# Koninklijke KPN NV <br> Corporate Action: Takeover 

Implied volatilities
Individual Equity Options (KPN)

| Call implied vola | Expiry date | Series | Put implied vola |
| :---: | :---: | :---: | :---: |
| 94.4 | 20 September 2013 | 0.50 | 46.8 |
| 55.6 | 20 September 2013 | 0.91 | 46.8 |
| 49.6 | 20 September 2013 | 1.00 | 46.8 |
| 38.4 | 20 September 2013 | 1.21 | 46.8 |
| 33.6 | 20 September 2013 | 1.30 | 46.8 |
| 38.4 | 20 September 2013 | 1.40 | 46.8 |
| 39.9 | 20 September 2013 | 1.46 | 46.8 |
| 45.6 | 20 September 2013 | 1.52 | 47.1 |
| 45.4 | 20 September 2013 | 1.58 | 47.7 |
| 48.3 | 20 September 2013 | 1.70 | 47.3 |
| 47.1 | 20 September 2013 | 1.82 | 46.1 |
| 47.0 | 20 September 2013 | 1.90 | 46.0 |
| 45.9 | 20 September 2013 | 1.94 | 46.4 |
| 46.2 | 20 September 2013 | 2.00 | 45.6 |
| 46.7 | 20 September 2013 | 2.06 | 46.9 |
| 47.6 | 20 September 2013 | 2.12 | 48.2 |
| 49.4 | 20 September 2013 | 2.18 | 50.1 |
| 53.4 | 20 September 2013 | 2.30 | 52.8 |
| 55.4 | 20 September 2013 | 2.43 | 58.4 |
| 61.2 | 20 September 2013 | 2.55 | 60.2 |
| 62.9 | 20 September 2013 | 2.67 | 63.9 |
| 66.9 | 20 September 2013 | 2.79 | 65.6 |
| 71.4 | 20 September 2013 | 2.91 | 69.8 |
| 72.1 | 20 September 2013 | 3.15 | 73.5 |
| 71.9 | 20 September 2013 | 3.40 | 77.9 |
| 71.9 | 20 September 2013 | 3.64 | 72.1 |
| 71.9 | 20 September 2013 | 3.88 | 54.1 |
| 71.9 | 20 September 2013 | 4.12 | 59.3 |
| 71.9 | 20 September 2013 | 4.37 | 52.1 |
| 33.1 | 18 October 2013 | 1.20 | 45.7 |
| 44.7 | 18 October 2013 | 1.40 | 45.7 |
| 49.1 | 18 October 2013 | 1.50 | 45.5 |
| 47.6 | 18 October 2013 | 1.60 | 45.3 |
| 45.4 | 18 October 2013 | 1.70 | 44.8 |


| 43.6 | 18 October 2013 | 1.80 | 42.5 |
| :---: | :---: | :---: | :---: |
| 43.6 | 18 October 2013 | 1.90 | 43.0 |
| 43.8 | 18 October 2013 | 2.00 | 43.6 |
| 44.6 | 18 October 2013 | 2.10 | 44.4 |
| 46.0 | 18 October 2013 | 2.20 | 45.4 |
| 47.8 | 18 October 2013 | 2.40 | 49.0 |
| 51.4 | 18 October 2013 | 2.60 | 51.9 |
| 43.0 | 15 November 2013 | 1.80 | 42.6 |
| 42.6 | 15 November 2013 | 2.00 | 43.8 |
| 43.5 | 15 November 2013 | 2.10 | 43.3 |
| 44.3 | 15 November 2013 | 2.20 | 44.2 |
| 45.3 | 15 November 2013 | 2.30 | 45.4 |
| 45.7 | 15 November 2013 | 2.40 | 46.6 |
| 48.3 | 15 November 2013 | 2.60 | 48.3 |
| 54.6 | 20 December 2013 | 0.50 | 46.7 |
| 32.6 | 20 December 2013 | 0.91 | 46.7 |
| 43.6 | 20 December 2013 | 1.21 | 46.4 |
| 41.9 | 20 December 2013 | 1.30 | 46.6 |
| 43.2 | 20 December 2013 | 1.40 | 47.3 |
| 45.4 | 20 December 2013 | 1.46 | 45.9 |
| 45.1 | 20 December 2013 | 1.52 | 44.6 |
| 44.2 | 20 December 2013 | 1.58 | 44.3 |
| 44.5 | 20 December 2013 | 1.70 | 42.4 |
| 42.0 | 20 December 2013 | 1.82 | 42.6 |
| 42.1 | 20 December 2013 | 1.94 | 42.3 |
| 41.3 | 20 December 2013 | 2.00 | 43.9 |
| 42.3 | 20 December 2013 | 2.06 | 42.5 |
| 42.4 | 20 December 2013 | 2.10 | 42.2 |
| 42.4 | 20 December 2013 | 2.12 | 42.0 |
| 42.3 | 20 December 2013 | 2.18 | 42.8 |
| 43.6 | 20 December 2013 | 2.30 | 43.5 |
| 43.5 | 20 December 2013 | 2.40 | 44.2 |
| 43.5 | 20 December 2013 | 2.43 | 44.4 |
| 44.3 | 20 December 2013 | 2.50 | 44.2 |
| 44.8 | 20 December 2013 | 2.55 | 44.1 |
| 45.5 | 20 December 2013 | 2.67 | 45.4 |
| 47.2 | 20 December 2013 | 2.73 | 44.6 |
| 46.8 | 20 December 2013 | 2.75 | 44.5 |
| 46.1 | 20 December 2013 | 2.79 | 44.3 |
| 47.4 | 20 December 2013 | 2.91 | 46.1 |
| 50.0 | 20 December 2013 | 3.03 | 46.9 |
| 51.1 | 20 December 2013 | 3.40 | 50.3 |
| 53.3 | 20 December 2013 | 3.64 | 51.1 |


| 52.1 | 20 December 2013 | 3.88 | 36.9 |
| :---: | :---: | :---: | :---: |
| 52.1 | 20 December 2013 | 4.37 | 35.3 |
| 52.1 | 20 December 2013 | 4.85 | 34.3 |
| 52.1 | 20 December 2013 | 5.34 | 37.2 |
| 52.1 | 20 December 2013 | 5.82 | 39.9 |
| 52.1 | 20 December 2013 | 6.06 | 41.1 |
| 52.1 | 20 December 2013 | 6.67 | 45.0 |
| 52.1 | 20 December 2013 | 7.28 | 48.9 |
| 52.1 | 20 December 2013 | 8.49 | 51.7 |
| 52.1 | 20 December 2013 | 9.70 | 55.3 |
| 42.8 | 21 March 2014 | 0.50 | 55.6 |
| 39.6 | 21 March 2014 | 0.91 | 55.6 |
| 43.4 | 21 March 2014 | 1.21 | 45.2 |
| 43.6 | 21 March 2014 | 1.30 | 43.8 |
| 40.6 | 21 March 2014 | 1.40 | 44.4 |
| 40.2 | 21 March 2014 | 1.46 | 43.1 |
| 42.4 | 21 March 2014 | 1.52 | 42.5 |
| 40.6 | 21 March 2014 | 1.58 | 42.8 |
| 41.9 | 21 March 2014 | 1.70 | 41.6 |
| 39.7 | 21 March 2014 | 1.82 | 40.5 |
| 40.3 | 21 March 2014 | 1.94 | 40.6 |
| 40.1 | 21 March 2014 | 2.12 | 40.1 |
| 40.1 | 21 March 2014 | 2.20 | 40.3 |
| 41.2 | 21 March 2014 | 2.43 | 41.1 |
| 42.1 | 21 March 2014 | 2.60 | 42.7 |
| 43.2 | 21 March 2014 | 2.80 | 44.5 |
| 44.3 | 21 March 2014 | 3.00 | 46.4 |
| 36.1 | 20 June 2014 | 0.61 | 52.6 |
| 45.1 | 20 June 2014 | 1.00 | 45.2 |
| 42.6 | 20 June 2014 | 1.21 | 44.9 |
| 41.0 | 20 June 2014 | 1.40 | 42.4 |
| 39.5 | 20 June 2014 | 1.52 | 42.4 |
| 39.3 | 20 June 2014 | 1.60 | 40.1 |
| 38.2 | 20 June 2014 | 1.82 | 38.2 |
| 37.9 | 20 June 2014 | 1.94 | 38.8 |
| 37.9 | 20 June 2014 | 2.12 | 39.0 |
| 37.9 | 20 June 2014 | 2.18 | 38.3 |
| 39.0 | 20 June 2014 | 2.43 | 40.6 |
| 39.3 | 20 June 2014 | 2.67 | 40.1 |
| 39.8 | 20 June 2014 | 2.91 | 41.1 |
| 41.6 | 20 June 2014 | 3.40 | 41.6 |
| 42.9 | 20 June 2014 | 3.64 | 42.7 |
| 45.2 | 20 June 2014 | 3.88 | 44.3 |


| 47.4 | 20 June 2014 | 4.37 | 43.6 |
| :---: | :---: | :---: | :---: |
| 48.7 | 20 June 2014 | 4.85 | 46.9 |
| 55.8 | 20 June 2014 | 7.28 | 46.2 |
| 60.4 | 19 December 2014 | 0.61 | 64.7 |
| 50.3 | 19 December 2014 | 1.00 | 47.9 |
| 46.2 | 19 December 2014 | 1.21 | 45.8 |
| 41.6 | 19 December 2014 | 1.52 | 41.4 |
| 38.1 | 19 December 2014 | 1.82 | 39.6 |
| 36.8 | 19 December 2014 | 1.94 | 39.1 |
| 36.8 | 19 December 2014 | 2.12 | 39.1 |
| 37.0 | 19 December 2014 | 2.18 | 39.1 |
| 37.1 | 19 December 2014 | 2.43 | 39.0 |
| 37.8 | 19 December 2014 | 2.67 | 39.6 |
| 38.1 | 19 December 2014 | 2.91 | 40.9 |
| 38.6 | 19 December 2014 | 3.03 | 42.8 |
| 39.9 | 19 December 2014 | 3.40 | 43.8 |
| 40.3 | 19 December 2014 | 3.64 | 45.9 |
| 40.7 | 19 December 2014 | 3.88 | 46.5 |
| 40.9 | 19 December 2014 | 4.37 | 44.9 |
| 43.3 | 19 December 2014 | 4.85 | 46.8 |
| 45.3 | 19 December 2014 | 5.34 | 47.6 |
| 47.3 | 19 December 2014 | 5.82 | 49.3 |
| 48.7 | 19 December 2014 | 6.06 | 50.8 |
| 48.9 | 19 December 2014 | 7.28 | 35.7 |
| 49.4 | 19 December 2014 | 8.49 | 35.7 |
| 49.4 | 19 December 2014 | 9.70 | 38.3 |
| 44.1 | 19 June 2015 | 1.00 | 48.2 |
| 38.3 | 19 June 2015 | 1.50 | 43.6 |
| 36.0 | 19 June 2015 | 2.00 | 40.0 |
| 36.0 | 19 June 2015 | 2.50 | 40.6 |
| 36.5 | 19 June 2015 | 3.00 | 41.4 |
| 52.4 | 18 December 2015 | 0.61 | 58.3 |
| 45.6 | 18 December 2015 | 1.00 | 49.3 |
| 42.1 | 18 December 2015 | 1.21 | 46.2 |
| 39.8 | 18 December 2015 | 1.52 | 42.9 |
| 37.5 | 18 December 2015 | 1.82 | 41.4 |
| 36.1 | 18 December 2015 | 1.94 | 40.6 |
| 36.0 | 18 December 2015 | 2.12 | 40.9 |
| 35.3 | 18 December 2015 | 2.43 | 40.6 |
| 35.9 | 18 December 2015 | 2.73 | 41.0 |
| 36.5 | 18 December 2015 | 2.91 | 41.0 |
| 36.0 | 18 December 2015 | 3.64 | 42.9 |
| 37.6 | 18 December 2015 | 4.24 | 44.8 |


| 38.9 | 18 December 2015 | 4.85 | 46.1 |
| :---: | :---: | :---: | :---: |
| 39.8 | 18 December 2015 | 5.34 | 46.9 |
| 40.2 | 18 December 2015 | 6.06 | 49.1 |
| 41.9 | 18 December 2015 | 7.28 | 48.1 |
| 48.5 | 18 December 2015 | 9.70 | 41.3 |
| 48.3 | 16 December 2016 | 0.61 | 52.8 |
| 39.2 | 16 December 2016 | 1.21 | 45.6 |
| 37.1 | 16 December 2016 | 1.52 | 42.3 |
| 36.8 | 16 December 2016 | 1.82 | 41.0 |
| 35.5 | 16 December 2016 | 1.94 | 41.3 |
| 35.8 | 16 December 2016 | 2.12 | 40.6 |
| 35.0 | 16 December 2016 | 2.43 | 40.9 |
| 35.0 | 16 December 2016 | 2.73 | 40.9 |
| 35.3 | 16 December 2016 | 2.91 | 41.1 |
| 35.3 | 16 December 2016 | 3.03 | 41.6 |
| 35.6 | 16 December 2016 | 3.64 | 42.3 |
| 35.9 | 16 December 2016 | 4.24 | 43.3 |
| 36.2 | 16 December 2016 | 4.85 | 44.4 |
| 34.8 | 16 December 2016 | 6.06 | 46.1 |
| 37.6 | 16 December 2016 | 7.28 | 44.6 |
| 41.2 | 15 December 2017 | 0.61 | 57.6 |
| 38.0 | 15 December 2017 | 1.21 | 46.6 |
| 36.4 | 15 December 2017 | 1.52 | 44.0 |
| 35.3 | 15 December 2017 | 1.82 | 42.5 |
| 34.8 | 15 December 2017 | 2.12 | 42.5 |
| 34.0 | 15 December 2017 | 2.43 | 42.4 |
| 34.0 | 15 December 2017 | 2.73 | 42.4 |
| 34.0 | 15 December 2017 | 3.03 | 42.3 |
| 33.9 | 15 December 2017 | 3.64 | 43.1 |
| 34.1 | 15 December 2017 | 4.85 | 44.5 |

Individual Equity Options (KPO)

| Call implied <br> vola | Expiry date | Series | Put implied <br> vola |
| :---: | :---: | ---: | :---: |
| 55.6 | 20 September 2013 | 0.91 | 46.8 |
| 38.4 | 20 September 2013 | 1.21 | 46.8 |
| 39.9 | 20 September 2013 | 1.46 | 46.8 |
| 45.6 | 20 September 2013 | 1.52 | 47.1 |
| 45.4 | 20 September 2013 | 1.58 | 47.7 |
| 48.3 | 20 September 2013 | 1.70 | 47.3 |
| 47.1 | 20 September 2013 | 1.82 | 46.1 |
| 45.9 | 20 September 2013 | 1.94 | 46.4 |
| 46.7 | 20 September 2013 | 2.06 | 46.9 |
| 47.6 | 20 September 2013 | 2.12 | 48.2 |
| 49.4 | 20 September 2013 | 2.18 | 50.1 |
| 53.4 | 20 September 2013 | 2.30 | 52.8 |
| 55.4 | 20 September 2013 | 2.43 | 58.4 |
| 61.2 | 20 September 2013 | 2.55 | 60.2 |
| 62.9 | 20 September 2013 | 2.67 | 63.9 |
| 66.9 | 20 September 2013 | 2.79 | 65.6 |
| 71.4 | 20 September 2013 | 2.91 | 69.8 |
| 72.1 | 20 September 2013 | 3.15 | 73.5 |
| 71.9 | 20 September 2013 | 3.40 | 77.9 |
| 71.9 | 20 September 2013 | 3.64 | 72.1 |
| 71.9 | 20 September 2013 | 3.88 | 54.1 |
| 71.9 | 20 September 2013 | 4.12 | 59.3 |
| 71.9 | 20 September 2013 | 4.37 | 52.1 |
| 32.6 | 20 December 2013 | 0.91 | 46.7 |
| 43.6 | 20 December 2013 | 1.21 | 46.4 |
| 45.4 | 20 December 2013 | 1.46 | 45.9 |
| 45.1 | 20 December 2013 | 1.52 | 44.6 |
| 44.2 | 20 December 2013 | 1.58 | 44.3 |
| 44.5 | 20 December 2013 | 1.70 | 42.4 |
| 42.0 | 20 December 2013 | 1.82 | 42.6 |
| 42.1 | 20 December 2013 | 1.94 | 42.3 |
| 20 December 2013 | 2.06 | 42.5 |  |
| 20 December 2013 | 2.12 | 42.0 |  |
| 42.3 |  |  |  |
| 42 |  |  |  |


| 42.3 | 20 December 2013 | 2.18 | 42.8 |
| :---: | :---: | :---: | :---: |
| 43.6 | 20 December 2013 | 2.30 | 43.5 |
| 43.5 | 20 December 2013 | 2.43 | 44.4 |
| 44.8 | 20 December 2013 | 2.55 | 44.1 |
| 45.5 | 20 December 2013 | 2.67 | 45.4 |
| 47.2 | 20 December 2013 | 2.73 | 44.6 |
| 46.1 | 20 December 2013 | 2.79 | 44.3 |
| 47.4 | 20 December 2013 | 2.91 | 46.1 |
| 50.0 | 20 December 2013 | 3.03 | 46.9 |
| 51.1 | 20 December 2013 | 3.40 | 50.3 |
| 53.3 | 20 December 2013 | 3.64 | 51.1 |
| 52.1 | 20 December 2013 | 3.88 | 36.9 |
| 52.1 | 20 December 2013 | 4.37 | 35.3 |
| 52.1 | 20 December 2013 | 4.85 | 34.3 |
| 52.1 | 20 December 2013 | 5.34 | 37.2 |
| 52.1 | 20 December 2013 | 5.82 | 39.9 |
| 52.1 | 20 December 2013 | 6.06 | 41.1 |
| 52.1 | 20 December 2013 | 6.67 | 45.0 |
| 52.1 | 20 December 2013 | 7.28 | 48.9 |
| 52.1 | 20 December 2013 | 8.49 | 51.7 |
| 52.1 | 20 December 2013 | 9.70 | 55.3 |
| 39.6 | 21 March 2014 | 0.91 | 55.6 |
| 43.4 | 21 March 2014 | 1.21 | 45.2 |
| 40.2 | 21 March 2014 | 1.46 | 43.1 |
| 42.4 | 21 March 2014 | 1.52 | 42.5 |
| 40.6 | 21 March 2014 | 1.58 | 42.8 |
| 41.9 | 21 March 2014 | 1.70 | 41.6 |
| 39.7 | 21 March 2014 | 1.82 | 40.5 |
| 40.3 | 21 March 2014 | 1.94 | 40.6 |
| 40.1 | 21 March 2014 | 2.12 | 40.1 |
| 41.2 | 21 March 2014 | 2.43 | 41.1 |
| 36.1 | 20 June 2014 | 0.61 | 52.6 |
| 42.6 | 20 June 2014 | 1.21 | 44.9 |
| 39.5 | 20 June 2014 | 1.52 | 42.4 |
| 38.2 | 20 June 2014 | 1.82 | 38.2 |
| 37.9 | 20 June 2014 | 1.94 | 38.8 |
| 37.9 | 20 June 2014 | 2.12 | 39.0 |
| 37.9 | 20 June 2014 | 2.18 | 38.3 |
| 39.0 | 20 June 2014 | 2.43 | 40.6 |
| 39.3 | 20 June 2014 | 2.67 | 40.1 |
| 39.8 | 20 June 2014 | 2.91 | 41.1 |
| 41.6 | 20 June 2014 | 3.40 | 41.6 |
| 42.9 | 20 June 2014 | 3.64 | 42.7 |


| 45.2 | 20 June 2014 | 3.88 | 44.3 |
| :---: | :---: | :---: | :---: |
| 47.4 | 20 June 2014 | 4.37 | 43.6 |
| 48.7 | 20 June 2014 | 4.85 | 46.9 |
| 55.8 | 20 June 2014 | 7.28 | 46.2 |
| 60.4 | 19 December 2014 | 0.61 | 64.7 |
| 46.2 | 19 December 2014 | 1.21 | 45.8 |
| 41.6 | 19 December 2014 | 1.52 | 41.4 |
| 38.1 | 19 December 2014 | 1.82 | 39.6 |
| 36.8 | 19 December 2014 | 1.94 | 39.1 |
| 36.8 | 19 December 2014 | 2.12 | 39.1 |
| 37.0 | 19 December 2014 | 2.18 | 39.1 |
| 37.1 | 19 December 2014 | 2.43 | 39.0 |
| 37.8 | 19 December 2014 | 2.67 | 39.6 |
| 38.1 | 19 December 2014 | 2.91 | 40.9 |
| 38.6 | 19 December 2014 | 3.03 | 42.8 |
| 39.9 | 19 December 2014 | 3.40 | 43.8 |
| 40.3 | 19 December 2014 | 3.64 | 45.9 |
| 40.7 | 19 December 2014 | 3.88 | 46.5 |
| 40.9 | 19 December 2014 | 4.37 | 44.9 |
| 43.3 | 19 December 2014 | 4.85 | 46.8 |
| 45.3 | 19 December 2014 | 5.34 | 47.6 |
| 47.3 | 19 December 2014 | 5.82 | 49.3 |
| 48.7 | 19 December 2014 | 6.06 | 50.8 |
| 48.9 | 19 December 2014 | 7.28 | 35.7 |
| 49.4 | 19 December 2014 | 8.49 | 35.7 |
| 49.4 | 19 December 2014 | 9.70 | 38.3 |
| 52.4 | 18 December 2015 | 0.61 | 58.3 |
| 42.1 | 18 December 2015 | 1.21 | 46.2 |
| 39.8 | 18 December 2015 | 1.52 | 42.9 |
| 37.5 | 18 December 2015 | 1.82 | 41.4 |
| 36.1 | 18 December 2015 | 1.94 | 40.6 |
| 36.0 | 18 December 2015 | 2.12 | 40.9 |
| 35.3 | 18 December 2015 | 2.43 | 40.6 |
| 35.9 | 18 December 2015 | 2.73 | 41.0 |
| 36.5 | 18 December 2015 | 2.91 | 41.0 |
| 36.0 | 18 December 2015 | 3.64 | 42.9 |
| 37.6 | 18 December 2015 | 4.24 | 44.8 |
| 38.9 | 18 December 2015 | 4.85 | 46.1 |
| 39.8 | 18 December 2015 | 5.34 | 46.9 |
| 40.2 | 18 December 2015 | 6.06 | 49.1 |
| 41.9 | 18 December 2015 | 7.28 | 48.1 |
| 48.5 | 18 December 2015 | 9.70 | 41.3 |
| 48.3 | 16 December 2016 | 0.61 | 52.8 |


| 39.2 | 16 December 2016 | 1.21 | 45.6 |
| :---: | :---: | :---: | :---: |
| 37.1 | 16 December 2016 | 1.52 | 42.3 |
| 36.8 | 16 December 2016 | 1.82 | 41.0 |
| 35.5 | 16 December 2016 | 1.94 | 41.3 |
| 35.8 | 16 December 2016 | 2.12 | 40.6 |
| 35.0 | 16 December 2016 | 2.43 | 40.9 |
| 35.0 | 16 December 2016 | 2.73 | 40.9 |
| 35.3 | 16 December 2016 | 2.91 | 41.1 |
| 35.3 | 16 December 2016 | 3.03 | 41.6 |
| 35.6 | 16 December 2016 | 3.64 | 42.3 |
| 35.9 | 16 December 2016 | 4.24 | 43.3 |
| 36.2 | 16 December 2016 | 4.85 | 44.4 |
| 34.8 | 16 December 2016 | 6.06 | 46.1 |
| 37.6 | 16 December 2016 | 7.28 | 44.6 |
| 41.2 | 15 December 2017 | 0.61 | 57.6 |
| 38.0 | 15 December 2017 | 1.21 | 46.6 |
| 36.4 | 15 December 2017 | 1.52 | 44.0 |
| 35.3 | 15 December 2017 | 1.82 | 42.5 |
| 34.8 | 15 December 2017 | 2.12 | 42.5 |
| 34.0 | 15 December 2017 | 2.43 | 42.4 |
| 34.0 | 15 December 2017 | 2.73 | 42.4 |
| 34.0 | 15 December 2017 | 3.03 | 42.3 |
| 33.9 | 15 December 2017 | 3.64 | 43.1 |
| 34.1 | 15 December 2017 | 4.85 | 44.5 |
|  |  |  | 4 |

