



*Notice of Ofcom's
proposal to make
regulations in connection
with the award of 800
MHz and 2.6 GHz*

Response by Everything Everywhere

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1 Introduction

This is Everything Everywhere's response to Ofcom's notice of its proposal to make regulations in connection with the award of 800 MHz and 2.6 GHz spectrum. We are also providing our views on Ofcom's final proposal for the level of reserve prices, as well as the detailed specification of the 800 MHz coverage obligation neither of which have previously been the subject of consultation. Given these particular proposals have not previously been consulted on, we expect Ofcom to take our views on this matter into consideration before making the final regulations for the award.

This response is structured as follows: section 2 comments on reserve prices, section 3 comments on the detailed specification of the coverage obligation, section 4 explains that we think the regulations provide for too many deposit payments, section 5 comments on the default rules in light of the deposit rules, section 6 notes that the regulations seem to lack clarity on the information provided to bidders during the auction, section 7 comments on rounding of round prices and finally section 8 provides a number of further, detailed comments which do not relate specifically to the previous headings.

2 Reserve prices

Ofcom has consulted twice on a proposed methodology for the setting of reserve prices and during this process changed its view on what is the preferred methodology. The final statement is the first occasion where Ofcom has put forward a specific proposal for what reserve price levels would be under the methodology that it now prefers.

We have two comments in relation to these specific reserve prices:

- It seems that Ofcom has not brought out clearly the distinction between 'market value estimated in a conservative way' and 'estimated market value but with a discount' that was important in the methodology discussion on reserve prices.
- There is a clear inconsistency between the 800 MHz methodology and the 2600 MHz methodology.

These points are associated with each other, but are worth making separately.

2.1 Estimated market value but with a discount

In its first auction consultation published in March 2011,¹ Ofcom noted that its previous approach of setting low, but non-trivial reserve prices may not be the most appropriate for this auction and presented three quite different approaches to setting material reserve prices, namely:

- a level that would ensure the recovery of costs of clearing spectrum and enabling the award but would be unlikely to be close to the spectrum value;
- a level reflecting likely market value estimated in a conservative way; or
- an option with differentiated reserve prices so that spectrum forming part of an MPP would attract the higher reserve whilst other spectrum would be subject to the lower reserve.

In its second consultation on the award published in January 2012,² Ofcom acknowledged that there was no merit in differentiated reserve prices and it would be difficult to implement. It went on to discuss the pros and cons of setting high vs. low reserve prices. By implication, low reserve prices would mean low but non-trivial or reserve prices to cover the cost of spectrum and high reserve prices would mean reserve prices reflecting likely market value estimated in a conservative way. Ofcom concluded that there was a middle ground, which would strike a balance between the

¹ Consultation on assessment of future mobile competition and proposals for the award of 800 MHz and 2.6 GHz spectrum and related issues, Ofcom, 22 March 2011

² Second consultation on assessment of future mobile competition and proposals for the award of 800 MHz and 2.6 GHz spectrum and related issues, Ofcom, 12 January 2012

risks associated with high reserve prices against the risks associated with low reserve prices. "This is to set reserve prices by reference to estimated market value but with a discount."³ As reserve prices set with "reference to estimated market value but with a discount" were promoted as the middle ground between high and low reserve prices, such reserve prices would clearly have to be at a level less than "the likely market value estimated in a conservative way", or they would not represent a middle ground between high and low prices as suggested. More generally, it might be argued that there is little point in using an auction to facilitate price discovery if the reserve prices are potentially set in line with the market values, which could lead a marginal bidder indifferent as to whether to participate or not, when the marginal bidder(s) have such a critical role in setting the efficient level of prices.

Ofcom has now published proposed reserve prices as well as the results of a benchmarking valuation exercise carried out by Ofcom's consultants, which forms the basis for Ofcom's proposals, as summarised in the following table:

Table 1: Ofcom reserve price proposal against conservative estimate of valuations

	Lot category A(i) 2x5 MHz of 800 MHz	Lot category A(ii) 2x10 MHz of 800 MHz with coverage obligation	Lot category C 2x5 MHz of 2.6 GHz	Lot category D 5 MHz of 2.6 GHz TDD
Report ranges of small bidder valuation from benchmarking	£159-273m	£180-500m	£50.4-76.2m	£3.5-18.6m
Ofcom's reserve price proposal	£225m	£250m	£15m	£100,000

Source: Assessment of future mobile competition and award of 800 MHz and 2.6 GHz, Ofcom Statement, 24 July 2012

We note that the consultant's report appears to fail to make recommendations in line with Ofcom's January 2012 proposal of setting reserve prices by reference to estimated market value with a discount. It appears to have based its recommendations for reserve prices on the March 2011 proposal of setting reserve prices that reflect market prices estimated conservatively. (The report produces conservative estimates by considering the likely valuation of a small bidder, which seems a reasonable approach.) For this reason we do not consider that the recommended reserve prices of the report are relevant to setting reserve prices on the basis of the principle that Ofcom proposed in its January 2012 consultation, but that the relevance of the report is to produce an estimated valuation range of a small bidder as an estimate of spectrum valuations in the UK.⁴

Ofcom has not adopted the consultant's recommended reserve price levels and so it is not necessarily a problem that the consultant's recommendations are not consistent with the methodology Ofcom consulted on in January. However, it is concerning that Ofcom, on the back of the benchmark valuations produced in the consultant's report, does not seem to adhere to the methodology itself. Ofcom argues with the consultant benchmark valuations for some of the lot categories but it does not propose what might be a suitable discount to apply to those valuations and why. Rather it progresses directly from a discussion of value to proposed reserve prices without any explanatory logic and in particular without proper discussion of what 'with a discount' should amount to.

We believe that Ofcom's proposed reserve price levels fail to apply the methodology that it consulted on in January 2012 consistently in the proposed reserve prices on the basis of the

³ Second consultation, para. 6.101

⁴ For the avoidance of doubt, we have not taken a view on the correctness of the international benchmark valuation as being relevant or accurate benchmarks for spectrum valuation in the UK.

valuations produced by the consultant's report. The implications are that the proposed reserve prices for 800 MHz are too high.

2.2 Inconsistency between the methodology for 800 MHz and 2.6 GHz

Whilst Ofcom's proposed reserve price for paired 2.6 GHz spectrum is £15m compared to the consultant's report's conservative estimate of valuations at £50-76m, its proposed reserve price for 800 MHz (without a coverage obligation) is £225m against a conservative estimate of value at £159-273m. Hence its proposed reserve price for paired 2.6 GHz spectrum includes a discount on the conservative estimate of market value of 70%, while the 800 MHz reserve price does not include any discount on the market value. Moreover, Ofcom has not taken account of the mandatory £30m payment to MitCo per 2x5 MHz of 800 MHz when deriving reserve prices from an international benchmark valuation. The MitCo payment can be considered as an additional component to the reserve price and means the reserve price for a 2x5 MHz lot is actually £255m (and £310m for the 2x10 MHz lot with a coverage obligation). This could in fact be above the market value according to the estimate of market value derived by Ofcom's consultants. This appears out of line with the approach taken for paired 2.6 GHz spectrum where a considerable discount has been applied to the estimated the market value. We are concerned that this inconsistency could also affect the way in which the competition constraint is meant to identify the most efficient MPP to award to an opted in bidder. If the discount applied to reserve prices varied greatly between 800 MHz and 2.6 GHz, the 'competition credit' an opted-in bidder would implicitly be given on a portfolio including 2.6 GHz could appear relatively more than on a portfolio including 800 MHz.

Although Ofcom states it has taken into account its new proposal to apply reserve price by lot rather than by package,⁵ this does not appear to be the case for 800 MHz. In that context Ofcom should also be concerned that the high reserve prices proposed for 800 MHz prevent bidders from expressing valuations for packages including larger amounts of 800 MHz because the marginal valuation will be less than the average valuation.

We would propose that Ofcom could take the estimates of market value from the consultant's report and apply a discount consistently across the different categories of lots.

3 Coverage obligation

Everything Everywhere notes the changes in relation to the coverage obligation, in particular the adoption of the ITU-R P1812-2 propagation model. This is not a model typically used by mobile operators. Ofcom should consider variance in performance against Hata based modelling. It is unclear from the Information Memorandum⁶ as to whether the 98% overall and 95% individual nation coverage obligations were assessed using ITU-R P1812-2 or Hata. The Real Wireless study⁷ suggests Hata was used. Ofcom needs to state clearly which model was used for the establishment of the obligation thresholds and if different from ITU-R P1812-2, the sensitivity of the analysis to propagation model choice.

4 Too many deposit payments

The deposit rules as outlined in the draft regulations are over-elaborate with too many instances where deposits have to be topped up throughout the bidding process.

We understand the regulations to propose:

⁵ Second consultation, footnote 174

⁶ The award of 800 MHz and 2.6 GHz spectrum, Information Memorandum, published by Ofcom 24 July 2012, see Annex 9

⁷ Methodologies used for the analysis of costs relating to a coverage obligation at 800MHz, Real Wireless, 23rd July 2012

- an initial deposit to apply of £100,000 required with the application to participate, as stated by regulation 5(3)(b);
- an additional deposit before the opt-in round and the first primary bid round to determine initial eligibility, as stated by regulation 15;
- the possibility of further deposits during the primary bid rounds, as stated by regulation 52;
- a further deposit for the supplementary round as required by regulation 59; as well as
- a final principal stage deposit, as required by regulation 63

We agree that it is desirable to have an initial deposit of £100,000 with an additional deposit due from qualified applicants immediately before bidding starts. Given the high reserve prices and given that deposits do not earn interest, it would seem unreasonable to ask for deposits in line with reserve prices much in advance of the auction.

However, the three further occasions for depositing top up payments seem an unnecessary requirement in light of the substantial additional deposit a bidder would have paid before bidding starts and which is at risk if a bidder defaults on any final payment due for spectrum won. We are concerned that, unlike regulation 52, the wording of regulations 59 and 63 means there is no discretion for Ofcom not to ask for these deposits. Both regulations 59 and 63 use words such as “each bidder must pay” and “The final principal stage deposit must be paid”. Stopping the auction whilst these deposits are collected will cause unnecessary delay to the auction process when bidders already have good reasons to honour bids made given the additional deposit. The many deposit payments could also add unwanted administration and transaction costs to the process.

We would therefore suggest that regulations 59 and 63 are omitted but that the scope of regulation 52 is extended beyond the primary rounds, and perhaps not limited to requesting half the amount of the highest valid bid. This would give Ofcom the discretion to stop the auction at any point and ask for deposits to be topped up if bid amounts have gone much higher than deposit levels.

If regulation 59 was to be maintained, we have an additional and specific concern that as currently worded and in combination with regulations 53 and 63, the deposit arrangements proposed for the supplementary round do not work as intended. Regulations 59(a)(ii) and 59(b)(ii) both make references to a further deposit for the supplementary bids round being determined in relation to “the amount of the bidder’s highest valid supplementary bid”. This cannot be known until after the supplementary round has closed. Section 53 suggests that before the start of the supplementary round, Ofcom will notify each bidder of the deadline for payment of such deposit. Hence we assume that this deadline is intended to be prior to the start of the supplementary round although this does not seem to be strictly necessary given the wording. Given there is a separate provision for a “Final principal stage deposit” in regulation 63, which would be payable immediately after the supplementary round, it would seem somewhat unnecessary for regulation 59 to ask for a further deposit for the supplementary round after the supplementary round had been conducted as there is already a final principal stage deposit due at this stage. We therefore assume that it is intended that the deadline referred to in regulation 53(b) is before the supplementary round in which case the requested deposit in regulation 59 cannot refer to the amount of the bidder's highest valid supplementary bid.

5 Default rules

The many deposit payments means that there are many potential default situations for which rules have to be specified. We note that if the number of deposit payments were reduced this would also provide scope for reducing the number of potential default situations, which would further help to avoid unnecessary complexity in the auction rules.

We would encourage Ofcom to take the opportunity to consider carefully whether the default rules are sufficiently specified and clear. In particular, we believe that Ofcom should consider a potential default situation in relation to the status of the auction at the point where the default

might occur. For example it is very relevant whether the winner determination and pricing has been calculated at the point where a default occurs and hence whether there is scope for re-running the winner determination and pricing calculation if there is a default after winners have been determined but before licences assigned. Re-running the winner determination and pricing calculation in that situation might avoid an unfortunate situation whereby a default would otherwise mean:

- spectrum was left unsold despite there being another bidder that was willing to pay at least the reserve price for it; and
- prices were calculated according to bids which were no longer valid because a bidder had defaulted and, where the defaulting bidder's bids had set opportunity costs for other winners, those winners would be paying too much.

In particular, the default rules specified in regulation 63 would suggest that spectrum could be left unsold if a winning bidder defaulted, even if there were other unsuccessful bids for this spectrum above reserve price. The default rules are perhaps crafted this way to discourage collusion through strategic default. We think the risk of strategic default is very low given the large deposits that a bidder would forfeit in that instance and consider therefore that in setting default rules, more weight should be attached to preventing the undesirable situation whereby a default results in unallocated spectrum even if there were other bidders who had bid for that spectrum at or above the reserve price or winners paying too much due to inflated opportunity costs.

We would therefore suggest that, for example, regulation 63 (if it was retained) could be reworded to include the possibility of Ofcom rerunning the winner determination. At this stage bidders would have been informed whether they have won any lots and the base price for any lots won (regulation 62). Since there is a chance that a recalculation of the winner determination and pricing could change the outcome that bidders would have already been informed of, we would propose that regulation 64 was amended to require the auctioneer to offer the alternative outcome to all winners. The alternative outcome (which should have a higher total value given the default), would only be accepted as the final outcome of the principal stage if all winners agreed this was preferred to the previous outcome.

It must of course also be clear that all the bids of a defaulting bidder will become invalid, including any opted-in bids from an opted-in bidder. This is particularly important so that an opted-in bidder cannot use the default rules to bid up packages larger than an MPP, only to then default and rely on the competition constraint to fall back on an MPP. We believe that the draft regulations are clear on this point by stating that all the bids submitted by a defaulting bidder will become invalid and that the winning combination of principal stage bids can only include valid bids. This clarity needs to be retained if the default rules are amended. We recommend Ofcom ensures these provisions are retained if the deposit and default rules are simplified as we have suggested.

6 Information policy

It appears to us that the draft regulations are unclear about what information will be revealed to bidders during the primary rounds. This is in contrast to the auction rules as drafted in annex 5 to the statement and needs to be clarified in the regulations. For example, the draft regulations do not even state clearly that the round prices will be revealed before each round.

Regulation 51 is rather vague compared to paragraph A5.57 of annex 5, which is explicit on what information would be provided before each primary round. The regulation only notes that Ofcom will notify bidders of the total number of lots "included in valid primary bids" but it is not clear whether:

- that is the total number of lots in the auction or the most recent primary round;
- they will reveal the total number lots included in valid bids for each category of lot or aggregated across categories; or

- "excess demand" refers to the total number of lots included in valid primary bids (according to regulation 29) or where relevant, adjusted demand (according to regulation 30)?

We recommend that Ofcom amend regulation 51 so that it provides a similar level of clarity on the information policy as is included in the auction rules in annex 5 of the auction statement.

7 Rounding of round prices

There is also some inconsistency between the auction rules as explained in annex 5 to the statement and the draft regulations with respect to rounding of base prices. The auction rules as explained in Annex 5 to the statement (paragraph A5.124) note that base prices will be rounded up to the nearest thousand pounds whereas the draft regulations (Schedule 7, paragraph 1 (2)) state that base prices will be rounded up the nearest pound. Although it would be desirable for annex 5 and the draft regulations to be consistent, this is not necessarily a problem, as long as the regulations are internally consistent.

Critically, it is important that any rounding of round prices in primary rounds and supplementary bids is consistent, or the relative cap rule will provide caps for supplementary bids that are too tight. We note that regulation 37(1)(h) states that supplementary bids must be specified in whole thousands of pounds but there does not appear to be any constraint on primary round prices to be in whole thousand pounds. We believe that if supplementary bids are constrained to whole thousands of pounds, Ofcom should add a constraint to regulation 33 that primary round prices must be in whole thousands of pounds too. This would avoid the risk of the auctioneer inadvertently setting primary round prices that were not in whole thousands of pounds, which would mean that there would be situations where a bidder could not submit a supplementary bid up to the cap due to the rounding rule in the supplementary round.

Alternatively, the restriction on supplementary bids could be amended so that regulation 37 (1)(h) requires a supplementary bid to be "an amount in whole pounds", not "an amount in whole thousands of pounds" as is currently the case.

8 Further, detailed comments on the draft regulations

In this section we note a number of further more detailed comments on the draft regulations, ordered according to the number of the regulation we comment on:

- **Regulation 5(3)(a)(iv):** the current drafting would seem to suggest that an applicant has to provide details of its own existing spectrum holdings as well as the spectrum holdings of its parent company or companies. This should not be necessary and given the requirement to notify Ofcom of any changes to spectrum holdings contained in regulation 110 (j), it would be undesirable as spectrum auctions are also ongoing in other countries which could change spectrum holdings of parent companies. It would be better if the requirement in regulation 5(3)(a)(iv) was limited to holdings of mobile spectrum in the UK as that is what is relevant.
- **Regulation 8(2)(b):** the reference to "regulation 5(3)(a)(v)" must be wrong as there is no regulation 5(3)(a)(v). Perhaps the reference should be to regulation 5(3)(a)(iv) instead?
- **Regulation 17(2), first line:** there should be a comma after ("opt-in round").
- **Regulation 19(7)(f) and 19(7)(g):** why are these regulations included when the 2.6 GHz concurrent low-power lots do not feature in any of the opt-in selections (as listed in Schedule 2)?
- **Regulation 28(2):** it is good to have restrictions on Ofcom's ability to close the primary rounds early. However, we wonder whether the requirement for it to be "unlikely that the information that would be made available to bidders following any such further primary rounds would change [the outcome of the principal stage]", is too restrictive? For example, does it cover sufficiently a situation where Ofcom has got serious suspicions of collusion?

- **Regulation 40(2):** “the completed supplementary bids form” should read “the completed opt-in bid form” instead.
- **Regulation 37(1)(b) and 37(1)(c):** “lot” should be plural to make these consistent with regulation 37(a). Similarly in regulation 46(1)(b)(ii) and (iii): again, “lot” might need to be plural. We note that in regulations 51(a)(ii) and (iii) “lots” is plural. We think the regulations should be consistent throughout.