 years directly in the field of hydroelectric and thermal power plant engineering, design, project management, due diligence, asset management, consulting and upgrade of electric power generation, substation and power distribution systems, construction supervision and management, start-up and commissioning for several hydroelectric facilities and industrial switchgear and controls in Canada and overseas.

Michael Goodwin — Senior Rolling Mill Engineer, Hatch Light Metals Australia — B Tech (Engineering and Management), Associate Diploma in Mechanical Engineering, Mechanical Engineering Certificate, Toolmaking Trade Certificate.

Michael has 30 years broad base tooling, manufacturing, design and project experience including over 15 years experience in aluminium and steel rolling mills, oil and gas wellhead and valve production. Michael has also contributed to due diligence assignments and competent persons reports in the downstream aluminium industry.

Dr. David Chinloy — Senior Process Consultant, Hatch Light Metals Canada — Bachelor of Science (Chem. Eng, First Class Hons), Master of Arts (Chem. Eng.), Ph.D. (Chem. Eng.).

David has over 30 years experience in the bauxite and alumina industry, in the plant, in research and development, and in engineering. He has knowledge of the fundamental science of the Bayer process, as well as the day-to-day operations. He has published papers on the Bayer process, and holds several patents. He has worked in alumina refineries throughout the world, from front-end engineering through to commissioning.

Fadi Chidiac — Manager Hydroelectric Projects, Hatch Energy Canada — B.A.Sc. Thermodynamic and Energetic, 1976 — B.A.Sc. Civil Engineering, 1978 — M.A.Sc. and D.E.A. Structural Engineering, 1979 — Member of Professional Engineers of Ontario, Order of Engineers of Quebec, Association of Civil Engineers of France.

Fadi is a Hydropower Engineer with over 25 years experience in the design, design management, rehabilitation and construction of water retaining structures and hydroelectric projects both in Canada and overseas. His most recent experience includes a review of design concepts and concept optimization, preparation of tender design through detail design, construction and rehabilitation of a 450 MW hydroelectric project.

Dr Mark Dupuis — External Consultant, GeniSim Inc.

Dr. Marc Dupuis is a consultant specialized in the applications of mathematical modelling for the aluminium industry since 1994, the year when he founded his own consulting company GeniSim Inc. Before that, he graduated with a Ph.D. in chemical engineering from Laval University in Quebec City in 1984, and then worked 10 years as a research engineer for Alcan International.

His main research interests are the development of mathematical model of the Hall-Héroult cell dealing with the thermo-electric, thermo-mechanic, electro-magnetic and hydrodynamic aspect of the problem. He was also involved in the design of experimental high amperage cells and the retrofit of many existing cell technologies.

Ron Adlam BSc, MSc (Hons)

Ron Adlam has 20 years experience in design, project management, geotechnical investigation and construction management for commercial and mine infrastructure developments and has post graduate qualifications in engineering geology. He has undertaken numerous projects involving design and construction of bulk earthworks, tailings storages, water and effluent storages, landfills, water supplies, mineral processing plant sites, roads, pipelines, contaminated sites and wastewater treatment plants. He has specific expertise in residue and solid waste disposal design, residue disposal operation, low permeability liner systems, preparation of technical specifications, qualitative risk assessment, environmental risk assessment, contract administration, construction documentation and related project management and has managed multidisciplinary design and construction teams for a wide variety of projects.

Ian Moller, Regional Director — Asia Pacific, Hatch Environment and Community Interface - Associate Diploma of Applied Biology, Royal Melbourne Institute of Technology, 1976, Bachelor of Applied Science (Applied Biology), Royal Melbourne Institute of Technology, 1978, Graduate Diploma in Management, University College of Central Queensland, 1989

In the Aluminium industry, Mr. Moller's key experience and training is in the field of environment, health, safety and community management of major industrial, infrastructure and development projects. He has extensive experience in the aluminium smelting industry, with 15 years at Comalco sites in Australia and New Zealand and periodic consulting projects involving light metals industry until the present. His fields of specialty include, impact assessment studies, facility auditing, industrial processes and emissions monitoring, ambient environmental impact monitoring, environmental health and safety and waste management. Ian has five published papers relating to environmental impacts of smelters.

Boris Lankov — Lead Engineer Hatch Russia — Engineer of Metallurgy, PhD in Engineering (Moscow Institute of Steel and Alloys)

Boris has more than 20 years of experience in areas including the beneficiation of copper-nickel sulfide ore, manganese ore, bacterial pressure leaching of magnetic pyrite concentrates, metallurgical processing of secondary aluminium, copper, lead, and aluminium wire rod production. His most recent experience includes turnkey production organisation; market analysis and business planning and site selection. He has been a Lead Engineer at Ozernoe Lead-Zinc Project in Russia.

Paul Relton — Senior Engineering Consultant (London) - Bachelor of Science (Civil Engineering), Master of Science (Water Resources), Chartered Engineer (UK), Member of the Institution of Civil Engineers (UK).

Paul is a Chartered Civil Engineer with over 22 years of industry experience, specializing in Infrastructure and Construction. Paul has undertaken a wide variety of project roles including business development, project management, design management and contract administration for major coal, rail and civil infrastructure projects and metals and mining projects. He has previously been involved in a number of alumina refinery and smelter projects in Africa and South America.

Stephen Daughney — Technical Director — Hatch Water, Americas, Hatch Infrastructure Canada — Bachelor of Applied Sciences (Chem Eng).

Steve has 15 years of experience in the water treatment and environmental fields, primarily within industry. He has been responsible for process design and project management of several large capital projects with the focus on improving environmental emissions performance. He is currently involved with a comprehensive water management evaluation for an alumina refinery in South America.

Julie Ward — Senior Consultant, Hatch Consulting Canada — Bachelor of Engineering (Civil), Master of Business Administration.

Julie is a Senior Consultant with the Investment and Business Planning group in Canada. She has more than 10 years consulting experience in a variety of industries and has experience in management consulting covering strategy development and implementation, performance improvement, due diligence, post merger integration and organizational effectiveness. She has also been involved in project management and has completed engineering design on multiple global mining and metals projects, including base metals, aluminium and precious metals. Most recently, Julie has led due diligence studies in the metals and energy sectors on behalf of financial institutions and investors.

Pavlo Bodak — Director of Industrial Minerals Business Unit, Hatch Russia — PhD, M. Eng. Chem. (Honours).

Pavlo has over 10 years experience in operations review, process design development, mass and energy balancing, flowsheet design, environmental issues, process economics and project management, in particular, EPCM. His recent experience includes management of Alcoa's Sustaining Capital program at the Fjardaal smelter; due diligence and contribution to the preparation of a Competent Persons Report.

Andrew Bodley — Geotechnical Consultant, Hatch Infrastructure Australia — Bachelor of Engineering (Civil, First Class Hons), Master of Engineering Science (Geotechnical), Member of the Institute of Engineers Australia, Member of Geomechanics Society Australia.

Andrew has postgraduate qualifications in geotechnical engineering with over seven years experience in all facets of geotechnics in both the public and mining sectors. Andrew has extensive experience in the analysis and design of residue impoundment to contain red mud produced from the Alumina refining process. He has been involved in the review and design for Alcoa World Alumina's residue sites in West Australia on and off for the last 8 years. His particular focus has been the investigation and design for upstream embankment raises on the soft residue mud and investigation of sites for proposed greenfields residue areas. Andrew has also been heavily involved in the long term planning for Alcoa's Western Australian Residue facilities and numerous soft soil investigations for their annual upstream embankment construction projects.

Anastasia Kazakova — Senior Consultant, Hatch Light Metals Russia - MPhil in Engineering for Sustainable Development (University of Cambridge, UK), Advanced Diploma in Environmental Science (MSU n.a. M.V. Lomonosov) (Hons).

Anastasia is an environmental and sustainable development specialist recently graduated from the University of Cambridge, where she researched sustainable sourcing and stewardship of aluminium throughout its lifecycle. She has completed several papers and studies comparing environmental legislation and environmental performance of several companies. Her most recent experience includes contribution to Minerals Expert and Competent Persons Reports, as well as due diligence of alumina refineries and aluminium smelters in Russia, Guinea, Nigeria, and Bosnia. She speaks Russian, English and French fluently.

Vivienne Tieu — Consultant, Hatch Consulting — Bachelor of Engineering (Chem Eng, Hons), Bachelor of Science (Chemistry).

Vivienne has four years of experience as a plant metallurgist in various BHP Billiton copper, nickel, uranium, gold and silver processing operations. She has practical experience in a number of concentrating, smelting and refining processes. In addition to her operational knowledge she has extensive experience in laboratory test work design, statistical metallurgical modelling, project finance evaluation, and project delivery utilizing six sigma methodologies. Since joining Hatch she has been involved in a number of technical operation reviews, market studies and cost benchmarking exercises

Nerida Stacy — Consulting Analyst, London — Bachelor of Engineering (Chemical), Bachelor of Economics

Nerida has four years experience as an analyst and was involved in a number of due diligence projects in both the mining and infrastructure areas during her employment with Connell Hatch in Australia. Nerida also has experience in the financial modelling of projects across a range of industries.

SRK

McCracken, Allan — BSc. Principal Geotechnical Engineer

Allan is a chartered engineer who has 28 years of experience in mining and excavation engineering, has consulted to over 250 mine properties worldwide and specialises in geotechnical risk assessment in open pit and underground mining, mining method selection, geotechnical design optimisation and rock support design.

Anderson, Sabine — MEng. Senior Mining Engineer

Sabine has ten years experience in underground and surface mining and performs technical assessment of exploration and mining projects, in support of acquisitions, debt and equity finance. Her experience includes project evaluation, economic analysis, multi-disciplinary due diligence, project managing numerous commissions, and performing scoping and pre-feasibility studies.

Campodonic, Mark — MSc. Principal Resource Geologist

Specialising in the exploration, development and mining of bauxite deposits, Mark has over 9 years of international experience generating technical-economic models, geological modelling, producing resource/reserve estimates for feasibility studies, auditing mining operations for competent person's reports and stock exchange listings, technical reviews, as well as project managing exploration programmes and scoping and pre-feasibility studies.

Fox, Nick — MSc. Senior Resource Geologist

Nick joined SRK in 2004 after two years of mining industry experience and four years in finance. Nick's responsibilities include generating and auditing technical-economic models for feasibility studies, stock exchange listing valuations and raising finance, databasing, QA/QC, geological modelling, and producing and reviewing resource/reserve estimates.

Gilbertson, James — MSc. Resource Geologist

James' has experience in resource estimates planning, implementing and supervising mineral exploration, the auditing of geological models, the design of resource drilling programs, the implementation of future mine planning issues, QA/QC management, and local/national government relationships.

Polonyankin, Alexander — MSc. Senior Resource Geologist

At SRK (Russia), Alexander has been project manager of several resource audits. He has over 10 years of experience in mining industry, having worked as an exploration geologist, a mine geologist at an open pit gold mine, as a gemologist for a jewellery company and as a resource modeling geologist at a large iron ore company.

Roberts, Lucy — PhD. Senior Resource Geologist

Lucy has extensive knowledge of geological and mine planning software including Gemcom, Whittle and Isatis geostatistical. After completing a PhD in Geostatistics and joining SRK in 2006, she has undertaken resource estimates for precious metals, gemstone and bulk commodity projects and provided key input for Competent Persons' Reports for various international exchanges.

Bright, Paul — BSc. Principal Geologist

Paul has over thirty years experience in mining and exploration. Paul has worked as a geologist on a range of exploration projects. At SRK Paul has headed a CAD department as well as undertaken due diligence, expert witness and other geological project work, which has included resource and reserve audits, pre-feasibility studies and competent person's reports.

Cremin, Sean — BSc. Principal Mining Engineer

After more than 30 years within the mining industry, Sean experience includes competent persons reporting and due diligence appraisal, practical auditing and strategic advice, scoping and feasibility studies, and various technical audits throughout the World.

Miles, John — MSc. Associate Principal Mining Engineer

John has 23 years of experience in mining, having been employed by a number of gold and diamond mining operations in various technical and managerial positions of responsibility. In the nine years working for SRK John has been involved in due diligence reviews, feasibility investigations, technical design and mining evaluations for open pit and underground projects.

Woolliscroft, Jon — BEng. Associate Principal Mining Engineer

Jon is a former regional operations manager and assistant chief production manager for the British Coal Opencast Executive (BCO) in South Wales. Since 1995 he has acted as a freelance consultant for opencast mine development, land restoration and coal bed methane development and has more recently undertaken resource and reserve audits, due diligence, pre-feasibility studies, design and planning for open pits and provided operational assistance.

Connelly, Richard — MSc. Principal Hydrogeologist

Richard has more than 39 years experience in mining hydrogeology and geological engineering. He specialises in integrated water management for open pit and underground mines including mine dewatering and slope depressurisation, water supply, ground water pollution, acid mine drainage and ground water recovery after closure and Environmental Audits.

Goran Andric — BSc. Senior Mining Eng

Goran has over 16 years of experience in open pit coal mining industry. His extensive coal knowledge comes from his operational experience as Chief Engineer at Kolubara Coal Mines (Serbia) and Mine Superintendent at Falls Mountain Coal (western Canada). He has participated in several engineering studies on coal projects in Serbia, Canada and South Africa.

Chapman, John — BSc. Principal Geoenvironmental Consultant

John is a recognized as an expert in acid mine drainage assessment, prediction and control. Working at SRK (Australia) he gained international experience ranging from research and development work completed in biological engineering and bio-leaching, to site assessment, reaction pathway modeling, and site reclamation.

Peralta, Helen — MSc. Senior Environmental Consultant

Helen has over 10 years experience in the mining and energy industry. Her responsibilities include baseline and environmental impact studies, development of closure plans, environmental auditing and due diligence projects for international financial institutions. Helen has managed and implemented integrated safety, health and environmental management systems.

Pollhammer, Linda — BSc. Environmental Scientist

Linda has 6 years experience as an environmental scientist. She spent 4 years with GCS Environmental Consultants in South Africa working in the water use authorization and management unit. She currently contributes to environmental and social impact assessments, baseline studies and supports the geo-environmental team in a wide range of capacities.

Moors, Inge — MSc. Mining Engineer

Inge specialises in all aspects of mineral economics. After joining SRK in 2007, she has been directly involved in various due diligence studies with specific focus on mineral experts' reports for the London Stock Exchange. She is responsible for the development of Financial Models for scoping, pre-feasibility and feasibility studies.

Polutornaya, Svetlana — PhD. Mining Economist

Svetlana has experience as a mining economist and in financial mine evaluation and has been developing cost databases for pre-feasibility and feasibility studies at SRK (Russia). She graduated from Moscow State Mining University and has a PhD in economics.

Annex B
Scope of work/Limitations and Exclusions

Scope of work

The following Scope of Work is an extract from Schedule 1 of the Services Agreements between Hatch and UC RUSAL and SRK and UC RUSAL, effective November 15 2008 and from Hatch and SRK letter proposal, titled 'Finalisation of Kandinsky 2 Mineral Expert report for Initial Public Offering of UC Rusal' dated 27 August 2009.

QUOTE (From Schedule 1 of the Services Agreement between Hatch and UC RUSAL and SRK and UC RUSAL, dated November 15 2008)

SCHEDULE 1 - SCOPE OF WORK

1.0 Introduction

This Schedule 1 sets out the Services which Hatch and SRK agree to provide in connection with the admission of the ordinary shares and/or global depositary receipts representing shares ("**GDRs**") in United Company RUSAL Limited (the "**Client**") to listing on one or more international stock exchanges (the "**Listing**").

In connection with the Listing, a mineral expert's report (the "**MER**" or the "**Mineral Expert's Report**") is intended to be prepared by Hatch and SRK for all the major assets that will be held by the Client and/or its subsidiaries at the time of Listing.

Hatch and SRK are preparing the Mineral Expert's Report to be addressed to the Board of Directors of the Client. SRK is reporting on the mining assets of the Client and will take responsibility for the sections of the Mineral Expert's Report it produces. Hatch is reporting on the non-mining assets of the Client and will take responsibility for the sections of the Mineral Expert's Report that it has prepared. In order to achieve this, a detailed audit of these assets must be undertaken, utilising an experienced team of industry professionals including geologists, mining engineers, process engineers, environmental engineers, expert technology consultants and industry economists. The responsibility statements of Hatch and SRK together will cover the entire Mineral Expert's Report.

The recommendations for a Mineral Expert's Report are detailed in CESR documentation as a report from a suitably qualified and experienced independent expert. The content of the expert report, including the appropriate definitions, should be agreed with the competent authority". This will be carried out, however, for the purposes of the Services Agreement, and the scope and costs presented are based upon advice from the Client and their advisers that Chapter 19 of the UK Listing Rules which were in force until July 1st, 2005 (the "**previous UK Listing Rules**") should be adhered to for the purposes of this engagement, together with Chapter 18 of Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**HK Listing Rules**").

Since Hatch are reporting on the non-mining assets of the Client, the requirements of Chapter 19 of the previous UK Listing Rules and Chapter 18 of the HK Listing Rules will be expanded to undertake an independent review of non-mining assets to industry-acceptable standards, including analysis and verification of the business plan by evaluating supporting documents and reports, including plant design and engineering diagrams, process flow sheets, material flow sheets, and operations reports to confirm the competitive, technical, managerial and financial performance of the Client. This scope of work outlines the work to be undertaken in order to support the eventual Listing.

In addition to the Mineral Expert's Report, Hatch and SRK may be requested to write an additional private report for the Client and its advisers, with additional rates to be agreed between the Client and Hatch and/or SRK for the production of such report. The contents and timing of this report will be discussed and agreed throughout the assignment. Any addressees of this report will need to deliver an Undertaking Respecting Limitation of Liability pursuant to Section 6.2 of the Services Agreement.

2.0 Facilities Description

Table 1 indicates the facilities that are to be evaluated throughout the course of this assignment by Hatch, whilst Table 2 details those facilities being evaluated by SRK;

Table 1 — Non-Mining Assets Included within Hatch Scope

Asset	Location	Asset Type	Comment
Queensland Alumina Ltd.	Australia	Alumina Refinery	
Friguia Alumina Refinery	Guinea	Alumina Refinery	
Aughinish Alumina	Ireland	Alumina Refinery	
Eurallumina	Italy	Alumina Refinery	
Alpart	Jamaica	Alumina Refinery	
Windalco-Ewarton Works	Jamaica	Alumina Refinery	
Windalco-Kirkvine Works	Jamaica	Alumina Refinery	
Bogoslovsk Alumina Refinery (BAZ)	Russia	Alumina Refinery	
Achinsk Alumina Refinery (AGK)	Russia	Alumina Refinery	
Ural Alumina Refinery (UAZ)	Russia	Alumina Refinery	
Boxitogorsk Alumina Refinery (BGZ)	Russia	Alumina Refinery	
Nikolaev Alumina Refinery (NGZ)	Ukraine	Alumina Refinery	
Zaporozhye Alumina Refinery (ZALK)	Ukraine	Alumina Refinery	
Bratsk Aluminium Smelter (BrAZ)	Russia	Aluminium Smelter	
Krasnoyarsk Aluminium Smelter (KrAZ)	Russia	Aluminium Smelter	
Sayanogorsk Aluminium Smelter (SAZ)	Russia	Aluminium Smelter	
Irkutsk Aluminium Smelter (IrkAZ)	Russia	Aluminium Smelter	
Novokuznetsk Aluminium Smelter (NkAZ)	Russia	Aluminium Smelter	
Khakas Aluminium Smelter (KhAZ)	Russia	Aluminium Smelter	
Bogoslovsk Aluminium Smelter (BAZ)	Russia	Aluminium Smelter	
Volgograd Aluminium Smelter (VgAZ)	Russia	Aluminium Smelter	
Ural Aluminium Smelter (UAZ)	Russia	Aluminium Smelter	
Nadvoitsky Aluminium Smelter (NAZ)	Russia	Aluminium Smelter	
Kandalaksha Aluminium Smelter (KAZ)	Russia	Aluminium Smelter	
Volkhov Aluminium Smelter (VAZ)	Russia	Aluminium Smelter	
Alukom Taishet Aluminium Smelter	Russia	Aluminium Smelter	

Asset	Location	Asset Type	Comment
Kubikenborg Aluminium (KUBAL)	Sweden	Aluminium Smelter	
Zaporozhye Aluminium Smelter (ZALK)	Ukraine	Aluminium Smelter	
ALSCON	Nigeria	Aluminium Smelter	
Krasnoturyinsk Powder Metallurgy	Russia	Downstream Processing	
Shelekhov Powder Metallurgy	Russia	Downstream Processing	
Volgograd Powder Metallurgy	Russia	Downstream Processing	
Kremniy	Russia	Silicon Smelter	
Kremniy Ural	Russia	Silicon Smelter	
Resal	Russia	Secondary Aluminium Plant	
Bellis	Russia	Secondary Aluminium Plant	
Zvetmetobrabotka	Russia	Secondary Aluminium Plant	
ARMENAL	Armenia	Packaging Material Plant	
SAYANAL	Russia	Packaging Material Plant	
Rusal SAYANAL Foil	Russia	Packaging Material Plant	
Ural Foil	Russia	Packaging Material Plant	
Polevsk Cryolite Plant	Russia	Cryolite Production	
South Urals Cryolite Plant	Russia	Cryolite Production	
Shanxi Rusal Cathode Company	China	Cathode Production	
Baoguan Cathode Plant	China	Cathode Production	
Taishet Aluminium Smelter	Russia	Smelter	
Boguchanskaya aluminium Smelter and Hydro Power Plant	Russia	Smelter/Power plant	

Table 2 — Mining Assets Included in SRK Scope

Asset	Location	Asset Type	Comment
Compagnie des Bauxites de Kindia (CBK)	Guinea	Bauxite Mine Complex	Plus Kindia 2 Project
Bauxite Company of Guyana Inc (BCGI)	Guyana	Bauxite Mine Complex	
Alpart Bauxite Mine	Jamaica	Bauxite Mine Complex	Plus Alpart expansion project
Windalco-Ewarton Bauxite Mine	Jamaica	Bauxite Mine Complex	Plus Windalco expansion project
Windalco-Kirkvine Bauxite Mine	Jamaica	Bauxite Mine Complex	
Timan Bauxite Mine	Russia	Bauxite Mine Complex	Plus Timan expansion project
North Urals Bauxite Mine	Russia	Bauxite Mine Complex	Plus SUBR project
Kiya Shaltyr Nepheline Mine	Russia	Nepheline Mine Complex	
Cheremshansk Quartzite Mine	Russia	Quartzite Mine	
Glukhovskiy Quarzite Mine	Ukraine	Quartzite Mine	
Bogatyr Coal Mine	Kazakhstan	Coal Mine	
Mazulski Limestone Mine	Russia	Limestone Mine	
Petropavlovsk Limestone Mine	Russia	Limestone Mine	
Friguia Bauxite Mine	Guinea	Bauxite Mine Complex	Plus Friguia expansion project
Yaroslavski Ore Mining Company	Russia	Fluorspar Mine/ Complex	
Mining Projects			
Dian-Dian	Guinea	Greenfield Bauxite/ Alumina complex	No visit, Review Feasibility Study only
Kurubuka 22	Guyana	Greenfield Bauxite Mine	No visit, review available pre-feasibility documents only

The Client may reasonably add additional properties to the lists set out in Tables 1 and 2 above, in addition to potential capital project development sites, by agreement with Hatch and/or SRK, subject to schedule and cost estimate changes.

3.0 Included in the Scope of Work

Hatch, together with SRK, will produce a comprehensive Mineral Expert's Report on the assets listed in Section 2.0.

A Request for Information ("**RFI**") document will be issued to the Client prior to the site visit to allow ample time for the Client to send initial information and prepare for the site visits

The RFI will assume that the information as requested is made available to the team members in a format which enables ready assessment of the relative factors. It assumes that suitable access to key members of the management group will be given to the site evaluation team and that these persons will be willing to disclose the necessary information at that time and post visit via additional requests for information, as required. It is further assumed that the information will be of a suitable quality, enabling satisfactory appraisal by the relevant qualified personnel.

Table 3 shows the division of responsibility among Hatch and SRK for addressing the scope of work in respect of the Client's mining and non-mining assets.

Appendix 1 to the Services Agreement sets forth a preliminary planning schedule in order to achieve the site visits and complete the Mineral Expert's Report for submission on 25 March 2009 which is the date to which the currently estimated fees and expenses are calculated. Hatch and SRK shall remain committed and available for the IPO process after this date (such as responding to any queries/comments that may be raised by the relevant listing authorities), subject to the written request by the Client. However at the present time it is only possible to estimate input to this date due to uncertainties in the process thereafter. The schedule shown in Appendix 1 may be revised when mutually agreed by the Client, Hatch and SRK.

Table 3 — Scope of Work and Responsibility

MINERAL EXPERT'S REPORT IN RESPECT OF THE BAUXITE, ALUMINA, ALUMINIUM AND COAL/ENERGY ASSETS OF THE CLIENT	Mining	Non-Mining
Description of Resources and Reserves		
the nature and extent of the Client's rights of exploration and extraction and a description of the properties to which the rights attach. Details of the duration and other principal terms and conditions of the concessions including relevant legislation, environmental and rehabilitation requirements, abandonment costs and any necessary licenses and consents including planning permission	SRK	n/a
geological characteristics of the occurrence of the reserves, the type of deposit, its dimensions and grade distribution	SRK	n/a
methods/exploration techniques to be employed for exploration and extraction, and where appropriate the mineral and metallurgical processes to be employed	SRK	n/a
Maps and plans		
maps, sections and plans demonstrating for each major property or field its location, the nature and extent of workings thereon and its principal geological characteristics	SRK	n/a
surface location plan showing boreholes, sample pits, trenches and other evidence	SRK	n/a
Reserves		
an estimate of the volume, tonnage in place and grades, as appropriate, each split between proven and probable reserves	SRK	n/a
method by which the reserves were estimated	SRK	n/a
expected recovery and dilution factors	SRK	n/a
where appropriate, mineral processing and metallurgical recovery factors and grades, with evidence in support thereof, or recovery factors with respect to mineral reserves in place on a deposit by deposit basis, together with the expected period of working	SRK	HATCH
expected extraction tonnage or volume	SRK	n/a
where relevant, processing volumes or tonnages together with the other principal assumptions relating to forecast revenues and operating costs.	SRK	HATCH
if there are mineral resources which have not been sufficiently appraised to demonstrate them as proven or probable reserves, a separate statement of such mineral resources classified into measured, indicated and inferred mineral resources	SRK	n/a

MINERAL EXPERT'S REPORT IN RESPECT OF THE BAUXITE, ALUMINA, ALUMINIUM AND COAL/ENERGY ASSETS OF THE CLIENT	Mining	Non-Mining
Long term prospects		
details of any mineral resources or non-mining investments relevant to the long term future of the Client	SRK	HATCH
Nature of evidence		
the nature of any geophysical and geological evidence used in the estimation of the mineral resources and ore reserves	SRK	n/a
summarised details of the geophysical and geological evidence including information on quality control procedures	SRK	n/a
the results of drilling and sampling, stating the number of holes drilled (including its distribution), sample pits or trenches and their location, with a description of their current status.	SRK	n/a
the names of the organisations that carried out the investigation and analysis	SRK	n/a
Production schedule		
production policy, including production rates of sites, mines, wells (at least for the past three years) and non-mining assets where production has already been commenced	SRK	HATCH
estimated production rates relating to new mines, or reworkings, or new drilling, or work-overs	SRK	n/a
estimate of the working lives and degree of depletion of each major property	SRK	n/a
an assessment of the expertise of the technical staff being or to be employed (including the number of experts involved in each of the mines)	SRK	HATCH
an indication of the bases on which these estimates have been arrived at.	SRK	HATCH
an assessment of product quality and mix	n/a	HATCH
Commencement of working		
the date(s) on which commercial extraction by the applicant was commenced, or is expected to commence, on each major property	SRK	n/a
Progress of workings		
an indication of the progress of actual working, including analysis (both in narrative an numerical form) of previous exploration, development and extraction carried out on the relevant properties or fields	SRK	n/a
Forecast extraction rates		
comment on the reasonableness of the directors' forecasts (if any) of the rate(s) of extraction of the major properties or fields	SRK	HATCH
Valuation of reserves		
an estimate of net present value (or a valuation arrived at on an alternative basis, with an explanation of the basis and of the reasons for adopting it) of proven and probable reserves (financial analysis by Hatch, based upon the Client's mining plan as adjusted by SRK to define relevant reserves and resources figures, with relevant inputs for bauxite cost and processing technical data). Note 1	SRK	HATCH
the principal assumptions on which the valuation of proven and probable reserves is based	SRK	n/a
information to demonstrate the sensitivity to changes in the principal assumptions (split between resource modelling and financial analysis as noted two points above)	SRK	HATCH

MINERAL EXPERT'S REPORT IN RESPECT OF THE BAUXITE, ALUMINA, ALUMINIUM AND COAL/ENERGY ASSETS OF THE CLIENT	Mining	Non-Mining
Plant and equipment		
commentary on the type, extent and condition of plant and equipment which is of material significance to the Client's operations and which is currently in use on the Client's major properties or fields	SRK	HATCH
information on additional plant and equipment which will be required to achieve the forecast rates of extraction/production (including an estimate of the relevant costs and of the cost of maintaining and repairing all plant and equipment)	SRK	HATCH
Valuation of plant		
a valuation (made on an existing use basis within six months of the date of publication of the Listing Particulars) of the plant and equipment owned by the Client currently in use for exploration or extraction and processing of mineral reserves, save that a valuation is not required if a statement is made confirming that either: Note 1		
directors do not consider that plant and equipment to be of material importance to an investor's assessment of the Client's operations; or		
the valuation of the plant and equipment has been included in the net present valuation of the reserves	SRK	HATCH
Human resources		
an assessment of the expertise of the management, technical staff and general workforce being or to be employed	SRK	HATCH
Special factors		
a statement setting out any additional information required for a proper appraisal of any special factors affecting the exploration or extraction or processing businesses of the Client, including difficulties of access to, or in recovery of, mineral reserves on properties where the Client has extraction rights, and special circumstances, such as difficulties in transporting or marketing the extracts which may affect the commercial viability of the project, or an appropriate negative statement	SRK	HATCH
Other former-Chapter 19 requirements		
any other information or analysis required by former-Chapter 19 of the Listing Rules or otherwise for the purposes of the relevant listing authorities	SRK	n/a

Note 1 — Should the valuation be required in the MER, Hatch and SRK will require specific validation of non-technical inputs which are beyond the scope of expertise. Please refer to specific exclusion in Section 4.0

Deliverables/Output

The Mineral Expert's Report will be presented in hard copy format on plain A4 paper and on a computer disk using Microsoft compatible word-processing software. Subject to satisfactory approval of draft report, a final report will be issued in the same format. All documents will be presented in English.

The proposed format of these documents will be subject to confirmation by the Client prior to the site visits, however previously issued reports will be used as the basis.

Hatch, together with SRK, will produce a single Mineral Expert's Report for inclusion within one or more prospectuses (the "**Prospectus**") of the Client for the purposes of Listing, covering all the assets listed in Tables 1 and 2, together with any additional properties as may reasonably be added by the Client under Section 2. Hatch agree that they will allow the Client and their advisers to comment on the Mineral Expert's Report and also understand that a draft form of the Mineral Expert's Report will be commented upon by the relevant listing authorities. In particular Hatch, together with SRK, will discuss and agree with the Client and/or its advisers the format and content of the Mineral Expert's Report, prior to the site visits, in the interests of ensuring consistency across the Mineral Expert's Report to be included in the Prospectus and compliance with the listing requirements of the relevant listing authorities. Hatch and SRK agree that they will assist, from time to time, the Client in responding to any queries/comments that may be raised by the relevant listing authorities in relation to the Mineral Expert's Report.

Hatch and SRK also agree that, subject to the terms of the Services Agreement (including Section 6.2), copies of the Mineral Expert's Report can be made available to the Client's legal adviser, the sponsor's legal adviser and financial advisers and such other persons as the Client reasonably requires and may be may be addressed to and can be relied upon by such persons.

4.0 Excluded from the Scope of Work

Should an NPV valuation of the Client be required in the Mineral Expert's Report or any private report to the Client and its advisers, we will require 3rd Party verification of the following:

- 3rd party verification of the base year inputs — reconciliation to audited financial statements;
- Provision of aluminium, alumina, coal, downstream commodity prices — to be provided by an independent market consultant, although Hatch and/or SRK shall promptly notify the Client should any such price seem unreasonable, given industry consensus and/or Hatch and/or SRK's professional judgement;
- Effective ownership of assets — to be provided by the Client's legal advisors, or qualified by Hatch and/or SRK, as applicable, as to the source of the ownership data;
- Effective tax rate — to be provided by Client tax advisors;
- Exchange Rate/Inflation/Discount Rate — to be provided by the Client's financial advisors — no real long term reduction in costs;

UNQUOTE

QUOTE **(From Hatch and SRK letter proposal, titled 'Finalisation of Kandinsky 2 Mineral Expert report for Initial Public Offering of UC Rusal', dated 27 August 2009)**

Scope of work

The Kandinsky 2 Mineral Expert Report (MER) was prepared in draft form in late 2008. UC RUSAL are now requesting that Hatch and SRK finalise this report with information as of 30 June 2009 plus any material changes up to the present.

UNQUOTE

Limitations and exclusions

Although Hatch and SRK have taken all reasonable care to ensure that the information contained in this report is in accordance with the facts and contains no omissions likely to affect its import, much of this report is based on historical information (e.g., financial information, plant operating and maintenance data, health and safety statistics, emissions data) and legal information (e.g., information respecting permits, licenses and approvals, title to properties, ownership interests in facilities, legal agreements and tax and royalty rates) provided by UC RUSAL and third parties on behalf of UC RUSAL. Although Hatch and SRK have no reason to believe that there are any errors, omissions or misrepresentations in such information, it is not possible for Hatch or SRK to verify that no such errors, omissions or misrepresentations exist. Accordingly, neither Hatch nor SRK accept any responsibility or liability for any errors, omission or misrepresentations that could not have been discovered through the exercise of reasonable care in the gathering and evaluation of the information provided by or on behalf of UC RUSAL.

The technical report is predominantly based on information provided by UC RUSAL at the time of site visits during September to October 2008 and meetings with UC RUSAL in Moscow during November to December 2008, in addition to advice on material changes to the data and information made available to Hatch and/or SRK before 23 September 2009. Between that date and the date of this report UC RUSAL has not advised Hatch or SRK of any additional material change, or event likely to cause any material change to the information provided by UC RUSAL or on its behalf for the purpose of the preparation of this report.

The work undertaken for this report is a technical review of the information obtained by Hatch and SRK together with such inspections as each of Hatch and SRK considered appropriate. This report does not express any legal opinion and does not constitute legal advice.

Annex C
Glossary of Abbreviations/Terms/Units

Glossary of Abbreviations

$/t	United States Dollars per tonne
ACG	Alumina Company of Guinea
Al	Aluminium
AlF_3	Aluminium Fluoride
Al_2O_3	Alumina
C1, 2	Chemical grade bauxites
CAPEX	Capital Expenditure
CBG	Compagnie des Bauxites de Guinea
CCD	Counter current decantation
CHP	Combined Heat and Power Plant
CIS	Commonwealth of Independent States
CO	Carbon Monoxide
CO_2	Carbon Dioxide
C_2F_4	Tetrafluoroethylene
C_2F_6	Hexafluroethane
CF_4	Carbon Tetrafluoride
DC	Direct Current
DCF	Discounted Cash Flow
DCS	Distributed Control System
DWT	Deadweight Tonne
ECC	Engineering and Construction Company
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EPCM	Engineering, Procurement and Construction Management

ESP	Electrostatic Precipitator
ETC	Engineering and Technology Centre
FEED FFE	Front End Engineering and Design FFE Minerals, (the minerals processing arm of FLSmidth)
FIBC	Flexible Intermediate Bulk Containers
FS	Feasibility Study
FTP	Fume Treatment Plant
GIS	Insulted Switchgear
GHG	Greenhouse Gas
GOST	Technical standards maintained by the Euro-Asian Council for Standardization, Metrology and Certification (EASC)
GT	Gas Turbine
GTC	Gas Treatment Centre
HDC	Horizontal Direct-Chill
HDPE	High Density Polyethylene
HF	Hydrogen Fluoride
HPP	Hydroelectric Power Plant
HSS	Horizontal Stud Söderberg
HV	High Voltage
IBSH	Indirect Bauxite Slurry Heating
IPPC	Integrated Pollution Prevention and Control
ISO	International Standards Organisation
JORC	Joint Ore Reserves Committee of the Australian Institute of Mining and Metallurgy
JSC	Joint Stock Company
LME	London Metal Exchange
LSFO	Low Sulphur Fuel Oil
LTIFR	Lost Time Injuries Frequency Rate

M1, 2, 3	Metallurgical grade bauxites
Mg	Magnesium
MHA	Monohydrate Alumina
MHB	Monohydrate Bauxite
MRN	Mineracao Rio do Norte
NaOH	Caustic Soda
NGC	Nigeria Gas Company
NOC	National Oil Company
NOx	Nitrogen Oxides
Ni	Nickel
OPEX	Operating expenditure
OHSAS	Occupational Health and Safety Assessment Series
OW	Observation Well
O_2	Oxygen
P_2O_5	Phosphorous oxide
PCB	Polychlorinated biphenyl
PDS	Maximum Permissible Discharge (for water)
PDV	Permitted Limit Value of Emissions
PFC	Perfluorocarbon
PFPB	Point Feed Pre Bake
PNOOLR	Draft Waste Generation Standards and Waste Disposal Limits (for solids)
PPE	Personal Protective Equipment
pH	A measure of the acidity or alkalinity of a solution
PTFE	Polytetrafluoroethylene
QA/QC	Quality Assessment/Quality Control
R&D	Research and Development

RDA	Residue Disposal Area
RGRK	Russian Ore Mining Company
Rosatom	Federal Agency for Atomic Energy
SO_2	Sulphur Dioxide
Si	Silicon
SibVAMI	Siberian Scientific and Research, Construction and Design Institute
SIP	Siberia Industrial Park
SPL	Spent Pot Lining
SUAL	Siberia-Urals Aluminium Company
TEO	Construction Feasibility Study
The Company	UC RUSAL
The Group	UC RUSAL
THB	Tri-Hydrate Bauxite
UC RUSAL	United Company RUSAL
US	United States of America
UV	Ultraviolet
USD	United States Dollar
USSR	Union of Soviet Socialist Republics
VAMI	All-Russia National Aluminium and Magnesium Institute
VAP	Value Added Product
VDC	Vertical Direct Chill
VDV	Temporary Limit Value of Emissions
VDS	Temporary Limit Value of Discharge
VOC	Volatile Organic Compounds
VSS	Vertical Stud Söderberg

Glossary of Terms

Alkali Salts	Salts which contain one or more hydroxide ions.
Alumina	Any of several forms of aluminium oxide, Al_2O_3, occurring naturally as corundum.
Available Alumina	The quantity of aluminium oxide available to be converted to alumina during processing. This is dependent on the mineralogy of the bauxite and the processing methodology.
Assay	Chemical analysis of mineral samples to determine the metal content.
Auger Drilling	A method of drilling in which penetration is accomplished by the cutting or gouging action of chisel-type cutting edges forced into the substance by rotation of the auger bit.
Bauxite	The principal ore of aluminium composed mainly of hydrous aluminium oxides and aluminium hydroxides.
Bayer process	A method of producing alumina from bauxite by heating it in a sodium hydroxide solution.
Bench	The horizontal step or floor along which coal, ore stone, or overburden is mined.
Blasthole	A hole drilled in a material to be blasted, for the purpose of containing an explosive charge.
Boehmite	An aluminium oxide hydroxide (AlO(OH)) mineral, a component of the aluminium ore bauxite. It is dimorphous with diaspore.
Capital Expenditure	Expenditures incurred during the process of commencing, expanding or sustaining production.
Conveyor Belt	A mechanical apparatus consisting of a continuous moving belt that transports materials from one place to another.
Crushing	Size reduction into relatively coarse particles by stamps, crushers, or rolls.
Cut-off grade	The lowest grade of mineralized material that qualifies as ore in a given deposit; rock of the lowest assay included in an ore estimate.

Dilution	The contamination of ore with barren or grade bearing wall rock in stoping. The assay of the ore after mining is frequently lower than when sampled in place. Dilution relates to the proportion of waste that is contained in the Run-of-Mine ore delivered to the metallurgical processing plant. Dilution relates to diluting tonnage expressed as a percentage of in-situ ore mined.
Diluting grade	The grade of the diluting material.
Dip	The angle at which a bed, stratum, or vein is inclined from the horizontal, measured perpendicular to the strike and in the vertical plane.
EMS	Environmental Management System
Exploration	The search for coal, mineral, or ore by (1) geological surveys; (2) geophysical prospecting (may be ground, aerial, or both); (3) boreholes and trial pits; or (4) surface or underground headings, drifts, or tunnels. Exploration aims at locating the presence of economic deposits and establishing their nature, shape, and grade, and the investigation may be divided into (1) preliminary and (2) final.
Fault	A fracture or a fracture zone in crustal rocks along which there has been displacement of the two sides relative to one another parallel to the fracture. The displacement may be a few inches or many miles long.
Footwall	The part of the country rock that lies below the ore deposit.
Goethite	A common weathering product of iron-bearing minerals; precipitates in bogs and springs; a major constituent of limonite and gossans, and a source of iron and a yellow ochre pigment.
Grade	The relative quantity or the percentage of ore-mineral or metal content in an orebody.
Grade Control	The process of monitoring the estimation of grade in the mining operation by comparison of estimates based on exploration drilling, infill drilling, blast-hole sampling and mining/milling reconciliation exercises.
Haematite	The most widely mined ore of iron; in sedimentary rocks, Precambrian banded iron formations (including their metamorphosed equivalents), oolitic ironstones, contact-metamorphic deposits, commonly by alteration of magnetite; may be of secondary origin, having formed by oxidation and decomposition of iron silicates and carbonates; also occurs as a primary mineral in veins and replacement deposits associated with igneous intrusions.

Hangingwall	The overlying side of an orebody, fault, or mine working, esp. the wall rock above an inclined vein or fault.
Indicated Mineral Resources	That part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
Inferred Mineral Resources	That part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.
JORC Code	The 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.
Kaolinite	A clay mineral which is usually the result of argillic alteration of feldspars.
Karst	A topography characterized by caves, sinkholes, disappearing streams, and underground drainage. Karst forms when groundwater dissolves pockets of limestone, dolomite, or gypsum in bedrock.
Karstic	Geological formation which displays karst features.
Lenses	Geological bodies that are thick in the middle and thin at the edge.
Limestone	Sedimentary rock consisting chiefly (more than 50% by weight or by area percentages under the microscope) of calcium carbonate, primarily in the form of the mineral calcite, and with or without magnesium carbonate; specif. a carbonate sedimentary rock containing more than 95% calcite and less than 5% dolomite.
Lithology	Description of the characteristics of rocks.

Measured Mineral Resources	That part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.
Mill	1. A mineral treatment plant in which crushing, wet grinding, and further treatment of ore is conducted. Also, separate components, such as ball mill, hammer mill, and rod mill. 2. A preparation facility within which metal ore is cleaned, concentrated, or otherwise processed before it is shipped to the customer, refiner, smelter, or manufacturer. A mill includes all ancillary operations and structures necessary to clean, concentrate, or otherwise process metal ore, such as ore and gangue storage areas and loading facilities.
Mineral Resource	A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Mining Assets	The mines, projects, stand-alone exploration projects and the regional exploration campaigns.
Modifying Factors	The term 'Modifying Factors' is defined to include mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations.
Nepheline Syenite	Nepheline syenite is a medium to coarse-grained, light- to medium-gray, igneous rock that is composed predominantly of a silicate mineral called orthoclase ($KAlSi_3O_8$) and has a granite-like appearance.
Open pit	A mine working or excavation open to the surface.
Operating Expenditure	Expenditures necessary to support annual production.

Ore	The naturally occurring material from which a mineral or minerals of economic value can be extracted profitably or to satisfy social or political objectives. The term is generally but not always used to refer to metalliferous material, and is often modified by the names of the valuable constituent; e.g., iron ore.; ore mineral.
Orebody	The volume of rock containing the Mineral Resource.
Ore Reserve	The economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
Potline	A row of electrolytic cells used in the production of primary aluminium.
Probable Ore Reserves	The economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. A Probable Ore Reserve has a lower level of confidence than a Proved Ore Reserve but is of sufficient quality to serve as the basis for a decision on the development of the deposit.
Proved Ore Reserves	A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. A Proved Ore Reserve represents the highest confidence category of reserve estimate. The style of mineralisation or other factors could mean that Proved Ore Reserves are not achievable in some deposits.

Quartzite	A metamorphic rock type formed predominantly of recrystallised quartz.
Real	Removal of the effect of inflation.
Refinery	An electrolytic or chemical facility producing pure metals.
Shaft	A near-vertical mine entry of limited area constructed to access underground workings or to provide ventilation.
Shovel	Any bucket-equipped machine used for digging and loading earthy or fragmented rock materials.
Silicious	Containing abundant silica.
Stockpile	An accumulation of ore or mineral built up when demand slackens or when the treatment plant or beneficiation equipment is incomplete or temporarily unequal to handling the mine output; any heap of material formed for loading or other purposes.
Strike	The course or bearing of the outcrop of an inclined bed, vein, or fault plane on a level surface; the direction of a horizontal line perpendicular to the direction of the dip.
Stripping ratio	The unit amount of spoil or overburden that must be removed to gain access to a unit amount of ore or mineral material.
Waste	Rock which is does not contain economic concentrations of minerals.

Glossary of Units

ºC	degrees Celsius
A	amperes
bara	Bar atmosphere (1 bar = $10^5 N/m^2$)
barg	Bar gauge (1 bar = $10^5 N/m^2$)
Cal	calorie (1 cal = 4.19 Joule)
g	gramme
GJ	Giga Joule
g/l	grammes per litre
h	hour
ha	hectare
Kg/cell/day	kilogrammes per cell per day
Kg/tAL	kilogrammes per tonne of aluminium
kg.std.fuel/t	kilogrammes of standard fuel per tonne
kt	kilo-tonnes
ktpa	kilo-tonnes per annum
ktpd	kilo-tonnes per day
kV	kilo-Volt
L	litre
m	metre
mg	milligram
Nm^3	normal cubic metres per hour
Mt	million tonnes
Mtpa	million tonnes per annum
N	Newton
t	tonne

tpa	tonnes per annum
tph	tonnes per hour
tpd	tonnes per day
V	volt
W	watt

Prefixes

G	Giga	(10^9-1,000,000,000)
M	Mega	(10^6-1,000,000)
k	kilo	(10^3-1,000)
c	centi	(10^{-2}-0.01)
m	milli	(10^{-3}-0.001)
μ	micro	(10^{-6}-0.000001)

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Supplementary Letter to the Independent Technical Report prepared by Hatch and SRK dated 30 September 2009

24th December 2009

The Board of Directors
United Company RUSAL Limited

Dear Sirs,

United Company RUSAL Limited (the "Company")

We refer to the prospectus dated 31st December 2009 (the "Prospectus") in connection with the Company's global offering and the proposed listing of its shares on the Main Board of the Stock Exchange of Hong Kong Limited, which includes the Independent Technical Report.

To Hatch's knowledge, as informed by the Company, there have been no material changes deviating from the Company's plans, since 30 September 2009 up till the date of the Prospectus, in respect of the assets, projects and associated technical aspects reviewed by Hatch (and as described in the Independent Technical Report, Section 1.3, or of any matter which would affect the content of the Independent Technical Report as published in the Prospectus, other than the below updated UC RUSAL Environmental Permits as at 15 December 2009. This table excludes mining assets, which have been reviewed separately by SRK.

Updated Table 2.4: UC RUSAL Environmental Permits as of 15 December 2009

	Air Emissions	Liquid Emissions	Solid Emissions
Asset	**Expiry of Permit**	**Expiry of Permit**	**Expiry of Permit**
Queensland Alumina Refinery	unlimited permit	unlimited permit	unlimited permit
Fria Alumina Refinery	no permit required	no permit required	no permit required
Aughinish Alumina	IPPC (1) &GHG Licences until 16 April 2013	IPPC (1) &GHG Licences until 16 April 2013	IPPC (1) &GHG Licences until 16 April 2013
Eurallumina	currently idle (2)	currently idle (2)	currently idle (2)
Alpart	currently idle (2)	no permit required	no permit required
Windalco-Ewarton Works	currently idle (2)	no permit required	no permit required
Windalco-Kirkvine Works	currently idle (2)	no permit required	no permit required
Bogoslovsk Alumina Refinery (BAZ)	1 September 2010	awaiting approval (3)	31 December 2011
Achinsk Alumina Refinery (AGK)	31 December 2010	Issue 1: 01 January 2010 Issues 2 and 3: 01 January 2014	7 July 2013
Urals Alumina Refinery (UAZ)	31 December 2009	awaiting approval (3)	1 January 2010
Boxitogorsk Alumina Refinery (BGZ)	31 December 2011	31 December 2013	10 June 2011
Nikolaev Alumina Refinery (NGZ)	27 December 2012	no permit required	31 December 2009
Zaporozhye Alumina Refinery (ZALK)	currently idle (2)	currently idle (2)	currently idle (2)
Bratsk Aluminium Smelter (BrAZ)	31 December 2010	no permit required	31 December 2009
Krasnoyarsk Aluminium Smelter (KrAZ)	31 December 2009	1 January 2010	31 December 2009
Sayanogorsk Aluminium Smelter (SAZ)	31 December 2010	no permit required	23 April 2012
Novokuznetsk Aluminium Smelter (NkAZ)	31 December 2009	awaiting approval (3)	01 January 2010
Irkutsk Aluminium Smelter (IrkAZ)	31 December 2010	no permit required	31 December 2009
Khakas Aluminium Smelter (KhAZ)	31 December 2010	no permit required	23 April 2012
Bogoslovsk Aluminium Smelter (BAZ)	01 September 2010	awaiting approval (3)	11 December 2011
Volgograd Aluminium Smelter (VgAZ)	1 June 2010	no permit required	30 March 2014
Urals Aluminium Smelter (UAZ)	31 December 2009	awaiting approval (3)	1 January 2010
Nadvoitsy Aluminium Smelter (NAZ)	31 December 2009	no permit required	03 May 2010
Kandalaksha Aluminium Smelter (KAZ)	01 December 2010	awaiting approval (3)	31 December 2009
Volkhov Aluminium Smelter (VAZ)	31 December 2011	no permit required	3 May 2012
Alukom Taishet Aluminium Smelter	currently idle (2)	currently idle (2)	currently idle (2)
Kubikenborg Aluminium (KUBAL)	31 December 2011	31 December 2011	31 December 2011
Zaporozhye Aluminium Smelter (ZALK)	awaiting approval (3)	31 December 2009	31 December 2009
Aluminium Smelting Company of Nigeria (ALSCON)	no permit required	no permit required	no permit required
Krasnoturyinsk Powder Metallurgy	awaiting approval (3)	no permit required	1 March 2011
Shelekhov Powder Metallurgy	31 December 2009	no permit required	1 January 2010
Volgograd Powder Metallurgy	6 August 2010	no permit required	awaiting approval (3)
Irkutsk Silicon	31 December 2009	no permit required	22 February 2010
Urals Silicon	1 January 2010	no permit required	10 June 2010
Zaporozhye Silicon	currently idle (2)	currently idle (2)	currently idle (2)
Resal	1 January 2011	no permit required	1 January 2012
Bellis	30 September 2010	no permit required	31 December 2013
Zvetmetobrabotka	1 January 2014	no permit required	awaiting approval (3)
ARMENAL	25 December 2011	17 July 2010	no permit required
SAYANAL	31 December 2009	no permit required	11 June 2013
Urals Foil	awaiting approval (3)	no permit required	15 April 2010
Polevskoy Cryolite Plant	awaiting approval (3)	awaiting approval (3)	21 April 2010
South Urals Cryolite Plant	awaiting approval (3)	no permit required	15 December 2010
Lingshi Cathode Plant	30 December 2010	no permit required	no permit required
Taigu Cathode Plant	15 June 2011	no permit required	no permit required

Note: (1) Unlimited Integrated Pollution Prevention and Control. (2) Facility is currently idled. As such the permit is not currently required, but must be reapplied for once operations restart. (3) Final Permit has been submitted for approval by the Sta

Yours faithfully,

Julian Clark

Regional Director - Light Metals, EMEA

Practice Director - Hatch Management Consulting

SRK Consulting
Engineers and Scientists

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Supplementary Letter to the Independent Technical Report prepared by Hatch and SRK dated 30 September 2009

24 December 2009

The Board of Directors
United Company RUSAL Limited

Dear Sirs,

United Company RUSAL Limited (the "Company")

We refer to the prospectus dated 31 December 2009 (the "Prospectus") in connection with the Company's global offering and the proposed listing of its shares on the Main Board of the Stock Exchange of Hong Kong Limited, which includes the Independent Technical Report.

To SRK's knowledge, as informed by the Company, there have been no material changes deviating from the Company's plans, since 30 September 2009 up till the date of the Prospectus, in respect of the Mining Assets (reviewed by SRK and as described in the Independent Technical Report, Section 1.3), or of any matter which would affect the content of the Independent Technical Report as published in the Prospectus, other than the below updated Mining Asset Environmental Compliance table as at 15 December 2009.

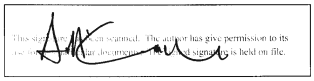
Updated Table 2.3: UC RUSAL Mining Asset Environmental Compliance as of 15 December 2009

Mining Asset	Country	Environmental permit	Water discharge	Air emmissions	Waste
Bauxite					
Alpart	Jamaica	Currently not required, controlled by Memorandum of Understanding with Government	Currently idle	Currently idle	Currently idle
Windalco Ewarton	Jamaica	Currently not required, controlled by Memorandum of Understanding with Government	Currently idle	Currently idle	Currently idle
Windalco Kirkvine	Jamaica	Currently not required, controlled by Memorandum of Understanding with Government	Currently idle	Currently idle	Currently idle
Kindia	Guinea	Understood to be covered by mining licence	Not required	Not required	Not required
Friguia	Guinea	Understood to be covered by mining licence	Not required	Not required	Not required
Bauxite Co. de Guyana	Guyana	Not required for historical operations, with environmental aspects controlled by a Compliance Agreement.	Not required	Not required	Not required

SRK Consulting
Engineers and Scientists

Mining Asset	Country	Environmental permit	Water discharge	Air emmissions	Waste
Bauxite					
North Urals (incl. Petropavlovsk)	Russia	Environmental controls on exploration and project development specified in mining licence.	Obtained and valid to 31 December 2012	awaiting approval	awaiting approval
Timan	Russia	OVOS (EIA) approved by Pechorskiy Interregional Department of Technological and Environmental Supervision on 6 February 2007 and to for 6 February 2012)	Obtained and valid to 31 December 2012	Obtained and valid to 31 December 2011	Obtained and valid to 9 June 2013
Nepheline Syenite/Limestone					
Kiya Shaltyr Nepheline Syenite	Russia	Site became operational before OVOS requirements	awaiting approval	Obtained and valid to 1 January 2012	Obtained and valid to 13 December 2011
Mazulsky Limestone	Russia	Site became operational before OVOS requirements	Obtained and valid to 1 January 2014	Obtained and valid to 30 December 2009	Obtained and valid to 31 December 2009
Quartzite					
Cheremshansk	Russia	Environmental controls on exploration and project development specified in mining licence	Not required	Obtained and valid to 3 November 2014	Obtained and valid to 2 October 2010
Glukhovsky	Ukraine	Environmental controls on exploration and project development specified in mining licence	Obtained and valid to 13 December 2012	Obtained and valid to 31 December 2013	Obtained and valid to 31 December 2009
Fluorite					
Yaroslavsky	Russia	Environmental controls on exploration and project development specified in mining licence	awaiting approval	Obtained and valid to 19 May 2013	Obtained and valid to 28 April 2011
Coal					
Bogatyr	Kazakhstan	Environmental controls on exploration and project development specified in mining licence	31 December 2009 (annually renewed)	31 December 2009 (annually renewed)	31 December 2009 (annually renewed)

Yours faithfully



For and on behalf of SRK Consulting (UK) Limited
Allan McCracken
Director

Set out below is a summary of certain provisions of the Memorandum and Articles of the Company and of certain aspects of Jersey company law.

The Company was incorporated in Jersey as a private company with limited liability on 26 October 2006 under the Jersey Companies Law. The Memorandum and the Articles comprise its constitution.

1 MEMORANDUM OF ASSOCIATION

1.1 The Memorandum was adopted on 26 December 2009 with effect from the admission of Shares to trading on the Main Board of the Hong Kong Stock Exchange and states, inter alia, that:

(a) the name of the Company is United Company RUSAL plc;

(b) the liability of each member arising from his holding of a share in the Company is limited to the amount (if any) unpaid on it;

(c) the Company has unrestricted corporate capacity;

(d) the Company is a par value company; and

(e) the Company is a public company.

1.2 The Company may by special resolution alter its Memorandum.

2 ARTICLES OF ASSOCIATION

The Articles were adopted on 24 November 2009 with effect from the admission of Shares to trading on the Main Board of the Hong Kong Stock Exchange. The following is a summary of certain provisions of the Articles:

2.1 Directors

(a) ***Power to allot and issue shares and warrants***

(i) Without prejudice to any special rights for the time being conferred on the holders of any shares or class of shares, any share or class of shares in the capital of the Company may be issued with such preferred, deferred or other special rights or such restrictions whether in regard to dividends, return of capital, voting or otherwise as the Company may from time to time by ordinary resolution determine. The Directors may issue warrants to subscribe for any class of shares or other securities of the Company, which warrants may be issued on such terms as the Directors may from time to time determine.

(ii) Subject to the provisions of the Jersey Companies Law, the Company may from time to time:

(A) issue; or

(B) convert any existing non-redeemable shares (whether issued or not) into,

shares which are to be redeemed or are liable to be redeemed at the option of the Company or at the option of the holder thereof and on such terms and in such manner as may be determined by special resolution.

(iii) Subject to the provisions of the Articles and any direction that may be given by the Company in general meeting and where applicable the rules of any Designated Stock Exchange (as defined in the Articles), the unissued shares for the time being in the capital of the Company shall be at the disposal of the Directors who may allot, grant options over or otherwise dispose of them to such persons at such times and generally on such terms and conditions as they think fit.

(iv) Subject to the Jersey Companies Law, the Companies (Uncertificated Securities) (Jersey) Order 1999, as amended, and the Listing Rules and requirements of the HKSE, the Directors may permit any class of shares to be held in uncertificated form and to be transferred by means of a relevant system and may revoke any such permission.

(b) ***Power to dispose of the assets of the Company or any subsidiary***

There are no specific provisions in the Articles relating to the disposal of the assets of the Company or any of its subsidiaries. The business of the Company shall be managed by the Directors who may pay all expenses incurred in promoting and registering the Company and may exercise all such powers of the Company as are not by the Jersey Companies Law or the Articles required to be exercised by the Company in general meeting.

(c) ***Compensation or payments for loss of office***

The Directors shall obtain the approval of the Company in general meeting before making any payment to any Director or past Director of the Company by way of compensation for loss of office, or as consideration for or in connection with his retirement from office (not being payment to which the Director is contractually entitled).

(d) ***Loans to Directors***

There are comprehensive provisions in the Articles prohibiting the making of loans to Directors.

(e) ***Giving of financial assistance to purchase the shares of the Company or any of its subsidiaries***

The Company may give financial assistance for the purpose of or in connection with a purchase made or to be made by any person of any shares in the Company in any manner authorised or not prohibited by the Jersey Companies Law, provided always that for so long as the shares are listed on the HKSE , any such provision of financial assistance shall also comply with the requirements of the Companies Ordinance (Cap.32 of the Laws of Hong Kong) from time to time in force as if the Company was incorporated in Hong Kong unless the HKSE waives this requirement for companies incorporated outside Hong Kong (in which case the Company shall then comply with the requirements of the HKSE from time to time in force, if any).

(f) ***Disclosure of interests in contracts with the Company or any of its subsidiaries***

(i) A Director who, to his knowledge, is in any way (directly or indirectly) interested in any contract, arrangement, transaction or proposal to be entered into or proposed to be entered into by the Company and such interest conflicts or may conflict to a material extent with the interests of the Company shall declare the nature of his interest at the earliest meeting of the Directors at which it is practicable for him to do so, either specifically or by way of a general notice in writing delivered to the secretary, at the earliest meeting of the Directors after he knows that he is or has become so interested.

(ii) For the purpose of the above:

(A) a general notice given to the Directors by a Director that he is to be regarded as having an interest (of the nature and extent specified in the notice) in any contract, transaction, arrangement or proposal in which a specified person or class of persons is interested shall be deemed to be a sufficient disclosure under the Articles in relation to such contract, transaction, arrangement or proposal; and

(B) an interest of which a Director has no knowledge and of which it is unreasonable to expect him to have knowledge shall not be treated as an interest of his.

(iii) Save in limited circumstances, a Director shall not vote on (nor shall he be counted in the quorum in relation to) any resolution of the Directors or of a committee of the Directors concerning any contract, transaction, arrangement, or any other proposal whatsoever to which the Company is or is to be a party and in which he or any of his associates has an interest which is to his knowledge a material interest otherwise than by virtue of his interests in shares or debentures or other securities of or otherwise in or through the Company.

(g) ***Remuneration***

(i) The Directors shall be entitled to such remuneration as the Directors may determine subject to any limitation as the Company may by ordinary resolution determine.

(ii) The Directors shall be paid out of the funds of the Company their travelling hotel and other expenses properly and necessarily incurred by them in connection with their attendance at meetings of the Directors or members or otherwise in connection with the discharge of their duties.

(h) ***Retirement, appointment and removal***

(i) Any Director holding office prior to the adoption of the Articles shall continue to hold office until he resigns or is disqualified or removed in accordance with the provisions of the Articles.

(ii) The Directors shall have power at any time and from time to time to appoint any person (other than one disqualified or ineligible by law to act as a director of a company) to be a Director either to fill a casual vacancy or as an addition to the existing Directors provided that the appointment does not cause the number of Directors to exceed any number fixed by or in accordance with the Articles as the maximum number of Directors. Any Director so appointed shall hold office until the next following annual general meeting of the Company and shall then be eligible for re-election at such meeting (but shall not be taken into account in determining the Directors or the number of Directors who are to retire by rotation).

(iii) The Company may by ordinary resolution:

(A) appoint any person (other than one disqualified or ineligible by law to act as a director of a company) as a Director; and

(B) remove any Director from office before the expiration of his period in office (without prejudice to a claim for damages for breach of contract or otherwise).

(iv) The office of a Director shall be vacated if the Director:

(A) resigns his office by notice to the Company;

(B) ceases to be a Director by virtue of any provision of the Jersey Companies Law or he becomes prohibited or disqualified by law from being a Director;

(C) becomes bankrupt or makes any arrangement or composition with his creditors generally;

(D) becomes of unsound mind; or

(E) is removed from office by ordinary resolution.

(v) There is no shareholding qualification for Directors nor is there any specified age limit for Directors.

(vi) At every annual general meeting one-third of the Directors or, if their number is not three or a multiple of three, the number nearest to one-third shall retire from office; but if any Director has at the start of the annual general meeting been in office for three years or more since his last appointment or re-appointment, he shall retire at that annual general meeting.

(vii) Subject to the provisions of the Jersey Companies Law and the Articles, the Directors to retire by rotation shall be, first, those who wish to retire and not be re-appointed to office, and, second, those who have been longest in office since their last appointment or re-appointment. As between persons who became or were last re-appointed directors on the same day those to retire shall (unless they otherwise agree among themselves) be determined by lot. The Directors to retire on each occasion (both as to number and identity) shall be determined by the composition of the Directors at the date of the notice convening the annual general meeting. No Director shall be required to retire or be relieved from retiring or be retired by reason of any change in the number or identity of the Directors after the date of the notice but before the close of the meeting.

(viii) If the Company does not fill the vacancy at the meeting at which a Director retires by rotation or otherwise, the retiring Director shall, if willing to act, be deemed to have been re-appointed unless at the meeting it is resolved not to fill the vacancy or unless a resolution for the re-appointment of the Director is put to the meeting and lost.

(ix) No person other than a Director retiring by rotation shall be appointed a Director at any general meeting unless he is recommended by the Directors or during a period, being not less than seven days, between a day that is not less than seven days before the date appointed for the meeting and the day after the despatch of the notice of such meeting, notice by a Member qualified to vote at the meeting (not being the person to be proposed) has been received by the Company of the intention to propose that person for appointment stating the particulars which would, if he were so appointed, be required to be included in the Company's register of Directors, together with notice by that person of his willingness to be appointed.

(x) Any one or more members holding not less than 5 (five) per cent of the paid up capital of the Company carrying the right of voting at general meetings of the Company (a "proposer") shall at all times have the right, by written notice to the Company, to propose one or more persons to be considered for nomination or recommendation by the Directors as a Director or to be considered as a suitable nominee as a director of the board of directors

of a subsidiary of the Company (a "proposal"). A proposal shall state the particulars which would, if that person were to be appointed, be required to be included in the Company's register of Directors (or that of the relevant subsidiary), together with notice by that person of his willingness to be appointed.

(i) ***Borrowing powers***

The Directors may exercise all such powers of the Company as are not by the Jersey Companies Law or the Articles required to be exercised by the Company in general meeting. As set out in the Memorandum, the Company has unrestricted corporate capacity.

(j) ***Delegation of powers***

The Directors may delegate any of their powers to committees consisting of such Director or Directors or such other persons as they think fit. The Directors shall establish an executive committee. Subject to the Law, the executive committee (or any manager or managers to whom the executive committee has delegated authority) may resolve and carry into effect any matter involving an outlay of no more than US$75 million (except a transaction involving a controlled interest of any member) without further authority from the Directors, and shall also be responsible for implementing matters already approved by the Directors.

(k) ***Quorum for board meetings***

The quorum necessary for the transaction of the business of the Directors may be fixed by the Directors and unless so fixed at any other number shall be two provided that, where at least two Directors have been appointed, whether before or after the adoption of the Articles, who were initially proposed in a proposal by proposers (as such terms are set out in paragraph 2(h)(x) above), whether before or after the adoption of the Articles, then the quorum shall consist of an aggregate number of Directors (or their alternates) equal to such number representing one Director so appointed by each proposer unless any such Director is prohibited from voting for any reason in which case the quorum shall be reduced accordingly provided that the quorum shall not be less than two. In the event that a quorum is not present at a duly convened meeting, then such meeting shall be adjourned for at least ten business days and each Director shall be notified of the time, date and place for the reconvened meeting and the quorum at such meeting, in the event that all Directors have been duly notified of the time, date and place for the reconvened meeting, shall be two Directors howsoever appointed. An alternate Director shall be counted in a quorum but so that not less than two individuals will constitute the quorum. A resolution in writing signed by a majority of the Directors entitled to receive notice of a meeting of Directors or of a committee of Directors provided that such resolution is signed by at least one Director appointed by each proposer shall be valid and effectual as if it had been passed at a meeting of the Directors or of a committee of Directors duly convened and held.

2.2 **Alterations to constitutional documents**

The Articles state that the Memorandum and the Articles are only capable of being amended by the passing of a special resolution.

2.3 **Variation of rights of existing shares or classes of shares**

Whenever the capital of the Company is divided into different classes of shares the special rights attached to any class may (unless otherwise provided by the terms of issue of the shares of that class) be varied or abrogated either whilst the Company is a going concern or during or in contemplation of a winding up with the consent in writing of the holders of three-fourths of the issued shares of that class or with the sanction of a special resolution passed at a separate meeting of the holders of shares of that class.

2.4 **Special resolutions - majority required**

A special resolution is defined in the Articles as a resolution of the Company passed as a special resolution by a majority of not less than three quarters of members who (being entitled to do so) vote in person, or by proxy, at a general meeting of the Company of which not less than twenty-one clear days' notice, specifying the intention to propose the special resolution, has been given. Provided that, if it is so agreed by a majority in number of the members having the right to attend and vote at such meeting upon the resolution, being a majority together holding not less than ninety-five per cent. of the total voting rights of the members who have that right a resolution may be proposed and passed as a special resolution at a meeting at which less than twenty-one clear days' notice has been given in accordance with the Jersey Companies Law.

2.5 **Voting rights (generally and on a poll)**

(a) Subject to any special rights restrictions or prohibitions as regards voting for the time being attached to any shares as may be specified in the terms of issue thereof or the Articles:

(i) on a show of hands, every member present in person shall have one vote and every proxy who has been appointed by a member entitled to vote on the resolution has one vote (except where multiple proxies have been appointed by a member); and

(ii) on a poll, every member present in person or by proxy shall have one vote for each share of which he is the holder.

(b) In the case of joint holders of any share such persons shall not have the right of voting individually in respect of such share but shall elect one of their number to represent them and to vote whether personally or by proxy in their name. In default of such election the person whose name appears first in order in the register in respect of such share shall be the only person entitled to vote in respect thereof.

(c) No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the Company of which he is holder or one of the joint holders have been paid.

(d) Where any shares of the Company are held in trust for the Company, such shares shall not, for so long as they are so held, confer any right to vote at meetings of the Company.

(e) For as long as the shares of the Company are admitted to trading on the Hong Kong Stock Exchange, at any general meeting a resolution put to the meeting shall be decided in the manner as prescribed in the Listing Rules (i.e. on a poll).

(f) Where any member under the Listing Rules is required to abstain from voting on any particular resolution or is restricted to voting only for or only against any particular resolution, any votes cast by or on behalf of such member in contravention of such requirement or restriction shall not be counted.

2.6 **Requirements for annual general meetings**

The Company shall in each calendar year hold a general meeting as its annual general meeting at such time and place as may be determined by the Directors. Not more than fifteen months (or such longer period as the Designated Stock Exchange or the Jersey Companies Law may authorise) shall elapse between subsequent annual general meetings.

2.7 **Accounts and audit**

(a) The Company shall keep accounting records, prepared in accordance with and subject to the provisions of the Jersey Companies Law, which are sufficient to show and explain the Company's transactions and are such as to disclose with reasonable accuracy at any time the financial position of the Company at that time and enable the Directors to ensure that any accounts prepared by the Company comply with requirements of the Jersey Companies Law and International Financial Reporting Standards.

(b) The Directors shall prepare accounts of the Company made up to such date in each year as the Directors shall from time to time determine in accordance with and subject to the provisions of the Jersey Companies Law and International Financial Reporting Standards.

(c) No member shall (as such) have any right to inspect any accounting records or other book or document of the Company except as conferred by the Jersey Companies Law or authorised by the Directors or by ordinary resolution of the Company.

(d) Subject to the Jersey Companies Law, copies of either (i) the Company's balance sheet (including every document required by the Jersey Companies Law to be annexed thereto) and profit and loss account, together with a copy of the Directors' report for that financial year and the auditors' report on those accounts, or (ii) the summary financial report shall, at least twenty-one clear days before the date of the meeting at which copies of those documents are to be laid in accordance with the provisions of the Jersey Companies Law, be delivered or sent by post to every member and to every holder of the Company's debentures of whose address the Company is aware and to every other person who is entitled to receive notice of meetings of the Company under the provisions of the Jersey Companies Law or the Articles, or in the case of joint holders of any share or debenture to one of the joint holders. Copies need not be sent to a person for whom the Company does not have a current address.

(e) The Directors or the Company by ordinary resolution shall appoint auditors to hold office until the conclusion of the next annual general meeting for any period or periods to examine the accounts of the Company and to report thereon in accordance with the Jersey Companies Law. A Director, officer or any employee of such Director and officer shall not be appointed the auditors of the Company.

2.8 **Notice of meetings and business to be conducted thereat**

(a) ***Notice of meetings***

(i) At least twenty-one clear days' notice shall be given of every annual general meeting and of every general meeting called for the passing of a special resolution and at least fourteen clear days' notice shall be given of all other general meetings.

(ii) A meeting of the Company shall notwithstanding that it is called by shorter notice than that specified above be deemed to have been duly called if it is so agreed in the case of an annual general meeting by all the members entitled to attend and vote thereat and in the case of any other meeting by a majority in number of the members having a right to attend and vote at the meeting being a majority together holding not less than ninety-five per cent in nominal value of the shares giving that right.

(iii) Every notice shall specify the place the day and the time of the meeting and the general nature of the business to be transacted and in the case of an annual general meeting shall specify the meeting as such.

(iv) Subject to the provisions of the Articles and to any restrictions imposed on any shares, notice of every general meeting shall be given to all the members, to all persons entitled to a share in consequence of the death, bankruptcy or incapacity of a member, to the auditors (if any) and to every Director who has notified the secretary in writing of his desire to receive notice of general meetings.

(v) In every notice calling a meeting of the Company there shall appear with reasonable prominence a statement that a member entitled to attend and vote is entitled to appoint one or more proxies to attend and vote instead of him and that a proxy need not also be a member.

(vi) The accidental omission to give notice of a meeting to or the non-receipt of notice of a meeting by any person entitled to receive notice shall not invalidate the proceedings at that meeting.

(vii) Where the Company gives notice of its intention to move a resolution at a general meeting of the Company or a meeting of any class of members, the notice shall include or be accompanied by a statement containing such information and explanation, if any, as is reasonably necessary to indicate the purpose of the resolution and disclosing any material interests of any Director in the matter dealt with by the resolution so far as the resolution affects those interests differently from the interests of other members.

(b) ***business of general meetings***

The business of an annual general meeting shall be to receive and consider the accounts of the Company and the reports of the Directors and auditors, to elect Directors (if proposed), to elect auditors and fix their remuneration, to sanction a dividend (if thought fit so to do) and to transact any other business of which notice has been given.

2.9 **Transfer of shares**

(a) Save as otherwise permitted under the provisions of the Jersey Companies Law, all transfers of shares shall be affected using an instrument of transfer. The instrument of transfer of any share shall be in writing in any usual common form or in any form approved by the HKSE or any form approved by the Directors and may be under hand or, if the transferor or the transferee is a clearing house or its nominee(s) by hand or machine imprinted signature or by such other manner of execution as the board of Directors may approve from time to time. The instrument of transfer of any share shall be signed by or on behalf of the transferor and in the case of an unpaid or partly paid share by the transferee. The transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the register of members in respect thereof. A Shareholder may transfer all or any uncertificated Shares in accordance with the Companies (Uncertificated Securities) (Jersey) Order 1999, as amended.

(b) Fully paid shares of the Company shall be free from any restriction on transfer (except where permitted by the Designated Stock Exchange) and shall also be free from all liens. The Directors may in their absolute discretion and without assigning any reason therefor refuse to register the transfer of a certificated share which is not fully paid up including without limitation a transfer of such shares to a person of whom they do not approve and a transfer of a certificated share on which the Company has a lien. The Directors may also refuse to register the transfer of a share unless the instrument of transfer is lodged at the Company's registered office or at such other place as the Directors may appoint accompanied by the certificate for the shares to which it relates and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer, is in respect of only one class of shares and is in favour of not more than four transferees.

(c) If the Directors refuse to register a transfer of a share they shall within two months after the date on which the instrument of transfer was lodged with the Company send to the proposed transferor and transferee notice of the refusal.

(d) The registration of transfers of shares or of transfers of any class of shares may be suspended at such times and for such periods as the Directors may determine, provided always that such registration shall not be suspended for more than thirty days in any calendar year. Unless otherwise permitted by the Companies (Uncertificated Securities) (Jersey) Order 1999, as amended, the Company may not close any register relating to a participating security without the consent of the approved operator of the relevant system.

(e) Unless otherwise decided by the Directors in their sole discretion no fee shall be charged in respect of the registration of any instrument of transfer or other document relating to or affecting the title to any share. To the extent that the Directors decide to charge a fee in respect of the registration, the fee shall be the same or less than the maximum amount prescribed by the Designated Stock Exchange from time to time.

(f) In respect of any allotment of any share the Directors shall have the same right to decline to approve the registration of any renouncee of any allottee as if the application to allot and the renunciation were a transfer of a share under the Articles.

2.10 **Power for the Company to purchase its own shares**

Subject to the provisions of the Jersey Companies Law, the Company may purchase its own shares (including redeemable shares) in any manner authorised or not prohibited by the Jersey Companies Law, provided always that for so long as the shares are listed on the HKSE, any such purchase shall also comply with the requirements of the Companies Ordinance (Cap.32 of the Laws of Hong Kong) from time to time in force as if the Company was incorporated in Hong Kong unless the HKSE waives this requirement for companies incorporated outside Hong Kong (in which case the Company shall then comply with the requirements of the HKSE from time to time in force, if any).

2.11 **Power for any subsidiary of the Company to own shares in the Company**

There are no provisions in the Articles relating to ownership of shares in the Company by a subsidiary.

2.12 **Dividends and other methods of distribution**

(a) Subject to the provisions of the Jersey Companies Law, the Company may by ordinary resolution declare dividends in accordance with the respective rights of the members but no dividend shall exceed the amount recommended by the Directors. The Directors may also

if they think fit from time to time pay to the members such interim dividends as they may determine. If at any time the share capital of the Company is divided into different classes the Directors may pay such interim dividends in respect of those shares which confer on the holders thereof deferred or non-preferred rights as well as in respect of those shares which confer on the holders thereof preferential rights with regard to dividend. Furthermore, the Directors may also pay half-yearly or at other suitable intervals to be settled by them any dividend which may be payable at a fixed rate. Provided the Directors act bona fide they shall not incur any personal liability to the holders of shares conferring a preference for any damage that they may suffer by reason of the payment of an interim dividend on any shares having deferred or non-preferred rights.

(b) Subject to any particular rights or limitations as to dividend for the time being attached to any shares as may be specified in the Articles or upon which such shares may be issued, all dividends shall be declared apportioned and paid pro rata according to the amounts paid up on the shares on which the dividend is paid (otherwise than in advance of calls) provided that if any share is issued on terms providing that it shall rank for dividend as if paid up (in whole or in part) or as from a particular date (either past or future) such share shall rank for dividend accordingly.

(c) The Directors may before recommending any dividend set aside such sums as they think proper as a reserve or reserves which shall at the discretion of the Directors be applicable for any purpose to which such sums may be properly applied and pending such application may at the like discretion be employed in the business of the Company or be invested in such investments as the Directors may from time to time think fit. The Directors may carry forward to the account of the succeeding year or years any balance which they do not think fit either to dividend or to place to reserve.

(d) A general meeting declaring a dividend may upon the recommendation of the Directors direct that payment of such dividend shall be satisfied wholly or in part by the distribution of specific assets and in particular of paid-up shares or debentures of any other company and the Directors shall give effect to such resolution. Where any difficulty arises in regard to the distribution the Directors may settle the same as they think expedient.

(e) Any resolution declaring a dividend on the shares of any class whether a resolution of the Company in general meeting or a resolution of the Directors or any resolution of the Directors for the payment of a fixed dividend on a date prescribed for the payment thereof may specify that the same shall be payable to the persons registered as the holders of shares of the class concerned at the close of business on a particular date notwithstanding that it may be a date prior to that on which the resolution is passed (or as the case may be that prescribed for payment of a fixed dividend) and thereupon the dividend shall be payable to them in accordance with their respective holdings so registered but without prejudice to the rights inter se in respect of such dividend of transferors and transferees of any shares of the relevant class.

(f) The Directors may deduct from any dividend or other monies payable to any member on or in respect of a share all sums of money (if any) presently payable by him to the Company on account of calls or otherwise in relation to the shares of the Company.

(g) All unclaimed dividends may be invested or otherwise made use of by the Directors for the benefit of the Company until claimed. No dividend shall bear interest as against the Company. Any dividend which has remained unclaimed for a period of ten years from the date of declaration thereof shall if the Directors so resolve be forfeited and cease to remain owing by the Company and shall thenceforth belong to the Company absolutely.

2.13 **Proxies**

(a) On a show of hands or a poll votes may be given either personally or by proxy. The Directors may at the expense of the Company send by post or otherwise to the members instruments of proxy (with or without provision for their return prepaid) for use at any general meeting or at any separate meeting of the holders of any class of shares of the Company either in blank or nominating in the alternative any one or more of the Directors or any other persons. A member may appoint more than one proxy to attend on the same occasion provided that each such proxy is appointed to exercise the rights attached to a different share or shares held by that member. If for the purpose of any meeting invitations to appoint as proxy a person or one or more of a number of persons specified in the invitations are issued at the Company's expense they shall be issued to all (and not to some only) of the members entitled to be sent a notice of the meeting and to vote thereat by proxy.

(b) The instrument appointing a proxy shall be in writing in any common form or as approved by the Directors and shall be under the hand of the appointer or of his attorney duly authorised in writing or if the appointer is a corporation either under seal or under the hand of a duly authorised officer, attorney or other representative. A proxy need not be a member. The instrument appointing a proxy and the power of attorney or other authority (if any) under which it is signed or a notarially certified copy of that power or authority shall:

(i) be deposited at the registered office of the Company or at such other place as is specified for that purpose by the notice convening the meeting not less than forty-eight hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote;

(ii) in the case of a poll taken more than forty-eight hours after it is demanded, be deposited as aforesaid after the poll has been demanded and not less than twenty-four hours before the time appointed for taking the poll; or

(iii) where the poll is not taken forthwith but is taken not more than forty-eight hours after it was demanded, be delivered at the meeting at which the poll was demanded to the chairman or the secretary or to any Director.

(c) An instrument of proxy which is not deposited in the manner so required shall be valid only if it is approved by all the other members who are present at the meeting.

(d) Unless the contrary is stated thereon the instrument appointing a proxy shall be as valid as well for any adjournment of the meeting as for the meeting to which it relates. In addition, a proxy or proxies representing either a member who is an individual or a member which is a corporation shall be entitled to exercise the same powers on behalf of the member which he or they represent as such member could exercise. A vote given in accordance with the terms of an instrument of proxy shall be valid notwithstanding the previous death or insanity of the principal or revocation of the proxy or of the authority under which the proxy was executed, provided that no notice in writing of such death, insanity or revocation shall have been received by the Company at its registered office before the commencement of the meeting or adjourned meeting at which such vote is cast.

2.14 **Calls on shares and forfeiture of shares**

(a) ***Calls on shares***

(i) The Directors may subject to the provisions of the Articles and to any conditions of allotment from time to time make calls upon the members in respect of any monies unpaid on their shares (whether on account of the nominal value of the shares or by way of premium) and each member shall (subject to being given at least fourteen clear days' notice specifying the time or times and place of payment) pay to the Company at the time or times and place so specified the amount called on his shares. A call may be required to be paid by instalments. A call may before receipt by the Company of any sum due thereunder be revoked in whole or in part and payment of a call may be postponed in whole or in part. A person upon whom a call is made shall remain liable for calls made upon him notwithstanding the subsequent transfer of the shares in respect whereof the call was made. A call shall be deemed to have been made at the time when the resolution of the Directors authorising the call was passed. The joint holders of a share shall be jointly and severally liable to pay all calls and all other payments to be made in respect of such share.

(ii) If a sum called in respect of a share is not paid before or on the day appointed for payment thereof the person from whom the sum is due may be required to pay interest on the sum from the day appointed for payment thereof to the time of actual payment at a rate determined by the Directors but the Directors shall be at liberty to waive payment of such interest wholly or in part.

(iii) Any sum which by or pursuant to the terms of issue of a share becomes payable upon allotment or at any fixed date whether on account of the nominal value of the share or by way of premium shall for the purposes of the Articles be deemed to be a call duly made and payable on the date on which by or pursuant to the terms of issue the same becomes payable and in case of non-payment all the relevant provisions of the Articles as to payment of interest, forfeiture, surrender or otherwise shall apply as if such sum had become due and payable by virtue of a call duly made and notified.

(iv) The Directors may on the issue of shares differentiate between the holders as to the amount of calls to be paid and the times of payment.

(v) The Directors may if they think fit receive from any member an advance of monies which have not yet been called on his shares or which have not yet fallen due for payment. Such advance payments shall, to their extent, extinguish the liability in respect of which they are paid. The Company may pay interest on any such advance, at such rate as the Directors think fit, for the period covering the date of payment to the date when the monies would have been due had they not been paid in advance. For the purposes of entitlement to dividends, monies paid in advance of a call or instalment shall not be treated as paid until the due date.

(b) ***forfeiture of shares***

(i) If a member fails to pay any call or instalment of a call on or before the day appointed for payment thereof the Directors may at any time thereafter during such time as any part of such call or instalment remains unpaid serve a notice on him requiring payment of so much of the call or instalment as is unpaid together with any interest which may have accrued and any costs, charges and expenses which may have been incurred by the Company by reason of such non-payment. The notice shall name a further day (not earlier than the expiration of fourteen clear days from the date of service of such notice) on or before which the

payment required by the notice is to be made and the place where payment is to be made and shall state that in the event of non-payment at or before the time appointed and at the place appointed the shares in respect of which the call was made will be liable to be forfeited.

(ii) If the requirements of any such notice as aforesaid are not complied with any share in respect of which such notice has been given may at any time thereafter before payment of all calls and interest due in respect thereof has been made be forfeited by a resolution of the Directors to that effect and such forfeiture shall include all dividends which shall have been declared on the forfeited shares and not actually paid before the forfeiture.

(iii) A forfeited or surrendered share shall become the property of the Company and may be sold, re-allotted or otherwise disposed of either to the person who was before forfeiture or surrender the holder thereof or entitled thereto or to any other person upon such terms and in such manner as the Directors think fit and at any time before a sale, re-allotment or other disposition the forfeiture or surrender may be cancelled on such terms as the Directors think fit.

(iv) A member whose shares have been forfeited or surrendered shall cease to be a member in respect of the forfeited or surrendered shares and shall (if he has not done so already) surrender to the Company for cancellation the certificate for the shares forfeited or surrendered. Notwithstanding the forfeiture or the surrender such member shall remain liable to pay to the Company all monies which at the date of forfeiture or surrender were presently payable by him in respect of those shares with interest thereon at the rate at which interest was payable before the forfeiture or surrender or at such rate as the Directors may determine from the date of forfeiture or surrender until payment, provided that the Directors may waive payment wholly or in part or enforce payment without any allowance for the value of the shares at the time of forfeiture or surrender or for any consideration received on their disposal.

2.15 **Inspection of register of members**

The register of members and any overseas branch register of members as the case may be, shall be open to inspection by the members and other persons in accordance with the Jersey Companies Law. Subject to applicable law, the register of members including any overseas or local or other branch register of members may, after notice has been given by advertisement in an appointed newspaper or any other newspapers in accordance with the requirements of the Designated Stock Exchange, be closed at such times or for such periods not exceeding in the whole thirty (30) days in each year as the Directors may determine and either generally or in respect of any class of shares. The period of 30 days may be subsequently extended in respect of any year in relation to the register of members by an ordinary resolution passed at a general meeting of the Company in that year, provided that the said period shall not be extended beyond 60 days in any year. The Company shall, on demand, furnish any person seeking to inspect the register of members or part of the register of members which is closed with a certificate under the hand of the secretary stating the period for which, and by whose authority, it is closed.

2.16 **Quorum for meetings and separate class meetings**

(a) No business shall be transacted at any general meeting except the adjournment of the meeting unless a quorum of members is present at the time when the meeting proceeds to business. Such quorum shall consist of not less than two members present together holding not less than 50% of the total voting rights of the members but so that not less than two individuals will constitute the quorum.

(b) To every separate meeting of the holders of a class of shares all the provisions of the Articles and of the Jersey Companies Law relating to general meetings of the Company or to the proceedings thereat shall apply mutatis mutandis except that the necessary quorum shall be two persons holding or representing at least one-third in nominal amount of the issued shares of that class but so that if at any adjourned meeting of such holders a quorum as above defined is not present those holders who are present shall be a quorum.

2.17 **Rights of the minorities in relation to fraud or oppression**

There are no provisions in the Articles relating to rights of minority shareholders in relation to fraud or oppression. However, certain remedies are available to shareholders of the Company under Jersey law, as summarised in paragraph 3.6 of this Appendix.

2.18 **Procedures on liquidation**

(a) Subject to any particular rights or limitations for the time being attached to any shares as may be specified in the Articles or upon which such shares may be issued if the Company is wound up, the assets available for distribution among the members shall be applied first in repaying to the members the amount paid up on their shares respectively and if such assets shall be more than sufficient to repay to the members the whole amount paid up on their shares the balance shall be distributed among the members in proportion to the amount which at the time of the commencement of the winding up had been actually paid up on their said shares respectively.

(b) If the Company is wound up, the Company may with the sanction of a special resolution and any other sanction required by the Jersey Companies Law divide the whole or any part of the assets of the Company among the members in specie and the liquidator or where there is no liquidator the Directors may for that purpose value any assets and determine how the division shall be carried out as between the members or different classes of members and with the like sanction vest the whole or any part of the assets in trustees upon such trusts for the benefit of the members as the liquidator or the Directors (as the case may be) with the like sanction determine but no member shall be compelled to accept any assets upon which there is a liability.

2.19 **Other provisions material to the Company or its shareholders**

(a) ***alteration of share capital***

(i) The Company may by special resolution:

(A) increase its share capital by such sum to be divided into shares of such amount and in such currency or currencies as the resolution prescribes;

(B) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;

(C) convert all or any of its fully paid shares into stock, and reconvert that stock into fully paid shares of any denomination;

(D) subject to the provisions of the Jersey Companies Law, sub-divide its shares, or any of them, into shares of smaller amount than is fixed by the Memorandum and the resolution may determine that, as between the shares resulting from the sub-division, any of them may have any preference or advantage as compared with the others;

(E) subject to the provisions of the Jersey Companies Law convert or denominate any of its shares the nominal value of which is expressed in one currency into shares of a nominal value of another currency; and

(F) cancel shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person and diminish the amount of its share capital by the amount of the shares so cancelled.

(ii) Any new shares created on an increase or other alteration of share capital shall be issued upon such terms and conditions as the Company may by ordinary resolution determine.

(iii) Subject to the provisions of the Jersey Companies Law, the Company may by special resolution reduce its share capital and its share premium account in any way.

(b) ***Lien***

(i) The Company shall have a first and paramount lien on every share (not being a fully paid share) for all monies (whether presently payable or not) called or payable at a fixed time in respect of that share and the Company shall also have a first and paramount lien on all shares (other than fully paid shares) registered in the name of a single member for all the debts and liabilities of such member or his estate to the Company whether the period for the payment or discharge of the same shall have actually commenced or not and notwithstanding that the same are joint debts or liabilities of such member or his estate and any other person whether a member or not. The Company's lien (if any) on a share shall extend to all dividends or other monies payable thereon or in respect thereof. The Directors may resolve that any share shall for such period as they think fit be exempt from such provisions.

(ii) The Company may sell in such manner as the Directors think fit any shares on which the Company has a lien but no sale shall be made unless the monies in respect of which such lien exists or some part thereof are or is presently payable nor until fourteen clear days have expired after a notice stating and demanding payment of the monies presently payable and giving notice of intention to sell in default shall have been served on the holder for the time being of the shares or the person entitled thereto by reason of the death, bankruptcy or incapacity of such holder.

(iii) The net proceeds of such sale after payment of the costs of such sale shall be applied in or towards payment or satisfaction of the debt or liability in respect of which the lien exists so far as the same is presently payable and any residue shall (subject to a like lien for debts or liabilities not presently payable as existed upon the shares prior to the sale) be paid to the person entitled to the shares at the time of the sale.

(c) ***Untraceable members***

(i) Subject to the Companies (Uncertificated Securities) (Jersey) Order 1999, as amended, the Company shall have the power to sell, in such manner as the Directors think fit, any shares of a member who is untraceable, but no such sale shall be made unless:

(A) all cheques or warrants in respect of dividends of the shares in question, being not less than three in total number, for any sum payable in cash to the holder of such shares in respect of them sent during the relevant period (which is the period commencing twelve years before the date of publication of the advertisement referred to at (C) below and ending at the expiry of the period referred to at (C) below) in the manner authorised by the Articles have remained uncashed;

(B) so far as it is aware at the end of the relevant period, the Company has not at any time during the relevant period received any indication of the existence of the member who is the holder of such shares or of a person entitled to such shares by death, bankruptcy or operation of law; and

(C) the Company, if so required by the Listing Rules has given notice to, and caused advertisement in newspapers in accordance with the requirements of, the Designated Stock Exchange to be made of its intention to sell such shares in the manner required by the Designated Stock Exchange, and a period of three months or such shorter period as may be allowed by the Designated Stock Exchange has elapsed since the date of such advertisement.

(ii) The net proceeds of the sale will belong to the Company and upon receipt by the Company of such net proceeds it shall become indebted to the former member for an amount equal to such net proceeds. No trust shall be created in respect of such debt and no interest shall be payable in respect of it and the Company shall not be required to account for any money earned from the net proceeds which may be employed in the business of the Company or as it thinks fit. Any such sale shall be valid and effective notwithstanding that the member holding the shares sold is dead, bankrupt or otherwise under any legal disability or incapacity.

(d) ***Capitalisation of profits***

The Directors may with the authority of an ordinary resolution of the Company:

(i) subject as provided below, resolve that it is desirable to capitalise any undistributed profits of the Company (including profits carried and standing to any reserve or reserves) not required for paying any fixed dividends on any shares entitled to fixed preferential dividends with or without further participation in profits or to capitalise any sum carried to reserve as a result of the sale or revaluation of the assets of the Company (other than goodwill) or any part thereof or to capitalise any sum standing to the credit of the Company's share premium account or capital redemption reserve fund;

(ii) appropriate the profits or sum resolved to be capitalised to the members in the proportion in which such profits or sum would have been divisible amongst them had the same been applicable and had been applied in paying dividends and to apply such profits or sum on their behalf either in or towards paying up any amount for the time being unpaid on any shares held by such members respectively or in paying up in full either at par or at such

premium as the said resolution may provide any unissued shares or debentures of the Company such shares or debentures to be allotted and distributed credited as fully paid up to and amongst such members in the proportions aforesaid or partly in one way and partly in the other provided that the share premium account and the capital redemption reserve fund and any unrealised profits may for these purposes only be applied in the paying up of unissued shares to be allotted to members credited as fully paid up;

(iii) make all appropriations and applications of the profits or sum resolved to be capitalised thereby and all allotments and issues of fully paid shares or debentures if any and generally shall do all acts and things required to give effect thereto with full power to the Directors to make such provision by the issue of certificates representing part of a shareholding or fractions of shares or by payments in cash or otherwise as they think fit in the case of shares or debentures becoming distributable in fractions; and

(iv) authorise any person to enter on behalf of all the members entitled to the benefit of such appropriations and applications into an agreement with the Company providing for the allotment to them respectively credited as fully paid up of any further shares or debentures to which they may be entitled upon such capitalisation and any agreement made under such authority shall be effective and binding on all such members.

(e) ***Indemnity of directors***

(i) In so far as the Jersey Companies Law allows, every present or former director, secretary or liquidator of the Company shall be indemnified out of the assets of the Company against any loss or liability incurred by him by reason of being or having been such an individual.

(ii) The Directors may without sanction of the Company in general meeting authorise the purchase or maintenance by the Company for any such individual or former individual of any such insurance as is permitted by the Jersey Companies Law in respect of any liability which would otherwise attach to such individual or former individual.

(f) ***Director's qualification shares***

A director need not be a member of the Company.

(g) ***Corporate members***

If a clearing house (or its nominee(s)), being a corporation, is a member, it may authorise such persons as it thinks fit to act as its representatives at any meeting of the Company or at any meeting of any class of members provided that, if more than one person is so authorised, the authorisation shall specify the number and class of shares in respect of which each such representative is so authorised. Each person so authorised shall be deemed to have been duly authorised without further evidence of the facts and be entitled to exercise the same rights and powers on behalf of the clearing house (or its nominee(s)) as if such person was the registered holder of the shares in the Company held by the clearing house (or its nominee(s)) including the right to vote individually on a show of hands.

3 JERSEY COMPANY LAW

The Company is incorporated in Jersey subject to the Jersey Companies Law and, therefore, operates subject to Jersey law. Set out below is a summary of certain provisions of Jersey company law, although this does not purport to contain all applicable qualifications and exceptions or to be a complete review of all matters of Jersey company law and taxation, which may differ from equivalent provisions in jurisdictions with which interested parties may be more familiar:

3.1 Operations

(a) The Company is restricted from trading in Jersey insofar as, if it wanted to carry out business activities in Jersey (including, in particular, employing staff in Jersey), it may need to obtain a licence pursuant to the Regulation of Undertakings and Development (Jersey) Law 1973, as amended.

(b) The Company is required to file an annual return each year with the Jersey Registrar of Companies. The current filing fee is £150.

3.2 Share capital

(a) ***Alteration of share capital***

The Articles provide substantially similar provisions in relation to alteration of share capital as those set out in the Jersey Companies Law.

(b) ***Share premium accounts***

(i) The Jersey Companies Law sets out what is meant by share premium and what share premium may be used for. If the Company allots shares at a premium (whether for cash or otherwise) where the premiums arise as a result of the issue of a class of limited shares, a sum equal to the aggregate amount or value of those premiums shall be transferred, as and when the premiums are paid up, to a share premium account for that class.

(ii) A share premium account may be applied by the Company for any of the following purposes:

(A) in paying up unissued shares to be allotted to members as fully paid bonus shares;

(B) in writing off the Company's preliminary expenses;

(C) in writing off the expenses of and any commission paid on any issue of shares of the Company;

(D) in the redemption or purchase of shares under Part 11 of the Jersey Companies Law (Redemption and Purchase of Shares); and

(E) in the making of a distribution in accordance with Part 17 of the Jersey Companies Law.

(iii) Subject to the above, the provisions of the Jersey Companies Law relating to the reduction of the Company's share capital apply as if each of its share premium accounts were part of its paid up share capital.

(iv) The Company may also make a distribution in accordance with Part 17 of the Jersey Companies Law (Distributions) from a share premium account (see 3.5 (Dividends and distributions) below).

(c) ***Reductions of capital***

The Jersey Companies Law provides that, subject to confirmation by the Royal Court of Jersey except in certain limited circumstances, the Company may by special resolution reduce its capital accounts in any way. The redemption, purchase or cancellation by a Jersey company of its shares under Part 11 of the Jersey Companies Law is not, for the purposes of Part 12 of the Jersey Companies Law, a reduction of capital.

(d) ***Variation of rights***

The Jersey Companies Law provides for variation of class rights in accordance with the Articles or, where this is not specified in the Articles, with the consent in writing of holders of not less than 2/3rds in nominal value of the issued shares of that class or by a special resolution of the members of that class. The Articles provide for a higher majority for written consent by holders of three-fourths of the issued shares of the class.

(e) ***Treasury shares***

The Jersey Companies Law provides that the Company may hold as treasury shares any of the limited shares that it has redeemed or purchased under the Jersey Companies Law, to the extent that it is not prohibited by the Memorandum or Articles and it is authorised by a resolution of the Company to hold shares as treasury shares.

3.3 **Financial assistance to purchase shares of a company or its holding company**

There is no specific restriction under the Jersey Companies Law on the provision of financial assistance by the Company to another person for the purchase of, or subscription for, its own or its holding company's shares. However, the Articles contain a prohibition on financial assistance (as mentioned above). Accordingly, subject to the restrictions under the Articles, the Company may provide financial assistance if the Directors of the Company consider, in discharging their fiduciary duties, that such assistance can properly be given. The Directors will need to be mindful of their statutory obligations in relation to making distributions (as set out below) if any financial assistance is made by way of a payment to a member in their capacity as a member and such payment constitutes a distribution of the Company's assets.

3.4 **Purchase of shares and warrants by a company and its subsidiaries**

(a) ***Redemptions***

(i) Subject to the provisions of the Jersey Companies Law, the Company may, if authorised by the Articles (which it is), issue or convert existing non-redeemable limited shares, whether issued or not, into, limited shares which are to be redeemed, or are liable to be redeemed, either in accordance with their terms or at the option of the Company or the shareholder. The Articles provide for the issue of redeemable shares (or conversion of non-redeemable shares) on such terms and in such manner as may be determined by special resolution.

(ii) The redeemable limited shares of the Company shall be capable of being redeemed from any source, but only if they are fully paid up.

(iii) The redeemable limited shares are not capable of being redeemed unless all the directors of the Company who authorise the redemption make a statement as to the solvency of the Company at the time of redemption which is forward looking for a twelve month period following the redemption.

(iv) Any shares redeemed under the Jersey Companies Law (other than shares that are, immediately after being purchased or redeemed, held as treasury shares) are treated as cancelled on redemption.

(b) ***Share purchases***

(i) In addition, the Company may purchase its own shares (including any redeemable shares). Such a purchase shall be sanctioned by a special resolution of the Company.

(ii) If the shares are to be purchased otherwise than on a stock exchange, they may only be purchased in pursuance of a contract approved in advance by a resolution of the Company and they shall not carry the right to vote on the resolution sanctioning the purchase or approving the contract.

(iii) If the shares are to be bought on a stock exchange, the resolution authorising the purchase shall specify the maximum number of shares to be purchased, the maximum and minimum prices which may be paid for them and a date, not being later than 18 months after the passing of the resolution, on which the authority to purchase is to expire.

(iv) A purchase also requires the authorising Directors to make a solvency statement in the same terms as that required for a redemption.

(c) ***Warrants***

The Jersey Companies Law does not contain provisions relating to the issue, redemption or purchase of share warrants although the Articles provide that the Directors may issue warrants to subscribe for any class of shares or other securities of the Company, which warrants may be issued on such terms as the Directors may from time to time determine.

3.5 **Dividends and distributions**

Pursuant to the Jersey Companies Law, the Company may make a distribution at any time which shall be debited to the share premium account or any other account other than the capital redemption reserve or nominal capital account provided that the Directors authorising the distribution make a statement as to the solvency of the Company immediately following payment of the distribution which is forward looking for a twelve month period following the payment in the form set out in the Jersey Companies Law.

3.6 **Protection of minorities**

(a) The principle under English case law that, if any wrong is done to a company (e.g. if the directors have acted in breach of duty in some way), the proper claimant in any legal action for breach of such duty is the company itself has been held to form a part of Jersey law. However, in exceptional situations a minority shareholder is permitted to bring a derivative action in a company's name, and on a company's behalf, in particular where:

(i) the majority cannot ratify what has been done (e.g. where the company acts illegally or where a resolution has been improperly passed); or

(ii) where it would be unfair not to allow a derivative action (e.g. where there exists fraud on the minority or unfairly prejudicial conduct of the directors or the majority shareholder(s)).

(b) Under the Jersey Companies Law, a member of the Company may apply to the Royal Court of Jersey for an order that the Company's affairs are being or have been conducted in a manner which is unfairly prejudicial to the interests of its members generally or of some part of its members (including at least the member) or that an actual or proposed act or omission of the Company (including an act or omission on its behalf) is or would be so prejudicial. If the Royal Court of Jersey is satisfied that such an application is well founded, it may make such order as it thinks fit for giving relief in respect of the matters complained of.

(c) Under the Jersey Companies Law, inspectors may be appointed to investigate the affairs of the Company, whether or not the Company is being wound up, on the following basis:

(i) The Minister for Economic Development (the "Minister") or the Jersey Financial Services Commission (the "Commission") may appoint one or more competent inspectors to investigate the affairs of the Company and to report on them as the Minister or the Commission may direct.

(ii) The appointment may be made on the application of the registrar, the Company or a member, officer or creditor of the Company.

(iii) The Minister or the Commission may, before appointing inspectors, require the applicant, other than the registrar, to give security, to an amount not exceeding £10,000 or such other sum as may be prescribed for payment of the costs of the investigation.

(d) Any member of the Company may apply to the Royal Court of Jersey to wind the Company up on just and equitable grounds.

3.7 Management

Except in relation to distributions as mentioned above, the Jersey Companies Law contains no specific restrictions on the power of the Directors to dispose of the assets of the Company. However, under the Jersey Companies Law, the Directors, in exercising their powers and discharging their duties, must (a) act honestly and in good faith with a view to the best interests of the Company; and (b) exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Under the Jersey Companies Law, a Director will not be held to have breached his duties if all of the members of the Company authorise or ratify his act or omission and after the act or omission the Company will be able to discharge its liabilities as they fall due.

3.8 Accounting and auditing requirements

Under the Jersey Companies Law, the Company must keep accounting records which are sufficient to show and explain its transactions and are such as to disclose with reasonable accuracy, at any time, the financial position of the Company. Accounts must be prepared in accordance with generally accepted accounting principles and audited accounts must show a true and fair view of, or be presented fairly in all material respects, so as to show the company's profit or loss for the period covered by the accounts and the state of its affairs at the end of the period.

3.9 Exchange control

There are no exchange control regulations or currency restrictions under Jersey law.

3.10 **Taxation**

(a) Jersey taxation legislation provides that the general basic rate of income tax on the profits of companies regarded as resident in Jersey or having a permanent establishment in Jersey will be zero per cent and that only a limited number of financial services companies shall be subject to income tax at a rate of ten per cent. There is no capital gains tax in Jersey.

(b) A 3% sales tax is generally paid in Jersey on the sale or exchange of goods and services used in Jersey. All businesses with a 12-month taxable turnover in excess of £300,000 must, by Jersey law, register for this tax. For so long as the Company is an international service entity within the meaning of the Goods and Services (Jersey) Law 2007, having satisfied the requirements of the Goods and Services Tax (International Services Entities) (Jersey) Regulations 2008, as amended, a supply of goods or of a service made by or to the Company shall not be a taxable supply for the purposes of Jersey law.

3.11 **Stamp duty on transfers**

There is no stamp duty payable in Jersey on transfers of shares in a Jersey company.

3.12 **Loans to directors**

There is no express provision in the Jersey Companies Law prohibiting the making of loans by the Company to any of the Directors. However, the Articles include comprehensive prohibitions on loans to Directors.

3.13 **Inspection of corporate records**

Under the Jersey Companies Law, the Company's register of members shall during business hours be open to the inspection of a member of the Company without charge and may, on the payment of such sum (if any), not exceeding the published maximum, as the Company may require and on submission to the Company of a declaration under the Jersey Companies Law (as to the use of the copy) require a copy of the register and the Company shall, within 10 days after receipt of the payment and the declaration, cause the copy so required to be available at the place where the register is kept for collection by that person during business hours.

3.14 **Winding up**

(a) The Company may be placed into liquidation under Jersey law by a summary or creditors' winding up, by order of the Royal Court of Jersey on just and equitable grounds or following a declaration "en désastre" by the Royal Court of Jersey pursuant to Jersey bankruptcy law.

(b) The Company may be wound up summarily if the company is solvent and the Directors make a statement to that effect. The winding up would commence upon the members passing a special resolution to wind the Company up summarily.

(c) A creditors' winding up would commence if the members passed a special resolution to wind the Company up by way of creditors' winding up or if the Company is being summarily wound up and becomes insolvent. The Jersey Companies Law set out comprehensive provisions with regard to, amongst other things, meetings of creditors and procedures thereat, appointment, powers and duties of liquidators, the involvement of the Royal Court of Jersey and the disposal and clawback of the Company's property. Pursuant to the Jersey Companies Law, a liquidator must report possible criminal offences relating to the Company, those involved with it or the Directors. As soon as the affairs of the

Company in a creditors' winding up were fully wound up, the liquidator would make up an account of the winding up, showing how it had been conducted and the Company's property had been disposed of, and thereupon call a general meeting of the Company and a meeting of the creditors for the purpose of laying the account before the meetings and giving an explanation of it.

(d) Jersey bankruptcy law allows for the Company to be declared "en désastre" by the Royal Court of Jersey upon an application by the Company or by a creditor with a claim of not less than £3,000 against the Company and if the Royal Court of Jersey considers it just and equitable to do so. The Company would have the ability to recall the declaration if it was not insolvent (i.e. not unable to pay its debts as they fell due). The Royal Court of Jersey would, on such a declaration, appoint the Viscount of Jersey to administer the liquidation of the Company and all the property and assets of the Company would vest in the Viscount. The Viscount has similar powers to a liquidator under a creditor's winding up. In a désastre, the first duty of the Viscount is to liquidate the estate for the benefit of the creditors who prove their claims. Co-extensive with the Viscount's duty to protect and realise the Company's property would be a duty requiring him to investigate the circumstances giving rise to the désastre. The Viscount also has a duty to report possible misconduct. The Viscount would have an obligation to supply all the creditors with a report and accounts relating to the désastre when he had realised all the Company's property.

3.15 **Reconstructions**

Under the Jersey Companies Law, the Company has the power to compromise with creditors and members. Where a compromise or arrangement is proposed between the Company and its creditors, or a class of them, or between the Company and its members, or a class of them, the Royal Court of Jersey may on the application of the Company or a creditor or member of it or, in the case of the Company being wound up, of the liquidator, order a meeting of the creditors or class of creditors, or of the members of the Company or class of members (as the case may be), to be called in a manner as the Royal Court of Jersey directs. If a majority in number representing:

(a) 3/4ths in value of the creditors or class of creditors; or

(b) 3/4ths of the voting rights of the members or class of members,

as the case may be, present and voting either in person or by proxy at the meeting, agree to a compromise or arrangement, the compromise or arrangement, if sanctioned by the Royal Court of Jersey, is binding on:

(a) all creditors or the class of creditors; or

(b) all the members or class of members,

as the case may be and also on the Company or, in the case of the Company in the course of being wound up, on the liquidator and contributories of the Company.

3.16 **Compulsory acquisition**

(a) Under the Jersey Companies Law, if, following a takeover offer (which is defined as "an offer to acquire all the shares, or all the shares of any class or classes, in a company (other than shares which at the date of the offer are already held by the offeror), being an offer on terms which are the same in relation to all the shares to which the offer relates"), an offeror has acquired or contracted to acquire not less than nine-tenths in value of the shares to which the offer relates, the offeror may give notice, in accordance with the Jersey

Companies Law to the holders of those shares to which the offer relates which the offeror has not acquired or contracted to acquire, that it desires to acquire those shares. Subject to the provisions of the Jersey Companies Law, upon service of the notice by the offeror, it shall become entitled and be bound to acquire the shares. A minority shareholder also has a right, pursuant to the Jersey Companies Law, to be bought out by an offeror.

(b) Where a notice is given under the Jersey Companies Law to the holder of any shares the Royal Court of Jersey may, on an application made by the shareholder within 6 weeks from the date on which the notice was given, order that the offeror shall not be entitled and bound to acquire the shares or specify terms of acquisition different from those of the offer.

3.17 **Indemnification**

(a) Subject to the exceptions in (b) below, the Jersey Companies Law prohibits any provision whether contained in the Articles or in a contract with the Company or otherwise whereby the Company or any of its subsidiaries or any other person, for some benefit conferred or detriment suffered directly or indirectly by the Company, agrees to exempt any person from, or indemnify him against, any liability which by law would otherwise attach to him by reason of the fact that he is or was an officer of the Company.

(b) The above prohibitions do not apply to a provision for exempting a person from or indemnifying him against:

(i) any liabilities incurred in defending any proceedings (whether civil or criminal):

(A) in which judgment is given in his favour or he is acquitted; or

(B) which are discontinued otherwise than for some benefit conferred by him or on his behalf or some detriment suffered by him; or

(C) which are settled on terms which include such benefit or detriment and, in the opinion of a majority of the Directors (excluding any Director who conferred such benefit or on whose behalf such benefit was conferred or who suffered such detriment), he was substantially successful on the merits in his resistance to the proceedings;

(ii) any liability incurred otherwise than to the Company if he acted in good faith with a view to the best interests of the Company; or

(iii) any liability incurred in connection with an application made under the Jersey Companies Law in which relief is granted to him by the Royal Court of Jersey; or

(iv) any liability against which the Company normally maintains insurance for persons other than Directors.

4 GENERAL

Ogier, the Company's legal counsel on Jersey law, have sent to the Company a letter of advice summarising certain aspects of Jersey Islands company law . This letter, together with a copy of the Jersey Companies Law, is available for inspection as referred to in the paragraph headed "Documents Available for Public Inspection" in Appendix IX to this prospectus. Any person wishing to have a detailed summary of Jersey company law or advice on the differences between it and the laws of any jurisdiction with which he is more familiar is recommended to seek independent legal advice.

A. FURTHER INFORMATION ABOUT THE GROUP

1. Incorporation of the Company

The Company was incorporated under the name of "United Company RUSAL Limited" in Jersey under the Jersey Companies Law with registered number 94939 as a company with limited liability on 26 October 2006. The Company has established a principal place of business in Hong Kong at 15th Floor, Entertainment Building, 30 Queen's Road Central, Hong Kong and was registered with the Registrar of Companies in Hong Kong on 17 December 2009 as a non-Hong Kong company under Part XI of the Companies Ordinance. Wong Po Ying, Aby of Flat 7A, Block 26, South Horizons, Apleichau, Hong Kong, has been appointed as the authorised representative of the Company for the acceptance of service of process and notices on behalf of our Company in Hong Kong.

The Shareholders of the Company have by resolution dated 26 December 2009 resolved that the Company will be renamed as United Company RUSAL plc, with effect from the admission of the Shares to trading on the Hong Kong Stock Exchange. The change of the Company's name is subject to the registration of the change of the name becoming effective in Jersey and the registration of the change of the Company's name under Part XI of the Companies Ordinance. The Company will publish an announcement on the change of name and the arrangements for the exchange of share certificates, if any, as soon as practicable after the new name has been registered and the registration has taken effect.

As the Company is incorporated in Jersey, its corporate structure and Articles of Association are subject to the relevant laws and regulations of Jersey. A summary of the relevant laws and regulations of Jersey and of the Articles of Association is set out in the section headed "Summary of the Constitution of the Company and Jersey Companies Law" in Appendix VII to this prospectus.

2. Changes in share capital of the Group

The Company

The Company was incorporated with an authorised share capital of US$10,000 ordinary shares of US$1.00 each, of which one subscriber share was issued on incorporation to each of Ogier Nominees (Jersey) Limited and Reigo Nominees (Jersey) Limited. On 27 October 2006, these two shares were transferred to En+ for US$1.00 each. On 2 March 2007, 6,598 shares were issued to En+ and on 26 March 2007, 2,200 shares were allotted to SUAL Partners and 1,200 shares were allotted to Amokenga Holdings. On 8 April 2008, the authorised share capital of the Company was increased, by special resolution for the creation of 1,628 new ordinary shares of US$1.00 each, to 11,628 ordinary shares of US$1.00 each. These 1,628 new ordinary shares were allotted to Onexim on 24 April 2008. On 1 December 2009, the authorised share capital was increased to 13,500 ordinary shares of US$1.00 each and on 7 December 2009, 742 new ordinary shares were allotted to Onexim. On 24 December 2009, the entire authorised and issued share capital of the Company was subdivided by the division of the nominal share capital of each ordinary share from US$1.00 each to US$0.01 each thereby increasing the number of authorised ordinary shares to 1,350,000 and the issued ordinary shares to 1,237,000.

Immediately following completion of the Global Offering (but not taking into account any Shares which may be allotted and issued pursuant to the exercise of the Over-allotment Option) and the Capitalisation Issue, the issued share capital of the Company will be US$151,363,636.46 divided into 15,136,363,646 Shares, all fully paid or credited as fully paid and 4,863,636,354 Shares will remain unissued.

Other than pursuant to the exercise of the Over-allotment Option or in connection with any conversion of warrants into Shares in connection with the Group's debt restructuring arrangements or in connection with any management compensation or incentivisation schemes or agreements, as disclosed in this prospectus, there is no intention to issue any of the authorised but unissued share capital of the Company.

Save for aforesaid and as mentioned in the subsection headed "Resolutions in Writing of our Shareholders passed on 26 December 2009" below, there has been no alteration in the share capital of the Company since its incorporation.

Our subsidiaries

The list of our material subsidiaries is set out in the section headed "Appendix I — Accountants' Report" to this prospectus.

3. Resolutions in Writing of the Shareholders passed on 26 December 2009

Pursuant to the written resolutions passed by the Shareholders on 26 December 2009:

(a) simultaneously with the admission of Shares to trading on the Main Board of the Stock Exchange, the authorised share capital of the Company increased from US$13,500 comprising 1,350,000 ordinary shares of US$0.01 each to US$200,000,000 comprising 20,000,000,000 ordinary shares of US$0.01 each;

(b) conditional upon the conditions for completion of the Global Offering being fulfilled and (i) the Listing Committee of the Hong Kong Stock Exchange granting the listing of, and permission to deal in, the Shares in issue and to be issued as mentioned in this prospectus and (ii) the obligations of the Underwriters under the International Placing Agreement becoming unconditional and not being terminated in accordance with the terms of the International Placing Agreement or otherwise, in each case on or before the date falling 30 days after the date of this prospectus:

(1) the Global Offering and the Directors were authorised to allot and issue, and to approve the transfer of, such number of Shares in connection with the Global Offering and any exercise of the Over-allotment Option as they see fit, on and subject to the terms and conditions stated in this prospectus;

(2) a general unconditional mandate was given to the Directors to allot, issue and deal with Shares (otherwise than pursuant to, or in consequence of, the Global Offering, a rights issue or pursuant to the exercise of any subscription rights which may be granted under any scrip dividend scheme or similar arrangements, any adjustment of rights to subscribe for shares under options and warrants or a special authority granted by the shareholders) with an aggregate nominal value of not more than the sum of:

— 20% of the aggregate nominal value of the share capital of the Company in issue immediately following completion of the Global Offering before any exercise of the Over-allotment Option; and

— the aggregate nominal value of the share capital of the Company repurchased by us (if any);

(3) subject to the Jersey Companies Law, a general unconditional mandate was given to the Directors to exercise all the powers of the Company to repurchase Shares to be listed on the Hong Kong Stock Exchange with a total nominal value of not more than 10% of the aggregate nominal value of the Company's share capital in issue immediately following completion of the Global Offering before any exercise of the Over-allotment Option at:

(i) a maximum price (exclusive of expenses) for each Share of an amount equal to 105 per cent of the average of the middle market quotations as derived from the Main Board of the Hong Kong Stock Exchange for such Shares for the five business days immediately preceding the date of purchase; and

(ii) a minimum price (exclusive of expenses) for each share of the nominal amount of the Share purchased; and

(4) the general unconditional mandate as mentioned in paragraph (2) above was extended by the addition to the aggregate nominal value of the Shares which may be allotted and issued or agreed to be allotted and issued by the Directors pursuant to such general mandate of an amount representing the aggregate nominal value of the Shares purchased by the Company pursuant to the mandate to repurchase Shares referred to in paragraph (3) above.

Each of the general mandates referred to in paragraphs (2) and (3) above will remain in effect until whichever is the earliest of (i) in respect of paragraph (3) only, the date falling 18 months from the date of the passing of the relevant resolution; (ii) the conclusion of the next annual general meeting of our Company; (iii) the expiration of the period within which the next annual general meeting of our Company is required to be held by any applicable law or the Articles of Association of our Company; or (iv) the time when such mandate is revoked or varied by a special resolution of the Shareholders of the Company in a general meeting.

4. Repurchase of the Company's own Shares

This section includes information relating to the repurchase of the Company's Shares, including information required by the Hong Kong Stock Exchange to be included in this prospectus concerning such repurchase.

(a) *Relevant Legal and Regulatory Requirements*

The Listing Rules permit the Shareholders to grant to the Directors a general mandate to repurchase the Shares that are listed on the Hong Kong Stock Exchange. Such mandate is required to be given by way of an ordinary resolution passed by our Shareholders in a general meeting. However, the Jersey Companies Law requires the Shareholders to pass a special resolution to authorise share repurchases.

(b) *Shareholders' Approval*

All proposed repurchases of Shares (which must be fully paid up) must be approved in advance by special resolutions of our shareholders in a general meeting, either by way of general mandate or by specific approval of a particular transaction.

On 26 December 2009, the Directors were granted a general unconditional mandate to repurchase up to 10% of the aggregate nominal value of the share capital of the Company in issue immediately following completion of the Global Offering on the Hong Kong Stock Exchange, before any exercise of the Over-allotment Option, subject to a minimum and maximum price. This mandate will remain in effect until whichever is the earliest of (i) the date falling 18 months from the date of the passing of the resolution; (ii) the conclusion of the next annual general meeting of the Company; (iii) the expiration of the period within which the next annual general meeting of the Company is required to be held by any applicable law or the Articles of Association of the Company; or (iv) the time when such mandate is revoked or varied by a special resolution of the shareholders of the Company in a general meeting (the "**Relevant Period**").

(c) *Source of Funds*

The repurchase of the Shares listed on the Hong Kong Stock Exchange must be funded from the funds legally available for the purpose in accordance with the Memorandum of Association and Articles of Association and the applicable laws of Jersey. The Company may not repurchase the Shares

on the Hong Kong Stock Exchange for consideration other than cash or for settlement otherwise than in accordance with the trading rules of the Hong Kong Stock Exchange. Subject to the foregoing, the Company may make repurchases with funds which would otherwise be available for dividend or distribution or out of an issue of new Shares for the purpose of the repurchase.

(d) *Reasons for Repurchases*

The Directors believe that it is in the Company's and the Shareholders' best interests for the Directors to have general authority to execute repurchases of the Shares in the market. Such repurchases may, depending on market conditions and funding arrangements at the time, lead to an enhancement of the net asset value per Share and/or earnings per Share and will only be made where the Directors believe that such repurchases will benefit the Company and the shareholders.

(e) *Funding of Repurchases*

In repurchasing securities, the Company may only apply funds legally available for such purpose in accordance with the Memorandum of Association and Articles of Association and the Listing Rules.

On the basis of the current financial position of the Company as disclosed in this prospectus and taking into account the current working capital position of the Company, the Directors believe that, if the repurchase mandate were to be exercised in full, it might have a material adverse effect on the working capital and/or the gearing position as compared with the position disclosed in this prospectus. However, the Directors do not propose to exercise the repurchase mandate to such an extent as would, in the circumstances, have a material adverse effect on the working capital requirements of the Company or the gearing levels which in the opinion of the Directors are from time to time appropriate for us.

(f) *Status of Repurchased Shares*

All repurchased Shares (whether effected on the Hong Kong Stock Exchange or otherwise) will be automatically delisted and the certificates for those Shares must be cancelled and destroyed. Under the Jersey Companies Law, a company's repurchased shares (other than shares that are, immediately after being purchased or redeemed, held as treasury shares) shall be treated as cancelled and the amount of the company's issued share capital shall be diminished by the nominal value of the repurchased shares accordingly although the authorised share capital of the company will not be reduced.

(g) *Suspension of Repurchase*

Pursuant to the Hong Kong Listing Rules, the Company may not make any repurchase of Shares after a price sensitive development has occurred or has been the subject of a decision until such time as the price sensitive information has been made publicly available. In particular, under the requirements of the Hong Kong Listing Rules in force as of the date hereof, during the period of one month immediately preceding the earlier of: (i) the date of the Board meeting (as such date is first notified to the Hong Kong Stock Exchange in accordance with the Listing Rules) for the approval of the Company's results for any year, half year, quarterly or any other interim period (whether or not required under the Listing Rules); and (ii) the deadline for the Company to publish an announcement of the Company's results for any year or half-year under the Hong Kong Listing Rules, or quarterly or any other interim period (whether or not required under the Hong Kong Listing Rules), and in each case ending on the date of the results announcement, the Company may not repurchase Shares on the Hong Kong Stock Exchange unless the circumstances are exceptional.

(h) *Procedural and Reporting Requirements*

As required by the Hong Kong Listing Rules, repurchases of Shares on the Hong Kong Stock Exchange or otherwise must be reported to the Hong Kong Stock Exchange not later than 30 minutes before the earlier of the commencement of the morning trading session or any pre-opening session on the Hong Kong Stock Exchange business day following any day on which the Company may make a purchase of Shares. The report must state the total number of Shares purchased the previous day, the purchase price per Share or the highest and lowest prices paid for such purchases. In addition, the Company's annual report is required to disclose details regarding repurchases of Shares made during the year, including a monthly analysis of the number of shares repurchased, the purchase price per Share or the highest and lowest price paid for all such purchases, where relevant, and the aggregate prices paid.

(i) *Connected Persons*

A company is prohibited from knowingly repurchasing securities on the Hong Kong Stock Exchange from a connected person and a connected person shall not knowingly sell its securities to the company on the Hong Kong Stock Exchange.

(j) *Share Capital*

The exercise in full of the current repurchase mandate, on the basis of 15,136,363,646 Shares in issue immediately after completion of the Global Offering and the Capitalisation Issue before any exercise of the Over-allotment Option, could accordingly result in up to 1,513,636,364 Shares being repurchased by the Company during the Relevant Period.

(k) *General*

None of the Directors nor, to the best of their knowledge having made all reasonable enquiries, any of their associates (as defined in the Listing Rules) currently intends to sell any of their Shares to the Company or its subsidiaries.

The Directors have undertaken to the Hong Kong Stock Exchange that, so far as the same may be applicable, they will exercise the repurchase mandate in accordance with the Listing Rules, the Memorandum of Association and Articles of Association, the Jersey Companies Law and any other applicable laws of Jersey.

If, as a result of any repurchase of the Company's Shares, a shareholders' proportionate interest in our voting rights is increased, such increase will be treated as an acquisition for the purposes of the Hong Kong Code on Takeovers and Mergers. Accordingly, a shareholder or a group of shareholders acting in concert could obtain or consolidate control of the Company and become obliged to make a mandatory offer in accordance with rule 26 of the Hong Kong Code on Takeovers and Mergers. The Directors are not aware of any consequences of repurchases which would arise under the Hong Kong Code on Takeovers and Mergers.

No connected person as defined by the Listing Rules has notified the Company that he or it has a present intention to sell his or its Shares to the Company, or has undertaken not to do so, if the repurchase mandate is exercised.

B. FURTHER INFORMATION ABOUT THE BUSINESS OF THE GROUP

1. Summary of material contracts

The Group has entered into the following contracts (not being contracts entered into in the ordinary course of business) within the two years immediately preceding the date of this prospectus that are or may be material:

(a) A guarantee agreement dated 2 December 2009 (the "**Guarantee Agreement**") entered into between the Company, the original guarantors named therein including RUSAL Armenal, CJSC, Bencroft Financial Ltd., Tameko Developments Inc., United Company RUSAL Aluminium Limited (formerly known as W.A.C. Worldwide Aluminum Co Ltd.), RTI Limited (formerly known as Rusal Trading International Ltd.), RUSAL Limited (formerly known as Rusal Holding Limited), the Company, Eurallumina SpA, Noirieux-Consultadoria E Serviços Sociedade Unipessoal Lda, Khakas Aluminium Smelter, LLC, RUSAL Bratsk OJSC, RUSAL Krasnoyarsk OJSC, RUSAL Novokuznetsk OJSC, RUSAL Sayanogorsk OJSC, RUSAL Taishet LLC, Russian Aluminium OJSC, Siberian-Urals Aluminium Company OJSC (or OJSC SUAL), United Company RUSAL-Trading House OJSC (formerly known as OJSC Russian Aluminium Management), Kubikenborg Aluminium AB, RS International GmbH (formerly known as Rusal Services GmbH), RUSAL Marketing GmbH, Aluminum Group Ltd., United Company Rusal Alumina Limited (formerly known as Worldwide Alumina (Cyprus) Co Ltd.), United Company RUSAL Foil Limited, United Company RUSAL Energy Limited, Limerick Alumina Refining Limited, Friguia S.A., RUSAL Achinsk, OJSC, Mykolayiv Alumina Refinery Company Limited, Rusal Financial Center Limited and Bauxite & Alumina Mining Venture Limited (the "**Original Guarantors**" and each of them "**Original Guarantor**"), and BNP Paribas (Suisse) SA (as security agent) pursuant to which, among others, each Original Guarantor guarantees to the Security Agent the punctual performance by each other Original Guarantor of certain Original Guarantor's obligations under the Guarantee Agreement and the punctual performance by the Company of certain obligations of the Company under the Guarantee Agreement;

(b) A master warrant agreement dated 7 December 2009 between the Company and the warrantholders named therein including ABN AMRO Bank N.V., Banca Nazionale del Lavoro S.p.A., Banco Bilbao Vizcaya Argentaria S.A., London Branch, Banco Finantia SA, Bank of Baroda, London, Bank of China (Eluosi), Bank of Taiwan, Offshore Banking Branch, Banque Cantonale Vaudoise, Barclays Bank plc, BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse Aktiengesellschaft, Bayerische Hypo- und Vereinsbank AG, Bayerische Landesbank, BBVA Ireland p.l.c., Black Sea Trade and Development Bank, BlueCrest Mercantile BV, BNP Paribas (Suisse) SA, Calyon, Chang Hwa Commercial Bank Ltd, Offshore Banking Branch, China Development Bank Corporation, Citibank N.A., Bahrain Branch, Citibank N.A., London Branch, Commerzbank (Eurasia) SAO, CREDIT SUISSE AG, DekaBank Deutsche Girozentrale Luxembourg S.A. + Credits Luxembourg, Deutsche Bank AG, Amsterdam Branch, DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, Erste Group Bank AG, First Commercial Bank, GarantiBank International N.V., HSBC Bank plc, HSBC Bank plc, Investment Banking Division, HSH Nordbank AG, London Branch, ICICI Bank Eurasia LLC, IKB Deutsche Industriebank AG, ING Bank N.V., Intesa Sanpaolo, London Branch, Intesa Sanpaolo, Paris Branch, Joint-Stock company "Banque Societe Generale Vostok", JPMorgan Securities Ltd, KBC Bank NV, KBC Finance Ireland, KfW IPEX-Bank GmbH, Landesbank Baden-Württemberg, Medicapital Bank Plc, Mega International Commercial Bank, Mizuho Corporate Bank, Ltd., MKB BANK ZRT., Morgan Stanley & Co. International PLC, N M Rothschild & Sons Limited, Natixis, Norddeutsche Landesbank Luxembourg S.A., Nordea Bank AB (Publ.), OJSC Nordea Bank (formerly known as JSB

"ORGRESBANK"), Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A., Raiffeisen Landesbank Oberösterreich AG (Linz), Raiffeisen Zentralbank Österreich Aktiengesellschaft, Savings Bank of the Russian Federation (Sberbank), Skandinaviska Enskilda Banken AB (publ), SOCIETE GENERALE, Standard Chartered Bank, State Bank of India, Antwerp, Sumitomo Mitsui Banking Corporation, Sumitomo Mitsui Banking Corporation Europe Limited, The Bank of Tokyo-Mitsubishi UFJ, Ltd., The Shanghai Commercial & Savings Bank Ltd., Offshore Banking Branch, UBS AG, London Branch, VTB Bank (Deutschland) AG, VTB Bank (France) SA, VTB Capital plc (formerly VTB Bank Europe plc), WestLB AG, ZAO Raiffeisenbank and ZAO Unicredit Bank setting out the terms and conditions on which the Company will issue the fee warrants and equity compensation warrants and related matters;

(c) An international override agreement dated 7 December 2009 (the "**International Override Agreement**") entered into between the Company, the companies listed in Part I of Schedule I therein (as borrowers) (the "**Borrowers**") including RUSAL Armenal CJSC, Tameko Developments Inc., United Company RUSAL Aluminium Limited (formerly known as W.A.C. Worldwide Aluminum Co Limited), the Company, Eurallumina SpA, Noirieux-Consultadoria E Serviços Sociedade Unipessoal, Lda, Khakas Aluminium Smelter LLC, Boguchansk Aluminium Smelter CJSC, RUSAL Bratsk OJSC, RUSAL Krasnoyarsk OJSC, RUSAL Sayanogorsk OJSC, RUSAL Taishet LLC, Siberian-Urals Aluminium Company OJSC (or OJSC SUAL) and Kubikenborg Aluminium AB, the companies listed in Part I of Schedule I therein (as guarantors) (the "**Original Guarantors**") including RUSAL Armenal CJSC, Bencroft Financial Ltd., Tameko Developments Inc., United Company RUSAL Aluminium Limited (formerly known as W.A.C. Worldwide Aluminum Co Limited), RTI Limited (formerly known as Rusal Trading International Ltd.), RUSAL Limited (formerly known as Rusal Holding Limited), the Company, Eurallumina SpA, Noirieux-Consultadoria E Serviços Sociedade Unipessoal Lda, Khakas Aluminium Smelter LLC, RUSAL Bratsk OJSC, RUSAL Krasnoyarsk OJSC, RUSAL Novokuznetsk OJSC, RUSAL Sayanogorsk OJSC, RUSAL Taishet LLC, Russian Aluminium OJSC, Siberian-Urals Aluminium Company OJSC (or OJSC SUAL), United Company RUSAL-Trading House OJSC (formerly known as OJSC Russian Aluminium Management), Kubikenborg Aluminium AB, RS International GmbH (formerly known as Rusal Services GmbH), RUSAL Marketing GmbH, Aluminum Group Ltd., United Company Rusal Alumina Limited (formerly known as Worldwide Alumina (Cyprus) Co Ltd.), United Company RUSAL Foil Limited, United Company RUSAL Energy Limited, Limerick Alumina Refining Limited, Friguia S.A., RUSAL Achinsk, OJSC, Mykolayiv Alumina Refinery Company Limited, Rusal Financial Center Limited and Bauxite & Alumina Mining Venture Limited (the Borrowers and Original Guarantors, collectively, the "**Original Obligors**"), the financial institutions listed in Part III of Schedule I therein (as lenders) (the "**Financial Institutions**") including DekaBank Deutsche Girozentrale Luxembourg S.A., Landesbank Baden-Württemberg, BBVA, Erste Group Bank AG, Sumitomo Mitsui Banking Corporation, Morgan Stanley, The Bank of Tokyo-Mitsubishi UFJ, Ltd., HSBC Bank plc, HSBC Bank plc, Investment Banking, Intesa Sanpaolo Bank Ireland PLC, Intesa Sanpaolo, London Branch, Banco Finantia SA, Calyon, NATIXIS, ING Bank N.V., BAWAG P.S.K. Bank für Arbeit und Wirtscharft und Österreichische Postsparkasse Aktiengesellschaft, Mizuho, Commerzbank Aktiengesellschaft, Bayerische Landesbank, KBC Bank NV, IKB Deutsche Industriebank AG, Credit Suisse, DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfrut am Main, Raiffeisen Zentralbank Österreich Aktiengesellschaft, BNP Paribas (Suisse) SA, KfW IPEX-Bank GmbH, ABN AMRO Bank N.V., VTB Bank (Deutschland) AG, Raiffeisen Landesbank Oberösterreich AG Linz, Citibank, Bahrain Branch, N M Rothschild & Sons Limited, HSH Nordbank AG, London Branch, Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A., Norddeutsche Landesbank Luxembourg S.A., Banque Cantonale Vaudoise, State Bank of India, ICICI Bank Eurasia LLC, Mega International Commercial Bank, Medicapital Bank, MKB Bank Zrt., Bayerische

Hypo-und Vereinsbank AG, Barclays, Citibank, London Branch, Natixis, Societe Generale, J.P. Morgan Chase Bank, N.A., UBS AG, London Branch, China Development Bank, BNP Paribas SA, BBVA Ireland plc, BTMU (Europe) Limited, Sumitomo Mitsui Banking Corporation Europe Limited, Intesa Sanpaolo, Paris Branch, Deutsche Bank AG, Amsterdam Branch, West LB AG, BlueCrest Mercantile BV, Bank of China, Sumitomo Mitsui Banking Corp, Shanghai Commercial Bank, Bank of Baroda, VTB Capital plc (formerly VTB Europe plc), Chang Hwa Commercial Bank, Offshore Banking Branch, First Commercial Bank, GarantiBank International N.V., Bank of Taiwan, Skandinaviska Enskilda Banken AB (publ), Sberbank, ING Bank (EURASIA) ZAO, KBC Finance Ireland, Banque Societe Generale Vostok, Standard Chartered Bank, NORDEA BANK AB (Publ.), OJSC Nordea Banks (formerly JSB "ORGRESBANK"), VTB Bank (France) SA, Black Sea Trade and Development Bank, BNP Paribas ZAO, ZAO Unicredit Bank, ZAO Raiffeisenbank, WestLB AG, OJSC Nordea Bank, Banca Nazionale del Lavoro S.p.A., Commerzbank (Eurasija) SAO and Banco Nazionale del Lavoro S.p.A., the facility representatives listed in Part IV of Schedule 1 therein (the "**Facility Representatives**") including Natexis Banques Populaires, ABN AMRO Bank N.V. (London Branch), BNP Paribas SA, Morgan Stanley International Limited, BNP Paribas, Barclays Bank PLC, Bayerische Hypo- und Vereinsbank AG, ING Bank NV, Standard Chartered Bank and Bayerische Landesbank, the existing security agents listed in Part V of Schedule 1 therein (the "**Existing Security Agents**") including Natexis Banques Populaires, ABN AMRO Bank N.V., London Branch, BNP Paribas SA, Bayerische Hypo-und Vereinsbank AG and Standard Chartered Bank and BNP Paribas (Suisse) SA (as administrative agent and security agent) pursuant to which during the override period, the Financial Institution and any person which has become a party pursuant to the terms of the International Override Agreement agreed to continue to make available their facilities and amend, vary, modify, waive, override, replace and supplement certain terms of the existing finance documents.

(d) An intercreditor agreement dated 7 December 2009 (the "**Intercreditor Agreement**") entered into between the Company, the Original Obligors, the Financial Institutions, the Facility Representatives, the Existing Security Agents and BNP Paribas (Suisse) SA (as administrative agent and security agent) which governed the intercreditor relations during the term of the International Override Agreement, including in relation to enforcement of security, the taking of any enforcement actions against the Company and certain of its subsidiaries and sharing of proceeds.

(e) An instrument constituting warrants to subscribe for Shares in the Company dated 7 December 2009 setting out the terms of fee warrants to subscribe for shares in the Company, made by way of deed by the Company;

(f) A cornerstone placing agreement dated 23 December 2009 entered into between the Company, Kuok Hock Nien, BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which Kuok Hock Nien agreed to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$2,000,000 at the Offer Price;

(g) A cornerstone placing agreement dated 23 December 2009 entered into between the Company, Kerry Trading Co. Limited ("Kerry Trading"), BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which Kerry Trading agreed to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$9,000,000 at the Offer Price;

(h) A cornerstone placing agreement dated 23 December 2009 entered into between the Company, Cloud Nine Limited ("Cloud Nine"), BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which Cloud Nine agreed to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$4,500,000 at the Offer Price;

(i) A cornerstone placing agreement dated 23 December 2009 entered into between the Company, Twin Turbo Limited ("Twin Turbo"), BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which Twin Turbo agreed to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$4,500,000 at the Offer Price;

(j) A cornerstone placing agreement dated 25 December 2009 entered into between the Company, State Corporation "Bank for Development and Foreign Economic Affairs (Vnesheconombank)" ("VEB"), BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which VEB agreed to subscribe for 477,090,000 Offer Shares at the Offer Price;

(k) A cornerstone placing agreement dated 25 December 2009 entered into between the Company, NR Investments Limited ("NR Investments"), BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which NR Investments agreed to subscribe for (i) such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$50,000,000 at the Offer Price, and such number of Global Depositary Receipts (rounded down to the nearest whole number of Global Depositary Receipts) as may be purchased with US$50,000,000 at the Offer Price or (ii) if the Global Depositary Receipts are not listed on the Professional Segment of Euronext Paris on the Listing Date, such number of Offer Shares (in the form of Shares) rounded down to the nearest board lot) as may be purchased with the Hong Kong dollar equivalent of US$100,000,000 at the Offer Price; and

(l) A cornerstone placing agreement dated 28 December 2009 entered into between the Company, Paulson & Co. Inc. ("Paulson"), BNP Paribas Capital (Asia Pacific) Limited, Credit Suisse (Hong Kong) Limited, BOCI Asia Limited and Merrill Lynch International pursuant to which Paulson agreed to subscribe for such number of Offer Shares (in the form of Shares) (rounded down to the nearest board lot) as may be purchased with HK$775 million (which is equivalent to US$100 million at the exchange rate of US$1.00 = HK$7.75) at the Offer Price.

2. Intellectual property rights

As of the Latest Practicable Date, the Group has registered or has applied for the registration of the following intellectual property rights.

A. *Trademarks*

As at the Latest Practicable Date, the Group is the registered owner of the following trademarks that are material to the operation of its business:

List of Registered Material Trademarks as of the Latest Practicable Date

No	Material Trademark	Registration number	Country*	Classes	Registration period	Registered owner
1	РУСАЛ	798187	Madrid registration for the following countries: AM, AZ, BY, CZ, KG, KZ, LV, MD, PL, SK, TJ, UA EE, GE, JP, LT, TM, UZ	1, 2, 6, 7, 12, 16, 21	10 years starting from 21 January 2003	OJSC "United Company RUSAL-Trading House"
2	РУСАЛ	798186	Madrid registration for the following countries: KZ, TJ EE, GE, JP, LT, TM, UZ AM, AZ, BY, CZ, KG, LV, MD, PL, SK, UA	1, 2, 6, 7, 12, 16, 21	10 years starting from 21 January 2003	OJSC "United Company RUSAL-Trading House"
3	RUSAL	805432	Madrid registration for the following countries: KZ, TJ AU, EE, GE, JP, LT, TM, TR, UZ AM, AZ, BY, CH, CN, CZ, KG, LV, MD, PL, SK, UA, VN	1, 2, 6, 7, 12, 16, 21	10 years starting from 21 January 2003	OJSC "United Company RUSAL-Trading House"
4	RUSAL	798188	Madrid registration for the following countries: KZ, TJ AU, EE, GE, JP, LT, TM, UZ AM, AZ, BY, CN, CZ, KG, LV, MD, PL, SK, UA	1, 2, 6, 7, 12, 16, 21	10 years starting from 21 January 2003	OJSC "United Company RUSAL-Trading House"
5		788131	Madrid registration for the following countries: KZ, TJ AU, EE, GE, JP, LT, TM, UZ AM, AZ, BY, CN, CZ, KG, LV, MD, PL, SK, UA	1, 2, 6, 7, 12, 16, 17, 21	10 years starting from 5 August 2002	OJSC "United Company RUSAL-Trading House"

No	Material Trademark	Registration number	Country*	Classes	Registration period	Registered owner
6	sual	813004	Madrid registration for the following countries: DZ, EG, KZ, LR, SD, TJ AG, AU, DK, EE, FI, GB, GE, GR, IE, IS, JP, LT, NO, SE, SG, TM, TR, UZ, ZM AL, AM, AT, AZ, BA, BG, BT, BX, BY, CH, CN, CU, CZ, DE, ES, FR, HR, HU, IT, KE, KG, KP, LI, LS, LV, MA, MC, MD, MK, MN, MZ, PL, PT, RO, RS, SI, SK, SL, SM, SZ, UA, VN GB, IE, SG	1, 6, 35, 40, 42	10 years starting from 27 March 2003	OJSC SUAL
7		2701068	European Community trademark	1, 6, 7, 12, 16, 21	10 years starting from 16 May 2002	OJSC "United Company RUSAL-Trading House"
8		2721348	European Community trademark	1, 6, 7, 12, 16, 21	10 years starting from 29 May 2002	OJSC "United Company RUSAL-Trading House"
9	RUSAL	2721355	European Community trademark	1, 6, 7, 12, 16, 21	10 years starting from 29 May 2002	OJSC "United Company RUSAL-Trading House"
10	RUSAL management	2736908	European Community trademark	1, 6, 7, 12, 16, 21	10 years starting from 13 June 2002	OJSC "United Company RUSAL-Trading House"
11	РУСАЛ	227928	Russia	1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 32, 33, 34, 43, 44, 45	10 years starting from 21 January 2002	OJSC "United Company RUSAL-Trading House"
12	РУСАЛ	227929	Russia	1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 32, 33, 34, 43, 44, 45	10 years starting from 21 January 2002	OJSC "United Company RUSAL-Trading House"

No	Material Trademark	Registration number	Country*	Classes	Registration period	Registered owner
13	RUSAL	227930	Russia	1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 32, 33, 34, 43, 44, 45	10 years starting from 21 January 2002	OJSC "United Company RUSAL-Trading House"
14	RUSAL	227931	Russia	1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 32, 33, 34, 43, 44, 45	10 years starting from 21 January 2002	OJSC "United Company RUSAL-Trading House"
15		218285	Russia	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45	10 years starting from 21 January 2002	OJSC "United Company RUSAL-Trading House"
16	SUAL	154226	Russia	1, 6, 40, 42	20 years starting from 22 November 1996	OJSC SUAL
17		03329803	USA	6, 7, 12, 16, 17, 21	10 years starting from 22 July 2002	OJSC "United Company RUSAL-Trading House"
18		02839545	USA	6, 7, 12, 16, 17, 21	10 years starting from 22 July 2002	OJSC "United Company RUSAL-Trading House"
19	RUSAL	02839544	USA	6, 7, 12, 16, 17, 21	10 years starting from 22 July 2002	OJSC "United Company RUSAL-Trading House"
20	SUAL	02999609	USA	1, 6, 21, 35, 40, 42	10 years starting from 23 May 2003	JSC "Siberian-Urals Aluminum Company"

No	Material Trademark	Registration number	Country*	Classes	Registration period	Registered owner
21	(A) (B)	301252467	HK	1, 2, 6, 7, 12, 16, 21	Due for renewal by 4 December 2018	OJSC "United Company RUSAL-Trading House"
22	(A) 俄鋁 (B) 俄铝 (C) 俄鋁 (D) 俄铝	301255833	HK	1, 2, 6, 7, 12, 16, 21	Due for renewal by 10 December 2018	OJSC "United Company RUSAL-Trading House"
23	(A) RUSAL (B) RUSAL	301252476	HK	1, 2, 6, 7, 12, 16, 21	Due for renewal by 4 December 2018	OJSC "United Company RUSAL-Trading House"

* Note The abbreviations for country names used in the table are:

DZ — Algeria; EG — Egypt; KZ — Kazakhstan; LR — Liberia; SD — Sudan; TJ — Tajikistan; AG — Antigua and Barbuda; AU — Australia; DK — Denmark; EE — Estonia; FI — Finland; GB — United Kingdom; GE — Georgia; GR — Greece; IE — Ireland; IS — Iceland; JP — Japan; LT — Lithuania; NO — Norway; SE — Sweden; SG — Singapore; TM — Turkmenistan; TR — Turkey; UZ — Uzbekistan; ZM — Zambia; AL — Albania; AM — Armenia; AT — Austria; AZ — Azerbaijan; BA — Bosnia and Herzegovina; BG — Bulgaria; BT — Bhutan; BX — Benelux (being Belgium, the Netherlands and Luxembourg); BY — Belarus; CH — Switzerland; CN — China; CU — Cuba; CZ — Czech Republic; DE — Germany; ES — Spain; FR — France; HR — Croatia; HU — Hungary; IT — Italy; KE — Kenya; HK — Hong Kong; KG — Kyrgyzstan; KP — Democratic People's Republic of Korea; LI — Liechtenstein; LS — Lesotho; LV — Latvia; MA — Morocco; MC — Monaco; MD — Moldova, Republic of; MK — Macedonia, The former Yugoslav Republic of; MN — Mongolia; MZ — Mozambique; PL — Poland; PT — Portugal; RO — Romania; RS — Serbia; SI — Slovenia; SK — Slovakia; SL — Slovenia; SM — San Marino; SZ — Swaziland; USA — United States of America; UA — Ukraine; VN — Viet Nam; GB — United Kingdom; IE — Ireland; and SG — Singapore.

B. ***Domain Names***

As at the Latest Practicable Date, the Group has registered the following domain names that are material to the operation of its business:

No.	Material Domain Name	Registered Owner	Expiration date
1	rusal.ch	ALUMTRADE Limited	1 May 2010
2	rusal.it	ALUMTRADE Limited	7 May 2010
3	sual-international.ru	OJSC "United Company RUSAL — Trading House"	24 January 2010

No.	Material Domain Name	Registered Owner	Expiration date
4	sualinternational.ru	OJSC "United Company RUSAL — Trading House"	24 January 2010
5	rusalgm.ru	OJSC "United Company RUSAL — Trading House"	14 February 2010
6	russal.ru	OJSC "United Company RUSAL — Trading House"	14 February 2010
7	russianalum.ru	OJSC "United Company RUSAL — Trading House"	15 February 2010
8	rusaluminium.ru	OJSC "United Company RUSAL — Trading House"	16 February 2010
9	russian-aluminium.ru	OJSC "United Company RUSAL — Trading House"	16 February 2010
10	boulygine.ru	OJSC "United Company RUSAL — Trading House"	19 February 2010
11	rusalgm.com	OJSC "United Company RUSAL — Trading House"	19 February 2010
12	bulygin.ru	OJSC "United Company RUSAL — Trading House"	20 February 2010
13	rusal.org	OJSC "United Company RUSAL — Trading House"	21 February 2010
14	agk.ru	OJSC "United Company RUSAL — Trading House"	1 March 2010
15	kesmsk.ru	OJSC "United Company RUSAL — Trading House"	6 March 2010
16	saz2.ru	OJSC "United Company RUSAL — Trading House"	7 April 2010
17	veritum.ru	OJSC "United Company RUSAL — Trading House"	14 April 2010
18	resal.ru	OJSC "United Company RUSAL — Trading House"	30 April 2010
19	rual.ru	OJSC "United Company RUSAL — Trading House"	1 May 2010
20	rusal.ru	OJSC "United Company RUSAL — Trading House"	1 May 2010
21	al2all.ru	OJSC "United Company RUSAL — Trading House"	24 May 2010
22	al4all.ru	OJSC "United Company RUSAL — Trading House"	24 May 2010
23	aluminum.ru	OJSC "United Company RUSAL — Trading House"	4 June 2010
24	sual.ru	OJSC "United Company RUSAL — Trading House"	4 June 2010
25	parkdruzei.ru	OJSC "United Company RUSAL — Trading House"	9 June 2010
26	parkproektov.ru	OJSC "United Company RUSAL — Trading House"	9 June 2010
27	glinozemtrade.ru	OJSC "United Company RUSAL — Trading House"	22 June 2010
28	ramanagement.ru	OJSC "United Company RUSAL — Trading House"	22 June 2010
29	komiproject.com	OJSC "United Company RUSAL — Trading House"	28 June 2010
30	komiproject.ru	OJSC "United Company RUSAL — Trading House"	28 June 2010
31	alumisha.ru	OJSC "United Company RUSAL — Trading House"	26 July 2010
32	sayana.ru	OJSC "United Company RUSAL — Trading House"	1 August 2010
33	aluminakomi.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
34	aluminiumkomi.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
35	komialumina.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
36	komialuminium.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
37	komialuminum.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
38	sual-group.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
39	sualgroup.ru	OJSC "United Company RUSAL — Trading House"	10 August 2010
40	rshg.ru	OJSC "United Company RUSAL — Trading House"	7 September 2010
41	aluminiumleader.com	OJSC "United Company RUSAL — Trading House"	2 October 2010
42	rusengineering.ru	OJSC "United Company RUSAL — Trading House"	24 October 2010
43	sual-holding.ru	OJSC "United Company RUSAL — Trading House"	27 October 2010
44	it-force.ru	OJSC "United Company RUSAL — Trading House"	14 November 2010
45	it4com.ru	OJSC "United Company RUSAL — Trading House"	14 November 2010
46	aluminum.su	OJSC "United Company RUSAL — Trading House"	27 November 2010
47	rusal.su	OJSC "United Company RUSAL — Trading House"	27 November 2010
48	ucrusal.ru	OJSC "United Company RUSAL — Trading House"	27 November 2010
49	alkomi.ru	OJSC "United Company RUSAL — Trading House"	30 November 2010

No.	Material Domain Name	Registered Owner	Expiration date
50	alumko.ru	OJSC "United Company RUSAL — Trading House"	30 November 2010
51	koalum.ru	OJSC "United Company RUSAL — Trading House"	30 November 2010
52	komial.ru	OJSC "United Company RUSAL — Trading House"	30 November 2010
53	rusalum.ru	OJSC "United Company RUSAL — Trading House"	10 December 2010
54	ucrusal.com	OJSC "United Company RUSAL — Trading House"	28 December 2010
55	unitedcompanyrusal.ru	OJSC "United Company RUSAL — Trading House"	28 December 2010
56	acg.com.gn	RUSAL Global Management B.V.	N/A
57	rual.com	RUSAL Global Management B.V.	15 January 2010
58	rusal.com.jm	RUSAL Global Management B.V.	13 May 2010
59	rusal.md	RUSAL Global Management B.V.	10 June 2010
60	ucr.md	RUSAL Global Management B.V.	10 June 2010
61	ucrusal.md	RUSAL Global Management B.V.	10 June 2010
62	rusal.vn	RUSAL Global Management B.V.	8 September 2010
63	rusal.sg	RUSAL Global Management B.V.	8 September 2010
64	rusal.hk	RUSAL Global Management B.V.	8 September 2010
65	rusal.com.hk	RUSAL Global Management B.V.	11 September 2010
66	al2all.com	RUSAL Global Management B.V.	23 May 2011
67	rusal.vg	RUSAL Global Management B.V.	10 June 2011
68	ucr.vg	RUSAL Global Management B.V.	10 June 2011
69	ucrusal.vg	RUSAL Global Management B.V.	10 June 2011
70	rusal.com	RUSAL Global Management B.V.	6 July 2011
71	rti.gi	RUSAL Trading International Gibraltar Ltd	26 November 2010

C. ***Patents***

As at the Latest Practicable Date, the Group has registered the following patents that are material to the operation of its business:

List of patents covering RA-300 technology

No.	Description	Type	Patent No. Registration date	Registration period	Registered owner
1	Compensation apparatus	Invention patent	2237752 dated 10 October 2004	20 years starting from 20 June 2003	LLC RUS Engineering
2	Cathode aluminium cell lining	Invention patent	2266983 dated 27 December 2005	20 years starting from 16 March 2004	LLC RUS Engineering
3	Method for controlling alumina point feeding into cells	Invention patent	2233914 dated 8 August 2004	20 years starting from 29 April 2003	LLC RUS Engineering
4	Two-level automated aluminium electrolysis control system	Utility model patent	38767 dated 10 July 2004	10 years starting from 16 March 2004	LLC RUS Engineering
5	Apparatus for compensating magnetic fields induced by an adjacent string of series-connected high-capacity cells	Invention patent	2316619 dated 10 February 2008	20 years starting from 18 April 2006	LLC RUS Engineering
6	Busbar for high-capacity aluminium cells	Invention patent	2328555 dated 10 July 2008	20 years starting from 25 July 2006	LLC RUS Engineering

No.	Description	Type	Patent No. Registration date	Registration period	Registered owner
7	Busbar for aluminium cells arranged side by side within a potroom	Invention patent	2303657 dated 27 July 2008	20 years starting from 27 February 2007	LLC RUS Engineering
8	Apparatus for gas removal from an aluminium cell	Invention patent	2316620 dated 10 February 2008	20 years starting from 18 April 2006	LLC RUS Engineering
9	Aluminium cell cathode	Invention patent	2321683 dated 10 April 2008	20 years starting from 23 May 2006	LLC RUS Engineering
10	Aluminium cell cathode shell	Invention patent	2320781 dated 27 March 2008	20 years starting from 23 May 2006	LLC RUS Engineering
11	Aluminium cell cathode lining method	Invention patent	2294403 dated 27 February 2007	20 years starting from 22 June 2005	LLC RUS Engineering
12	Method for forming seamless lining layers in aluminium cells and apparatus for performing the same	Invention patent	2296819 dated 10 April 2007	20 years starting from 17 August 2005	LLC RUS Engineering
13	Contact connection of a power-supply circuit to a cathode compartment of an cell	Invention patent	2318926 dated 10 March 2008	20 years starting from 22 December 2005	LLC RUS Engineering
14	Aluminium cell cathode	Invention patent	2299277 dated 20 May 2007	20 years starting from 22 June 2005	LLC RUS Engineering
15	Method for baking bottoms of aluminium cells	Invention patent	2318920 dated 10 March 2008	20 years starting from 26 April 2006	LLC RUS Engineering
16	Method for replacing anodes in high-capacity aluminium cells equipped with pre-baked anodes	Invention patent	2281348 dated 10 August 2006	20 years starting from 14 December 2004	LLC RUS Engineering
17	Method for baking bottoms of aluminium cells	Invention patent	2303653 dated 27 July 2007	20 years starting from 17 August 2005	LLC RUS Engineering
18	Method for aluminium cell start-up preparation	Invention patent	2307878 dated 10 October 2007	20 years starting from 22 December 2005	LLC RUS Engineering
19	Method for measuring the thickness of the molten aluminium layer on the bottom of an cell	Invention patent	2307880 dated 10 October 2007	20 years starting from 22 December 2005	LLC RUS Engineering
20	Method for eliminating anode effects	Invention patent	2285755 dated 20 October 2006	20 years starting from 05 April 2005	LLC RUS Engineering
21	Anode superstructure for cells equipped with pre-baked anodes	Invention patent	2328553 dated 10 July 2008	20 years starting from 22 August 2006	LLC RUS Engineering
22	Anode superstructure for aluminium cells	Invention patent	2338010 dated 27 October 2007	20 years starting from 30 August 2006	LLC RUS Engineering
23	Contact clamps for cells equipped with pre-baked anodes	Invention patent	2153028 dated 27 April 1999	20 years starting from 12 April 1999	OJSC RUSAL VAMI
24	Anode superstructure for aluminium cells	Invention patent	2214481 dated 6 May 2002	20 years starting from 06 May 2002	OJSC RUSAL VAMI
25	Anode superstructure for aluminium cells	Invention patent	2214482 dated 6 May 2002	20 years starting from 06 May 2002	OJSC RUSAL VAMI
26	Anode superstructure for aluminium cells	Invention patent	2224052 dated 27 May 2002	20 years starting from 27 May 2002	OJSC RUSAL VAMI

List of patents covering the RA-400 technology

No.	Description	Type	Patent No. Registration date	Registration period	Registered owner
1	Compensation apparatus	Invention patent	2237752 dated 10 October 2004	20 years starting from 23 June 2003	LLC RUS Engineering
2	Cathode aluminium cell lining	Invention patent	2266983 dated 27 December 2005	20 years starting from 16 March 2004	LLC RUS Engineering
3	Aluminium cell cathode shell	Invention patent	2214480 dated 20 October 2003	20 years starting from 15 July 2002	LLC RUS Engineering
4	Method for controlling alumina point feeding into cells	Invention patent	2233914 dated 8 August 2004	20 years starting from 29 April 2003	LLC RUS Engineering
5	Two-level automated aluminium electrolysis control system	Utility model patent	38767 dated 10 July 2004	10 years starting from 16 March 2004	LLC RUS Engineering
6	Method for replacing anodes in high-capacity aluminium cells equipped with pre-baked anodes	Invention patent	2281348 dated 10 August 2006	20 years starting from 14 December 2004	LLC RUS Engineering
7	Apparatus for compensating magnetic fields induced by an adjacent string of series-connected high-capacity cells	Invention patent	2316619 dated 10 February 2008	20 years starting from 18 April 2006	LLC RUS Engineering
8	Busbar for high-capacity aluminium cells	Invention patent	2328555 dated 10 July 2008	20 years starting from 25 July 2006	LLC RUS Engineering
9	Busbar for aluminium cells arranged side by side within a potroom	Invention patent	2303657 dated 27 July 2007	20 years starting from 27 February 2007	LLC RUS Engineering
10	Apparatus for gas removal from aluminium cells	Invention patent	2316620 dated 10 February 2008	20 years starting from 18 April 2006	LLC RUS Engineering
11	Aluminium cell cathode	Invention patent	2321683 dated 10 April 2008	20 years starting from 23 May 2006	LLC RUS Engineering
12	Aluminium cell cathode shell	Invention patent	2320781 dated 27 March 2008	20 years starting from 23 May 2006	LLC RUS Engineering
13	Aluminium cell cathode lining method	Invention patent	2294403 dated 27 February 2007	20 years starting from 22 June 2005	LLC RUS Engineering
14	Method for forming seamless lining layers in aluminium cells and apparatus for performing the same	Invention patent	2296819 dated 10 April 2007	20 years starting from 17 August 2005	LLC RUS Engineering
15	Aluminium cell cathode	Invention patent	2299277 dated 20 May 2007	20 years starting from 22 June 2005	LLC RUS Engineering
16	Method for baking bottoms of aluminium cells	Invention patent	2303653 dated 27 July 2007	20 years starting from 17 August 2005	LLC RUS Engineering
17	Method for aluminium cell start-up preparation	Invention patent	2307878 dated 10 October 2007	20 years starting from 22 December 2005	LLC RUS Engineering
18	Method for measuring the thickness of the molten aluminium layer on the bottom of a cell	Invention patent	2307880 dated 10 October 2007	20 years starting from 22 December 2005	LLC RUS Engineering
19	Method for eliminating anode effects	Invention patent	2285755 dated 20 October 2006	20 years starting from 05 April 2005	LLC RUS Engineering

No.	Description	Type	Patent No. Registration date	Registration period	Registered owner
20	Anode superstructure for cells equipped with pre-baked anodes	Invention patent	2328553 dated 10 July 2008	20 years starting from 22 August 2006	LLC RUS Engineering

List of patents covering the RA-500 technology

No.	Description	Type	Patent No. Registration date	Registration period	Registered owner
1	Aluminium pot cathode section	Invention patent	RU2285754 dated 20 October 2006	20 years starting from 29 March 2005	LLC RUS Engineering
2	Cathode section mounting procedure	Invention patent	RU2303654 dated 27 July 2007	20 years starting from 7 October 2005	LLC RUS Engineering
3	Aluminium pot anode bar gasket	Invention patent	RU2303661 dated 27 July 2007	20 years starting from 7 October 2005	LLC RUS Engineering
4	Aluminium pot cathode shell	Invention patent	RU2308547 dated 10 October 2007	10 years starting from 22 December 2005	LLC RUS Engineering
5	Aluminium pot cathode shell cooler	Invention patent	RU2318922 dated 10 March 2008	20 years starting from 2 May 2006	LLC RUS Engineering
6	Aluminium pot cathode	Invention patent	RU2320782 dated 27 March 2008	20 years starting from 23 May 2006	LLC RUS Engineering
7	Aluminium pot cathode	Invention patent	RU2321682 dated 10 April 2008	20 years starting from 23 May 2006	LLC RUS Engineering
8	Aluminium pot gas collecting and degassing unit	Invention patent	RU2308551 dated 20 October 2007	20 years starting from 22 December 2005	LLC RUS Engineering
9	Aluminium pot automatic process control procedure	Invention patent	RU2307881 dated 10 October 2007	20 years starting from 22 December 2005	LLC RUS Engineering
10	Anode superstructure for prebaked anode cell	Invention patent	RU2338011 dated 10 November 2008	20 years starting from 14 November 2006	LLC RUS Engineering

As at the Latest Practicable Date, the Group has filed for registration the following patents that are material to the operation of its business:

No.	Description	Type	Patent No. Application date	Registration period	Registered owner
1	Prebaked anode cell hood *(Note 1)*	Application	2007138723 dated 19 October 2007	N/A	UC RUSAL IP LTD
2	Cathode lining method for aluminium production *(Note 1)*	Application	2008145987 dated 21 November 2008	N/A	UC RUSAL IP LTD
3	Spent anode sealing container *(Note 1)*	Application	2008145991 dated 21 November 2008	N/A	UC RUSAL IP LTD
4	Aluminium pot operation mode	Application	2009119069 dated 21 May 2009	N/A	UC RUSAL IP LTD

Note:

1. Patent registration has been granted pending the receipt of the registration certificate which will show the registration period.

C. FURTHER INFORMATION ABOUT THE DIRECTORS, MANAGEMENT, STAFF AND EXPERTS

1. Disclosure of Interests

Interests and short positions of the Directors and the chief executive of the Company in the shares, underlying shares and debentures of the Company and its associated corporations

Immediately following completion of the Global Offering (assuming that the Over-allotment Option is not exercised and no bonus Shares are issued to management) the interests and short positions of the Directors and chief executive of the Company in the equity or debentures of the Company or any associated corporations (within the meaning of Part XV of the SFO) which will have to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and/or short positions which they are taken or deemed to have under such provisions of the SFO) once the Shares are listed, or which will be required, pursuant to section 347 of the SFO or the Model Code for Securities Transactions by Directors of Listed Companies in the Listing Rules to be notified to the Company and the Hong Kong Stock Exchange or which will be required pursuant to 352 of the SFO to be entered in the register referred to therein once the Shares are listed, are as follows:

Name of Director/ Chief Executive	Capacity/Nature of interest	Number and class of securities[1]	Approximate percentage of interest in our Company immediately after completion of the Global Offering
Oleg Deripaska[2]	Interest of a controlled corporation	7,202,910,267 Shares held by En+ (L)	47.59%
Victor Vekselberg[3]	Beneficiary of trust	2,400,920,089 Shares (L)[3]	15.86%

Notes:

1. The letter "L" denotes the person's long position in such securities.
2. Oleg Deripaska beneficially owns the entire issued share capital in En+. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.
3. Victor Vekselberg is the sole beneficiary and the beneficial owner of a trust which holds an indirect interest in 35.84% of the issued share capital of SUAL Partners and is therefore deemed to be interested in all the shares held by SUAL Partners by virtue of the SFO.

3. Victor Vekselberg is the sole beneficiary of a trust (of which TZ Columbus Services Limited is the trustee) which is indirectly interested in 35.84% of the issued share capital of SUAL Partners.
4. Shares held by SUAL Partners. These represent the Shares in which SUAL Partners has a direct beneficial interest.
5. Shares held by SUAL Partners. These represent the Shares in which SUAL Partners has an interest as a result of certain rights of first refusal granted by Glencore — see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only — Rights of first refusal — Glencore's Shares."

2. Substantial Shareholders

Interests and short positions of the Substantial Shareholders in the shares and underlying shares of the Company

(a) So far as the Directors are aware, immediately following the completion of the Global Offering (without taking into account any Shares that may be issued under the Over-allotment Option or any bonus shares that may be issued to management), the following persons, not being Directors or chief executive of the Company) will have or be deemed or taken to have an interest and/or short position in the Shares or the underlying Shares which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO:

Name of shareholder	Capacity/Nature of interest	Number and class of securities[1]	Approximate percentage of interest in the Company immediately after the Global Offering[2]
En+[3]	Beneficial owner	7,202,910,267 Shares (L)	47.59%
Onexim	Beneficial owner	2,586,499,596 Shares (L)	17.09%
TCO Holdings Inc.	Interest of controlled corporation	860,507,680 Shares (L)[4] 117,341,956 Shares (L)[4]	5.68% 0.77%
TZ Columbus Services Limited	Interest of controlled corporation	860,507,680 Shares (L)[5] 117,341,956 Shares (L)[5]	5.68% 0.77%
Renova Holdings Limited	Interest of controlled corporation	860,507,680 Shares (L)[6] 117,341,956 Shares (L)[6]	5.68% 0.77%
Renova Metals & Mining Limited	Interest of controlled corporation	860,507,680 Shares (L)[7] 117,341,956 Shares (L)[7]	5.68% 0.77%
SUAL Partners	Beneficial owner	2,400,970,089 Shares (L)[8] 327,405,012 Shares (L)[9]	15.86% 2.16%
Amokenga Holdings	Beneficial owner	1,309,620,048 Shares (L)	8.65%

Notes:
1. The letter "L" denotes the person's long position in such securities.
2. The fee warrants issued by the Company to its international restructuring lenders entitling them to 1% of the Company's fully diluted share capital as at the date of effectiveness of the override agreement may be settled in cash. If any such lenders elect not to exercise this cash settlement option, the warrants will be automatically converted into Shares on the date of the Global Offering, subject to lock-up arrangements. See "Financial Information — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Restructuring — Terms of International Debt Restructuring — Warrants". International lenders holding fee warrants representing 0.73% of the Company's share capital have exercised their cash settlement option and accordingly, immediately following completion of the Global Offering, assuming the Over-allotment Option is not exercised, the public would hold 10.81% of the issued share capital of the Company, of which VEB would hold 3.15% and the international lenders would hold 0.17%.
3. For information about a claim that could affect the size of En+'s interest in the Company, see "Risk Factors — Risks relating to the Group and its Business — A certain claim against the beneficial owner of En+ could have a material adverse effect on the Company and/or the trading price of its Shares", "Substantial Shareholders — Litigation Involving Certain Beneficial Owners — Litigation Involving Mr. Deripaska" and Appendix X to this prospectus.

4. TCO Holdings Inc. is the beneficial owner of 100% of the shares in TZ Columbus Services Limited, which in turn acts as trustee of a trust (details of which are referred to in Note 4 below) holding an indirect interest in 35.84% of the issued share capital of SUAL Partners. TCO Holdings Inc. is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.
5. TZ Columbus Services Limited is the trustee of a trust of which Victor Vekselberg is the sole beneficiary and the beneficial owner of 100% of the shares in Renova Holdings Limited and is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.
6. Renova Holdings Limited is the beneficial owner of 100 % of the shares in Renova Metals and Mining Limited and is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.
7. Renova Metals and Mining Limited is the beneficial owner of 35.84% of the shares in SUAL Partners and is therefore deemed to be interested in the Shares in which SUAL Partners has an interest.
8. Shares held by SUAL Partners. These represent the Shares in which SUAL Partners has a direct beneficial interest.
9. Shares held by SUAL Partners. These represent the Shares in which SUAL Partners has an interest as a result of certain rights of first refusal granted by Glencore — see "Substantial Shareholders — Shareholders' Agreement between Major Shareholders only — Rights of first refusal — Glencore".

(b) As at the Latest Practicable Date, so far as the Directors are aware, the following persons were interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of the following members of the Group:

Name of Shareholder	Name of the Group member	Capacity/Nature of interest	Approximate percentage shareholding
Hydro Aluminum Jamaica A.S.	Alpart Farms (Jamaica) Limited	Beneficial Owner	33.33%
Hydro Aluminum Jamaica A.S.	Alpart	Beneficial Owner	35%(1)
Bureau of Public Enterprise	Aluminium Smelter Company of Nigeria PLC (ALSCON)	Beneficial Owner	15%
Hydroogk Aluminium Company Limited	Balp Limited	Beneficial Owner	50%
Aroaima Mining Company	Bauxite Company of Guyana Inc.	Beneficial Owner	10%
Fund of support of investments program of the Komi Republic, OJSC	Bauxite Timana, OAO	Beneficial Owner	20%
Hydroogk Power Company Limited	Boges Limited	Beneficial Owner	50%
RusHydro, OJSC	Building owner of Boguchansk aluminium smelter, JSC	Beneficial Owner	51%
RusHydro, OJSC	Building owner of Boguchansk hydroelectric power station, JSC	Beneficial Owner	49%
RusHydro, OJSC	Organiser of building of Boguchansk aluminium smelter, JSC	Beneficial Owner	49%
RusHydro, OJSC	Organiser of building of Boguchansk hydroelectric power station, JSC	Beneficial Owner	51%

Name of Shareholder	Name of the Group member	Capacity/Nature of interest	Approximate percentage shareholding
The Bank of New York Mellon International Nominees, holder and depository of MMC Norilsk Nickel OJSC's ADR programme	MMC Norilsk Nickel, OJSC	Beneficial Owner	25.4%
Potanin V.O.	MMC Norilsk Nickel, OJSC	Beneficial Owner	25%
Rio Tinto Alcan	Queensland Alumina Limited	Beneficial Owner	80%
Mr. Gorbachevsky Vladimir Petrovich	Uralaluminium, OAO	Beneficial Owner	15%
OJSC Samruk-Energo	LLP Bogatyr Trans	Interest in a Controlled Corporation	50%(2)
Obermero Limited	YaGRK Limited	Interest in a Controlled Corporation	50%(3)

Notes:

(1) This entity is set up as a partnership and it does not have share capital.

(2) Bogatyr Komir Limited Liability Partnership is a wholly owned subsidiary of Form Muider B.V. which in turn is held as to 50% by Samruk — Energo Joint Stock Company.

(3) YaGRK Limited is a wholly-owned subsidiary of Cripple Creek Limited which in turn is held as to 50% by Obermero Limited.

3. Particulars of service contracts

A. *Executive Directors*

Each of the executive Directors has agreed to act as executive Director with effect from their respective dates of appointment with no fixed term agreed which may be terminated in accordance with the terms of their respective employment contracts. The appointment of each executive Director is subject to the provisions of retirement and rotation of Directors under the Articles of Association.

B. *Non-executive Directors and Independent Non-executive Directors*

Each of the non-executive Directors and the independent non-executive Directors has signed an appointment letter with our Company with effect from their respective dates of appointment with no fixed term agreed. Appointment of non-executive Directors may be terminated by the non-executive Director by giving one month's notice of termination and/or otherwise in accordance with the Articles of Association. Appointment of independent non-executive Directors may be terminated by the Company or the independent non-executive Director by giving one month's notice of termination and/or otherwise in accordance with the Articles of Association. Each of the non-executive Directors and the independent non-executive Directors is entitled to a fixed director's fee. The appointment of each non-executive Director and independent non-executive Director is subject to the provisions of retirement and rotation of Directors under the Articles of Association.

None of our Directors has or is proposed to have a service contract with any member of our Group (other than contracts expiring or determinable by the employer within one year without the payment of compensation other than the statutory compensation).

4. Directors' remuneration

The aggregate amount of remuneration (including fees, salaries, contributions to pension schemes, housing allowances and other allowances and benefits in kind and discretionary bonuses) which has been paid to the Directors for the years ended 31 December 2006, 2007 and 2008 and six months ended 30 June 2009 was approximately US$18.9 million, US$22.0 million, US$14.1 million and US$0.8 million, respectively.

It is estimated that remuneration and benefits in kind equivalent to approximately US$10.4 million in aggregate will be paid and granted to our Directors by us in respect of the financial year ending 31 December 2009 under arrangements in force at the date of this prospectus.

5. Fees or commissions received

Save as disclosed in this prospectus, none of our Directors or any of the persons whose names are listed in the paragraph headed "Consents" in this Appendix VIII had received any commissions, discounts, agency fee, brokerages or other special terms in connection with the issue or sale of any capital of any member of our Group from our Group within the two years preceding the date of this prospectus.

6. Disclaimers

Save as disclosed in this prospectus:

(a) none of the Directors or any of the parties listed in the section headed "D. Other Information — 9. Consents" in this Appendix has any direct or indirect interest in the promotion of, or in any assets which have been, within the two years immediately preceding the date of this prospectus, acquired or disposed of by or leased to any member of the Group or are proposed to be acquired or disposed of by or leased to any member of the Group;

(b) none of the Directors is materially interested in any contract or arrangement subsisting at the date of this prospectus which is significant in relation to the business of the Group taken as a whole;

(c) no share or loan capital of the Company or any of its subsidiaries is under option or is conditionally or unconditionally agreed to be put under option; and

(d) none of the Directors, their respective associates or shareholders of the Company is interested in more than 5.0% of the issued share capital of the Company has any interests in the five largest end-user customer of our Group.

D. OTHER INFORMATION

1. Estate Duty

The Directors have been advised that no material liability for estate duty would be likely to fall upon any member of the Group.

2. Litigation

Save and except as disclosed in the section "Business", and "Substantial Shareholders — Litigation Involving Certain Beneficial Owners", as at the Latest Practicable Date, the Group is not aware of any other litigation or arbitration proceedings of material importance pending or threatened against the Group or any of its directors that could have a material adverse effect on the Group's financial condition or results of operations.

3. Interruptions

There have been no interruptions in the business of the Group which may have or have had a significant effect on the financial position of the Group in the last 12 months.

4. Joint Sponsors

The Joint Sponsors have made an application on behalf of our Company to the Listing Committee of the Stock Exchange for a listing of, and permission to deal in, all the Shares in issue and to be issued as mentioned in this prospectus (including any Shares which may fall to be issued pursuant to the exercise of the Over-allotment Option).

Credit Suisse (Hong Kong) Limited is not acting as an independent Sponsor. Credit Suisse (Hong Kong) Limited affiliates have business relationships, including but not limited to, lending, financial advisory, investment advisory and strategic relationship with the Company, its directors, substantial shareholders and/or their respective associates which Credit Suisse (Hong Kong) Limited believes might, taken together, reasonably give rise to a perception that its independence would be so affected and, as a result would not be independent for Listing Rule purposes under Rule 3A.07(10) of the Listing Rules.

5. Preliminary expenses

The Company has not incurred any preliminary expenses in relation to the Global Offering.

6. Promoter

The Company has no promoter for the purpose of the Listing Rules. Save as disclosed in this prospectus, within the two years immediately preceding the date of this prospectus, no cash, securities or other benefit has been paid, allotted or given nor are any proposed to be paid, allotted or given to any promoters in connection with the Global Offering and the related transactions described in this prospectus.

7. Taxation of Holders of Shares

(a) ***Hong Kong***

The sale, purchase and transfer of Shares registered with the Company's Hong Kong branch register of members will be subject to Hong Kong stamp duty and the current rate charged on each of the purchaser and seller is 0.1% of the consideration of, or if higher, the fair value of the Shares

being sold or transferred. Profits from dealings in the Shares arising in or derived from Hong Kong may also be subject to Hong Kong profits tax for persons who carry on a business of trading or dealing in securities in Hong Kong. No Hong Kong stamp duty will be levied on the transfer of shares that are registered on a share register outside Hong Kong.

(b) ***Jersey***

No stamp duty is payable in Jersey on the transfer of shares in a Jersey company. There is no capital gains tax in Jersey.

(c) ***Consultation with Professional Advisers***

Intending holders of the Shares are recommended to consult their professional advisers if they are in doubt as to the taxation implications of subscribing for, purchasing, holding or disposing of or dealing in the Shares. It is emphasized that none of the Company, the Directors or the other parties involved in the Global Offering can accept responsibility for any tax effect on, or liabilities of, holders of Shares resulting from their subscription for, purchase, holding or disposal of or dealing in Shares or exercise of any rights attaching to them.

8. Qualifications of experts

The qualifications of the experts (as defined under the Listing Rules and the Hong Kong Companies Ordinance) who have given their opinions or advice in this prospectus are as follows:

Name	Qualifications
BNP Paribas Capital (Asia Pacific) Limited	Licensed corporation under the SFO to conduct type 1 (dealing in securities) and type 6 (advising on corporate finance) regulated activities as defined under the SFO
Credit Suisse (Hong Kong) Limited	Licensed corporation under the SFO for Type 1 (dealing in securities), Type 2 (dealing in futures contracts), Type 4 (advising on securities), Type 5 (advising on futures contracts), Type 6 (advising on corporate finance) and Type 7 (providing automated trading services) regulated activities as defined under the SFO
Ogier	Qualified Jersey Lawyers
Egorov, Puginsky, Afanasiev and Partners	Qualified Russian Lawyers
Junhe Law Offices	Qualified PRC Lawyers
Cabinet D'Avocats "BAO & Fils"	Qualified Guinea Lawyers
Asters Law Firm	Qualified Ukraine Lawyers

Name	Qualifications
KPMG	Certified Public Accountants
ZAO KPMG	Member of The Chamber of Auditors of Russia
American Appraisal	Property Valuer
Hatch Associates Limited	Technical Advisor
SRK	Technical Advisor
CRU	Technical Advisor

9. Consents

Each of the Joint Sponsors, KPMG and ZAO KPMG as joint reporting accountants, American Appraisal as property valuer, Hatch, SRK and CRU as technical advisers, Ogier as legal advisers on Jersey law, Egorov, Puginsky, Afanasiev and Partners as legal advisers on Russian law, Junhe Law Offices as legal advisers on PRC law, Cabinet D'Avocats "BAO & Fils" as legal advisers on Guinea law and Asters Law Fim as legal advisers on Ukraine law has given and has not withdrawn its respective written consents to the issue of this prospectus with the inclusion of their reports and/or letters and/or valuation certificates and/or the references to their names included herein in the form and context in which they are respectively included.

Save as disclosed in this prospectus, none of the experts named above has any shareholding interests in any member of the Group or the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of the Group.

10. Binding effect

This prospectus shall have the effect, if an application is made in pursuant hereof, of rendering all persons concerned bound by all the provisions (other than the penal provisions) of sections 44A and 44B of the Hong Kong Companies Ordinance so far as applicable.

11. Financial adviser

N M Rothschild & Sons (Hong Kong) Limited ("Rothschild") has been appointed by the Company as the financial adviser in respect of the Global Offering. The appointment of Rothschild was not made pursuant to the requirements of the Listing Rules, and the appointment of Rothschild is separate and distinct from the appointment of the Joint Sponsors (which is required to be made by us pursuant to the Listing Rules). The Joint Sponsors are responsible for fulfilling their duties as sponsors to the Company's application for listing on the Stock Exchange, and the Joint Sponsors have not relied on any of the work performed by Rothschild in fulfilling those duties. Rothschild's role in the Global Offering is different from that of the Joint Sponsors in that it focuses on providing general corporate finance advice to the Company on matters relating to the Listing and the Global Offering. Rothschild is a corporation licensed under the SFO to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities under the SFO.

12. Compliance Adviser

The Company will appoint Somerley Limited as its compliance adviser pursuant to Rule 3A.19 of the Listing Rules. Pursuant to Rule 3A.23 of the Listing Rules, the compliance adviser will advise the Company on the following circumstances:

- before the publication of any regulatory announcement, circular or financial report;
- where a transaction, which might be a notifiable or connected transaction, is contemplated including share issues and share repurchases;
- where the Group propose to use the proceeds of the Global Offering in a manner different from that detailed in this prospectus or where our business activities, developments or results deviate from any estimate, or other information in this prospectus; and
- where the Hong Kong Stock Exchange makes an inquiry of the Company regarding unusual movements in the price or trading volume of the Shares.

The term of the appointment shall commence on the Listing Date and end on the date on which the Company distribute its annual report in respect of its financial results for the first full financial year commencing after the Listing Date and such appointment may be subject to extension by mutual agreement.

13. Bilingual Prospectus

The English language and Chinese language versions of this prospectus are being published separately in reliance upon the exemption provided by section 4 of the Exemption Notice.

DOCUMENTS DELIVERED TO THE REGISTRAR OF COMPANIES

The documents attached to a copy of this prospectus and delivered to the Registrar of Companies in Hong Kong for registration were (i) the statement of adjustments issued by KPMG and ZAO KPMG on the figures shown in the Accountants' Report of the Group; (ii) copies of each of the material contracts referred to the section headed "Further Information About the Business of the Group" in "Appendix VIII — Statutory and General Information" to this prospectus; and (iii) the written consents referred to in paragraph (q) of this Appendix.

A copy of this prospectus, signed by or on behalf of all of the Directors, together with signed copies of any reports included in or attached to the prospectus and such other particulars as the registrar may require have been delivered to the registrar of companies in Jersey.

DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents will be available for inspection at the office of Sidley Austin at Level 39, Two International Finance Centre, 8 Finance Street, Central, Hong Kong during normal business hours up to and including 27 January 2010:

(a) the Memorandum of Association and the Articles of Association of the Company;

(b) the accountants' report issued by ZAO KPMG and KPMG, the text of which is set out in Appendix I;

(c) the statement of adjustments issued by ZAO KPMG and KPMG on the figures shown in the Accountants' Report of the Group and giving the reasons thereto;

(d) the letter in relation to unaudited pro forma financial information, the text of which is set out in Appendix III;

(e) the letters from the Joint Reporting Accountants and the Joint Sponsors in relation to the profit forecast, the texts of which are set out in Appendix IV;

(f) the letter, summary of values and valuation certificates relating to the Company's property interests that are subject to valuation prepared by American Appraisal, the texts of which are set out in Appendix V;

(g) the full valuation report in respect of the valuation properties in English only;

(h) the Russian legal opinions issued by Egorov, Puginsky, Afanasiev and Partners the Company's legal advisers on Russian law in respect of certain property interests of the Group;

(i) the letter prepared by Ogier, the Company's legal counsel on Jersey law, summarising certain aspects of the Jersey Companies Law referred to in Appendix VII;

(j) the legal opinion issued by Junhe Law Offices, the legal advisers to the Company as to PRC law in respect of, among other things, property matters of our Group in the PRC;

(k) the legal opinion issued by Cabinet D'Avocats "BAO & Fils", the legal advisers to the Company as to Guinea law in respect of, among other things, property matters of our Group in Guinea;

(l) the legal opinion issued by Asters Law Firm, the legal advisers to the Company as to Ukraine law in respect of, among other things, property matters of our Group in Ukraine;

(m) the Jersey Companies Law;

(n) the independent technical report issued by Hatch Associates Limited and SRK, the text of which is set out in Appendix VI;

(o) the independent assessment report issued by CRU in relation to the aluminium and alumina market as referred to in the section headed "Industry and Market Overview" of the prospectus;

(p) the material contracts referred to in paragraph B of Appendix VIII;

(q) the written consents referred to in paragraph D of Appendix VIII; and

(r) High Court decision dated 3 July 2008 in Cherney v. Deripaska [2008] EWHC 1530 (Comm).

The following are extracts from the decision of the High Court in Cherney v. Deripaska [2008] EWHC 1530 (Comm) dated 3 July 2008. The full decision is on public display and can be found at <www.bailii.org/ew/cases/EWHC/Comm/2008/1530.html>.

Neutral Citation Number: [2008] EWHC 1530 (Comm)

Case No: 2006 FOLIO 1218

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
COMMERCIAL COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 03/07/2008

Before:

MR JUSTICE CHRISTOPHER CLARKE

- -

Between:

MICHAEL CHERNEY	**Claimant**
- and -	
OLEG VLADIMIROVICH DERIPASKA	**Defendant**

- -
- -

Geoffrey Vos QC & David Lord (instructed by **Dechert LLP**) for the **Claimant**
Roger Stewart QC, Nick Cherryman & Graham Chapman
(instructed by **Bryan Cave**) for the **Defendant**

Hearing dates: 30th April & 1st May 2008

- -

Judgment

MR JUSTICE CHRISTOPHER CLARKE :

1. This is an application for permission to serve the claim form on Mr Oleg Deripaska, the defendant, out of the jurisdiction. The original claim form was issued on 24th November 2006. It was purportedly served on Mr Deripaska by service on a security guard at his house in Belgrave Square on 26th November 2006. In a judgment of 3rd May 2007 Langley, J decided that Mr Deripaska had not been properly served and that the Court had no jurisdiction to try the claim under Article 2 of Council Regulation (EC) 44/201 (the "Jurisdiction Regulation") because Mr Deripaska was not domiciled in England & Wales. He also refused (a) to dispense with service of the claim form; (b) to extend time for its service and (c) to grant permission to appeal.

[Paragraphs 2 to 4 intentionally omitted.]

The claimant's case

5. The claimant is Mr Michael Cherney. He claims that he was a partner of Mr Deripaska, in a business whose principal asset was a large interest in an aluminium company — OJSC United Company Siberian Aluminium ("Sibal"). He and Mr Deripaska each had, he says, a 40% ultimate beneficial interest in Sibal. In about late 2000 or 2001 a merger took place between Sibal and an aluminium business called Sibneft, owned by Mr Roman Abramovich, Mr Boris Berezovsky and Mr Badri Patarkatsishvili. Sibal and Sibneft transferred their assets to a company called Russian Aluminium ("Rusal"), in which Sibal and Sibneft took a 50% interest. As a result he became entitled to a 20% (40% of 50%) share in Rusal, the world's largest aluminium producer.

6. In March 2001 he and Mr Deripaska met at an hotel in London. They then entered into an agreement, principally contained in two written documents. Under the first document Mr Deripaska agreed to pay Mr Cherney $ 250 million up front for his shareholding in Sibal. Under the second Mr Deripaska undertook (a) to hold 20% of the shares in Rusal on trust for Mr Cherney, (b) to sell them between 10th March 2005 and 10th March 2007; and (c) to account to Mr Cherney for the proceeds of these sales, minus the $ 250,000,000. It was also orally agreed that the agreement would be governed by English law and be subject to English jurisdiction. It is not suggested that, in the absence of that agreement the agreement is governed by English law.

7. Subsequently there was a merger of Rusal and two companies named Sual and Glencore to form United Company Rusal ("UCR"). The former shareholders of Rusal hold 66% of UCR. The effect of that, according to Mr Cherney, is that Mr Deripaska holds 20% of 66% i.e.13.2% of UCR on trust for him. He claims declarations to give effect to his trust claims, an order that Mr Deripaska sell or procure the sale of 20% of Rusal and 13.2% of UCR and account to him for the proceeds, and damages.

8. It is common ground that the $ 250,000,000 has been paid, that Mr Deripaska does not accept that he has any obligation towards Mr Cherney in respect of 40% of the shares in Sibal, 20% of the shares in Rusal, or 13.2% of the shares in UCR, and that he has not accounted to Mr Cherney for any proceeds of any sale of shares in Rusal.

Mr Deripaska's position

9. Mr Deripaska denies that he was ever a partner, in any normally accepted commercial meaning of the word, with Mr Cherney in the aluminium, or any other, business. He agrees that at a meeting at the Lanesborough Hotel on 10th March 2001 he signed the first of the two documents relied on by Mr Cherney, which provided for the payment of $ 250,000,000. That payment was made, he claims, because Mr Cherney, together with Mr Anton Malevsky ("Mr Malevsky"), was engaged in a "protection" racket in relation to what was Mr Deripaska's business. The $ 250,000,000 was paid in order to buy Mr Cherney off. The second document, which deals with the shares in Rusal, was not produced at the meeting, nor was it intended to be part of any agreement with Mr Cherney. It was a proposal to be put forward to Mr Malevsky.

[Paragraphs 10 to 44 intentionally omitted.]

The factual dispute

45. The factual background of this case is lengthy[5], complex and in large measure in dispute. In the paragraphs that follow I set out so much of the account of events given by or on behalf of the claimant together with the response of the defendant as is necessary to determine the matters in issue on this application.

[5] The evidence extends to sixteen lever arch files, which the parties estimated would require 2 — 2.5 days to read.

46. Michael Cherney was borne in the Ukraine and grew up in Uzbekistan. He has two brothers, one of whom is Lev Cherney. He claims to have had significant influence and vast contacts in government circles which were completely transformed when Mr Putin came to power in Russia. He had lost such influence by 2001[6]. He left the former territory of the USSR with his family in 1991 to live in the West. He stopped visiting the territory of the former USSR in 1994 as a result of fears for his safety, save for the Ukraine which he started to revisit in 2003. In 1994 allegations started to be made in the Russian press that he had links to organised crime. Following the election of Mr Yel'tsin as President in the middle of 1996 for a second term (Mr Cherney being connected with the opposition) there was an organised press campaign stating that he was connected with the mafia. At the end of 1993 and in 1994 and 1995 (and subsequently) he was warned by people with connections to the Russian security service, including retired personnel, that there were threats to his safety. He emigrated to Israel in 1994 and claimed Israeli citizenship.

47. In 1995 an attempt was made to assassinate him in Israel. It appeared from the trial of two of his would-be assassins and from what the Israeli police told him that a Russian business crime group, possibly connected to the Russian secret services, contacted an Israeli private investigation firm to kill him. That firm hired a would-be assassin who was in fact a police informant. Two former military intelligence officers were sentenced to prison. A third man, who was the go-between, fled to Russia.

48. In a statement to the Swiss authorities made in 1997 Mr Cherney said that the "*contract*" [to kill him] referred to in a press article related both to him and Mr Malevsky and was in relation to business negotiated in Russia. In 2007 the Russian media in Israel published an article reporting that a private investigation firm had staged an attempt to assassinate him and had discovered that it would be very easy to do. Two private investigators have recently been arrested in Israel on suspicion of illegally phone tapping calls to gather information about him.

49. According to Mr Cherney's evidence he is an unconventional businessman, who delegated day to day management to his trusted partners, as was, in any event necessary after he had left for the West in 1991. He did not retain or receive much in the way of routine documentation. Further the conclusion of deals for enormous sums on a handshake or primitive agreement was a common feature of business life in the former Soviet Union in the 1990s.

50. Oleg Deripaska is said by Mr Cherney to have been his protégé, and the recipient of his trust. He is now, on any view, one of the modern Russian business elite. According to Mr Cherney he is part of former President Putin's close circle and one of his unofficial confidants and advisers, having been close to the family of Boris Yel'tsin. He is married to the stepdaughter of the daughter of former President Yel'tsin, whom he married in 2001 after Mr Yel'tsin left office and before her father, who was Mr Yelt'tsin's chief of staff, married President Yelt'tsin's daughter. Mr Cherney claims that Mr Deripaska is one of the most influential people in Russia having vast contacts and people he can trust in various positions of power which he successfully uses to promote his interests. Mr Deripaska accepts that he is a prominent businessman but not that he occupies some special unofficial position within the Russian government.

51. In 1989 Mr Cherney started to trade in metals and raw materials in partnership with a company called Trans Commodities Ltd. That partnership ended in 1992 at which point he entered into partnership with a Mr Iskander Makhmoudov, his manager. Originally the partnership was 70/30

[6] This claim may be contrasted with an interview he gave to *Vedemosti*, a leading Russian business paper, on 2nd November 2000 in which, when asked "*Did you really not play politics, not use ties for the development of your business?*", he replied that he only knew one politician — former vice-premier Oleg Soskovetz — who promised a copper export licence and then never provided it.

in Mr Cherney's favour but later became 50/50, with some of Mr Makhmoudov's half being shared with two junior partners. I call this "*the Makhmudov/Cherney joint venture*". The partnership owned companies and assets in the business of the processing and sale of copper, the sale and purchase of commodities and raw material in ferrous and non ferrous metallurgy, and later energy resources, engineering, ports etc.

52. Mr Cherney also started to create corporate structures in Liechtenstein, Switzerland, Cyprus and other countries. For this purpose he made use of the services of a Liechtenstein professional fiduciary called Prasidial Anstalt and, later its subsidiary, Syndikus Treuhandanstalt ("Syndikus"), where the relevant individuals were Messrs Staeger, Domenjoz, and Wyss; and of one Joseph Karam, a former banker, of Switzerland. .

53. In 1992 Mr Cherney and his brother, Lev, began to work in the aluminium business on a 50/50 basis with a company called Trans World Group, which was controlled by two brothers, David and Simon Reuben. TWG was involved in the supply of alumina ore from two refineries in the CIS to four smelters in Russia, of which the joint venture obtained control.

54. Mr Cherney first met Mr Deripaska at the end of 1993 or the beginning of 1994 at an event at the Dorchester Hotel. He was impressed by him. He thought that he might be suitable as his manager and, later, as one of the partners in his future business. They became partners in a project to buy a share in the Sayansky Aluminium Plant ("Saaz") in Hakassia. I call this "*the Cherney/Deripaska joint venture*". The venture began to invest, with finance provided or procured by Mr Cherney, in various projects. But its core business was its interest in Saaz. Mr Deripaska was not then in a position to acquire any substantial interest in Saaz on his own. Subsequently the venture acquired interests in aviation, car manufacture, and hydro-energy.

55. The agreement was that all the companies involved in the project, of both parties, would eventually be merged into one structure and that, so long as the joint venture continued, Mr Deripaska could not participate in any other business, although Mr Cherney could[7].

56. A large stake in Saaz was acquired by TWG and the Cherney/Deripaska joint venture, acting together, and the beneficial interest in the shares was held, as to 50% for TWG, as to 25% for Mr Cherney and 25% for Mr Deripaska. I refer to the beneficial interest in this and other corporations because the ownership structure of the businesses in both the Makhmoudov/Cherney joint venture and the Cherney/Deripaska joint venture involved a chain of different companies and other entities.

57. At the end of 1994 Mr Deripaska became General Manager of the Sayansky plant, partly as a result of Mr Cherney persuading the Ministry of Metallurgy, who at that stage had an approximate 20% interest in Saaz, to vote for his appointment.

[7] But in proceedings before a Swiss Investigating Magistrate in June 2004 Mr Cherney is recorded as saying that he "*...never had significant business interests with [Mr Deripaska], apart from the shares which we had bought together for these aluminium plants*". Mr Cherney's explanation is that that was true because the aluminium business was by far the largest of their joint interests and the non aluminium interests were, as he understood, owned by and part of the aluminium business or at least were acquired and developed with profits derived from the aluminium business.

Mr Deripaska's account of his investment in Saaz

58. According to Mr Deripaska Mr Cherney never provided him with any funds to purchase shares in Saaz or any other entity[8]. He began to purchase shares in Saaz in 1993 and was by 1994 its largest private shareholder. He continued to purchase shares thereafter together with TWG but the shares that they each purchased were financed by them separately and accounted for separately.

59. He was elected General Manager of Saaz in November 1994. At that time the aluminium business in Russia was the subject of often violent struggles for control by factions that were sometimes connected to organised crime groups ("OCG"), which in turn had contacts with corrupt members of the security services and government ministries[9]. These struggles became known as the "Aluminium Wars", in which the gangs killed off their competitors or rivals in large numbers in lawless areas of Russia where the aluminium plants were located.

60. Immediately after his election he received the first of a number of death threats, initially from the head of the local OCG. An unsuccessful attempt was made to assassinate his deputy. One such OCG was the Ismailovo organisation headed by Mr Malevsky. Ismailovo is an area in the north of Moscow with at least five hotels and huge outdoor markets. According to Mr Deripaska, Mr Cherney was closely involved with Mr Malevsky (a veteran of the Soviet invasion of Afghanistan) and was part of the Ismailovo group, of which, according to Professor Shelley, he was one of the leaders. This group was engaged in providing "*protection*" to businesses in return for a share in their profits. Legitimate businesses had little option but to accept such "*protection*". In turn, according to Professor Shelley, Mr Cherney and Mr Malevsky enjoyed the protection of Oleg Soskovets, who was first Minister of Metallurgy and then First Deputy Russian Prime Minister and other important officials.

Developments in the mid 1990s

61. In about 1995-1996 Mr Cherney, so he says, entrusted Mr Deripaska with the management of all his business interests in the Cherney/Deripaska joint venture. Mr Deripaska was introduced to Syndikus and Mr Karam and was authorised to give instructions to Syndikus in relation to the management of the business of the joint venture and their mutual assets. This was in part necessary because at this time Mr Cherney was unable to enter Liechtenstein save for limited purposes. Mr Deripaska was granted the widest authority by Mr Cherney, particularly in the appointment of representatives, lawyers, and directors of relevant companies. Ms Skir, Mr Cherney's personal assistant, confirms that between 1994 and 1997 Mr Deripaska came to visit

[8] In evidence given in an Irish action in April 2000 Lev Cherney asserted that TWG provided the necessary funds for the purchase of shares in Saaz, which Mr Deripaska describes as equally false. In the same statement Lev Cherney states that Michael Cherney had told him (apparently in early 1995) that he owned or was entitled to 1/3rd of MrDeripaska' shareholding in Saaz. Mr Cherney says that the proper percentage is 50%.

[9] A witness statement from Professor Louise Shelley, a distinguished expert on organised crime in the former Soviet Union sets out in considerable detail the development of OCGs from the time of the 1917 revolution and the provision by them of "*krysha*" = literally "*roof*", actually protection, initially to illicit private enterprise which used state owned materials and facilities (with the assistance of a network of corrupt government and party officials) and then to newly privatised businesses. The process became more sophisticated. Instead of cash the OCG took a financial interest in the business "protected" under a "*silovoe partnerstvo*" or "enforcement partnership".

Mr Cherney in Israel about every two or three months and they spoke frequently on the telephone and communicated by fax. Mr Deripaska was treated as a member of the family when he came to Israel, appeared originally to be an employee, and was very respectful to Mr Cherney; and later appeared to be a partner.

62. In 1997 there was a serious conflict between TWG and Mr Deripaska in relation to his powers as CEO of Saaz. Mr Cherney supported Mr Deripaska. As a result Mr Cherney sold his 25% share in TWG for $ 410 million[10]. Mr Deripaska claims that the conflict had nothing to do with Mr Cherney supporting him. It arose because TWG regarded its connection with Mr Cherney as seriously damaging because of the constant allegations in the press of Mr Cherney's link to organised crime.

The first merger: The Makhmudov/Cherney joint venture and the Cherney/Deripaska joint venture.

63. In 1997 Messrs Cherney, Deripaska and Makhmoudov agreed to merge all the businesses that Mr Cherney jointly owned with either Mr Deripaska or Mr Makhmudov into one structure. The interests of the trio were to be held through Liechtenstein Foundations: the *Galenit* Foundation for Mr Cherney; the *Cole* Foundation for Mr Deripaska; and the *Witestone* Foundation for Mr Makhmoudov. Those foundations were jointly to own (in differing proportions): (a) the *Meganetti* Foundation, which would primarily hold the former Cherney/Makhmoudov interests; and (b) the *Radom* Foundation ("Radom"), which would hold the former Cherney/Deripaska interests.

64. According to Mr Cherney the original owners of Radom were himself, Mr Deripaska and Mr Makhmoudov. But Mr Makhmoudov had no beneficial interest in Radom and always held his legal interest on Mr Cherney's behalf. He had a nominee interest because Mr Cherney had hoped that he and Mr Deripaska would work together, in which case he would have had a beneficial interest. This plan did not work out and Mr Makhmoudov left Radom. A document dated 31st October 1997, signed by Mr Cherney, Mr Makhmoudov, and Mr Deripaska shows the ownership of the Radom Line as shared 50/50 between the Cole and Galenit Foundations (i.e. Mr Deripaska and Mr Cherney) and the ownership of the Meganetty (sic) Line shared 50/50 between Galenit and Witestone (i.e. Mr Cherney and Mr Makhmoudov). By a document dated 9th April 1998 Mr Makhmoudov confirmed that he had no interest in Radom from that date.

65. Nevertheless, by a document dated 18th May 1998 Mr Deripaska confirmed to Syndikus that the ownership of Radom was as follows: Deripaska 40%; Cherney 30%; Makhmudov 10%; Andrei Malevsky (Mr Malevsky's brother) 10%; and Popov 10%. On a fax from Syndikus dated 20th May Mr Cherney confirmed these shareholdings. This position was reflected in Syndikus' records thereafter[11].

66. According to Mr Cherney it was Mr Deripaska who recommended Mr Andrei Malevsky (as requested by Mr Anton Malevsky, his brother) and Mr Popov as minority partners and "*as they were influential people*", as Mr Deripaska stated them to be, he had little choice but to agree.

[10] Mr Cherney has produced what purports to be an agreement between the Cherney and Reuben brothers in which he sells 25% of Trans-World Metals S.A. for $ 300million. He says he received $ 410 million.

[11] There are also two earlier documents signed by Mr Cherney in which the interests in Radom are said to be (a) Deripaska 45%; Cherney 35%; Makhmoudov 10%; Malevsky 10% and (b) Deripaska 45%, Cherney 45% and Malevsky 10%.

67. Mr Deripaska claims that Mr Cherney knew both Mr Malevsky, by which he means Anton Malevsky, the gang leader, and Mr Popov, and introduced Mr Malevsky to him (i.e. Mr Deripaska) in Israel in 1995. Mr Malevsky had moved to Israel that year, where he bought a house close to Mr Cherney[12]. The evidence of Professor Shelley is that Mr Popov was one of the leaders of the Podolsk crime group, a ruthless criminal gang in central Moscow. Information to the same effect appears in a Swiss Federal police report of 10th August 2000[13].

68. Mr Cherney stated in an interview with Konstatin Borovoy that he had met Mr Malevsky in 1993 and he said much the same in a declaration to the Swiss police in November 1996. In the same statement he described his friendly relationship with Mr Popov, who was staying at the hotel in Geneva where Mr Cherney was arrested.

69. Mr Cherney accepts that he knew both Mr Malevsky and Mr Popov before Mr Deripaska did. What happened was that after Mr Deripaska met Mr Malevsky they became friends and met regularly in Moscow and elsewhere. The same happened with Mr Popov, who is the godfather of Mr Deripaska's daughter. It was in that context that Mr Deripaska recommended Malevsky and Popov as partners. He, himself did not see Mr Malevsky after about 1997, although he spoke to him occasionally by telephone; whereas, when Mr Malevsky was required to leave Israel in 1997 he spent a considerable amount of time at Mr Deripaska's invitation at a house owned by Mr Deripaska in Russia on Mr Deripaska's estate. Mrs Malevsky confirms this to be so. For six months her husband and Mr Deripaska spent a lot of time together; and the two of them, herself and Mr Deripaska's then girlfriend socialised.

70. Mr Deripaska appears to have sought to hide any connection with Mr Malevsky from a Swiss Investigating Magistrate. On 17th February 2005 he told him:

> *"I know this person [Mr Malevsky] only by name. I have seen his name in the press".*

71. Mrs Malevsky says that this statement is completely untrue and, in the light of her evidence, that seems likely to be so. She also states that the accusation that her husband was involved in organised crime is completely false.

72. According to Mr Cherney at the time of the agreement reached in March 2001 Radom was beneficially owned in the following proportions:

Mr Cherney	40%
Mr Deripaska	40%
Mr Malevsky	10%
Mr Popov	10%

I call these "the group of four".

[12] In 1997 or 1998 Mr Malevsky was deprived of his Israeli citizenship and deported on the grounds that he had not reported on his citizenship application that he had been on a criminal wanted list and on the basis of confidential information obtained by the police.

[13] This report was later held by the Swiss Federal Supreme Court to be one of several documents that did not provide "*any tangible element of proof to support the allegations made therein*".

TWG and Lev Cherney sell out to the shareholders of Sibneft

73. In 1999 TWG (i.e. David and Simon Reuben) and Lev Cherney agreed to sell their aluminium business in Russia to the shareholders of Sibneft. Sibneft was a group controlled by Roman Abramovich, Boris Berezovsky and Badri Patarkatsishvili.

Reorganisation of the Cherney/Deripaska joint venture

74. A meeting took place in Paris on 23rd April 1999. Mr Cherney and Mr Deripaska were there, as was Mr Todor Batkov, Mr Cherney's Bulgarian lawyer since 1996, together with representatives of Syndikus and others. Confirmation was given that the shareholding in Radom remained unchanged from what Syndikus had previously been told. (The note does not state what that shareholding was, but, according to Mr Domenjoz, the position as reflected in Syndikus' records was as in the fax of 20th May 1998).

75. A decision was made to structure the business into four lines under one parent, namely (a) offshore tolling companies; (b) onshore trading companies; (c) Rostar Holding S.A., a Luxembourg company, which would primarily be engaged in the production of cans; (d) ownership of, or 75% or more participation in, about 10 Russian plants. The intention was that the plants should all be merged within a year into a new group to be called Sibal. All companies created as the result of the restructuring were ultimately to be owned by the owners of Radom.

76. On 26th April 1999, pursuant to the Paris meeting, Mr Deripaska sent a letter to Syndikus setting out the proposed new structure. There was to be a Luxembourg parent company called Alincor S.A., which was to have 4 Luxembourg subsidiaries as follows:

    a) Rostar Holding S.A. , holding Rostar, a Russian company;

    b) Altechnology Invest Holdings S.A.: holding Benet Invest & Trade and the tolling companies;

    c) Almetaltrade Holding S.A.: holding the trading companies in the UK, Germany, USA, China and Cyprus;

    d) Intermetal Investment Holding S.A.: holding participations in Russian enterprises of the Siberian Aluminium Group and enterprises in other countries.

77. The structure was set out in an attached diagram in English. The minutes of the 23rd April meeting had recorded that Mr Deripaska was to deliver to Syndikus an English version of the "*Holding Structure in the Russian Federation*" in addition to the Russian version already provided.

78. A note from Mr Stalbek Mishakov, Mr Deripaska's legal adviser, made it clear that the shares in Alincor were in due course to be transferred to the shareholders of Radom i.e. for the benefit of the group of four.

79. Between 1998 and 2000 the joint businesses continued to develop in several fields. Mr Deripaska created new companies in Russia, the CIS and other countries. A decision was made to have the main managing company in Cyprus and Mr Deripaska chose NFM Holding Limited, which in 2002 was renamed Bazovy Element Ltd. He then started to move companies into place under that company. Upon completion of the process these companies were to form part of the Radom Group.

80. At the end of July 1999 United Company Siberian Aluminium — "Sibal" — was formed by the merger of six entities controlled or owned by the group of four. Its core asset was Saaz. According to Mr Cherney, Sibal was effectively owned and controlled by Radom, although he is unaware as to the precise route by which that is so. The researches of Mr Batkov into records of the shareholding in Sibal at various times are said by him to support his understanding that Sibal was controlled by Mr Cherney and Mr Deripaska through the Radom Group[14].

The second merger: Sibal and Sibneft

81. In 2000 negotiations began for the merger of Sibal and Sibneft. The idea was that Sibal and Sibneft would contribute all of their aluminium assets to a company called Russian Aluminium (Russky Aluminy) — "Rusal". Because Sibal was smaller it was to pay Sibneft about $ 575 million[15].

82. In March 2000, according to the evidence of Mr Berezovsky, a meeting took place at the Dorchester Hotel in London attended by Mr Berezovsky, Mr Abramovich and Mr Patarkatsishvili, and Mr Deripaska. It was acknowledged that Mr Abramovich would hold a 25% share of Rusal beneficially and 25% as trustee for Mr Berezovsky and Mr Patarkatsishvili. According to Mr Berezovsky, Mr Deripaska did not (at the meeting or thereafter) hide the fact that Mr Cherney was his partner. Mr Abramovich expressed the view that, given Mr Berezovsky's political activism, his name should not appear on any of the formal documents in relation to Rusal, and Mr Berezovsky agreed that Mr Abramovich's name would appear representing his own interests and those of the two others. He assumed that Mr Cherney's name did not appear there for political reasons also.

83. Mr Deripaska's evidence is that he said nothing at the Dorchester meeting to the effect that Mr Cherney was his partner, because he was not. The names appearing on the legal documents were primarily those of the companies involved with some mutual guarantees from himself and Mr Abramovich. There was no discussion with Mr Deripaska's lawyers about the appearance of Mr Berezovsky's or Mr Cherney's name in the documents.

84. Mr Deripaska also draws attention to the fact that the original pleading in Mr Berezovsky's Particulars of Claim in his action against Mr Abramovich, in respect of which the statement of truth is dated 6th September 2007, stated that at the Dorchester meeting it was agreed that Mr Deripaska should own 50% of the shares in Rusal; and that it was not until 8th January 2008 that the particulars were amended to assert that 50% of the new company would be owned by Mr Deripaska and his partners, Mr Cherney being one of them.

85. According to Mr Cherney, in the second half of 2000 Mr Deripaska showed him a draft of the proposed merger between Sibal and Sibneft, which was governed by English law and subject to LCIA arbitration. Mr Cherney and Mr Deripaska agreed that Mr Deripaska would sign it on behalf of the group of four, and Mr Deripaska later said that he had signed it. But when Mr Cherney asked for a copy of the signed agreement Mr Deripaska told him that a copy could not be produced until the competition authorities approved it. At a meeting in Israel in 2001 Mr Deripaska said that the agreement was confidential and that the parties had decided that their respective lawyers would keep it in their safes.

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[14] The labyrinthine company structure makes it somewhat difficult to follow the route by which that is so.

[15] This was my understanding of the position. However, after seeing the judgment in draft, the parties informed me that they are agreed that this is inaccurate; but that the true position is complex and they have different cases as to what that position is. In those circumstances this paragraph should be read as my (erroneous) understanding and not as any form of finding.

86. Rusal was registered on 25th December 2000. By March 2001 the necessary State approval for the merger had been obtained and formal approval from the competition authorities was awaited. According to Mr Cherney, Mr Deripaska told him that the new partners and some important officials in Russia did not want Mr Cherney's name to be in the Rusal foundation documents or those of the companies affiliated with it because of the political risk, Mr Cherney being a controversial figure and associated with the wrong political faction. He also told him that the names of Mr Berezovsky and Mr Patarkatsishvili were similarly to be omitted. Mr Cherney reluctantly agreed to this, Mr Deripaska assured him that, after the creation of Rusal and the receipt of all necessary licences and permits, their group would receive 50% of Rusal, which would give Mr Cherney 20% of it.

The meeting at the Lanesborough hotel

Mr Cherney's account

87. Mr Cherney and Mr Deripaska met at the Lanesborough hotel on 10th March 2001. This was one of their regular meetings to discuss business. Mr Deripaska reported on the course of the Sibal/Sibneft merger. Mr Deripaska said that he and Mr Abramovich would jointly manage the company and that he, on behalf of both groups, would be in charge of Rusal's day to day management and strategy. They went through various documents which Mr Deripaska had brought relating to the merger.

88. When Mr Cherney asked whether it would be possible to pay out a dividend from the joint business Mr Deripaska said that if he, Mr Cherney, wanted money, why was he offering to sell his business interests to third parties and not to him. Mr Deripaska then offered to make an advance payment of $ 250 million and promised that he would hold 20% of the shares in Rusal (to which Mr Cherney would shortly be entitled by reason of his 40% ownership of Radom) in trust for Mr Cherney, and would continue to manage the companies and assets of the aluminium business of the Radom group. He would sell Mr Cherney's 20% of the shares in Rusal between 10th March 2005 and 10th March 2007 and account to Mr Cherney for the proceeds of these sales less the $ 250,000,000. Mr Cherney agreed to this.

89. Mr Cherney asked Mr Deripaska where any disputes would be dealt with and Mr Deripaska replied that they would be dealt with in England according to English law, as had been agreed with Mr Abramovich.

90. Mr Deripaska then started to type up an agreement in Russian on his lap top. He produced a document which included the following in translation[16]:

> *" AGREEMENT NO 1 10th March 2001*
>
> *This agreement has been concluded between M Cherney, hereinafter the First Party, on the one hand, and O. Deripaska, hereinafter the Second Party, on the other hand.*
>
> I. *Object of the Agreement*
>
> *This agreement shall regulate:*
>
> *1. Questions of the management of shares in [Sibal] belonging to the First Party;*
>
> *2. the repayment of the debt of [Sibal] to the First Party.*

[16] Neither this translation nor that in paragraph 92 are agreed.

II. *Implementation of the Agreement*

For the purposes of implementing this agreement, the Parties shall undertake the following:

1. *The First Party shall sell 17.5% of the shares in [Sibal] to the Second Party at a preliminary price of $ 100,000,000;*

2. *Payment for the shares shall take place within one year from the signing of this Agreement;*

3. *The Second Party shall ensure that the debt of [Sibal] to the company Bluzwed is repaid to a total sum of $ 150,000,000, including interest, which is for the benefit of the First Party* [17]*;*

4. *The repayment of the debt shall take place within one year from the moment of signing of this Agreement;*

In the event of the fulfilment of the payment conditions listed in points 1 -4, the First Party shall assign to the Second Party the right to settle of all obligations which [Sibal] has to third parties".

91. Why Mr Deripaska chose to refer to 17.5% or provide for payment of $ 250,000,000 is unclear. Mr Cherney's case is that he had no idea and was interested only in the ultimate result i.e. what was to happen about the 20% in Rusal. Mr Cherney asked where was the reference to his 20% interest in Rusal and the other agreed terms such as the future payment for that 20%. Mr Deripaska expressed reluctance to give a more detailed description of the agreement, repeated that Mr Cherney's name should not be linked to the Rusal transaction, and said that he had given his word to the new partners that he would ensure that that was so. However, when Mr Cherney insisted, Mr Deripaska agreed to put in writing the missing terms.

92. At this stage Mr Cherney left the hotel to meet his wife, agreeing to meet for lunch later. When he and Mr Deripaska met for lunch Mr Deripaska brought with him a document in Russian which reads, in translation:

"*Supplement No 1*

In fulfilment of Agreement No 1 dated 10th March 2001, the Parties have agreed on the following. The Second party must begin to sell shares in the company [Rusal] to third parties within three years from the moment of the beginning of the fulfilment, but not later than five years after the complete fulfilment of the Agreement[18]*; the Second party shall pay the First Party a sum equal to (Z*20-$250,000,000), where Z is the cost of one per cent of the shares of the company [Rusal]. If in the course of three years, several deals are concluded for the sale of shares to third parties, Z shall be calculated as the average for all the sale deals up to the sale of 20% of the shares.*

The Second Party shall pay the First Party the sum due to him within six months of the moment the shares are sold".

[17] There is a dispute as to whether Bluzwed was Mr Cherney's or Mr Deripaska's company. The agreement plainly contemplated that the repayment to Bluzwed would be for Mr Cherney's benefit.

[18] i.e. between 10th March 2005 and 10th March 2007. The first agreement was not due to be fulfilled until 10th March 2002.

93. Mr Cherney noticed the omission of any reference to disputes being dealt with in England under English law but, being eager to get the document finalised, and trusting Mr Deripaska, did not press for inclusion of these terms in the documents.

94. After lunch they returned to the hotel. Mr Deripaska had already printed out and placed on a table a number of sets of both of the documents which he had already signed. Mr Cherney signed two sets of such documents. He gave one of the sets back to Mr Deripaska and took the other set that he had signed along with the other remaining sets on the table. Mr Deripaska assured Mr Cherney that he would perform everything as had been agreed. They shook hands and parted.

Mr Deripaska's account

95. According to Mr Deripaska the meeting at the Lanesborough hotel was not one of a number of regular meetings. It followed an earlier unpleasant meeting in Moscow in March 2001 between himself and Mr Malevsky when he told Mr Malevsky that he wanted to end Mr Malevsky and Mr Cherney's "*protection*" of his business. They agreed a final global payment which included payments to Mr Malevsky and his Russian associates and a payment of $ 250,000,000 to Mr Cherney and his associates. On 10th March Mr Deripaska flew to London in a chartered plane with Agreement No 1 which had been was drafted by him in Moscow and, so far as he recalls, was not corrected at the hotel. He flew back the same afternoon and had no recollection of lunching with Mr Cherney.

96. The charter invoice and hotel documentation reveal that Mr Deripaska did, indeed, fly from Moscow and back; and that he arrived at the hotel at 0910 and his room was checked as cleared at 1529.

97. Supplement No 1 was not discussed at the meeting on 10th March 2001 nor was it shown to Mr Cherney. Supplement No 1 was a document which Mr Deripaska drafted in Moscow as an outline proposal to Mr Malevsky following the meeting with him in Moscow. It formed the basis of discussions with Mr Malevsky there a few days after that meeting. Mr Deripaska had no idea how Mr Cherney got hold of it. Mr Malevsky died in a parachuting accident in South Africa in late 2001.

98. Nor did Mr Deripaska discuss, much less agree, anything to do with English law or English jurisdiction on 10th March 2001 or at any other time. The suggestion that Mr Cherney would ever concern himself with such matters is ridiculous. (Mr Cherney asserts that, whereas someone might be indifferent to questions of law and jurisdiction if no question of safety was involved, he was not prepared, as Mr Deripaska, knew, to have to go to a country where he would not be safe).

99. Mr Deripaska draws attention to the fact that, in his examination before the Swiss Magistrate on 21st February 2004 Mr Cherney is recorded as saying (in translation):

> *"Maitre Hunziker asks me if I still maintain any interest, direct or indirect, in the company [Rusal]. I reply in the negative. All I have done was to sell my shares in the Russian plants that I used to own, I do not know through which intermediary this was done".*

100. However, in a later interview with the Magistrate on 21st June 2004, Mr Cherney stated that he sold "some shares to [Mr Deripaska], but that took longer, up to 2001. For the second instalment I have never received the full payment and the contract is still in force".

Events after the alleged agreement

101. There seems no doubt that $ 250,000,000 was paid to or for the benefit of Mr Cherney. On 8th October 2001 Siberian Investment Company ("SIC"), a share holder in Sibal, sold a 17.5% shareholding therein (10,482,965,692 10 kopek shares) to Hillgate Financial Corp ("Hillgate"),

a company in the Radom Group for 1,747,176,180 roubles. On 14th November 2001 Hillgate sold that shareholding to G.S.A. Cyprus Ltd ("GSA") for $ 150,335,560. SIC, Hillgate, and GSA were all controlled by Mr Deripaska. The result of these transactions was that Hillgate made about $ 91,000,000. On 21st January 2002 Mr Batkov, Mr Cherney's Bulgarian lawyer, was appointed Hillgate's sole director as a result of which Mr Cherney was able to receive the $ 91,000,000.

102. The second half of the payments was not effected by way of loan repayment to Bluzwed as envisaged in Agreement No 1. On 8th April 2002 Radom loaned Hillgate $ 129,043,495.28. That was loaned back by Hillgate to NFM Holding Ltd, the holding company established by Mr Deripaska. (This is odd if, as Mr Deripaska claims, he was buying Mr Cherney off). In the course of 2002 the loan was repaid to Hillgate, of which Mr Cherney now had effective control. On 18th February 2004 Radom waived its right to enforce the loan against Hillgate. The balance was paid by various payments at Mr Cherney's request by way of offset.

103. In around July 2002 Mr Mishakov, Mr Deripaska's legal advisor provided Mr Cherney's Cypriot accountant, Mr George Philipides, with two draft documents. The first was a Call Option Agreement, expressed to be dated 20th September 1999 in which Mr Cherney granted Mr Deripaska a call option to purchase 10,482,965,692 shares in Sibal for $ 150,335,560. The second was dated 2nd February 2000 and purported to record the sale of those shares pursuant to the option. The documents were supposed to be necessary for the purpose of the audit of Rusal. When Mr Philipides pointed out that these documents[19] did not reflect the agreement to pay 20% of the value of Rusal less $ 250,000,000, Mr Mishakov, in an e-mail of July 11th 2002, noted his comments and said that he would revert. So far as the evidence reveals he never did so. If, as Mr Deripaska claims, there was never any agreement about the 20%, I find this a most surprising omission.

104. Mr Cherney's evidence was that when he telephoned Mr Deripaska about the two draft documents he said that his lawyer had made a mistake and "*we should forget about it*". Mr Deripaska's evidence is that these documents said nothing about Mr Cherney's 20% interest in Rusal because he did not have one.

Changes in Sibneft

105. According to Mr Berezovsky in June 2001 he and Mr Patarkatsishvili agreed to sell their interests in Sibneft to Mr Abramovich and his nominees at a substantial undervalue.

Alleged recognition by Mr Deripaska of Mr Cherney's 20% interest in Rusal.

106. According to Mr Cherney he was approached in the second half of 2002 by Mr Gregory Loutchansky in relation to a substantial business proposition. He told Mr Loutchansky to ask Mr Deripaska if he could lend him money on account of his 20% interest in Rusal. Mr Deripaska later telephoned Mr Cherney and expressed anger that Mr Cherney had mentioned their agreement to a third party.

107. Mr Cherney also asked Mr Makhmoudov to liaise with Mr Deripaska with a view to obtaining a more comprehensive agreement with Mr Deripaska. Mr Makhmoudov told Mr Cherney that he had instructed lawyers to draft a more conventional agreement and that a draft had been sent to

[19] Mr Philipides referred to an agreement date 1 March 2001 and a subsequent amendment of 10 March 2001. Why he wrote "1 March" is unclear. Since it is agreed that the first agreement was made on 10th March 2001 it seems likely to be a typographical error.

Mr Deripaska. Mr Deripaska telephoned Mr Cherney and reminded him that their agreement was confidential and should not be disclosed to third parties, and that he should rely on him to perform his obligations. Mr Deripaska's evidence is that he was unaware of any such draft agreement.

2003 Sual offers $ 3 billion for 50% of Rusal

108. In 2003 a company named Sual offered, through intermediaries, to pay $ 3 billion for Mr Cherney and Mr Deripaska's 50% interest in Rusal. (It seems that by now Mr Deripaska had bought out the interests of the two minority partners). Mr Cherney telephoned Mr Deripaska and asked him to consider the offer. Mr Deripaska refused to sell. He said that he would comply with Supplement No 1 in due course. Mr Deripaska was planning to buy the Abramovich group's 50% of shares in Rusal.

109. Mr Cherney later sent to Mr Deripaska a document headed "*Supplement*" with a view to accelerating Mr Deripaska's obligation to buy out Mr Cherney's share in Rusal. It read (in translation):

"SUPPLEMENT

1. Party 2, before 31 March 2003, should perform assessment of [Rusal] including all the company assets. Starting from 1 April 2003, Party 2 should perform all necessary steps in order to realise the 20% stake of shares owned by Party 1 at the price at the time of sale, or in order to achieve a better result, all 50% joint stake of shares owned by Sibal.

2. Each party has a right to acquire the partner's shares at a price calculated on the basis of the offer price established with a third party in relation to the whole joint 50% stake"

Mr Deripaska called Mr Cherney and assured him that, although he refused to accept the Supplement, he would perform his obligations, for which there was still time.

Mr Abramovich sells 25% of Rusal to Mr Deripaska

110. In September 2003 Mr Abramovich sold his 25% of Rusal to Mr Deripaska or companies controlled by him. As a result Mr Berezovsky and Mr Patarkatsishvili became minority shareholders.

Mr Berezovsky and Mr Patarkatsishvili sell 25% of Rusal to Mr Deripaska

111. In October 2004 Mr Berezovsky and Mr Patarkazishvilli sold their 25% shareholding in Rusal to Mr Deripaska in an agreement with an English choice of law and jurisdiction clause. Mr Deripaska says that there was no agreement which contained such a clause. He says that Mr Patarkatsishvili confirmed that he was the sole ultimate beneficial owner of the 25% then acquired. Mr Berezovsky claims that Mr Patarkatsishvili told him that Mr Deripaska insisted as a condition of the sale that the transaction should be in Mr Patarkazishvilli's name alone and that, in the interests of completing the sale he agreed to that. But Mr Deripaska knew perfectly well that he, Mr Berezovsky, held a 12.5% beneficial interest in Rusal.

Further communications between Mr Cherney and Mr Deripaska

112. According to Mr Cherney Mr Deripaska would tell Mr Popov, Mr Makhmoudov and Mr Loutchansky that Mr Cherney had nothing to worry about. He met Mr Deripaska at the Ana Grand Hotel in Vienna at the end of 2003 or the beginning of 2004. He showed him Supplement No 1 and said that, if possible, he would like to receive the value of 20% of Rusal. Mr Deripaska replied that there was nothing to worry about and "*we still have time*". In January 2005 Mr

Cherney met Mr Deripaska in Kiev. Mr Deripaska told him that he hoped to reach a settlement shortly of the litigation in which he was engaged with TWG and would then address his obligations to Mr Cherney. He asked how much Mr Cherney wanted for his share in Rusal. Mr Cherney said he wanted to know the value of 100% of Rusal and would then make him an offer. Mr Deripaska exploded and asked why he should pay such a potentially huge sum calculated by reference to the total value of the business when he had only paid Mr Berezovsky and Mr Patarkatsishvili about $ 450,000,000 for their 25% share of Rusal. Mr Cherney reminded him that he, Mr Deripaska, had paid $ 1.7 billion for Mr Abramovich's 25% share and referred to Sual's offer. Mr Deripaska said he would discuss the issue again after he had reached agreement with TWG.

113. Mr Deripaska's evidence is that whenever he met Mr Cherney after March 2001 he made it clear that he did not regard himself as having any obligations towards him and that there was nothing to discuss. Statements to that effect have regularly been made by him or on his behalf. In January 2005 a spokesman for his management company was quoted in *Vedomosti,* a Russian business daily, as saying that Mr Cherney had never been among the shareholders of Sibal. In April 2006 a representative of that company was quoted as saying that Rusal had no unsettled financial obligations towards anyone. In July 2006 Mr Deripaska was reported as saying that he owed Mr Cherney nothing, In July 2007 he told the Financial Times that he had never worked in partnership with Mr Cherney.

Mr Cherney's claims

114. On 14th May 2006 Mr Cherney's Israeli lawyers, Dr J Weinroth & Co, wrote to Mr Deripaska. The letter referred to Agreement No I and Annex No 1 of March 2001 which "*you drafted and thereafter signed*" and attached a copy of each of the two documents. The copy of Agreement No 1 bore the signatures of both parties. The copy of Annex No 1 (i.e. Supplement No 1) bore only Mr Deripaska's signature. The letter of 14th May referred to meetings between Mr Deripaska and Mr Cherney to discuss the performance of the agreement in Israel in 2002, Vienna during 2003 and 2004, and Kiev in 2005 as well as telephone calls and "*a number of meetings between you and persons on behalf of Mr Chernoy in Moscow*", during which meetings Mr Deripaska promised that it was only a matter of time before he would begin to fulfil his obligations and that he was examining the best ways to do so. The letter requested commencement of the repayment of the $ 3 billion in respect of Mr Cherney's 20% interest in Rusal. No reply was ever sent.

The merger of Rusal, Sual and Glencore

115. In March 2007 a merger took place between Rusal, Sual and Glencore to form UCR. As a result of the merger Rusal's shareholders became the ultimate beneficial owners of 66% of UCR.

Reasonable prospect of success

116. I am satisfied that Mr Cherney has a reasonable prospect of success in respect of his claim. I consider the nature of the claim in more detail in paragraphs 136-8 below.

Good arguable case

117. The next question is whether Mr Cherney has established a "*good arguable case*" that his claim falls within one or more of the types of claim specified in CPR 6.20. That involves determining whether or not he has a good arguable case (a) that the agreement for the breach of which he sues was made; and (b) that it was made in England; or (c) it is governed by English law; or (d) that it was a term of the agreement that disputes should be determined in England. It is common ground that, if an agreement was made as alleged it was made in London. Otherwise (a), (c) and (d) are in dispute.

The type of "agreement" made

118. As to (a) the dispute is as to whether an agreement was made as described by Mr Cherney, including both Agreement No 1 and Supplement No 1, by which Mr Deripaska was to sell a 20% interest in Rusal and account to Mr Cherney for the price (less $ 250 million); or whether, as Mr Deripaska says, Supplement No 1 was never agreed at all, and Agreement No 1 was in reality a vehicle for the payment of protection money, Mr Cherney having no interest, legal or equitable, direct or indirect, in Saaz, Sibal, or Rusal.

119. I cannot and do not purport to determine who is right on this. One side or other is plainly telling lies on a grand scale. But I am satisfied that, on the material presently before me, Mr Cherney has a good arguable case on this point, in the sense that he has a strong argument and that, insofar as any judgment can be made on present material, he has much the better side of the argument. I say that for a number of reasons.

120. *Firstly*, the account which Mr Cherney gives, both as to the background to and the making of the agreement, and what happened thereafter is detailed and plausible and consistent with contemporaneous documentary material.

121. *Secondly*, if Mr Deripaska was never a partner with Mr Cherney in any shape or form and never agreed to do anything with any interest of Mr Cherney in Sibal, or Rusal, because Mr Cherney had none, it is somewhat curious that Mr Deripaska should have chosen to cloak the parties' true agreement in the form of a sale by Mr Cherney of shares in Sibal. It is equally, if not more, curious that he should have used as a proposed means of buying off Mr Malevsky a document which (a) says nothing about Mr Malevsky and (b) is expressed to be a supplement to and in fulfilment of Agreement No 1, to which Mr Malevsky was not a party, and of which it is not apparent that he ever received a copy, in which Mr Deripaska agrees to sell shares in Rusal and account for the proceeds to Mr Cherney. It is also curious that Supplement No 1 should bear the same date as Agreement No 1.

122. *Thirdly*, Mr Deripaska's evidence in relation to Supplement No 1 is scant. Nor is there any explanation as to how Mr Cherney might have got hold of Supplement No 1, if it was not at the meeting on 10th March 2001, or signed it when it was on top of Agreement no 1.

123. *Fourthly*, there are documents which, or the failure to reply to which, provide support to Mr Cherney's claims including:

(a) the document of 18th May 1998 (see paragraph 65);

(b) Syndikus' note of the meeting of 23rd April 1999 (see paragraph 74);

(c) the diagram of the proposed corporate structure (page 15 of MC1: see paragraph 77);

(d) Mr Deripaska's letter of 26th April 1999 (see paragraph 76);

(e) Mr Philipides' e-mail of 11th July 2002 and Mr Mishakov's reply, and the absence of any written denial of the applicability of Supplement No 1 thereafter (see paragraph 103);

(f) the further "*Supplement*" (see paragraph 109);

(g) Dr Weinroth's letter (see paragraph 114). Mr Deripaska's evidence is that he saw no reason to dignify Mr Cherney's unfounded claims with a reply. Since, however, this was a claim worth several billion dollars, some reply might be expected, at any rate if it was bad. Mr Deripaska certainly asked his English solicitors for advice about it: see paragraph 92 of Mr Hauser's witness statement.

124. In addition to the above:

a) On 9th February 2002 Mr Harari, Mr Deripaska's Swiss attorney, wrote to the Swiss Investigating Judge a letter in which he said:

"In 2001 Mr Deripaska purchased the economic rights which Mr Michael Cherney owned in the Sayansk factory"

b) On 17th February 2005 Mr Deripaska said in an interview with the Magistrate:

"….the repurchase which I made in 2001 was….for the economic rights on the Sayansk plant. When I say economic rights, I mean the shares of the company which owns this plant"

c) It is noticeable that, in the same interview, Mr Deripaska was asked to be more precise about extortion attempts made against him. He referred to threats made to him a man called Tatarenkov when he was the general manager of the Sayansk plant. He did not suggest that Mr Cherney was an extortioner.

d) A report by the United Overseas Bank of their visit to the Sayansk plant on 22nd November 1995 records that they met Messrs Bulygin, Deripaska and Karam and learnt that the shareholdings in the plant were, as to 60%, TWM and the "*Michael Cherney*" group and that all management was concentrated in the hands of the "*Cherney*" group via Mr Deripaska. The report contains no reference to Mr Deripaska being a shareholder;

e) A report of a visit of the directors of Syndikus in November 1997 to various Russian businesses, which was to be copied to the Cole, Witestone and Galenit Foundations, states:

"Our clients M.C., O.D., and I.M. jointly own approximately 51% of the plant. 35% of the plant belongs to the brother of M.C. (L.C. with his partners), and the rest is owned by minority shareholders and partially by employees".

The report also reveals that *"our clients"* were entitled to about 35% in a power plant supplied with waste heat from the factory, a significant interest in an aluminium foil factory, 100% of a copper refining plant at Yekaterinburg; and 100% of the Rostar canning factory. It also reveals that at a lunch in Moscow I.M. claimed that he and his two partners controlled over 15 of the 200 largest Russian firms.

f) A memorandum of a meeting of 14th December 1998 shows Mr Deripaska introducing Mr Mishakov as the new lawyer for the group. A Syndikus memorandum of 5th July 1999 records Mr Mishakov discussing with Syndikus the holdings of various companies including Alnicor and that

"In the long term the company intends to be listed on the stock exchange. As not all the beneficiaries of Radom Foundation wish to be mentioned, Iskander Makhmoudov and Pavel Esoubov will hold in trust 50% each of the shares of Alincor for the others when it comes to making the beneficiaries publicly known"

125. *Fifthly*, there is the evidence of various professionals. Mr Jean-Pierre Domenjoz of Syndikus states that Mr Cherney and Mr Deripaska were partners in the Russian aluminium business held as part of the Radom Group in which they were both interested. He attests to the restructuring of Mr Cherney's interests in 1997 arising from the introduction of new partners. He produces a number of documents signed by Mr Deripaska in which Mr Cherney or his foundation (Galenit) is expressed to have between a 30% and a 50% interest in Radom, which, as Mr Deripaska's letter of 26th April 1999 shows, was to be the parent of the group including Sibal. Syndikus plainly

treated Mr Cherney as one of the joint owners of Radom. Mr Domenjoz understood Mr Cherney to be the senior partner in the businesses under both the Meganetti and the Radom lines, and Mr Deripaska to be the day to day manager of the business under the Radom line. On August 10th 2001 Syndikus sent a fax to Mr Mishakov pointing out that:

> *"As you know Radom Foundation is hold [sic] by five different parties and we need a letter from each party giving us the order and authorisation to liquidate Radom Foundation".*

In a fax of 18th February 2003 Mr Deripaska referred to himself as "*one of the beneficiaries of Radom Foundation*".

126. Mr Batkov's evidence is that he met Deripaska more than 10 times between 1996 and 2001, one of which was at the meeting in Paris of 23rd April 1999. On the first occasion he understood Mr Deripaska to be managing Mr Cherney's aluminium business. Later Mr Cherney said that they were equal partners and Mr Deripaska treated Mr Cherney as if he was in practice the senior partner.

127. In October 2001 Mr Cherney commissioned Mr Philipides to research his financial history with a view to providing independent confirmation of the legitimate source of his wealth. Mr Cherney then explained to him that he effectively owned 50% of Sibal through a structure operated by Mr Deripaska and that earlier in the year he had come to an agreement with the latter to sell his interest for approximately $ 450 million (his then assessment of its value), that he was to be paid partly up front within a year and partly from the future proceeds of a 20% sale in Rusal. He says that his subsequent investigations e.g. with Mr Domenjoz of Syndikus and Mr Joseph Karam repeatedly confirmed that Mr Cherney had been in partnership with Mr Deripaska for the aluminium side of the business and with Mr Makhmoudov for the copper side. In addition Mr Cherney put him in touch with Mr Pavel Ezoubov, Mr Deripaska's cousin, and Mr Mishakov, his legal advisor. On 21st November 2001 Mr Ezoubov sent Mr Domenjoz a fax on Radom paper stating that he has been told that "*MC and OD agreed to make an audit of Radom Foundation and I was supplied with the letter from MC ... with request to inform you that he wants that it will be audited by "Horworth Philipides & Partners" and he asks from you all possible help in that thing*".

128. On 22nd January 2002 Mr Mishakov met Mr Philipides at Rusal's office in Moscow. On 15th November 2001 Mr Philipides had sent Mr Mishakov an e-mail setting up the meeting in which he had asked for a list of all investments held by Mr Cherney in "*aluminium and other joint businesses*". At the meeting, according to Mr Philipides, Mr Mishakov confirmed that Mr Cherney was until about a year before Mr Deripaska's partner in owning Sibal; that Mr Deripaska started out as Mr Cherney's assistant and eventually took over; that the operations of Sibal were delegated to Mr Deripaska; and that Mr Cherney advised on strategy but otherwise was really only a financier. He, Mr Mishakov, was aware that a buyout had been agreed and that Mr Cherney had effectively divested himself of any interest in the group. He said that Mr Cherney was an honourable business man who made one mistake which was to leave Russia and leave himself exposed to the mercy of anybody who wanted to gain control of his business.

129. *Sixthly,* there is evidence which tends to support the claim that both Agreement No 1 and Supplement No 1 were executed by the parties in March 2001. In 2008 Mr Robert Radley, an experienced forensic expert, examined the originals of Agreement No 1 and Supplement No 1, which were in the possession of Mr Cherney's solicitors. His report of 2nd April 2008 reveals that the dates and signatures on both Agreement and Supplement were completed with the same blue ballpoint ink, with similar ink flow onto the paper, and with similar defects in the lay down of the ink, save that Mr Cherney's signature on the Supplement was completed with a different blue ballpoint ink. In other words Mr Deripaska signed Agreement No 1 and Supplement No 1

with the same pen. Further, ESDA examination revealed that the original Supplement was signed by Mr Cherney when it was resting on Agreement No 1. This is consistent with both documents having been signed on the same occasion. Why Mr Cherney should have signed the Supplement with a different pen is unknown but I do not regard that as a circumstance that justifies a conclusion that the Supplement did not come into existence in the circumstances described by him.

130. The report also reveals, in agreement with the opinion of Dr Giles, instructed for Mr Deripaska, that the copy of the supplement signed only by Mr Deripaska attached to Dr Weinroth's letter of May 2006, has Mr Deripaska's signature in the same position as that in which it appears in (a) the original Supplement No 1, as inspected by Bryan Cave LLP, Mr Deripaska's solicitors, at the offices of Stephenson Harwood, Mr Cherney's then solicitors; (b) the copies of Supplement No 1 with two signatures ("the copies") exhibited to the statements of Mr Cherney and Mr Batkov; and (c) the copy signed only by Mr Deripaska attached to Dr Weinroth's letter. Mr Radley confirms that the original Supplement No 1 was the master document that has given rise to the copies. Accordingly Mr Cherney must have signed the original of the Supplement after it had been signed by Mr Deripaska. This, however, establishes no more than that someone took a copy of the original supplement bearing Mr Deripaska's signature alone before Mr Cherney signed it.

131. Ms Skir states that, when Mr Cherney returned to Israel from England in March 2001, he gave her a package of documents which she placed in the office safe. Mr Cherney later asked her to copy the package. This was on some date before 26th March 2001 when the Israeli police conducted a search of the office. Whilst copying the documents she became aware that the package contained (a) an agreement and a supplement in Russian, each signed by both Mr Cherney and Mr Deripaska, and (b) an additional copy of Supplement No 1 signed only by Mr Deripaska. She gave the documents in the package to Mr Cherney and put the copies in the safe. The Israeli police took the copies in the safe on 26th March, eventually returning them about six months later.

132. Mr Cherney's evidence is that, so far as Supplement No 1 is concerned, he signed two sets of originals. He brought back to Israel one of the original sets signed by both parties along with various other documents which included the copy of Supplement No 1 signed only by Mr Deripaska, which he later passed to Dr Weinroth. At the end of March 2001 he gave the two signed originals to Mr Batkov. Mr Batkov confirms that he received the two signed originals towards the end of March 2001 and retained them until they were provided to Stephenson Harwood (and thence to Dechert LLP). On Mr Deripaska's case no version of Supplement No 1 containing Mr Cherney's signature was, so far as he is aware, in existence in March 2001.

133. *Seventhly*, I note that on 9th February 2007 Tomlinson, J was told by Mr Roger Stewart QC, for Mr Deripaska, that it was common ground that the first agreement was signed in London but that the status of the second one was still being investigated. I find the vagueness of Mr Deripaska's lawyers' then understanding of his position difficult to square with the robust assertion now made that Supplement No 1 was a proposal for buying off Mr Malevsky — a position which, if true, must have been apparent since 2001.

134. *Eighthly,* I do not regard it as suspicious that there were two documents rather than a single one, in the first of which Mr Deripaska was content for Mr Cherney's name to appear. The first agreement could be represented as terminating Mr Cherney's involvement with Sibal. It is the second which may be regarded as confirming the link between Mr Cherney and Rusal, a link which Mr Deripaska, on one view of the evidence, was reluctant to have patent.

135. I have been constrained to deal with these matters in some detail because of the contention of the defendant that it is necessary for Mr Cherney to satisfy the *Canada Trust* gloss. I repeat, however, that these are not findings of fact against Mr Deripaska. Any such findings are the province of the trial judge who will make them in the light of the totality of the evidence before him or her. Had I been unable to reach a conclusion as to which side had the better of the argument in relation to the making of the agreement relied on I would have held that Mr Cherney had not established a sufficiently good arguable case to justify granting him permission to serve the claim form out of the jurisdiction.

[Paragraphs 136 to 138 intentionally omitted.]

English law and jurisdiction

139. I turn to consider whether Mr Cherney has a good arguable case that the agreement that he made was orally agreed to be subject to English law and jurisdiction. Mr Stewart submits that both of those suggestions are implausible. Since Mr Cherney is not a man concerned with details but only "*crucial issues*" it is unlikely that he would have concerned himself with questions of forum and law. If any such agreement had been made it would have been recorded. If the agreement was that disputes would be dealt with in England "*as had been agreed with Mr Abramovich*" the agreement would be for LCIA arbitration as that is what had been agreed with him. It is also to be noted that in the original Particulars of Claim filed in November 2006 the pleading was that it was expressly agreed that *"English law would govern the relations between the parties in respect of the agreement*". No reference was made to an agreement on English jurisdiction (curial or arbitral).

140. Mr Vos submits that it is entirely understandable that Mr Cherney should seek to agree English law and jurisdiction given his obvious unwillingness to return to Russia. He further points out that Mr Deripaska has often agreed English law and either English jurisdiction or arbitration. Thus the draft merger agreement between Sibal and Sibneft provided for English law and LCIA arbitration. The Loan Agreement between Radom Foundation and Hillgate of 8th April 2002 and between NFM Holding and Hillgate of 9th April 2002 were also subject to English Law and LCIA Arbitration. The draft Call Option Agreement and Share Purchase and Sale Agreement (see paragraph 103 above) were subject to English law and arbitration in the former and English law and UNCITRAL arbitration in London in the latter.

141. On this issue (which, again, I cannot and do not purport to determine) it seems to me that Mr Deripaska has the better side of the argument and, on the question of English jurisdiction, much the better side. Mr Cherney is avowedly not a man for detail. Choice of forum and law would seem to me a detail with which he would not normally concern himself. (According to Mr Hauser it is not a matter with which Mr Deripaska would normally concern himself either). If, as is suggested, this was something of particular significance because of his reluctance or refusal to go back to Russia, one would expect it to have been recorded. Mr Cherney, on his account, asked for the documents to record the agreement about his 20% interest in Rusal and could have asked that it record their agreement on English law and jurisdiction. The alleged agreement could have been quite briefly recorded and even added in manuscript. It is, also, noticeable that no mention was made of the alleged oral agreement on English law in the letter before action from Dr Weinroth.

142. Mr Cherney's evidence is that he spotted the omission but did not raise it because he was eager to get the document finalised and had Mr Deripaska's verbal assurance. That may be so; but it is not particularly convincing. Further, the failure to plead an agreement as to English jurisdiction until December 2007 casts considerable doubt on whether that was ever agreed. I accept that witnesses often leave something out when recounting what has happened, and that

language difficulties may contribute to that. Even so I find it highly surprising that Mr Cherney's experienced former solicitors do not seem to have understood from him that English jurisdiction had been agreed. No such suggestion was ever made to Tomlinson, J, Langley, J or Longmore, LJ and, if there was an agreement on English jurisdiction, an entirely unnecessary case was run on the question of Mr Cherney's domicile. No explanation has been given in any statements as to how the jurisdiction issue only came to be remembered or put forward later.

143. The fact that Mr Deripaska, or, more accurately, his lawyers have included English law and arbitration clauses in agreements does not go much further than to show that he is not averse to having some disputes determined in this manner. It does not, however, sit well with the averment that what Mr Deripaska agreed was English jurisdiction. If the question of where any dispute would be determined was addressed, it would seem more likely that the parties, or at any rate Mr Deripaska, would choose arbitration, which was the form of dispute resolution usually adopted by him.

144. In short, I am not satisfied, on the material before me, that Mr Cherney has a good arguable case that there was an oral agreement as to English law and jurisdiction in that I am not satisfied that on either of those issues he has either much the better or even the better side of the argument; and on the jurisdiction issue I am satisfied that Mr Deripaska has much the better side of the argument.

[Paragraphs 145 to 196 intentionally omitted.]

Discussion on forum conveniens

197. If there was no question of Mr Cherney not getting a fair trial in Russia and no doubt but that he would, if necessary, pursue his claim in the Russian Courts, or could reasonably be expected to do so, Mr Cherney would fail to establish that England was the proper forum for the trial of this dispute. The alleged agreement, if made, was made in England. There may have been an agreement that it would be governed by English law but, on the present material Mr Deripaska has the better side of the argument on that. The claim relates to a substantial stake in a major Russian aluminium business. Whether any agreement is found to have been made as alleged is in large measure dependant on whether or not the parties were partners in business or extortioner and victim. The answer to that depends, in part, on what happened in the relevant part of the aluminium business in Russia between 1993 and 2001. Any evidence on that topic is likely to come predominantly from Russians, who are likely to want to give evidence in Russian, or from Russian documents. Russia has an operating legal system of which Mr Cherney can avail himself.

198. It is, however, apparent to me that, if this claim is not allowed to proceed in England, it will not proceed in Russia. It is unrealistic to suppose that Mr Cherney's claim could be prosecuted with any hope of success without his giving oral evidence and he will not return there for three reasons. *Firstly,* he fears for his life; *secondly,* he fears that he may be arrested on what he claims would be trumped up charges; *thirdly,* he does not believe that he will get a fair trial. I have, therefore, to consider what significance if any, should attach to the fact that a trial in Russia will, in all probability never take place. That must depend on the extent to which any of Mr Cherney's fears are justified and whether, even if justified, they afford any reason for having a trial not in Russia but in England.

[Paragraphs 199 to 263 intentionally omitted.]

Conclusion

264. Taking all those considerations into account, I am persuaded that the risks inherent in a trial in Russia (assassination, arrest on trumped up charges and lack of a fair trial) are sufficient to make England the forum in which the case can most suitably be tried in the interests of both parties and the ends of justice and, accordingly, the proper place for the determination of this claim.

265. I shall, therefore, give permission for the claim form to be served outside the jurisdiction.

EXHIBIT 2:
CLARIFICATION ANNOUNCEMENT

Hong Kong Exchanges and Clearing Limited, The Stock Exchange of Hong Kong Limited and Hong Kong Securities Clearing Company Limited take no responsibility for the contents of this announcement, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this announcement.

This announcement is for information purposes only and does not constitute an invitation or offer to acquire, purchase or subscribe for securities.

Unless otherwise defined, terms and expressions used in this announcement shall have the same meanings as those defined in the prospectus (the "Prospectus") of United Company RUSAL Limited (the "Company") dated 31 December 2009.

An investment in the Shares in the Company involves significant risk. Investors may lose part or all of the value of their investment. Subscription for Shares in the Company is being limited to potential investors who are professional investors or who are willing to subscribe for or purchase at least HK$1 million worth of Shares. Trading in the Shares will be limited to minimum board lots of the number of Shares that make up a minimum board lot trading value at the Listing Date of HK$200,000. Shares in the Company should only be bought and traded by persons who are particularly knowledgeable in investment matters and can afford to lose their investment.

Potential investors should note that the Company does not meet the profit test to qualify for listing on the Main Board of the Hong Kong Stock Exchange. The Company has been admitted to listing on the Hong Kong Stock Exchange on the basis of a large market capitalisation, revenue of more than HK$500,000,000 and positive cash flows from operating activities. In late 2009, the Group entered into agreements with creditors to restructure US$16.8 billion of indebtedness. The Group continues to have significant debt obligations and is subject to stringent covenants and repayment schedules that severely limit its operations and ability to incur new financing. The restructuring has generally extended the maturity of the Group's debt obligations until 2013. However, an important part of the Group's debt falls due in less than ten months' time. By 29 October 2010, unless the Company obtains an extension, the Company must repay a US$4.5 billion loan from Vnesheconombank ("VEB"), a financial institution controlled by the Russian Government and used to support and develop the Russian economy. If the repayment of the whole of the Group's indebtedness is accelerated, for example because a relevant member of the Group is unable to comply with or satisfy any of the terms or conditions of, or triggers any event of default under, the debt restructuring or other debt obligations, or if the Company should be unable to extend or refinance or repay the VEB loan as and when it falls due (for any reason including, without limitation, should OJSC Savings Bank of the Russian Federation not assume the rights, claims and obligations under the VEB loan), the Group may cease to continue as a going-concern. Investors are directed to read the Risk Factors commencing on page 21 of the Prospectus for a description of these and other risks.

UNITED COMPANY RUSAL LIMITED

(Incorporated under the laws of Jersey with limited liability)
(Stock Code: 486)

CLARIFICATION ANNOUNCEMENT

The Directors wish to clarify certain information about the Company as reported in some of the statements in the Prospectus. In particular, the Directors wish to make corrections to certain statements in relation to (i) net debt to adjusted EBITDA, (ii) market share figures, (iii) estimated gain in relation to debt restructuring in December 2009, (iv) information on certain directors, (v) disclosure of interests, (vi) directors' remuneration and (vii) conditions subsequent.

The Directors are of the view that the corrections set out herein are not material and do not alter the disclosure in the Prospectus. The Directors wish to affirm that all material information relevant to the Global Offering and the Group has been disclosed in the Prospectus to enable a reasonable person to form a valid and justifiable opinion of the Shares and the financial condition and profitability of the Company. The Directors consider that the information in the Prospectus is correct and accurate and there is no material omission which will make any statement therein misleading and would warrant the issuance of a supplemental prospectus.

Reference is made to the Prospectus of the Company issued on 31 December 2009.

Net Debt to Adjusted EBITDA

The Directors have identified an error in presentation with respect to the Net Debt to Adjusted EBITDA ratio for the six months ended 30 June 2009. On pages 15, 164 and 250 of the Prospectus, this ratio is stated as 46.6:1. The actual ratio, however, is -46.6:1, which is calculated by dividing Net Debt of US$13,426 million at 30 June 2009 by annualised Adjusted EBITDA of negative US$288 million for the six months ended 30 June 2009 (actual Adjusted EBITDA of negative US$144 million for that six month period annualised by multiplying by two). The Directors believe that the actual Net Debt to Adjusted EBITDA ratio for the six months ended 30 June 2009 is not meaningful, considering annualized Adjusted EBITDA for the period was negative.

Market share figures

The Prospectus presents on pages 11, 92, 94 and 168 the aluminium market share of the Group for 2008 (as a percentage of global aluminium production) and presents on pages 82 and 168 the aluminium market shares of the Group and its principal competitors for 2008. The Directors have identified an error in presentation with respect to these numbers. The Group´s aluminium market share for 2008 (as a percentage of global production) was 11%, and the aluminium market shares of the Group and its principal competitors for 2008 (on an equity basis) were as follows:

	Equity Basis[1]
UC RUSAL:	11%
Rio Tinto Alcan:	10%
Alcoa:	10%
Chalco:	7%
Hydro:	4%
BHP Billiton:	3%
Dubal:	2%
Aluminium Bahrain:	2%
Century:	2%
China Power Inv Corp:	2%

(1) "Equity basis" means the proportion of production from each operation attributed to a company in accordance with that company's equity holding in that operation.

Estimated Gain in Relation to Debt Restructuring in December 2009

It has come to the Directors' attention that, on page 249 of the Prospectus, the first paragraph under the heading "Profit Forecast" incorrectly refers to an estimated net gain of US$1,067 in relation to the debt restructuring in December 2009. The correct amount of the estimated net gain in relation to the debt restructuring in December 2009 is US$1,067 million.

Information on certain Directors

It has come to the Directors' attention that there are typographical errors on pages 259, 266, 267 and 268 in respect of the age of Vladimir Kiryukhin, Alexander Popov and Jivko Savov, each a non-executive Director. The correct age of these Directors should be as follows:

Vladimir Kiryukhin	—	53
Alexander Popov	—	38
Jivko Savov	—	43

Disclosure of Interests

It has also come to the Directors' attention that there is a typographical error on page VIII-19 expressing the interest of Victor Vekselberg in the Company as being 2,400,920,089 Shares. The correct figure should be 2,400,970,089 Shares.

Directors' remuneration

It has come to the Directors' attention that there are certain clerical errors on page 280 of the Prospectus and tables presented on pages I-54, I-55, I-56 and I-57 of the Prospectus in respect of the Directors' remuneration for the years ended 31 December 2007 and 2008 and the six months ended 30 June 2008 and 2009. The accurate amounts of aggregate remuneration the Group's Directors have received for the years ended 31 December 2007 and 2008 and the six months ended 30 June 2008 and 2009 were approximately US$22.6 million, US$15.3 million, US$12.3 million and US$1.2 million, respectively.

The first paragraph under the section "Directors and senior management — Historical compensation of directors and senior management" on page 280 of the Prospectus shoud be as follows:

The aggregate remuneration the Group's Directors have received (including fees, salaries, discretionary bonus, contributions to defined contribution benefit plans (including pension), housing and other allowances, and other benefits in kind) for the years ended 31 December 2006, 2007 and 2008 and the six months ended 30 June 2009 was approximately US$18.9 million, US$22.6 million, US$15.3 million and US$1.2 million, respectively.

The tables presented on pages I-54, I-55, I-56 and I-57 of the Prospectus in respect of the Directors' remuneration for the years ended 31 December 2007 and 2008 and the six months ended 30 June 2008 and 2009 should be as follows:

	Year ended 31 December 2007			
	Directors' fees	**Salaries, allowances, benefits in kind and discretionary bonuses**	**Retirement scheme contributions**	**Total**
	USD thousand	*USD thousand*	*USD thousand*	*USD thousand*
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				

Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	154	—	—	154
Alexander Bulygin (note (a))	—	15,864	—	15,864
Ivan Glasenberg	175	—	—	175
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev (note (b))	—	6,110	—	6,110
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	186	—	—	186
Philip Lader	160	—	—	160
Simon Thompson	—	—	—	—
	675	**21,974**	**—**	**22,649**

Notes:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

(b) Vladislav Soloviev was CFO of the Company during the year ended 31 December 2007 and resigned from the position of CFO in February 2008.

	Year ended 31 December 2008			
	Directors' fees	**Salaries, allowances, benefits in kind and discretionary bonuses**	**Retirement scheme contributions**	**Total**
	USD thousand	*USD thousand*	*USD thousand*	*USD thousand*
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	241	—	—	241
Alexander Bulygin (note (a))	—	2,362	—	2,362
Ivan Glasenberg	217	—	—	217
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev (note (b))	—	11,713	—	11,713
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	216	—	—	216
Philip Lader	304	—	—	304
Simon Thompson	227	—	—	227

	1,205	**14,075**	**—**	**15,280**

Notes:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

(b) Vladislav Soloviev was CFO of the Company during the year ended 31 December 2007 and resigned from the position of CFO in February 2008.

	Six months ended 30 June 2008			
	Directors' fees	**Salaries, allowances, benefits in kind and discretionary bonuses**	**Retirement scheme contributions**	**Total**
	USD thousand	*USD thousand*	*USD thousand*	*USD thousand*
Executive Director				
Oleg Deripaska (note (a))	—	—	—	—
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	120	—	—	120
Alexander Bulygin (note (a))	—	—	—	—
Ivan Glasenberg	109	—	—	109
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev (note (b))	—	11,713	—	11,713
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	108	—	—	108
Philip Lader	152	—	—	152
Simon Thompson	113	—	—	113
	602	**11,713**	**—**	**12,315**

Note:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

(b) Vladislav Soloviev was CFO of the Company during the year ended 31 December 2007 and resigned from the position of CFO in February 2008.

	Six months ended 30 June 2009			
	Directors' fees	**Salaries, allowances, benefits in kind and discretionary bonuses**	**Retirement scheme contributions**	**Total**

	USD thousand	*USD thousand*	*USD thousand*	*USD thousand*
Executive Director				
Oleg Deripaska (note (a))	—	659	—	659
Non-executive Directors				
Victor Vekselberg (Chairman)	—	—	—	—
Dmitry Afanasiev	—	—	—	—
Len Blavatnik	31	—	—	31
Alexander Bulygin (note (a))	—	139	—	139
Ivan Glasenberg	103	—	—	103
Vladimir Kiryukhin	—	—	—	—
Michael Nossal	—	—	—	—
Alexander Popov	—	—	—	—
Dmitry Razumov	—	—	—	—
Jivko Savov	—	—	—	—
Vladislav Soloviev	—	—	—	—
Anatoly Tikhonov	—	—	—	—
Independent Non-executive Directors				
Nigel Kenny	115	—	—	115
Philip Lader	73	—	—	73
Simon Thompson	129	—	—	129
	451	**798**	**—**	**1,249**

Note:

(a) Oleg Deripaska became CEO of the Company with effect from 1 January 2009, replacing Alexander Bulygin, who was CEO of the Company and resigned from the position of CEO on 31 December 2008.

Conditions subsequent

On page 236, the Prospectus refers to the requirement for the Company to provide certain information, including, no later than 14 January 2010, a copy of each related party contract. Since the date of the Prospectus, the Company has obtained the consent of the international lenders to the extension of such deadline to 15 February 2010 with respect to certain of the related party contracts.

General

The Directors are of the view that the corrections set out herein are not material and do not alter the disclosure in the Prospectus. The Directors wish to affirm that all material information relevant to the Global Offering and the Group has been disclosed in the Prospectus to enable a reasonable person to form a valid and justifiable opinion of the Shares and the financial condition and profitability of the Company. The Directors consider that the information in the Prospectus is correct and accurate and there is no material omission which will make any statement therein misleading and would warrant the issuance of a supplemental prospectus.

By order of the Board
United Company Rusal Limited
Tatiana Soina
Director

21 January 2010

As at the date of this announcement, our executive Directors are Mr. Oleg Deripaska, Mr. Petr Sinshinov and Ms. Tatiana Soina, our non-executive Directors are Mr. Victor Vekselberg (Chairman), Mr. Dmitry Afanasiev, Mr. Len Blavatnik, Mr. Ivan Glasenberg, Mr. Vladimir Kiryukhin, Mr. Alexander Popov, Mr. Dmitry Razumov, Mr. Jivko Savov, Mr. Vladislav Soloviev and Mr. Anatoly Tikhonov, and our independent non-executive Directors are Mr. Peter Nigel Kenny, Mr. Philip Lader and Ms. Elsie Leung Oi-sie.