



CORRECTION SLIP

Corrections to the consultation document entitled "*Annual licence fees for 900 MHz and 1800 MHz spectrum*" published by Ofcom on 10 October 2013

1. On 10 October 2013, Ofcom published a consultation document entitled "Annual licence fees for 900 MHz and 1800 MHz spectrum" (the "Consultation Document").
2. Since our publication of that document, it has come to our attention that the Consultation Document contains errors regarding the Spain 900 MHz benchmarks and attribution of the Ireland and Romania benchmarks, in addition to a typographical error related to the Romania benchmark. We wish to correct these as explained below.

Spain 900 MHz benchmarks

3. The Consultation Document shows a figure of £24.9m per MHz as the absolute value benchmark for 900 MHz from the November 2011 auction in Spain. It also shows £23.7m per MHz as the relative value benchmark of 900 MHz to 800 MHz,¹ based on a 79% ratio between the above mentioned £24.9m per MHz figure for 900 MHz and the £31.4m average price for 800 MHz in the July 2011 auction.
4. The correct absolute value benchmark for the November 2011 auction in Spain is slightly higher at £25.4m per MHz. As a result:
 - a) the ratio between this value and the 800 MHz benchmark in the Spain July 2011 auction is 81%;
 - b) this ratio in turn implies a relative value benchmark for 900 MHz to 800 MHz equal to £24.2m per MHz; and
 - c) in the sensitivity analysis, one scenario assumed 50% partial refund of initial contributions for DTT coexistence mitigation. Under this scenario, the relative value of 900 MHz to 800 MHz in Spain at 81% is £22.9m per MHz.
5. As explained in the Consultation Document², in relation to the 900 MHz spectrum, we considered that we should place greater weight on evidence from the auction held in Spain in November 2011, treating it as more important evidence. The erroneous figure (£24.9m per MHz) was due to Ofcom mistakenly using a figure which averaged the

¹ In Annex 8 to the Consultation Document, the relative value of 900 MHz to 800 MHz in Spain was reported as £23.6m per MHz in Figure A8.1 and as £23.5m in paragraph A8.12. Both of these figures are incorrect.

² See, in particular, paragraph 4.33 and Ofcom's preliminary conclusions in relation to the Spain auctions at page 113 of the Consultation Document.

licence prices for 900 MHz in the auctions held in Spain in July 2011 and November 2011 instead of using the results of the November 2011 auction only.

6. For the avoidance of doubt, we have placed less weight on the absolute values in the July 2011 auction, including for 900 MHz, and on the relative value of 900 MHz to 800 MHz in that auction. However, we have placed greater weight on the relative value of 900 MHz to 800 MHz derived by using the 900 MHz value in the November 2011 auction and the 800 MHz value in the July 2011 auction (see paragraph 3 above and page 113 in Annex 7). The evidence in the Spain July 2011 and November 2011 auctions that we have treated as more or less important is also summarised in the table at paragraph 20 below.

7. The following table summarises the erroneous figures and the correct ones:

Spain 900 MHz	Published in the October 2013 consultation document	Correct figures (Spain November 2011 benchmark)
Absolute value (November 2011)	£24.9m per MHz	£25.4m per MHz
Ratio of value to 800 MHz price in Spain (July 2011)	79%	81%
Relative value to 800 MHz	£23.7m per MHz	£24.2m per MHz
Relative value to 800 MHz under partial refund scenario	£22.4m per MHz	£22.9m per MHz

8. We identify below the paragraphs and figures of the Consultation Document that refer to the erroneous figures, explaining how we wish to correct them.

9. In **Paragraph 1.7** of the Consultation Document (page 4), the reference to “just below £24m per MHz” should read “just above £24m per MHz”.

10. In **Figure 4.2** the two rows for awards in Spain should instead be three rows as follows³:

£m/MHz (UK equivalent)	800MHz	900MHz	1800MHz	2.6GHz
Spain (May 2011)⁽⁵⁾		17.2	2.9	
Spain (July 2011)⁽⁶⁾	31.4	24.9 24.4		3.1
Spain (November 2011)⁽⁶⁾		<u>25.4</u>		

(5) May 2011 “beauty contest” in which largest operators were prevented from bidding.

³ Corrections shown by striking-out text to be deleted and by underlining added text.

(6) Auctions in which largest operators were not prevented from bidding. Multiband auction in July 2011 in which three leading operators were bound by spectrum caps. One lot of unsold 900 MHz in July 2011 re-auctioned in November 2011. ~~900 MHz price shown is from November 2011.~~

11. **Paragraph 4.32** of the Consultation Document (page 27) should include an additional bullet point at the end, to read as follows: “In Spain, the July 2011 auction was characterised by tight spectrum caps which resulted in 900 MHz spectrum being sold at reserve price and in 2 x 5 MHz of unsold 900 MHz spectrum”.
12. In **Figure 4.3** of the Consultation Document (page 28):
 - a) the reference to the “79%” ratio in the second column (headed “900 MHz”) for Spain should read “81%”; and
 - b) the reference to the “23.7” figure in the second column (headed “900 MHz”) for Spain should read “24.2”.
13. In **Paragraph 4.37** of the Consultation Document (page 29), the reference to “(£24.9m per MHz and £23.7m per MHz)” at the end of the paragraph should read “(£25.4m per MHz and £24.2m per MHz)”.
14. In **Figure 4.4** of the Consultation Document (page 33), the figures reported for Spain should read as follows:
 - a) “24.9” should read as “25.4”;
 - b) “79%” should read as “81%”; and
 - c) “23.7” should read as “24.2”.
15. In **Figure 4.5** of the Consultation Document (page 34), the figures reported for the November 2011 auction in Spain should read as indicated in paragraph 14 above. Furthermore, Figure 4.5 should include the additional benchmarks for the July 2011 auction in Spain:
 - a) “24.4” as the absolute value of 900 MHz; and
 - b) “78% of LRP 800, 23.2” as the relative value of 900 MHz to 800 MHz.
16. **Paragraph 4.57(b)** of the Consultation Document (page 35) should read as follows⁴:

“This lump-sum value is supported by several more important evidence points around the same level, namely the absolute values in Spain and Romania (~~both £25.4m per MHz in Spain and~~ £24.9m per MHz in Romania), both of which we have noted risk understating the value of 900 MHz in those countries, and by the relative value of 900 MHz to 800 MHz spectrum in Spain, which suggests a slightly lower price (~~£23.7m~~ £24.2m per MHz).”

⁴ Corrections shown by striking-out text to be deleted and by underlining added text.

17. In **Figure A7.1** in Annex 7 to the Consultation Document (page 84), the row headed “Spain Jul 11 / Nov-11” should be replaced by two rows, one for the July 2011 auction and the other for the November 2011 auction.

18. The existing row should apply to the July 2011 auction with the following changes:

- a) the row heading should be changed to “Spain Jul-11”;
- b) the text in the column headed “900 MHz” should be changed from “2x5 MHz sold at reserve in Jul-11; unsold 2x5 MHz from Jul-11 was re-auctioned in Nov-11 with relaxed spectrum caps; **More important evidence (risk of understating)**”; and should instead read as “2x5 MHz sold at reserve price and 2x5 MHz unsold; *Less important evidence*”; and
- c) the text in the column headed “900 MHz / 800 MHz” should be changed from “**More important evidence**” to read as “*Less important evidence*”.

19. Furthermore, an additional row should be added to Figure A7.1 for the November 2011 auction in Spain as follows:

- a) Row heading of “Spain Nov-11”;
- b) In the column headed “900 MHz” the text should be “Unsold 2x5 MHz lot from Jul-11 was re-auctioned with relaxed spectrum caps and sold at reserve price; **More important evidence (risk of understating)**”.
- c) In the column headed “900MHz/800MHz” the text should be “**More important evidence**”.

20. For ease of reference the table below shows the rows in **Figure A7.1** for the July 2011 and November 2011 auctions in Spain after the revisions set out above:

	800 MHz	900 MHz	1800 MHz	2.6 GHz	900 MHz / 800 MHz	1800 MHz / 800 MHz
Spain Jul-11	<i>Less important evidence</i>	2x5 MHz sold at reserve price and 2x5 MHz unsold; <i>Less important evidence</i>		Some spectrum unsold; <i>Less important evidence</i>	<i>Less important evidence</i>	
Spain Nov-11		Unsold 2x5 MHz lot from Jul-11 was re-auctioned with relaxed spectrum caps and sold at reserve price; More important evidence (risk of understating)			More important evidence	

21. In **Paragraph A8.12** in Annex 8 to the Consultation document (page 120), the reference in the first bullet point to “the relative value in Spain would be reduced from £23.5m per MHz to £22.4m per MHz” should read as follows:

“the relative value in Spain would be reduced from £24.2m per MHz to £22.9m per MHz”.

22. In **Figure A8.1** in Annex 8 to the Consultation Document (page 121):

- a) the reference to “24.9” in the second and third columns (headed “900 MHz base case” and “900 MHz UK LRP at £28.35m per MHz” respectively) in the row headed “Spain” should read “25.4”;
- b) the reference to “23.6” in the second column (headed “900 MHz base case”) in the row headed “Spain (Relative)” should read “24.2”; and
- c) the reference to “22.4” in the third column (headed “900 MHz UK LRP at £28.35m per MHz”) in the row headed “Spain (Relative)” should read “22.9”.

Attribution of Ireland and Romania benchmarks

23. Footnote 3 to Figure 4.2 of the Consultation Document (page 26) and the labels of the Ireland benchmark points in Figures 4.4 and 4.5 of the Consultation Document (pages 33 and 34) refer to Vodafone as the source for the values for the 900 MHz and 1800 MHz benchmarks.

24. The reference to Vodafone as the source for the Ireland benchmarks is incorrect. Footnote 130 in Annex 7 to the Consultation Document (page 98) explains the source of the estimated clock price ratios of 45% and 35% (for the relative prices of respectively 900 MHz and 1800 MHz to the price of 800 MHz spectrum). These are the basis of our estimates (the derivation of which is explained in pages 98-99 in Annex 7).

25. Footnote 3 to Figure 4.2 also refers to Vodafone as the source for the Romania 1800 MHz and 2.6 GHz benchmarks. However, this is also incorrect – as set out in Annex 7 (page 109), Romania benchmarks are based on reserve prices.

26. Therefore, Footnote 3 to Figure 4.2 and the reference to Vodafone in the labels of the Ireland benchmark points in Figures 4.4 and 4.5 should be deleted.

Romanian benchmark – typographical correction

27. In **Figure A8.1** in Annex 8 to the Consultation Document (page 121), the relative value of 900 MHz to 800 MHz in Romania is reported as “£34.0m” per MHz, whereas the correct figure should be “£34.1m”, as set out in paragraphs 4.37 and 4.57 (c), and also in Figures 4.3, 4.4 and 4.5.