

Statement on the final regulations for the award of spectrum in the 700 MHz and 3.6- 3.8 GHz frequency bands

Notice that Ofcom has made the Wireless Telegraphy
(Licence Award) Regulations 2020

STATEMENT:

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1. Overview

This document provides notice that Ofcom has made a statutory instrument for the award of spectrum in the 700 MHz and 3.6-3.8 GHz frequency bands.

What we have decided – in brief

On 13 March 2020, we published a statement setting out our decisions for the award of spectrum in the 700 MHz and 3.6-3.8 GHz frequency bands. At the same time, we published a final draft of the regulations which would implement our decisions.

We have now made the regulations which implement those decisions.

This overview is a high-level summary only. The decisions and reasoning are set out in the full document.

2. Introduction

Background

- 2.1 Ofcom has the statutory power under sections 14 and 122(7) of the Wireless Telegraphy Act 2006 (the “**WTA 2006**”) to make regulations to award spectrum licences by means of an auction.
- 2.2 On 28 October 2019, we published a notice in respect of our proposal to make the Wireless Telegraphy (Licence Award) Regulations 2020 (the “**October 2019 Notice**”).¹ The October 2019 Notice included a draft statutory instrument and invited comments on this by 9 December 2019.
- 2.3 On 13 March 2020, we published a statement setting out our final decisions on the award of spectrum in the 700 MHz and 3.6-3.8 GHz bands by auction (the “**March 2020 Statement**”).² On the same day, we also published a final draft of the regulations, taking account of the comments received in response to the October 2019 Notice (the “**March 2020 Notice**”).³

Making and publication of the Regulations for the award

- 2.4 We set out in the March 2020 Statement that we would make the Regulations once we were certain that stakeholders would not seek to challenge the decisions set out in that statement, or any such challenges had been disposed of.
- 2.5 The document gives notice that we made the final Wireless Telegraphy (Licence Award) Regulations 2020 (the “**Auction Regulations**”) on 3 November 2020, and they will be available on www.legislation.gov.uk.
- 2.6 A copy in draft form is also annexed to this statement for indicative purposes, in the form submitted for registration and publication after it was made by Ofcom.⁴ However, www.legislation.gov.uk is the only authorised source for published statutory instruments.
- 2.7 We have also published a separate document, ‘*Process guidance for potential applicants and bidders in the auction*’ alongside this notice.⁵ That document provides guidance on how we will run of the auction process.

¹ <https://www.ofcom.org.uk/consultations-and-statements/category-2/auction-regulations-award-700-mhz-3.6-3.8-ghz-spectrum>

² https://www.ofcom.org.uk/data/assets/pdf_file/0020/192413/statement-award-700mhz-3.6-3.8ghz-spectrum.pdf

³ https://www.ofcom.org.uk/data/assets/pdf_file/0018/192411/auction-regulations-award-700mhz-3.6-3.8ghz-spectrum.pdf

⁴ See Annex 1 to this document, which is published as a separate document:

https://www.ofcom.org.uk/data/assets/pdf_file/0023/205547/annex-draft-auction-regulations.pdf

⁵ https://www.ofcom.org.uk/data/assets/pdf_file/0022/205546/700mhz-3.6-3.8ghz-spectrum-auction-process-guidance.pdf

Document structure

- 2.8 This document explains the changes we have made to the Auction Regulations since we published the final draft regulations in March 2020. For further information on the Auction Regulations, please see the October 2019 Notice¹ and the March 2020 Notice².
- 2.9 **Section 3** of this document sets out the changes we have made to the final draft of the Auction Regulations which were annexed to the March 2020 Notice.
- 2.10 **Annex 1** to this document is a draft of the Auction Regulations in the form submitted for registration and publication after they were made.³
- 2.11 **Annex 2** is a copy of the regulatory impact assessment for the Auction Regulations.

¹ https://www.ofcom.org.uk/_data/assets/pdf_file/0029/172649/proposal-auction-regulations.pdf

² https://www.ofcom.org.uk/_data/assets/pdf_file/0018/192411/auction-regulations-award-700mhz-3.6-3.8ghz-spectrum.pdf

³ Annex 1 is published as a separate document, available here:

https://www.ofcom.org.uk/_data/assets/pdf_file/0023/205547/annex-draft-auction-regulations.pdf

3. Changes to the Regulations

- 3.1 The March 2020 Notice incorporated all changes to the Auction Regulations that we made having considered the responses to the October 2019 Notice.
- 3.2 We have only made minor changes to the draft regulations published in the March Notice for the following reasons:
- a) to correct minor drafting errors¹ which we have identified since publishing the March 2020 Notice; and
 - b) to reflect changes we have decided to make to how we will run the award process in light of the Covid-19 ('coronavirus') pandemic.

Changes to how we will run the award process

- 3.3 We have made the following changes to the version of the Auction Regulations that we published with the March 2020 Notice, in order to reflect changes we have made to how we will run the award process in light of the Covid-19 pandemic.
- a) **Regulation 4(3)(a), 4(4) and 4(5):** We have amended parts of Regulation 4 in order to allow applicants to submit their application forms to Ofcom electronically. The specific regulations we have amended and inserted now read:
 - Regulation 4(3):** "To apply for a licence a body corporate must –
 - (a)** on the day or days specified by OFCOM for receipt of applications, deliver to OFCOM **using the delivery method specified by OFCOM**, within the times on that day or those days specified by OFCOM—"
 - Regulation 4(4):** "OFCOM shall publish **the delivery method**, the day or days, times and deadline on their website."
 - Regulation 4(5):** "**The delivery method to be specified and published by OFCOM may require delivery of original signed documents to OFCOM premises or electronic delivery of an electronic version of originally signed documents.**"
 - b) **Regulations 127(1), 128 and 129:** We have amended these regulations in order to enable Ofcom to change timings, pause rounds, amend the start and end times of rounds, or re-run rounds, where the original times notified become impracticable for reasons relating to the coronavirus pandemic (or any other reason).

The revised regulations are as follows:

Regulation 127(1):

¹ For example, we have amended the references to 3.6 GHz 'frequency' lots in Schedules 1 and 9 to remove the word "frequency" to make the references consistent with the defined term ("3.6 GHz lot").

Subject to regulations 128 and 129, paragraph (2) applies where OFCOM determine that it is impracticable **for reasons relating to the coronavirus pandemic or for any other reason**—

(a) for any document which is to be delivered to OFCOM under these Regulations to be delivered at the place specified or by the deadline specified under these Regulations; or

(b) for any action which is required to be undertaken in accordance with these Regulations to be completed by the deadline specified.

Regulation 128:

(1) Where a time for the start of a round has been notified to bidders and OFCOM determine that it is impracticable **for reasons relating to the coronavirus pandemic or for any other reason** to start the round at that time, OFCOM shall take reasonable steps to notify bidders of a revised time for the start of the round.

(2) Where a time for the end of a round has been notified to bidders and OFCOM determine that it is impracticable **for reasons relating to the coronavirus pandemic or for any other reason** for the round to end at that time, OFCOM shall take reasonable steps to notify bidders of a revised time for the end of the round.

(3) Where OFCOM determine that it is impracticable **for reasons relating to the coronavirus pandemic or for any other reason** to use the electronic auction system for any of the purposes specified in these Regulations, OFCOM shall take reasonable steps to notify bidders of an alternative method of participating in the award process and any requirements relating to the authentication of communications made by means of the alternative method.

Regulation 129 (1):

Paragraph (2) applies where a round is in progress and OFCOM determine that it is not possible to continue the round because of—

(a) technical failure; or

(b) **an event or circumstance with similar effect to technical failure on the continuation of the round (including, in particular, any event or circumstance relating to the coronavirus pandemic).**

Regulation 129 (3): Paragraph (4) applies where OFCOM determine that it is not possible to continue the award process in accordance with the provisions of these Regulations because of—

(a) technical failure; or

(b) **an event or circumstance with similar effect to technical failure on the continuation of the award process (including, in particular, any event or circumstance relating to the coronavirus pandemic).**

- 3.4 For further information about how Ofcom intends to run the award process, please refer to Ofcom's [bidder guidance document](#).

4. Next steps

- 4.1 The Auction Regulations will come into force on **18 November 2020**.
- 4.2 We have published [guidance for prospective applicants](#) on how to apply to participate in the auction award process.

A1. The Auction Regulations

- A1.1 A [final draft of the Auction Regulations](#), in the form submitted for registration and publication after they were made is available on the Ofcom website.

A2. Regulatory Impact Assessment

The Wireless Telegraphy (Licence Award) Regulations 2020

- A2.1 In accordance with government practice Ofcom undertakes a Regulatory Impact Assessment (RIA) when a statutory regulation is proposed. We also comply with our duty under section 7 of the Communications Act 2003 (the “CA 2003”) to undertake impact assessments.
- A2.2 Regulatory impact assessments are a key tool in delivering better regulation and provide a valuable way of assessing different options for regulation. In producing the assessment in this document, Ofcom has had regard to such general guidance as it considers appropriate, including Cabinet Office guidance.
- A2.3 The analysis presented in this document is a RIA in regard of making regulations concerning the award of spectrum licences **by auction**. The regulations analysed specify in detail and precision the rules for the auction of spectrum licences. The RIA considers that the benefits of conducting an auction in the way set out in the regulations outweigh the costs involved.

The issue being considered and the citizen/consumer interest

- A2.4 This impact assessment concerns the award of spectrum licences in the 700 MHz and 3.6-3.8 GHz frequency bands. The frequencies being awarded are at 703-733 MHz and 738-788 MHz in the 700 MHz band, and 3680-3800 MHz in the 3.6-3.8 GHz band. These frequency bands are particularly suitable for the provision of mobile electronic communications services.
- A2.5 Ofcom believes that citizens and consumers will benefit from this spectrum award. The direct benefit to consumers and businesses will come from the provision of improved mobile communications services using this spectrum. Both bands are likely to be used by mobile networks to meet the increasing demand for mobile broadband services, and to invest in new technologies, including 5G - the new generation of mobile technology.

The policy objective and the public benefit

- A2.6 Our objectives for awarding the 700 MHz and 3.6-3.8 GHz frequencies are based on our statutory duties. Our principal duties are to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition. In discharging these principal duties, we are further required to secure the optimal use for wireless telegraphy of the electro-magnetic spectrum.
- A2.7 Our objectives for this award are:
- Securing the optimal use of spectrum;
 - Sustaining strong competition in mobile markets;

- Encouraging investment and innovation; and
- Ensuring the timely availability of spectrum.

A2.8 Radio spectrum is a scarce and finite resource. Access to spectrum is a major asset to the UK economy and society because it facilitates the operation of all wireless communications devices. Therefore, bringing the frequencies to be awarded into use, and achievement of the objectives for this award, will be of direct benefit to citizens, consumers and businesses.

Benefits of the award of the 700 MHz and 3.6-3.8 GHz frequency bands for citizens, consumers and businesses

- A2.9 Demand for mobile data has increased substantially in recent years, driven by the rapid take-up of internet enabled devices like smartphones and tablets and the ability of these devices to deliver popular data intensive services such as video streaming, the use of social media, etc.
- A2.10 We believe that strong growth in demand for enhanced mobile data services will continue for some time as technology continues to evolve, enabling ever more data-rich services.
- A2.11 The increasing demand for mobile data services will place pressure on mobile network operators (MNOs) to increase their capacity in order to meet growing consumer and business demand. If this demand cannot be met it will be to the detriment of citizens, consumers and businesses as end-user prices would be higher than otherwise and service quality would be degraded due to congestion.
- A2.12 There are different ways operators could potentially meet rising demand but deploying additional spectrum is likely to be very important.
- A2.13 The characteristics of the 3.6-3.8 GHz frequency band we are awarding makes it well suited to providing high data rates and providing high capacity to large numbers of connected mobile devices. The characteristics of the 700 MHz frequency band make it well suited to providing mobile coverage over wider areas and indoors. The 200 MHz of frequencies we are making available represents an increase of around 22% in the amount of spectrum currently available for mobile use. The 3.6-3.8 GHz frequency band is part of the wider 3.4-3.8 GHz frequency band, which has already been harmonised for mobile services and has been designated the primary band for 5G services in Europe. Development of 5G services has the potential to deliver significant benefits for UK consumers and businesses, including superfast broadband, greatly expanded capacity and innovative new services.
- A2.14 Overall, we consider the net effect of the 700 MHz and 3.6-3.8 GHz award on citizens, consumers and businesses (both small and large businesses) will be positive. We are confident that this award will enable a release of the frequencies as quickly as possible and will therefore maximise the benefits.

Identification and assessment of options and the impacts on stakeholders

A2.15 In deciding how to make the 700 MHz and 3.6-3.8 GHz frequency bands available we have sought to design an award that is most likely to achieve our objectives of securing the optimal use of spectrum; ensuring efficient allocation of spectrum; sustaining strong competition in mobile markets; and ensuring the timely availability of spectrum.

Decision to hold an auction

A2.16 In our 'Spectrum Management Strategy' statement published on 30 April 2014¹ we explained that the key objective when managing spectrum is to deliver its optimal use, meaning the use that delivers the greatest value to UK citizens and consumers. To do this, we explained further that we will usually rely on market mechanisms where possible and effective, but also take regulatory action where necessary. Consistent with this strategy, we have decided to award the spectrum in the 700 MHz and 3.6-3.8 GHz bands by holding an auction.

Consultations on the impacts of the award

- A2.17 We consulted on our proposals for the 700 MHz and 3.6-3.8 GHz award and its impact on citizens, consumers and businesses as follows.
- A2.18 In **December 2018** we published a consultation² with our proposals for an auction to award national licences in the 700 MHz and 3.6-3.8 GHz bands. This included proposals to use an auction format with coverage obligations aimed at providing good quality mobile services in underserved rural areas.
- A2.19 Having considered stakeholders' responses to the December 2018 consultation, we consulted again in **June 2019** on proposals to facilitate defragmentation of the wider 3.4-3.8 GHz band.³ Please also see paragraphs 1.37 to 1.39 below.
- A2.20 The proposals for coverage obligations in our consultation of December 2018 prompted the four mobile network operators (BT/EE, O2, Three and Vodafone, together the 'MNOs') to offer voluntary binding commitments to improve mobile coverage by sharing infrastructure and rolling out a 'Shared Rural Network' programme⁴. By industry working together, this programme is designed to deliver better coverage than could have been delivered by our original proposals.

¹ <http://stakeholders.ofcom.org.uk/consultations/spectrum-management-strategy/statement/>

² https://www.ofcom.org.uk/_data/assets/pdf_file/0019/130726/Award-of-the-700-MHz-and-3.6-3.8-GHz-spectrum-bands.pdf

³ https://www.ofcom.org.uk/_data/assets/pdf_file/0011/152102/consultation-defragmentation-spectrum-holdings.pdf

⁴ <https://www.gov.uk/government/news/shared-rural-network>

- A2.21 Based on the offer of these commitments we published a consultation document in October 2019 setting out revised proposals for the auction design, which no longer included coverage obligations.¹
- A2.22 On 13 March 2020, having considered responses, and after the MNOs entered into binding commitments to improve mobile coverage in the Shared Rural Network programme, we published our final decisions to use an auction format without coverage obligations, in our March 2020 statement.²
- A2.23 In the light of the conclusions reached through the consultations outlined above, on 13 March 2020 we also published the Notice of our final draft of the auction regulations which, when enacted, will give effect to our proposals.³
- A2.24 In response to concerns raised by a stakeholder, we published a further consultation on 15 May 2020 on modelling of throughput and on certain technical matters.⁴ We subsequently published a statement on 3 August 2020⁵ in which we confirmed the conclusions of our March 2020 statement.
- A2.25 All these documents considered the impact of our proposals and decisions on citizens, consumers and businesses and constitute the regulatory assessment for the award.

Competition Assessment

- A2.26 Our general approach to awarding spectrum is to allow the market to determine the best allocation, however, there may be circumstances in which an unfettered market approach may be detrimental to consumers. For example, if an auction outcome resulted in weaker competition, this could lead to an increase in prices and/or a reduction in the quality of services in some cases.
- A2.27 Having examined competition in the UK mobile services sector and evaluated a wide range of evidence, we consider that the market for mobile services is functioning well, with competition between the four MNOs delivering good outcomes for consumers. We consider nevertheless that certain extreme outcomes of the award could give rise to concerns about the strength of competition for mobile services in the UK. In particular, we would be concerned if the auction resulted in very asymmetric shares of spectrum amongst the mobile operators.
- A2.28 We therefore decided to impose a cap based on limiting to 37% the proportion of all of the spectrum designated for mobile services which a single mobile operator

¹ https://www.ofcom.org.uk/data/assets/pdf_file/0028/172648/revised-proposal-auction-design.pdf

² <https://www.ofcom.org.uk/consultations-and-statements/category-1/award-700mhz-3.6-3.8ghz-spectrum>

³ https://www.ofcom.org.uk/data/assets/pdf_file/0018/192411/auction-regulations-award-700mhz-3.6-3.8ghz-spectrum.pdf

⁴ https://www.ofcom.org.uk/data/assets/pdf_file/0023/195521/consultation-sut-modelling-700mhz-3.6-3.8ghz-spectrum.pdf

⁵ https://www.ofcom.org.uk/data/assets/pdf_file/0034/199717/statement-sut-modelling-700mhz-3.6-3.8ghz-spectrum.pdf

may hold as a result of the award. This cap is consistent with the policy we adopted in our 2018 spectrum auction. In practice, the cap will allow an operator to hold up to 416 MHz of mobile spectrum after the award.

A2.29 Full details of our reasons for making this decision, including more detailed consideration of the effects of different options on stakeholders, are set out in our December 2018 consultation and in our March 2020 statement.

Auction format and design

A2.30 In the March 2020 statement, we set out our decisions on the form and design of the auction. We had consulted stakeholders on the available options in our December 2018, June 2019 and October 2019 consultations.

A2.31 In these consultations we considered two possible auction formats for this award: the Simultaneous Multiple Round Ascending (SMRA) auction and the Combinatorial Clock Auction (CCA).

A2.32 In December 2018, we proposed a CCA format because we considered that it would be the most likely to strike an appropriate balance between our objectives at that time to improve mobile coverage and secure the efficient allocation of the spectrum. In October 2019, following the mobile network operators' and Government's 'in principle' commitment to full funding of the Shared Rural Network programme, we considered that including coverage obligations in this award would no longer be necessary.

A2.33 In the October 2019 consultation, we proposed a revised auction format using a SMRA design, without coverage obligations.

A2.34 Having considered all the comments from stakeholders, and noting the strong support among respondents, we decided to proceed with the proposed SMRA format for this auction.

A2.35 Our decision to proceed with an SMRA auction format is set out in our March 2020 statement. That statement also sets out our decisions on all aspects of the auction design. In reaching these decisions, we considered responses to our consultations of December 2018, June 2019, and October 2019.

Defragmentation of spectrum holdings

A2.36 We decided to include measures in this auction to facilitate rearranging ('defragmenting') spectrum holdings in the wider 3.4-3.8 GHz band.

A2.37 There is a consensus that optimal deployment of 5G is best achieved with large contiguous blocks of spectrum. However, in the UK, the current holdings in the band mean that, without rearrangement, some MNOs' holdings are likely to be fragmented after this award.

A2.38 In June 2019 we consulted on proposals to facilitate defragmentation of the 3.4-3.8 GHz band. Having considered consultation responses, we decided to adopt the following measures to facilitate defragmentation of the 3.4-3.8 GHz band:

- We will include a pause in the auction bidding process of up to four weeks before processing assignment stage bids.¹ This pause will allow for a negotiation period in which bidders can agree the assignment of precise frequencies in the 3.6-3.8 GHz band among themselves. In the first phase of this period, winners of 3.6-3.8 GHz spectrum will have the opportunity to reach unanimous agreement on the assignment of frequencies in the 3.6-3.8 GHz band. If winners are unable to reach unanimous agreement, there will be a further period during which one or more sub-set of winning bidders would have the opportunity to agree to be assigned adjacent blocks of spectrum. If a unanimous agreement were reached the process would end and assignment stage bids would not need to be processed. In all other eventualities assignment stage bids would be processed.
- Winners of 20 MHz or less of 3.6-3.8 GHz spectrum will be restricted to bidding only for the top or bottom of the 3.6-3.8 GHz band in the assignment stage of the auction.

Costs to Ofcom and the public sector

- A2.39 The following costs, to Ofcom and the public sector, are associated with our decision to auction the 700 MHz and 3.6-3.8 GHz spectrum:
- a) One-off administrative costs associated with making Statutory Instruments; and
 - b) Costs of carrying out the award process.
- A2.40 We consider that the level of costs in the first two categories is relatively low. For example, whilst there are costs of carrying out the award process itself, they amount to at most a few million pounds., In comparison with the likely consumer benefits generated by consumption of enhanced mobile services on 5G networks and we are confident that the costs of spectrum clearance will be significantly exceeded by these benefits.

Cost to business, including small business and the voluntary sector

- A2.41 The business sector most directly affected by the 700 MHz and 3.6-3.8 GHz spectrum auction is the mobile communications service provision sector. Those businesses wishing to take part in the auction will face the costs of participation. Additionally, businesses which are successful in acquiring spectrum through the auction process will face paying fees for the resulting licences, based on their winning bids.

¹ There will be two main stages in the auction: a principal stage and an assignment stage. Bidding in the principal stage will determine the amount of spectrum won by bidders, in frequency-generic lots. After conclusion of the principal stage, the assignment stage will determine the precise frequencies awarded.

- A2.42 The costs facing businesses in the mobile services sector are likely to be more than offset by benefits (e.g. additional profits) derived from using any spectrum rights they win.
- A2.43 We recognise that bidders who are unsuccessful in acquiring spectrum will have faced costs for participation that are irrecoverable. However, we consider these to be proportionate when set against the benefits of an efficient auction aimed at delivering the optimum use of spectrum, and against the benefit of citizens, consumers and businesses. Those businesses which choose to take part in the auction can undertake their own assessment of the costs and benefits of participation.
- A2.44 We do not consider that our decision to make these Regulations will have any material cost implications for any particular sectors of society, including the voluntary sector.

Conclusion

- A2.45 We have assessed the impact of a wide range of aspects of our auction of frequencies in the 700 MHz and 3.6-3.8 GHz spectrum bands.
- A2.46 We have done so in terms of their potential benefit to citizens, consumers and businesses, as against the likely costs involved in adopting these approaches. We have also assessed the potential impact of a number of alternative approaches to particular aspects of the award, including those suggested by stakeholders in response to our various consultations.
- A2.47 We consider that the final decision set out in our March 2020 statement – and put into effect through the auction Regulations – will deliver our objectives for the award of the 700 MHz and 3.6-3.8 GHz frequencies, as set out in paragraph A2.7 above.
- A2.48 Further, we consider that the benefits of conducting an auction in the way summarised in this regulatory impact assessment outweigh the costs involved and that our auction format is proportionate.
- A2.49 Accordingly, the auction will deliver benefits for citizens, consumers and businesses by bringing 200 MHz of spectrum into use.

Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed

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