



**Virgin Media O2 response to Ofcom's May 2024 consultation:**

**Proposals to make auction regulations for the mmWave award**

**June 2024**

# Contents

EXECUTIVE SUMMARY .....	2
MAIN RESPONSE .....	3
1. ISSUES OF SUBSTANCE.....	3
a. Potential for bidders to lose eligibility when switching between the 40 GHz and 26 GHz bands.....	3
b. All or Nothing (AON) Bids .....	7
c. Obligation to repeat bids every round if no excess demand.....	9
d. Auction schedule and bid increments .....	10
e. Auction software.....	11
f. Lack of reference to Spectrum Access High Density Licences in Regulations .....	12
2. MINOR ISSUES REQUIRING CLARIFICATION OR CHANGES TO CONSULTATION DOCUMENT .	13
3. MINOR ISSUES REQUIRING CLARIFICATION OR CHANGES IN THE REGULATIONS .....	15

## EXECUTIVE SUMMARY

Virgin Media O2 (“VMO2”) welcomes the opportunity to respond to Ofcom’s consultation on “Proposals to make auction regulations for the mmWave award”<sup>1</sup>. The entirety of this document responds to the single question posed in the consultation document: “Question 1: Do you have any comments on our proposals to make Wireless Telegraphy (Licence Award) Regulations [2024], which are set out in draft form in Annex 5?”.

Overall, we think that the proposed award of sub-national lots of 200 MHz, using Ofcom’s new clock auction design is an appropriate way to proceed for this award of mmWave spectrum. In general, the regulations appear to implement faithfully the award design that Ofcom has set out through successive consultations. However, we have identified a limited number of issues of substance and several other minor issues concerning the consultation document and regulations. These issues are set out in our main response below. We request that Ofcom consider and respond to each of these issues.

Our number one concern is Ofcom’s decision not to address the possibility that a bidder could inadvertently lose eligibility when switching between 40 GHz and 26 GHz in the auction. We consider this to be a flaw in the auction rules, and a bad precedent for future awards. Fortunately, there is a simple fix available, one that has been used for a similar award in Slovenia and does not require implementing grace rounds (which Ofcom rejected in its November 2023 Decision). The fix involves a small adjustment to the eligibility rule (Regulation 53), such that a bidder’s next round eligibility is the higher of the eligibility associated with its previous round demand at clock prices and its previous round posted demand. This change would eliminate the possibility of an unintended loss of eligibility following an auction round (although it would not prevent the award from ending in a round where a bidder had posted demand below their clock price demand).

In June 2023, H3G and Vodafone announced their intention to merge their UK operations, subject to regulatory approvals. The CMA’s decision on the proposed merger is expected in September 2024. Accordingly, Ofcom stated in September 2023 that it had decided to delay commencing the auction process until the CMA has taken its decision on the proposed merger. As the award process “*is not expected to begin before Q3 FY 2024/25*”,<sup>2</sup> Ofcom have plenty of time to address the issues flagged in our response.

---

<sup>1</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-2/proposals-to-make-auction-regulations-for-the-mmwave-award>

<sup>2</sup> Ofcom, September 2023, Enabling mmWave spectrum for new uses, para 9.8.

## MAIN RESPONSE

Our response is divided into three parts:

- In the first part, we identify and discuss a series of substantive issues concerning the draft Regulations or implementation of the Regulations. We believe these require careful consideration and response from Ofcom. These points may merit changes to the auction rules or guidance on how Ofcom intends to apply discretion that would be granted under the Regulations.
- In the second part, we identify a series of minor issues with the description of rules in Section 3 of the consultation document. These generally address lesser points concerning possible errors or ambiguity in Ofcom's text and may be addressed through clarifications.
- In the third part, we identify a series of minor issues with the Regulation in Section 5. Some of these points address minor errors in Regulations which we believe will need to be addressed in the final draft. Other points may be addressed through clarifications.

### 1. ISSUES OF SUBSTANCE

These are issues where we have substantive concerns about aspects of the regulations or the way they may be implemented. We request specific actions to address our concerns.

#### a. Potential for bidders to lose eligibility when switching between the 40 GHz and 26 GHz bands

In previous consultation responses, BT/EE, VMO2 and Vodafone have all expressed concerns about the potential for a bidder to suffer an *"an inadvertent loss of eligibility"*.<sup>3</sup> In part, in response to this concern, Ofcom decided to change the eligibility ratio between lots in the 26 GHz and 40 GHz bands from 1:1.5 to 1:2. As Ofcom recognises, this eliminates the possibility of a bidder inadvertently losing eligibility when attempting to switch from 26 GHz lots to 40 GHz, but the possibility that a bidder attempting to switch from 40 GHz to 26 GHz lots could inadvertently lose exactly 1 point of eligibility remains. We provide an example of this below.

VMO2 strongly opposes proceeding with an auction design in which there is a possibility that a bidder could inadvertently lose eligibility at an intermediate stage of a multi-round auction. We consider it a general principle of good auction design that a bidder that expresses demand for a certain quantity of spectrum in one round (measured in eligibility points) should normally have the option to demand an equivalent quantity in the next round. Any deviation from this principle introduces a barrier to valuation-based switching and has the potential to compromise the efficiency of the auction outcome. Deviation is also contrary to the way that Ofcom has run all previous multi-round auctions and sets a bad precedent for future awards.

Ofcom's reasoning for not addressing this issue is not well developed. It says that switching from 40 GHz to 26 GHz *"is less likely because bidders are likely to attach more value (relative to the reserve*

---

<sup>3</sup> Ofcom (Nov 2023), para 5.37.

price) to spectrum in the 26 GHz band.”<sup>4</sup> However, this reasoning does not consider that even if bidders first switch from 26 GHz to 40 GHz, they may later want to switch back, in response to changes in relative prices which may occur as a consequence of the initial switch. Ofcom also rejected the use of grace rounds on the basis that this might introduce “*the opportunity for strategic gaming or may lead bidders to take less care in bidding,*” but no evidence is provided to substantiate these concerns.<sup>5</sup>

Fortunately, there is a simple fix to the eligibility rules that eliminates this problem, one that has been used elsewhere. This involves a small adjustment to the eligibility rule (Regulation 53), such that a bidder’s next round eligibility is the higher of the eligibility associated with its previous round demand at clock prices and its previous round posted demand. This eliminates the possibility of an unintended loss of eligibility following an intermediate auction round. In the absence of a grace round rule, it does still mean there is a possibility that the auction could stop because there is no excess demand after processing. This is a risk that bidders would have to consider when attempting to switch from 40 GHz and 26 GHz, but one they could manage by placing an all-or-nothing (AON) bid.

We see no downside to the rule change we propose here, only upside in protecting both bidders and the Ofcom against an undesirable risk: a bidder losing its ability to express its full demand when it had made a good faith effort to maintain that demand. This is not a complex rule change and we see no reason why this would open up options for gaming or encourage careless bidding.

There is also precedent for adapting the rules of clock auctions to address this issue in contexts where the regulator is selling a limited number of national lot categories. For example, the earliest multi-category clock auction design, implemented by the IDMA in Singapore in 2013, introduced the concept of ‘free eligibility points’ to address the possibility of bidders being retained on a subset of their demand<sup>6</sup>. The Slovenian regulator, AKOS, which used essentially the same auction design as Ofcom proposes here for its 2021 multiband auction, adopted the eligibility rule we propose. We understand that AKOS introduced this rule in response to comments from stakeholders at consultation who similarly were concerned about inadvertent loss of eligibility. Furthermore, we understand that this rule change was implemented by AKOS’s advisors, Innovative Auctions, the same company contracted by Ofcom to provide auction software for this award.

Specifically, AKOS adopted the following rule for determining bidder eligibility at the end of each bidding round:<sup>7</sup>

*At the beginning of each round, the auction system informs each bidder of its Eligibility for the round, which is also expressed as a number. In each round, a bidder’s Eligibility is equal to the higher of:*

*a. the Activity associated with the bidder’s Start Quantities [posted demand] in that round and*

---

<sup>4</sup> Ofcom (Nov 2023), para 5.46.

<sup>5</sup> Ofcom (Nov 2023), para 5.48.

<sup>6</sup> For a short discussion of this auction, see: Marsden, Richard (Amazon 2024), Round-by-Round: Learnings from the First 35 Years of Spectrum Auctions, Chapter 9.

<sup>7</sup> <https://www.akos->

[rs.si/fileadmin/user\\_upload/dokumenti/Javna\\_posvetovanja\\_in\\_razpisi/2020/IM\\_multiband\\_10082020.pdf](https://www.akos-rs.si/fileadmin/user_upload/dokumenti/Javna_posvetovanja_in_razpisi/2020/IM_multiband_10082020.pdf)

*b. the Activity associated with the bidder's requested demand in the previous round (i.e. the Activity associated with the Start Quantities [posted demand] that the bidder would have had in that round if all of the bidder's bids in the previous round had been fully applied).*

Ofcom should recognise that inadvertent loss of eligibility is a much more serious issue in spectrum auctions involving a limited number of nationwide lot categories than it is in auctions with many regional lot categories. In auctions involving regional lots, auctioneers often deploy activity requirements below 100%, which protect against loss of eligibility. Even when no such rule is used or if the activity requirements is raised to 100%, bidders may ultimately only be exposed to losing a limited quantity of regional demand, which is much less serious than losing the ability to bid for a quantity of spectrum nationwide. This may explain why the IMDA and AKOS, which were selling national lots, adapted their eligibility rules to avoid the risk of inadvertent loss of eligibility, while regulators in Australia, Canada and the United States that were selling regional lots did not. This award features sub-national lots that cover urban areas across the United Kingdom, so the correct path to follow is that of Slovenia, not the United States.

In the following, we present an example of how a bidder could inadvertently lose eligibility when attempting to switch from the 40 GHz to a 26 GHz category. Following the example, we set out how the regulations could be edited to implement our proposed rule change to prevent any such loss of eligibility.

**EXAMPLE 1: Loss of eligibility point when switch request is partially denied**

We provide here an example of how a bidder could inadvertently lose eligibility under Ofcom's proposed rules and regulations.

Suppose posted demand and prices are as follows, after round n:

	26 GHz lower	26 GHz upper	40 GHz
Bidder A	0	5	8
Bidder B	6	0	9
Bidder C	0	5	0
Excess demand	-1	0	2
Posted price	5m	5m	3m

Now, suppose the three bidders submit the following bids in round n+1:

	26 GHz lower	26 GHz upper	40 GHz
Bidder A	1 (increase by 1 lot)	5 (maintain)	6 (decrease by 2 lots) Price 3.2m
Bidder B	6 (maintain)	0 (maintain)	8 (decrease by 1 lot) Price 3.1m
Bidder C	0 (maintain)	5 (maintain)	0 (maintain)

Processing proceeds as follows:

- First, Bidder B's decrease of 1 lot at 40 GHz is processed, as it has the lower price point. This bid is accepted.
- Second, Bidder A's decrease of 2 lots is processed, but this request is partially accepted (as excess demand at 40 GHz is 1 lot after Bidder B's bid was accepted).
- Third, Bidder A's increase at 26 GHz is rejected, as Bidder A only freed up 1 eligibility point from its decrease at 40 GHz.
- The result is that Bidder A has lost one eligibility point, even though Bidder A did not submit a bid to reduce demand.

Posted demand and prices are as follows after round n+1 (assuming a 10% price increment):

	26 GHz lower	26 GHz upper	40 GHz
Bidder A	0	5	7
Bidder B	6	0	8
Bidder C	0	5	0
Excess demand	-1	5	0
Posted price	5m	5.5m	3.2m

In this example, Bidder A had 18 eligibility points available for bidding in round 21 and it submitted a bid with 18 activity points. Owing to the partial processing of the switch from 40 GHz to 26 GHz lower, Bidder A continues the auction with only 17 eligibility points from round n+2 onwards.

The simple rule change we propose would result in Bidder A maintaining an eligibility equal to the higher of its round n demand as bid (18 points) and its posted demand (17 points). Accordingly, it would retain 18 points in round n+2, instead of losing eligibility. This would give it the option to attempt to complete its switch to 26 GHz lower in round n+2, to return to bidding for 8 lots in the 40 GHz band or drop its 'spare' eligibility point. This reasonable flexibility is achieved with no change to Ofcom's bid processing rules and no grace round. For avoidance of doubt, such a bidder would still need to internalise the risk that the auction closed because there was no processed excess demand in any category (i.e. as would happen in our example if there had not been excess demand for 26 GHz upper).

## REQUEST:

- VMO2 requests that Ofcom update Regulation 53 to protect bidders against an inadvertent drop in eligibility. We set out here recommended minimal edits (in red) to the regulations to implement this rule change.

### Eligibility limit in the second and subsequent rounds

53. In the second and subsequent principal stage rounds, a bidder's eligibility limit shall be equal to the higher of—

- (a) the number of eligibility points used by the bidder in the most recent round; and
- (b) the number of eligibility points associated with the bidder's "currently used eligibility points" at the end of the selection process for the last completed round before any bids have been processed, as defined in regulation 42.

## b. All or Nothing (AON) Bids

VMO2 supports the option to designate a bid as an All or Nothing (AON) bid. This may be a helpful tool for bidders with preferences for particular block sizes. However, it is a rather limited tool. Ultimately, this is not a package bid auction, and bidders that reach budget or valuation limits are not protected against winning an unwanted subset of their demand. An AON bid may provide protection for a bidder concerned that the auction could close when it is not on its full demand or (if the rule change we describe above is not applied) that it could inadvertently lose eligibility. However, using an AON bid in this way has a potential downside, as it may prevent a bid from being processed even when an equivalent simple bid would have been processed in full.

We provide here an example to illustrate the limitations of AON bids.

### Example 2: Failure to process AON bid

Suppose posted demand and prices are as follows, after round n:

	26 GHz lower	26 GHz upper	40 GHz
Bidder A	2	0	8
Bidder B	0	5	7
Bidder C	6	0	0
Excess demand	1	0	0
Posted price	5m	5m	3m



Now, suppose the three bidders submit the following bids in round n+1:

	26 GHz lower	26 GHz upper	40 GHz
Bidder A	0 (decrease by 2 lots) Price £5.1m	2 (increase by 2 lots)	8 (maintain)
Bidder B	2 (increase by 2 lots)	3 (decrease by 2 lots) Price £5.2m	7 (maintain)
Bidder C	6 (maintain)	0 (maintain)	0 (maintain)

First, suppose all decrease bids (by Bidders A and B) are simple bids; accordingly, bids are processed as follows:

- Bidder A's decrease bid at 26 GHz lower is considered first in the bid stack. This bid is partially accepted (1 lot only), such that residual demand equals supply at 26 GHz lower.
- Bidder B's decrease bid at 26 GHz upper is then considered in the bid stack. This bid is rejected in full as there is no excess demand at 26 GHz upper.
- In the next step, Bidder A has an increase bid accepted at 26 GHz upper, owing to the freed-up eligibility from decreasing at 26 GHz lower.
  - This in turn allows Bidder B to have a partial decrease bid (1 lot only) at 26 GHz upper accepted.
- In the next step, Bidder B has an increase bid accepted at 26 GHz lower, owing to the freed-up eligibility from decreasing at 26 GHz upper.
  - This in turn allows bidder A to have a decrease bid (1 lot) at 26 GHz lower accepted. Bidder A has now completed the requested decrease at 26 GHz lower in full.
- Next, Bidder A has an increase bid accepted at 26 GHz upper, owing to the freed-up eligibility from decreasing at 26 GHz lower.
  - This in turn allows Bidder B to have a decrease bid (1 lot) at 26 GHz upper accepted, and Bidder B then completes its increase at 26 GHz lower.

In this example, Bidders A and B ultimately have their bids processed in full, i.e. both bidders successfully switch 2 lots in opposite directions. This is facilitated by the iterative algorithm that processed demand lot by lot. Each decrease of 1 lot facilitates an increase of 1 lot, which in turn facilitates a further decrease/increase by 1 lot etc., until all demand has been processed.

If, on the other hand, Bidder A had specified its decrease bid at 26 GHz lower as an AON bid, the algorithm would have stopped at the first iteration (as bidder A's decrease of 2 lots could not be processed in full). In this case, the AON bid would block the chain of processed bids that facilitated the mutually compatible switches of both bidders.

As this example demonstrates, a bidder may reasonably not want to make an AON bid owing to concern that it may cause a demand switch to be rejected when it could in fact be accommodated in full. Accordingly, the adoption of the AON bid option is not a solution to the problem of a bidder potentially losing 1 point of eligibility when attempting to switch from 40 GHz to 26 GHz, as discussed in Section 1a. This reinforces our position, set out above that Ofcom should adjust its eligibility rules to eliminate the risk of inadvertent loss of eligibility.

## REQUEST:

VMO2 requests that Ofcom confirm that our example is plausible and consider it and other potential scenarios when assessing the case for changing the eligibility rule.

### c. Obligation to repeat bids every round if no excess demand

A peculiarity of the proposed clock format is that when the price for a lot type is wound back to a posted price which is below the clock price, bids above the posted price are effectively discarded. The auction proceeds as if the bid(s) at a higher price had never existed. From round 2 onwards, if there is a lot type with no excess demand, the posted price may repeatedly be rolled back from the clock price to the opening bid. Consequently, bidders active on this lot type face having to make the same bid every round in order to maintain their demand. Furthermore, if a bidder failed to repeat their bid, they could lose demand and eligibility if it so happened that another bidder increased demand for the same lot type in that round.

Requiring bidders to repeat the same bids again and again is tedious and heightens the risk of user error. A possible solution is to allow bidders to authorise repeat proxy bids on their behalf in situations where prices are unchanged. This would protect a bidder against an unintended loss of eligibility because they failed to submit a bid that they had previously submitted in prior rounds. Such protection may be particularly important if Ofcom decided to exercise its discretion to increase the pace of the auction, with a series of short duration rounds (see further discussion below).

We provide here an example of a situation where proxy bidding could protect bidders.

#### Example 3: Repeat bids at the same price

Suppose posted demand and prices are as follows, after round n:

	26 GHz lower	26 GHz upper	40 GHz
Bidder A	0	0	8
Bidder B	7	0	9
Bidder C	0	5	0
Excess demand	0	0	2
Posted price	5m	5m	3m

In this case, the clock price for 26 GHz lower and upper remains fixed at say £5.5m (assuming 10% price increments) as long as demand does not change. As there is excess demand at 40 GHz, the auction continues and bidders must bid at the same clock price repeatedly for the other lot types to as to protect against the risk of being outbid.

## REQUEST:

- We request that Ofcom consider adding functionality in the EAS to allow bidders to specify ‘proxy bids’, i.e. an instruction to the EAS to repeat a prior bid at the clock price in the event that the clock price is unchanged.
- This would primarily be a software change. It is not clear to us whether any change to the regulations would be required, as the system would only be resubmitting a bid that the bidder had already authorised.

### d. Auction schedule and bid increments

The regulations grant Ofcom wide discretion in setting the auction schedule and bid increments for each round. For example, Regulation 23 allows Ofcom to set bid increments for each lot type as low as £1,000 with no upper limit. Ofcom has indicated that it intends to use “*small price increments for the principal stage rounds*.”<sup>8</sup> Ofcom has further indicated that it will provide guidance regarding how it intends to exercise this discretion nearer to the auction.<sup>9</sup>

VMO2 notes that certain decisions announced in the November 2023 Statement and Consultation, and implemented in the draft regulations, reinforce the case for Ofcom taking a cautious approach when setting round parameters and bid increments:

- Ofcom has decided to limit the scope for intra-round bidding to a single price point per lot type between the opening price and clock price in any given round.<sup>10</sup> This means that bidders cannot specify separate price points when reducing demand by 2 or more lots in the same round. We are comfortable with this rule change, provided Ofcom (as it proposes) adopts modest price increments. Imposing large absolute price increments would be problematic, as the limitation on intra-round bidding would be more likely to constrain bidders from expressing their true demand.
- More generally, in each round, bidders may face significant uncertainty over what they might have to pay, as the price could clear at any price point between the opening price and clock price. For each lot type, this ‘payment exposure gap’ is equal to the bidders’ demand multiplied by the price increment. It is helpful for internal government processes if smaller bid increments are used, so that the exposure gap is never unduly large.
- Ofcom has decided not to allow for automatic round extensions.<sup>11</sup> As a result, bidders have no automatic protection against losing demand and eligibility if they fail to submit bids during the normal round time. Indeed, the only protection against such failure, which might arise owing to technical issues or other unexpected developments, is the possibility of contacting Ofcom, and the Auctioneer in turn exercising its discretion to extend or repeat bidding rounds. Each bidding round must therefore be sufficiently long to allow for the Ofcom process to be triggered. Our preliminary view is that this means that all rounds should be at least 25 minutes in duration.

---

<sup>8</sup> Ofcom (March 2023), para 9.66.

<sup>9</sup> Ofcom (Nov 2023), para 5.60.

<sup>10</sup> Ofcom (Nov 2023), paras 5.25-5.26.

<sup>11</sup> Ofcom (Nov 2023), paras 5.63-5.66.

## REQUEST:

- We request that Ofcom consider these additional comments when it develops its draft guidance on auction parameters.

### e. Auction software

Ofcom plans to make a stand-alone version of the EAS available to applicants. However, the functional details of the software are vague. Ideally, Ofcom's 'playground' should allow us to: (i) thoroughly verify the implementation of the rules; and (ii) conduct mock auctions in a realistic environment in an efficient way.

We request that the playground software have the following functionality for the auctioneer:

- Add or remove bidder accounts to allow for different bidder participation scenarios;
- Modify bidder account parameters, such as starting eligibility, to allow for different bidding scenarios;
- Modify other auction parameters such as the round schedule and bid increments both before the auction and while it is under way;
- Run an auction both according to a pre-set round schedule or in a manual way (to avoid wasting time waiting for rounds to finish);
- Rewind an auction in progress to some previous round, such that we can test the impact of different sets of bids in a given round;
- Save an auction's 'database', so that we can return to scenarios and mocks played previously;
- Reset the auction software to the start of an auction without having to wait for Ofcom to do so;
- Download all bids submitted and processed in a round such that we can independently verify results produced by Ofcom's software;
- View the outcome of each iteration of bid processing for a round. This should include rankings and values used for tie-breaks. Without this, the software is rendered opaque and identifying errors made difficult;
- Run the assignment stage;
- Upload principal stage results so that we can run different scenarios for assignment stage without having to go through principal stage.

We request that the playground software have the following functionality for bidders:

- Submit bids exactly as will be done in the live auction, such that we can practice bid submission procedures;
- Ideally, bidders should also be able to enter bids via a file upload to speed up simulations and avoid manual bid submission each round. This will make it easier and faster to rigorously test different scenarios without having to manually enter all bids;

- Download round results in a format identical to that which will be generated by the live auction software, such that we can develop and test our own bid tool;
- Request the extension of a round in progress, even if this is not adopted in the final version of the rules. This functionality is especially important if the auctioneer does not have the ability to rewind the auction, as mistakes cannot be corrected and we would have to resume the auction from the start;
- Select own login credentials.

## **f. Lack of reference to Spectrum Access High Density Licences in Regulations**

Our understanding is that the purpose of the regulations is to facilitate the award of the “Spectrum Access High Density 26 GHz Licences” and the “Spectrum Access High Density 40 GHz Licences”. These licences are subject to significant geographic limitations, as set out in Ofcom’s sample award licence,<sup>12</sup> with geographic boundaries defined in detail in Annex 10 of the September 2023 consultation.<sup>13</sup> However, in the Regulations, there is no reference to the “High Density” nature of the licenses or their geographic limitations.

In the draft regulations, four types of licences are defined in Reg 105: “40 GHz licence”; “26 GHz lower lot first period licence”; “26 GHz upper lot first period licence”; and “26 GHz lot second period licence”. Under Regulations 112-115, winners of these licences will be granted particular frequencies, comprised of lots, and the relevant frequency ranges for each lot are defined in Schedule 1. The names given to these licences do not correspond to the names used in other documents to describe the available High Density 26 GHz and 40 GHz licences, and the description of frequencies does not address the geographic limitations of the licences defined elsewhere.

We note that in contrast to the auction regulations, the draft amendment to the Wireless Telegraphy (Mobile Spectrum Trading) Regulations [2024]<sup>14</sup> uses the words “Spectrum Access High Density” to describe the new licences at 26 GHz and 40 GHz that will be subject to trading. It is not clear to us why the same licences appear to have different names in separate regulations.

### **REQUEST:**

- **We request that Ofcom consider the inconsistency in naming conventions across official documents relating to the licences available for award, and confirm that this is either not an issue, or otherwise make appropriate amendments.**
- **We request that Ofcom consider whether the absence of any reference to the high density geographic limitations of the licences in the regulations raises any issues.**

<sup>12</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0031/268654/A4-A5.-Draft-licences.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0031/268654/A4-A5.-Draft-licences.pdf)

<sup>13</sup> [Geographical boundaries of the ‘Spectrum Access High Density 26 GHz’ licences and the ‘Spectrum Access High Density 40 GHz’ licences \(ofcom.org.uk\)](#)

<sup>14</sup> [Annex 6 – Draft Wireless Telegraphy \(Mobile Spectrum Trading\) \(Amendment\) Regulations \[2024\] \(ofcom.org.uk\)](#)

## 2. MINOR ISSUES REQUIRING CLARIFICATION OR CHANGES TO CONSULTATION DOCUMENT

These are minor issues where we have identified apparent errors or ambiguous wording. We request that Ofcom review each point and either confirm our interpretation or otherwise clarify its position.

### Para 3.14 (a) and (b)

The consultation document clarifies that the application form and each associate form must be signed by two authorised persons.

Please confirm that each document may be signed by any two of the three-to-five authorised persons that a bidder must identify under Schedule 2 (2).

### Para 3.40

This paragraph should refer to the prices set out 3.37(a) and (b), not 3.38 (a) and (b). It should refer to Regulation 20, not 21.

Please confirm the identified errors.

### Para 3.43

There appears to be a typo. The phrase “up to and including” should presumably replace “*up to an including*”.

Please confirm the identified typo.

### Para 3.44

This paragraph highlights a “significant change” to the auction design from prior awards but is not clearly written. It states that “*Regulation 31 makes clear that such a bidder is deemed to have submitted zero lots for the type in question.*” Our understanding of the regulations is that, for each type of lots where the bidder fails to bid, the auction system will submit a maintain bid for zero lots at the clock price, if the bidder’s prior posted demand was for zero lots, or otherwise a decrease bid for zero lots at the opening price, if the bidder’s prior posted demand was one or more lots. A consequence of this rule is that the bidder could still have retained demand for a non-zero number of lots in the relevant category if there is no excess demand above the opening bid price.

Please confirm our interpretation.

### Para 3.46

This paragraph says that bidders “are constrained” by the sums on deposit but should more properly read “*may be constrained*”. Our understanding is that this constraint only applies if there is a deposit call and bidders fail to top up their deposit by the relevant deadline. Absent a deposit call, bidders still eligible to submit new bids are not constrained by the level of their deposit.

Please confirm our interpretation.

### Para 3.55

This paragraph purports to provide a full description of the process for determining each bidder’s posted demand but fails to deliver this because it does not discuss maintain bids. This appears only to be an issue with the consultation document, as the process is described fully in Regulation 32.

Please confirm our interpretation.

### **Para 3.55 (b)**

This sub-clause says that *“Ofcom calculates the price point (regulations 33 and 34) for all sets of bids to increase demand and all sets of bids to decrease demand.”* We note that Regulation 33 addresses decreases in demand and Regulation 34 addresses increases in demand, the opposite way round to what is stated in the consultation document.

### **Para 3.58**

This paragraph describes the determination of excess demand. This refers only to Regulation 49, but the actual calculation of excess demand is in Regulation 40, not 49.

Please confirm our interpretation.

### **Para 3.58**

This paragraph, which refers to Regulation 50, reads *“In the any round of the principal stage ...”*. Please confirm that the first *“the”* can be deleted for purposes of understanding this paragraph.

### **Para 3.70**

This paragraph, which addresses deposits, states that *“the sum owed shall be no greater than the difference between the bidder’s highest financial exposure from any previous round, and the amount the bidder has on deposit (regulation 55).”* However, Regulation 55 does not in fact consider bids in any previous round but rather appears to refer to a specific round, the one that ends immediately before the time when Ofcom gives notice of a requirement to increase deposits.

Please clarify whether it is Ofcom’s intention that the regulations give it the power to set deposit requirements in relation to any prior round, or only the last completed round before the deposit call.

### **Para 3.72**

This paragraph refers to a single assignment round bid of zero: *“which means it is deemed to have made assignment stage bid with a value of zero pounds.”* Our understanding of the regulations is that the paragraph should in fact refer to multiple assignment round bids, as a bidder may have multiple assignment bid options. Accordingly, this paragraph should more properly have been drafted in the same way as the end of para 3.72: *“the bidder will be deemed to have made a valid assignment stage bid of zero pounds for all assignment stage options.”*

Please confirm our interpretation.

### **Para 3.95**

We support the rule change set out here and in Regulation 124(2) that will relax the prohibition regarding exchange of confidential information as soon as bidders have received notification of all the assignment stage results. We would appreciate guidance on what action, if any, winning bidders might take to ensure compliance. For example, would it be helpful if a bidder was to notify Ofcom that it intends to contact another winning bidder once the results have been provided to bidders in accordance with Regulation 124? Please also see our comment in the next section on Regulation 124(2).

### **Annex A7.7**

This annex, which concerns the 40 GHz assignment round, says that Ofcom will run *“(i) A single assignment stage round for 40 GHz (40.5-43.3 GHz)”*.

Please confirm that you mean 40.5-43.5 GHz.

### **3. MINOR ISSUES REQUIRING CLARIFICATION OR CHANGES IN THE REGULATIONS**

These are minor issues where we have identified apparent errors or ambiguous wording in the draft Regulations in Annex 5 of the Consultation document. We request that Ofcom review each point and either confirm our interpretation or otherwise clarify its position. Some of these errors will need to be addressed in the final Regulations.

#### **Regulation 35 (5)**

Our interpretation of Regulation 35(2) is that the process of random selection, when required to determine the order of bids with the same price point within the processing queue, happens only once in each round. This has the implication that the established queue order is respected throughout the bid processing, regardless of how many times that the queue is reiterated from the beginning. It is also our understanding that a new queue order is generated after each round, such that the outcome of random tie breaks is not preserved across rounds, even if some bids are the same.

Please confirm our interpretation.

#### **Regulations 41, 43, 45 and 55**

In all these Regulations, the first two subclauses have both been labelled as (1), whereas they should be labelled as (1) and (2). Consequently, all subsequent numbering is off by one, and cross-references to these numbered items are broken.

Please confirm that these errors in the Regulations will be addressed.

#### **Regulations 74, 79 and 84**

These regulations fail to make clear that a block of spectrum within a lot type allocated to a bidder must contain contiguous frequency lots. In contrast, the regulations do clarify that any spectrum lots that are unallocated will be assigned to a contiguous frequency block. However, we recognise that Schedule 1 states that a block assigned to a bidder consists of contiguous lots.

Please confirm that the Regulations as drafted guarantee contiguity, based on the interrelationship between these specific regulations and Schedule 1, or otherwise update the Regulations.

#### **Regulations 75, 80, 85 and 91**

These Regulations concern the amount of assignment round bids. Each Regulation states that to be valid, a bid must be for "*an amount in whole thousands of pounds*". On this basis, it is not clear to us whether a zero bid would be valid. This is a concern given that it is standard practice for any bidder to bid zero for its least preferred option in an assignment auction of this type. If there is any ambiguity here, we request that the regulations are redrafted to say that a bid must be "either zero or for an amount in whole thousands of pounds".

We appreciate that other regulations make it clear that if a bidder fails to submit a valid bid for an option it will be deemed to have submitted a valid bid of zero for that option. Nevertheless, we would prefer to have confidence that our full set of initial bids, including zero bids, are valid, and not to have to fall back on contingency Regulations.

Please clarify whether "*an amount in whole thousands of pounds*" includes zero bids. If not, please amend the regulations.



### **Regulation 91 (1)**

We question whether it is necessary to include the final part of Regulation 91 (1) starting “in addition to— ... (a) .. and (b) ...”. It is clear from other regulations that a winning bid in the third assignment round may result in a unique additional fee. As drafted here, the regulation could be misinterpreted as implying the bidder must incorporate the assignment prices it has already paid into its bid amounts.

Please consider amending the Regulation.

### **Regulation 97 (b) and Regulation 98 (2)**

Regulation 98(2) refers to “*the time notified to bidders under regulation 97(6) as the end of the assignment stage round*” but we believe it should refer to Reg 97 (b), as there is no Reg 97 (6). We further note that Reg 97 (b) establishes the timing of the assignment round but does not explicitly specify and end time for an assignment round.

Please clarify and amend Regulations as necessary.

### **Regulation 122**

This Regulation refers to “*all of the persons to whom licences were granted*”. However, as per Regulation 4, only a body corporate not a person can apply and become a qualified bidder. We believe this Regulation should therefore refer to “winning bidders” rather than “persons”, consistent with other regulations in Chapter 4, e.g. Regulation 123.

Please clarify and amend Regulation as necessary.

### **Regulation 124 (2)**

The term “[results of the assignment stage]” is in square brackets. Should these brackets be removed? Given that this clause describes an exception to the confidentiality rules, we think it is very important that there is no ambiguity over interpretation of this rule.

### **Regulation 125 (2)**

This Regulation implies that if Ofcom decides to discard bids because a bidder is excluded, the auction must be rewound to the end of the round prior to the one in which bids were made that are being excluded. Please confirm if this interpretation is correct and that Ofcom is not giving itself any discretion to rewind the auction to some intermediate point.

### **Regulation 126 (f)**

This Regulation precludes an applicant from receiving or attempting to receive services from a party that has provided related services to Ofcom. Please can Ofcom confirm that (a) this clause only applies from the date of submission of applications, and is not retrospective; and that Ofcom will provide a list of all parties that have provided services to Ofcom prior to the Application date, so that bidders are not at risk of inadvertently violating this Regulation?

### **Schedule 2**

In Schedule 2, the numbering of sub-points under section (5) should presumably start at (a) not (j). This same issue applies to sections (6) and (8). We also note there is no section (7): is there missing text, or should section (8) be relabelled as (7)?

Please clarify and amend Schedule 2 as necessary.

**Schedule 3**

In Schedule 3, the numbering of sub-points should presumably start at (a) not (w).

Please amend Schedule 3 as necessary.