

2020-21 Licence Award Process

Response to Multi-
Band Spectrum Licence
Award Consultation
and Further
Consultation

Document Number: 23/20

Date: 22nd December 2020



Oaseirys Çhellinsh
Communications Commission

Contents

Contents.....	2
1 Executive Summary.....	3
2 Relevant Spectrum Bands	5
2.1 Available Spectrum for the Licence Award	5
2.2 Lots.....	8
2.3 Cap on Spectrum Allocated during the Award Process	12
A. Fees	15
3 Regulatory Impact Assessment (Final).....	21
3.1 Background	21
3.2 Regulatory Objectives	21
A. Promoting Sustainable Competition	22
B. Encouraging Investment	22
C. Fair, Reasonable, and Non-Discriminatory	23
3.3 Options.....	24
A. Beauty Contest vs Auction	25
3.4 Impact and Proposed Decision	26
4 Licence Fees	28
A. Background & Principles	28
B. Methodology.....	29
5 Transition Issues.....	33
A. Objectives.....	33
B. Transition Principles.....	34
C. Conclusion.....	36
6 Next Steps	37

1 Executive Summary

- 1.1. As of the 15th December 2020 the Communications Commission (the Commission) became the Communications and Utilities Regulatory Authority (the Authority) any previous references to the Commission should be construed as being references to the Authority.
- 1.2. The Authority published a consultation document on the Multi Band Spectrum Award in September 2020¹. The Authority received 3 responses to the consultation from the following:
 - BlueWave;
 - Manx Telecom and;
 - Sure
- 1.3. Non-confidential versions of the consultation responses will be available on the Authority's website. The Authority would like to thank the respondents for their comments, which have been taken into account during the production of this latest consultation. This document comprises the Response to the Consultation and further analysis and details/information on the next stages of the Multi Band Spectrum Award process.
- 1.4. The purpose of this document is to set out the Authority's response to those submissions and set out its Decision concerning the Multi-Band Spectrum Award 2020 process.

Licensing and Award Background

- 1.5. Since the initial consultation on the Future Use of Spectrum (06/19) in the Isle of Man, the Authority has been working with industry stakeholders to try and ensure there is clarity around this award process. It has also been progressing the Communications Bill through the Legislative Branches and it is now awaiting Royal Assent. The licences that would issue on conclusion of this award process would be made under the resultant Communications Act.
- 1.6. The Authority will shortly commence consulting on the form of the Licence that would be issued under the Communications Act and although it is useful to provide some

¹ <https://www.iomcc.im/media/1422/2020-multi-band-spectrum-award-consultation.pdf>

context on how such licences would work in conjunction with this award process, it will be a separate process. This is not a consultation on the detail of these licences, simply a high level guide as to how the licence regime would operate. In the last phase of the consultation the Authority provided an overview of the legislative basis for the award, however as things have progressed it is timely to update stakeholders in this regard.

- 1.7. Any party seeking to provide a 'public electronic communications network' or a 'public electronic communications service' using the radio spectrum, other than bands in which a licence exemption exists, would require two licences. Firstly a Licence issued under the Communications Act (hereafter the Licence), issued by the Authority, for that network or service and a second licence under the Wireless Telegraphy Act 2006², issued by Ofcom, for the use of the spectrum. The Authority works with Ofcom in this regard to determine the Wireless Telegraphy Act licences that are issued.
- 1.8. The Authority is proposing to issue licences under the Communications Act that would allow successful bidders in the award process to provide services to consumers using spectrum in the 700 MHz and/or 3.6 GHz Bands. The requirement for a licence under the Wireless Telegraphy Act, issued by Ofcom, still remains and this process does not seek to amend any of the terms and conditions in those licences. The Authority would then notify Ofcom of the corresponding Wireless Telegraphy Act licences to be issued.
- 1.9. Only the terms and conditions of the Communications Act Licences will be consulted upon during this Award Process, the terms and conditions applied by Ofcom are largely technical in nature and are designed to ensure efficient spectrum management. Conditions related to the networks and/or services provided have no bearing on Wireless Telegraphy Act licences and vice versa.
- 1.10. This document comprises of Responses to the Consultation (18/20), the Authority's analysis of submissions, and Final Decisions, and further consultation on the issues of:
 - Licence fees – the principles and methodology in their calculation
 - Consideration of Transition Issues including the objectives and principles.

² As extended to the Isle of Man by the Wireless Telegraphy (Isle of Man) Order 2007 No. 278

2 Relevant Spectrum Bands

2.1 Available Spectrum for the Licence Award

Overview of Preliminary Position

- 2.1. To ensure that the Manx consumer and economy derives the maximum benefit from services delivered using the radio spectrum, which is a finite natural resource, it is incumbent on the Authority to ensure that the maximum amount of spectrum is made available, on a service and technology neutral basis, in a fair, transparent, and non-discriminatory way³. As such the Authority is proposing to release Licences that would provide access to the following:
 - a) Within the 694 – 790MHz range (the 700MHz Band) up to 80MHz of spectrum;
 - b) All of the 3410 – 3800MHz band (the 3.6GHz Band).
- 2.2. Restricting access to the spectrum would artificially constrain supply which could in turn increase the risk of excess demand and result in an artificially inflated value for Licences granting access to the spectrum. This in turn would likely negatively impact on the investment cases and rollout of new technologies, ultimately to the detriment of the Manx consumer. Releasing all the spectrum available in the band is more likely to result in access fees being at a level that reflects its true value.
- 2.3. The Authority is not in a position to reserve spectrum for any particular user or use case, but must, in conjunction with Ofcom, ensure that spectrum is used in the most efficient way possible.
- 2.4. Releasing the spectrum on a service and technology neutral basis will facilitate telecoms development; providing the greatest degree of flexibility for operators to design and plan their networks in a way that best serves the different demand for services on the Island while also allowing for the development of new applications and services. This is in line with the decisions that the EU has adopted in relation to the

³ In addition to a Communications Act Licence, Wireless Telegraphy Licences issued by Ofcom are required for the use of the radio spectrum in the Isle of Man. The Authority works with Ofcom to determine the allocation of such licences and must be mindful of good spectrum management practices.

bands under consideration⁴ which should provide sufficient certainty to operators as to what coexistence measures would apply.

Summary of Responses Received

- 2.5. Both Manx Telecom and Sure were in agreement with the Authority's current thinking that the maximum amount of spectrum possible be made available. Manx Telecom stated this approach is most likely to see Licences offered at a price in line with the value of the services provided. Sure agreed that there would be no merit in withholding some of the available spectrum stating not only could that result in the value of the spectrum being artificially inflated, but also lead to a suboptimal outcome for the consumer.
- 2.6. Whilst Manx Telecom agreed with the Authority's approach of awarding the access to the spectrum on a service and technology neutral basis, Sure believes the extent to which spectrum is awarded on this basis should be limited within the 3.6 GHz band.
- 2.7. Sure noted specifically the delivery of 5G services as a key part of the Island's National Telecommunications Strategy and for that reason they continue to believe that 3.6 – 3.8 GHz should be reserved exclusively for 5G services. Sure highlighted comments by the GSMA to support its case:

“Mid-bands typically offer a good mixture of coverage and capacity for 5G services: It is vital that regulators assign as much contiguous spectrum as possible in the 3.5GHz range (3.3GHz- 4.2 GHz)⁵, and

Existing mobile licences should also be technology neutral to allow their evolution to 5G services”

Sure further stated that these comments accorded with their views in that the overall principle of technology neutrality can co-exist with reserving some spectrum within the 3.6GHz band specifically for 5G.

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016D0687&qid=1565342823703&from=EN> and <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019D0235&from=EN> respectively.

⁵ <https://www.gsma.com/spectrum/wp-content/uploads/2020/03/5G-Spectrum-Positions.pdf>

Authority Response

- 2.8. The Authority notes that two of the three respondents agreed with its thinking that the maximum amount of spectrum possible should be made available within both the 700 MHz and 3.6 GHz Spectrum Bands.
- 2.9. In relation to Sure's assertion that the Authority should reserve 3.6 – 3.8 GHz of the exclusively for 5G services, the Authority does not agree that this would be appropriate in this instance. The Authority is cognisant of the fact that the band in question has been identified internationally as a key band for the future development of 5G services, but when considering the future of the 3.6GHz Band it must balance the needs of all use cases. It is also only one of many bands that have been identified for 5G services, many of which are currently unencumbered in the Isle of Man.
- 2.10. It has been clear throughout this process that it is most appropriate to award the spectrum on a service and technology neutral basis; this is primarily intended to ensure operators are afforded the opportunity to develop new and innovative services, both now and in future. It also allows individual operators to make use of the spectrum in line with their own needs and business cases. Restricting certain Licences to a single use case would have the effect of curtailing the amount of spectrum available to some users which, as outlined by Sure, could result in the value of the 3.4 – 3.6 GHz spectrum being artificially inflated and have negative impacts on competition and ultimately consumers.
- 2.11. The Authority notes that the proposals it has put forward are in keeping with the comments by the GSMA that Sure highlighted. The GSMA did not advocate for the reservation of the 3.6 – 3.8 GHz (or any other) spectrum for 5G use, it advocated for the release of "*as much contiguous spectrum as possible*" which is what the Authority proposed to do. Furthermore, GSMA does advocate for Governments and Regulatory Authorities to ensure that "*all mobile licences are technology neutral*" in order to promote 5G roll out and better spectrum efficiency. Having considered the information provided the Authority is not minded to include in its licences any measures that would reserve spectrum for any particular use case.
- 2.12. It should be pointed out that there is no onus on any provider to rollout 5G, or any particular service for that matter; it would ultimately be a commercial decision for each operator that obtains spectrum to determine the most suitable use case. To reserve part of the Band for 5G purposes/use would fetter the discretion of the future use of

this spectrum e.g. for Operators to utilise the spectrum for a combination of 4G & 5G or in future to offer next generation services.

Final Position

2.13. On balance, the Authority remains of the view that the best approach is to make the maximum amount of spectrum available on a technology and service neutral basis for fixed, mobile, or nomadic applications.

2.2 Lots

Overview of Preliminary Position

2.14. To promote sustainable competition and enable Operators to tailor the spectrum rights of use associated with their Licence to best suit their business case the spectrum within each band will be divided into lot sizes in order to balance facilitating different use cases and keeping award process complexities to a minimum. A cap on the number of lots any party can obtain control of during the award and ensuring the spectrum is allocated in contiguous blocks will allow the number of access seekers to be maximised whilst facilitating bandwidths that are large enough to allow for the provision of high speed broadband services.

2.15. The Authority set out its view that it should follow, where practical, decisions and best practices adopted by EU jurisdictions⁶ in its consultation on the Future Use of Spectrum⁷.

2.16. Despite adopting a service and technology neutral approach to awarding access to the spectrum there is a need to place some restrictions on how the available spectrum is organised to ensure there are no compatibility issues between users. This is most apparent when considering the type of duplex system to be employed in each band – either Frequency Division Duplex (FDD) or Time Division Duplex (TDD). TDD is generally considered a more spectrally efficient system and allows all the available spectrum to be used for both uplink and downlink. There is a requirement that the spectrum allocations on the Island are in keeping with those in neighbouring countries.

⁶ While it is currently a member of the EU, it is likely that in the event of Brexit the UK would still broadly follow the EU spectrum allocations and technical specifications.

⁷ <https://consult.gov.im/communications-Authority/future-use-of-spectrum/> Document 06/19

- 2.17. The Authority's primary objective in this regard is to divide the spectrum into lots that are small enough to allow different users to express their demand for potentially different use cases, but large enough to avoid unnecessary complexity. Additionally, given the different amount of spectrum available in each band to be awarded it would not necessarily be appropriate to have the same lot size for each band, therefore each band is considered separately.
- 2.18. There is a total of 80 MHz available to be licensed in the 700 MHz band, however most of this is paired spectrum as the band is designated for FDD. Access seekers are likely to value the coverage that this band can achieve due to its favourable propagation characteristics; this could include wideband data transmission, voice services, or machine-to-machine/Internet of Things (IoT) type applications, which are typically narrow-band applications.
- 2.19. It is intended to award access to the 700MHz Band in line with the UK, and many other jurisdictions, in a way that would be compatible with the majority of the radio standards in use at present. To that end it is intended to utilise a FDD arrangement in the band as well as the provision of spectrum for Supplementary Downlink as per the UK allocation, please see **Error! Reference source not found.** below.
- 2.20. The Authority proposed to divide the band into 4 lots of spectrum in the supplementary downlink spectrum and 6 lots (2 X 5 MHz) in each of the uplink and downlink spectrum that must be taken as paired spectrum. This would allow users interested in use cases that require comparatively little bandwidth, such as machine-to-machine or IoT applications to express a demand for the spectrum. Users interested in acquiring spectrum for wideband applications, such as LTE or 5G, can potentially acquire multiple lots to satisfy their demand as these services typically operate carriers that are multiples of 5, typically 20 and 40 MHz in this band.
- 2.21. It is acknowledged that 5 MHz is likely to be at the upper end of what some providers potentially may require, however the Authority is of view that the potential benefits of reducing the lot sizes any further would be outweighed by the complexity that would be added to the award process.

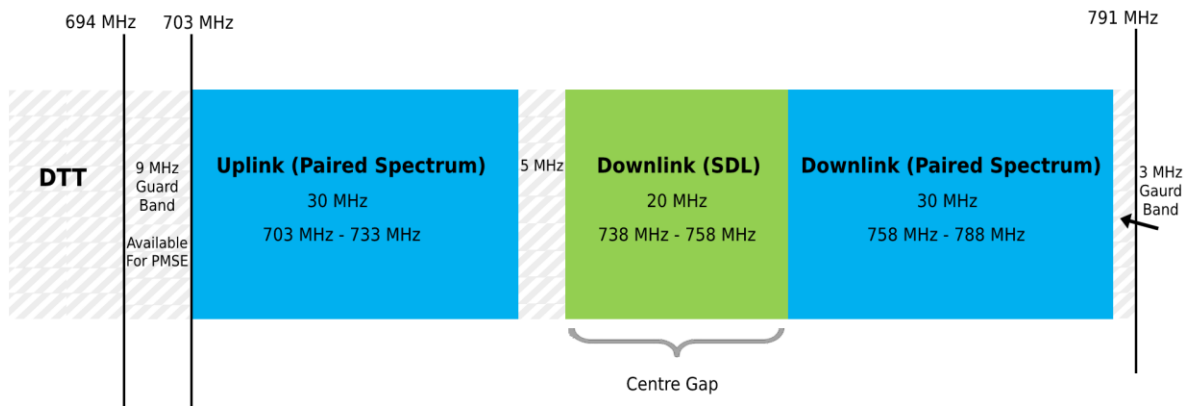


Figure 1 - 700 MHz Band Plan

2.22. While the 700 MHz Band has been cleared, there are currently services being provided utilising the 3.6 GHz Band and to facilitate the rollout of future services it was necessary to address this. The Authority previously notified incumbents in the 3.6 GHz band of its intentions to issue new Licences that would have the effect of re-farming the band in its entirety⁸. This was also clearly outlined in the Authority's initial consultation on the future use of the band (06/19⁹).

2.23. In the 3.6 GHz Band there is a total of 390 MHz of spectrum available (see **Error! Reference source not found.** below). The Authority is of the view that adopting a lot size of 10MHz would be the most appropriate to achieve the balance between facilitating different use cases and keeping award process complexities to a minimum. It is less likely that there would be as much demand for narrowband services in the 3.6 GHz band as perhaps there would in other bands and, given the amount of spectrum available, it would be disproportionate to reduce lot sizes further.

⁸ The Authority will continue to liaise with operators currently using the 3.6 GHz band in its project to clear the band to facilitate any potential rollout of new services. The issue of transition will be dealt with in the next round of consultation in this award process.

⁹ https://consult.gov.im/communications-Authority/future-use-of-spectrum/supporting_documents/Consultation%20Future%20Use%20of%20Spectrum%20Final.pdf

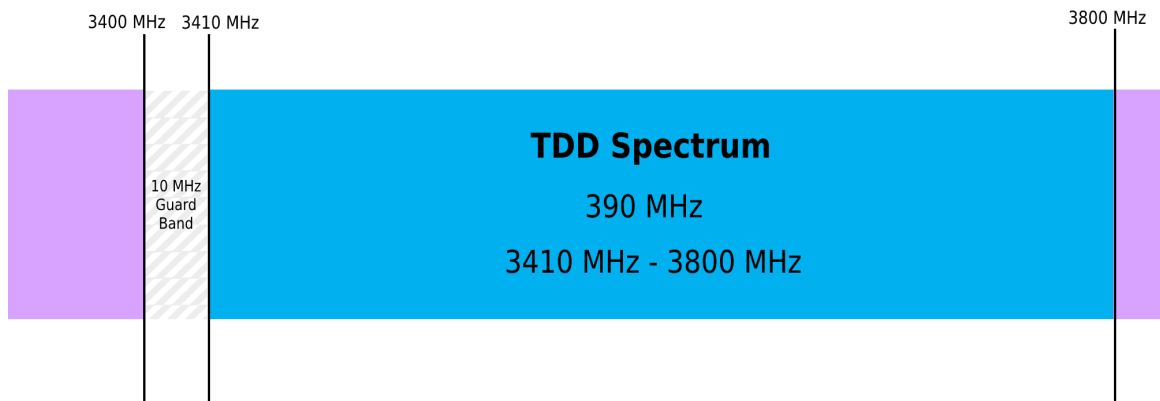


Figure 2 - 3.6 GHz Band Plan

2.24. The Authority proposed that the band should be awarded for TDD services only as the band has been harmonised for the use of TDD services in most regions so there is a well-developed equipment ecosystem that would allow Manx operators to benefit from economies of scale.

Summary of Responses Received

2.25. Of the responses received Manx Telecom agreed with the Authority's reasoning that following EU best practice made sense. They also agreed that with the limited spectrum availability in the 700 MHz Band, lots of 5 MHz were reasonable.

2.26. In the 3.6 GHz band Manx Telecom was of the view that lot sizes of 10 MHz seems needlessly restrictive. With 390 MHz of spectrum available Manx Telecom suggested larger lot sizes of 40 MHz or 50 MHz would be possible to provide on a contiguous basis. However, no supporting evidence or reasoning was provided as to the rationale behind the increased lot sizes. Sure was of the view that for both bands, it would be inappropriate to reduce the respective lot sizes below those proposed.

Authority Response

2.27. The Authority noted that there were no objections to its thinking of dividing the spectrum in the 700 MHz band and 3.6 GHz band into lots, with any potential applicant being able to acquire multiple contiguous lots.

2.28. After considering Manx Telecom's proposal the Authority remains of the view that adopting lot sizes of 10 MHz within the 3.6 GHz band achieves a balance between facilitating different use cases and keeping the award process complexities to a

minimum. There is no substantial benefit to participants in the award process from significantly larger lot sizes, in fact there is a risk it could potentially dissuade some potential users from participating in the Licence award process. As all spectrum will be assigned contiguously, and due to the manner in which bids would be assessed, there is little risk that any operator would get allocations other than what they bid for.

Final Position

- 2.29. Having considered the submissions to the consultation the Authority remains of the view that dividing the spectrum into lot sizes of 5 MHz in the 700 MHz band and 10 MHz in the 3.6 GHz band would allow users to express their demand for potentially different use cases, within each band, whilst being large enough to avoid unnecessary complexity.
- 2.30. The Authority believes the proposed lot sizes allows potential bidders to only bid for the amount of spectrum they require thus encouraging new entrants or those with use cases that only require comparatively little band width. However, by offering the ability to acquire multiple lots of contiguous spectrum the Authority recognises the requirements of users interested in acquiring spectrum for wideband applications, such as LTE or 5G.

2.3 Cap on Spectrum Allocated during the Award Process

- 2.31. In the consultation the Authority clarified the obligation to ensure that access to the spectrum is fair, reasonable, and non-discriminatory, and outlined the importance of Award Caps – a mechanism that puts a cap on the amount of spectrum any single party can gain access to, directly or indirectly, during the Licence award process.
- 2.32. There is a risk that a significant asymmetry in overall spectrum obtained during the award process could have a detrimental effect on competition, prices, and consumer's choice of providers and services. The Authority acknowledged that such asymmetries may occur due to other competitive forces, and they are not necessarily always a cause for concern. Award Caps are intended to strike a balance between ensuring operators gain access to sufficient spectrum to provide their services, while at the same time ensuring no party, or parties, can unreasonably prevent other parties accessing the spectrum.

2.33. The Award Caps that the Authority proposed are based on the amount of spectrum that is available and the services that are likely to be rolled-out in the band. In respect of the 700 MHz Band there is a total of 80 MHz of spectrum available, however 60 MHz of this can only be awarded on a paired basis, the remaining 20 MHz is for Supplementary Downlink only. To facilitate the potential rollout of wideband services the Authority proposed putting in place an Award Cap that would limit a single party, including any entities under its control, to a total of 15 MHz of paired spectrum and 10 MHz of Supplementary Downlink spectrum.

2.34. In the 3.6 GHz Band the Authority proposed to implement an Award Cap of 100 MHz for any single party, including any entities under its control. This is generally accepted as the upper bandwidth requirement for next generation mobile services and would be sufficient for multiple LTE channels. The foregoing is also true for Fixed Wireless Access services that could potentially use the 3.6 GHz Band.

Summary of Responses Received

2.35. Mixed responses were received to the Authority's proposed Award Caps within each band; Sure agreed with the Authority's thinking, MT expressed concerns with the award cap sizes and BlueWave made no comment.

2.36. Sure echoed the Authority's concern that asymmetric spectrum holdings could have adverse effects on competition and therefore accepted the need for caps on the maximum allocation of spectrum that any one operator could hold in each band. Sure believed the award caps proposed to be reasonable. Sure also reiterated its previous responses to the Authority that a contiguous block of 100 MHz of spectrum within the 3.6 GHz band would be the most efficient way to deploy 5G services using current hardware.

2.37. Manx Telecom questioned the suggested Award Caps in the 700 MHz Band and requested the Authority reconsider this aspect of the proposed approach expressing a view that the proposed Award Caps would likely compromise network performance. It was suggested that 30MHz paired and 10 MHz unpaired is ideally required to provide an effective 5G service. Similarly, Manx Telecom believes within the 3.6GHz band an award cap of 150 MHz rather than 100 MHz would be more appropriate.

2.38. Manx Telecom also raised the issue that depending on the level of interest shown for spectrum in the 3.6 GHz band the 100 MHz cap could lead to valuable spectrum, which could provide high speed services to Isle of Man residents, remaining unused.

Authority Response

2.39. The Authority is of the view the award cap of 15 MHz of paired spectrum and 10 MHz of Supplementary Downlink Spectrum in the 700 MHz Band would facilitate the potential rollout of wideband services, but accepts Manx Telecom's assertion that greater bandwidth would allow for improved services. It should be noted that the proposed Award Cap ensures that at least two operators can gain access to the spectrum, which should encourage competition in the market whilst not adversely impacting on any parties seeking access to the spectrum for narrow band applications. It is also in line with the band plans currently adopted by both the UK and Ireland and therefore would not likely cause any coordination issues.

2.40. The Authority is of the view that permitting asymmetric outcomes in the 700 MHz, given the comparatively small amount of spectrum available, would potentially lead to unhealthy competition in the Licence award process which would in turn negatively impact consumers. This would be the same net effect as artificially constraining the amount of spectrum available and the Authority has been clear on its views in this regard.

2.41. The prospect of using a different band plan was raised separately with the Authority and given the relevance to this consultation it is being included in the response. Alternative arrangements for the 700 MHz Band were considered and it was found that there would be little to no benefit for the market as a whole to deviate from what was proposed. From a technical perspective, having consulted with Ofcom, it is clear that to adopt a different band plan to the UK would cause difficulties that would likely result in a delay to the award process. It is also not clear that there would be sufficient equipment available on the market to make use of alternative band plans; the Authority has adopted the arrangements that have been harmonised across many regions to maximise the equipment ecosystem for potential users of the band. Additionally, no potential advantages to deviating from harmonised band plans have been provided by respondents that would outweigh the potential disadvantages.

2.42. In the 3.6 GHz Band the Authority remains of the view that a cap of 100 MHz of spectrum for this Award process is sufficient, it notes Manx Telecom's assertion but

cannot see a clear case to change from its proposals. What is proposed is generally considered the upper bandwidth requirement for next generation mobile services, such as 5G, and is sufficient to support multiple LTE channels. As such the 100 MHz award cap would ensure that there is sufficient spectrum available to the market to encourage diversity and sustainable competition.

2.43. The foregoing is also true for the Fixed Wireless Access services that could potentially use the 3.6 GHz Band. The proposed cap would also be sufficient to allow operators using the band to provide Fixed Wireless Services to provide services that could be substitutable for their fixed line equivalents. Having considered Manx Telecom's proposal the Authority is of the view that raising the cap as proposed would likely have the effect of preventing competition to fixed line services from Fixed Wireless Operators to the detriment of consumers. If the two existing mobile operators were to acquire 150 MHz of spectrum each there would be a total of 90 MHz remaining to service all remaining markets. While this is only one possible outcome, the Authority is of the view that the risk posed outweighs the potential benefits that would accrue from the increased Award Caps.

Final Position

2.44. Having considered the submissions received the Authority remains of the view that the Award Caps proposed in both the 700 MHz and 3.6 GHz Bands strike a balance between ensuring operators gain access to sufficient spectrum, whilst ensuring no party, or parties, can unreasonably prevent other parties from accessing the spectrum. It is important to reiterate that operators' future spectrum holdings may exceed 100 MHz; if an operator acquires further spectrum outside of this award process, for example through acquisitions or other such arrangements. The Authority does not intend to issue licences that would allow services in either of the 700 MHz and 3.6 GHz Bands for a period of three years after the completion of this Award Process.

A. Fees

2.45. As part of the consultation the Authority outlined its intention is to provide clarity, and an opportunity for comment, on how it will determine the appropriate fees for accessing the available bands. The Authority also sought to provide certainty as to how this issue will be dealt with.

- 2.46. To reiterate, the radio spectrum is a valuable limited natural resource, therefore the Authority must promote efficient use of spectrum. A commonly held principle in spectrum management is that the users that most value it should gain access to it on a fair and non-discriminatory basis. This ensures that the Manx consumer and economy derive the maximum benefit from the radio spectrum.
- 2.47. The Authority also acknowledges that there can be a high degree of uncertainty as to the true value of the spectrum and that one single party does not have sufficient information to determine what it should be. Many other jurisdictions have held market-based competitive award processes, typically auctions, to determine both access and levels of fees for the 700 MHz Band, 3.6 GHz Band, and other substitutable bands. Therefore, the Authority expressed the view that the most appropriate way to determine a reserve value for Licences would be to benchmark against the results of these award processes.
- 2.48. It was also clarified that fees are primarily influenced by the amount of spectrum that is to be awarded, it is typically seen that the less spectrum available the higher the fees; in the Isle of Man the maximum amount of spectrum that can be possibly awarded in each band is being made available to ensure there is no artificial shortage of supply created. The use of a benchmarking approach also affords the opportunity to remove any outliers in this regard.

Summary of Responses Received

- 2.49. Both Manx Telecom and BlueWave agreed in principle with the Authority's view that a benchmarking approach seemed reasonable and ensures only applicants who are genuinely interested in making use of the spectrum will apply. Manx Telecom stated that "*a competitive award process with auction rather than beauty contest would be [its] preferred approach and is clearly the approach most in line with the Regulatory Objectives*".
- 2.50. BlueWave supported the use of an auction and the proposed approach to determining a reserve fee. It also suggested that the Authority also look at a weighting function to take into account the size of organisations bidding for the spectrum use as they believe this would increase the opportunity for new and smaller operators to invest in technology. This approach may encourage new entrants to the market leading to a more competitive telecoms landscape and in turn increase consumer choice and access to new technologies ultimately benefiting the Consumer.

- 2.51. Sure acknowledged that the Authority will be providing more information on its benchmarking methodology in the next consultation phase. It stated it would welcome more detailed analysis and explanation of the Authority's choice of benchmarks, including the rationale behind the jurisdictions included and those excluded. Sure also sought further clarification in the next consultation as to the details of how the reserve price, once established, will be used.
- 2.52. Sure disagreed that adjusting the resulting benchmark price so it is expressed as a price per head per MHz of spectrum per head of population overcomes the issue of benchmarking different countries of differing jurisdiction sizes. It was further suggested that both Spectrum Bands will be largely deployed as a means to increase the capacity available on existing networks as opposed to being used to obtain maximum population and/or geographic coverage. It was outlined that as a result spectrum may be deployed in defined areas rather than the whole of the Island. The price per head of population adjustment would not take this fully into account and so could result in an excessive reserve price.
- 2.53. Finally, Sure queried the interaction between the Communications Act licence and the Wireless Telegraphy Act licence issued by Ofcom, particularly in relation to fees applicable to both. It requested the Authority "*gives thought as to whether it would be appropriate to devise a mechanism that would automatically adjust the operating element of the fee downwards to compensate for any increase in Ofcom fees*".
- 2.54. Sure also put forward its view that a beauty contest would be more appropriate than an auction for awarding the available spectrum, it holds that "*an auction process – whilst resulting in enormous financial bonuses for governments*" has in some cases resulted in worse outcomes for consumers. It cited the UK and Sweden as examples of auctions and comparative assessment respectively and the differences in coverage in 3G in both countries.

Authority Response

- 2.55. The Authority welcomes all comments with regards to fees and benchmarking but notes at the outset that some of the comments received in relation to levels of fees have been made in advance of the Authority publishing any benchmarking information.
- 2.56. In relation to BlueWave's request that the Authority look at a weighting function to take into account the size of organisation bidding for the spectrum use, the Authority

sees some merit in the proposal and will explore it further. On its face it would seem to be in line with many of the Authority's objectives, however it could be deemed discriminatory as it would only apply to certain operators. It may be possible to develop a mechanism that facilitates investment in networks while also ensuring the appropriate fees are levied. Nevertheless, the Authority will include its consideration of the proposal, including any proposals that may arise, as part of the Draft Information Memorandum which is due to be consulted on in Q1 2021.

- 2.57. The Authority notes Sure's claim that the use of a benchmarking approach where the resulting benchmark price is expressed as a price per head per MHz of spectrum per head of population does not overcome the issue of benchmarking different countries of differing jurisdiction sizes and does not address the issue of localised rollout/use of the spectrum acquired. The Authority will deal with this matter further as part of the Further Consultation accompanying this Response, however the evidence available at this time contradicts Sure's claims. It is apparent that the amount of spectrum made available has a greater impact on fees and that jurisdictions of different sizes that have released similar amounts of spectrum tend to have similar outcomes when the Price/Population/MHz correction is applied.
- 2.58. The Authority has considered Sure's submission in relation to the fees applicable for Ofcom licences being reflected in the licence fee that would apply for a licence issued under the Communications Act. As outlined at the beginning of this document it is a legal requirement for an operator to hold both licences to use the spectrum to deliver services in the Isle of Man. Sure's rationale as to why the Authority would in effect subsidise an operator's fees to Ofcom is unclear; it is noted that Sure claimed that excessive fees would be passed to consumers, but the Authority presumes that Sure's concerns revolve around fees possibly impacting on investment and business cases for same.
- 2.59. To be clear, the Authority does not intend to adjust its fees to compensate for fees applicable to another organisation. The measures that the Authority could consider in terms of varying its fees, as dealt with in paragraph 2.56, would likely go some way towards addressing Sure's concerns in this space and will be considered further when it is being consulted on.
- 2.60. When considering the points raised by Sure in relation to the use of a beauty contest rather than an auction, it must be noted that both award processes cited by Sure took

place in 2000 - 2001 (UK and Sweden) and at the time the use of beauty contests was more common – a contributing factor to this is that at the time spectrum bands were generally not service and technology neutral. As such it was possible to run a comparative process relatively easily as all applicants could be assessed on a like-for-like basis. Best practice in regards to spectrum awards has moved very much towards the use of auctions in the 20 years since these awards with the majority of jurisdictions opting for auctions as a preferable way of awarding access to the spectrum in a fair, reasonable, and non-discriminatory manner.

2.61. Sure claimed that there is a significant difference in coverage in both jurisdictions that is directly attributable to the award mechanism adopted. However, both jurisdictions opted to measure coverage by population, Ofcom in the UK stipulated a minimum 80% of population covered and in Sweden Mobile Operators committed to service an equivalent of c.99.9% of the population. Neither stipulated any level of geographic or rural coverage, any rural coverage was a consequence of population coverage. This was naturally going to result in different levels of geographic coverage as the UK has a population density of 281 persons/km² whereas Sweden has 25 persons/km². The Authority also notes that the Isle of Man has a significantly higher population density than Sweden at 149 persons/km². Simply put, any differences in coverage are not a function of the award type used.

2.62. As alluded to in 2.60 above, the use of a beauty contest is most appropriate when the relevant criteria for assessment can be clearly defined and applied on a like-for-like basis to all applicants. This is not possible where a service and technology neutral position is adopted as the relevant criteria on which to judge a service are not necessarily the same nor can they be applied proportionately. The use of an auction process on the other hand aims to ensure that the operators that value the spectrum most, and thus are more likely to use it in the way that produces the most benefit to the Island, gain access to it while not precluding or disadvantaging any particular use case.

Final Position

2.63. The Authority will deal with the specific issues related to fees that have been raised in more detail in subsequent consultations and will give further consideration to the proposal made by BlueWave, specifically if it can be applied in a non-discriminatory way.

2.64. Sure's submission on the use of a beauty contest has been noted but after further consideration there is insufficient evidence to give the Authority cause to deviate from its original position that an auction is preferable for this award.

3 Regulatory Impact Assessment (Final)

3.1 Background

- 3.1. When considering implementing regulation on the industry as a whole, or individual players, the Authority should first consider the impact of its decision to ensure it is proportionate, appropriate, and justified. This recognises that regulation, regardless of its potential benefits, is not without its costs. To that end a Regulatory Impact Assessment (RIA) is widely used to analyse the potential benefits and impacts that a decision or decisions may have on stakeholders.
- 3.2. The RIA is used to establish that if regulation is required, that it is proportionate, appropriate, and justified, and that available options have been considered in an objective manner. The Authority has had due regard to the Isle of Man Government's Guidelines on the Use of Impact Assessments for Primary Legislation and European guidelines and best practice. It should also be noted that the remedies and the associated obligations are consistent with the conditions licences issued under the Telecommunications Act 1984 and in that sense can be considered appropriate and proportionate.
- 3.3. In line with the abovementioned guidelines and its legislative obligations the Authority must consider all options taking account of Relevant Stakeholders. In this context Relevant Stakeholders are the Licenced Operators, consumers, and in a general sense the wider interests of the Isle of Man.

3.2 Regulatory Objectives

- 3.4. The Authority has a number of Regulatory Objectives in relation to awarding access to the spectrum which stem from the Act. Additionally, while not bound to follow it, the Authority must also be cognisant of current public policy on telecommunications. Public policy is currently set by the National Telecommunications Strategy which was unanimously agreed by Tynwald in October 2018.

A. Promoting Sustainable Competition

- 3.5. The Authority's primary function is to ensure that consumers continue to benefit from strong competition. It is clear that the bands in question are strategically important, for example they have been identified as 'Pioneer Bands' by the European Authority¹⁰ and National Regulatory Authorities in all regions are actively seeking to award access to them with many award processes already completed.
- 3.6. Both the 700 MHz and the 3.6 GHz Bands have characteristics that make them particularly suitable for mobile and Fixed Wireless Access broadband services. The Authority considers that making these bands available in a timely manner to meet consumer demand, would have the effect of increasing capacity for mobile broadband services, and to enable the industry to take advantage of opportunities for innovation.
- 3.7. Next generation Fixed Wireless Access services have the potential to offer a greater degree of choice in the retail broadband market and thereby increase competition to the benefit of the consumer. The Isle of Man is in a somewhat unique position of being able to grant access to larger tranches of spectrum that most other jurisdictions and therefore can potentially see the rollout of higher quality broadband data services.
- 3.8. There are other use cases for the Bands to be awarded including, IoT and Machine-to-Machine services, and nomadic services in addition to those already mentioned. By awarding the spectrum on a service and technology neutral basis the Authority would not stifle any particular use case, and by adopting the proposed approach to lots it would allow demand for different services to be expressed.
- 3.9. When viewed in the round the Authority is of the view that awarding access to these Bands is likely to benefit competition, and by extension the Island, in the long term. To that end, the Authority is making the maximum amount of spectrum that it can available in the award process to ensure this benefit is achieved.

B. Encouraging Investment

- 3.10. A central tenet of the National Telecommunications Strategy is ensuring that high-speed internet connectivity is available throughout the Island as it is seen as a key factor in the economic attractiveness of the Island. The Government has awarded the National Broadband Plan contract to ensure all parts of the Island benefit from

¹⁰ <https://ec.europa.eu/digital-single-market/en/news/Authority-decides-harmonise-radio-spectrum-future-5g>

investment in key infrastructure. The Authority is of the view that the rollout of services in the 700 MHz and 3.6 GHz Bands should be seen as an important complement to this.

3.11. At present consumers tend to value connectivity above all; smart devices with the ability to connect to the internet over multiple networks have blurred the lines that traditionally existed between fixed and mobile services. Consumers expect to be able to use their device to access their desired services regardless of location so, when at home the device would likely be utilising the fixed line infrastructure using Wi-Fi, and when out-and-about would access the same services using 3G or 4G mobile networks. As such, it is crucial that while there is a significant, and welcome investment in securing the Island's fixed line infrastructure, the investment in its mobile infrastructure continues in parallel.

3.12. One impact of the recent CoVid-19 pandemic was to shine a light on the reliance on telecommunications for most aspects of economic and social life on the Island. It has also heralded a change in how people are working with more people working remotely than ever before. It is therefore essential that the Island has sufficient capacity in all of its networks, in all areas, to cope with future demand. Encouraging investment in wireless networks across the Island should be seen as essential in safeguarding the Island against future disruptive events that may occur. The Authority is seeking to ensure that the number of access seekers can be maximised whilst facilitating suitable bandwidths

3.13. The Authority believes it is in consumers' interests for there to be a number of credible telecoms providers as this would support retail competition in supplying services to consumers. This also provides resilience to guard against future crises that may arise. This is also in line with the Authority's obligation to ensure it is fostering an environment that encourages the development of services and products for which there is a demand.

C. Fair, Reasonable, and Non-Discriminatory

3.14. The Authority is bound to making decisions in a fair, reasonable, and non-discriminatory manner and it holds openness and transparency as key values. In matters such as this the Authority believes that adopting a process that facilitates participation and focuses on the efficient use of the radio spectrum best serves the interests of all stakeholders.

3.3 Options

3.15. The Authority must consider all options available to it, taking into account Relevant Stakeholders, and determine the course of action that is most beneficial for all Relevant Stakeholders. In this context Relevant Stakeholders are identified as:

- a) Consumers - for the purpose of this Assessment, consumers include both business and residential consumers;
- b) Industry Stakeholders - which includes those with current rights of use and those seeking access to spectrum, including new entrants; and,
- c) Public Interest – this includes stakeholders with an interest in the social and economic impact of this process on the Island¹¹ and taking an overall view of telecoms infrastructure as Critical National Infrastructure.

3.16. In its response to the previous consultation on the Future Use of Spectrum the Authority concluded that it was appropriate to award access to the 700 MHz and 3.6 GHz bands. The focus of this consultation and this Regulatory Impact Assessment is to determine the appropriate mechanisms to be used to determine who will gain access to the Bands in question.

3.17. The options for determining access to the spectrum can be considered to fall within one of the following broad headings:

- a. **Administrative Award** where access is determined directly by the Authority based on applications submitted; and,
- b. **Competitive Award** where access is determined based on a competitive process such as comparative analysis, typically referred to as a 'Beauty Contest' or an auction.

3.18. It is clear that based on present use of the spectrum, and from information received from Industry, that it is possible there will be excess demand for the spectrum. This would rule out an Administrative Award process as the Authority must ensure that access is determined in a fair, open, and transparent manner. Therefore the Authority believes that its Objectives would best be met through employing a competitive award.

¹¹ While Consumers can often have interests aligned with the Public Interest, it is not necessarily true that they will always be the same. For example, it could be argued that Consumers would like to see prices continually falling whereas this may not result in sustainable competition and therefore at odds with the Public Interest.

3.19. There are a number of advantages to utilising a competitive process to determine access to the spectrum. A properly designed competitive process would ensure that participants do not incur fees above the true market value for the spectrum. Competitive awards generally ensure that the successful parties are the most efficient operators; this in turn helps ensure the timely and successful allocation and utilisation of the spectrum. The Decision for the Authority therefore becomes which competitive process best meets its Regulatory Objectives.

A. Beauty Contest vs Auction

3.20. In a beauty contest, the Authority would have to set a number of criteria, possibly with different weightings, against which proposals would be assessed. Candidates' offers are then evaluated to determine the offerings that have the best balance of those criteria. The success, or otherwise, of a process such as this depends on the information available to the Authority to determine the appropriate value of accessing the spectrum, and the ability to compare all bids on a like-for-like basis.

3.21. A beauty contest typically selects the operators on criteria that are not necessarily objectively measurable, this is compounded in this instance by the Authority adopting a service and technology neutral approach. It is unlikely that bids by operators seeking to provide different services, for example IoT and Fixed Wireless Access services, could be compared on an objective like-for-like basis.

3.22. Auctions are used around the world for awarding licences and assigning spectrum rights of use. They best support the main regulatory objectives of technical and economic efficiency and are well suited for assigning valuable spectrum rights for numerous reasons. Principally the main drawback of a beauty contest is the lack of information regarding the true value of the spectrum, however, a properly designed auction process would ensure that access to the spectrum is awarded to the operator that values it most. It is reasonable to assume that the operator that values it most would use the spectrum efficiently to deliver services for which demand exists.

3.23. Auctions are a comparatively quick method of delivering a result and would represent less of a burden to participants. Auctions also have the added advantage of being less prone to external influence and interference and therefore could be considered fair and non-discriminatory processes, especially when compared to a beauty contest.

3.24. An auction would best meet the important objective of Encouraging Sustainable Competition as participation is open to all and decisions regarding potential services and investments are made by the market, not the regulatory authority. Ultimately the Consumer and Public Interest both stand to benefit from operators that value spectrum access highly being successful bidders as they are most likely to invest in rolling out sustainable services.

3.4 Impact and Proposed Decision

3.25. It can be seen from the foregoing that adopting a Competitive Award process would likely be the preferred option for most stakeholders. From a consumer perspective it would be preferable as it is the option that is most likely to Promote Sustainable Competition which has inherent benefits for Consumers in terms of choice and quality of service. The public interest is likely to be best served by a Competitive Award process as successful bidders are more likely to invest in infrastructure based on the value they would have placed on spectrum access.

3.26. Industry is most likely to prefer a Competitive Award process as it is inherently a fairer, non-discriminatory process with less chance of external influence and interference. An Administrative Award process is also less likely to be able to objectively assess different use cases which may arise. In an open auction process, where the access to the spectrum is awarded on a service and technology neutral basis, the same issues do not arise and all participants have an equal opportunity to gain access to the amount of spectrum they require.

3.27. Finally, the Public Interest is likely to be best served through the use of a Competitive Award process. The Authority considers that Public Interest Stakeholders are likely to value investment in telecoms infrastructure most highly. A Competitive Award process is more likely to ensure that parties who value access to the spectrum most get it, as stated previously it is reasonable to assume that those who value the spectrum most are most likely to invest in the infrastructure required to make use of it. This, paired with the service and technology neutral approach, have the effect of ensuring that the Island's telecoms infrastructure would evolve in line with economic and social demand not regulatory obligations.

3.28. Given the foregoing, the Authority is of the view that the use of an auction process rather than a beauty contest is preferable, given the efficiency, transparency benefits, and inherent non-discriminatory nature of auctions.

4 Licence Fees

A. Background & Principles

4.1. In the Multi-Band Spectrum Award Consultation 2020 (Document 18/20) the Authority set out its views on setting licence fees for provision of services in the 700 MHz and 3.6 GHz Bands. It is important to note that the Authority considers its benchmarking exercise to be ongoing until the final Information Memorandum is published, whenever it is updated the results will be published. In considering matters related to licence fees applicable in this Award Process the Authority examined the following:

- Why the use of reserve prices is appropriate for the proposed award; and,
- The methodology for deriving reserve prices for the proposed award.

4.2. The Authority is of the view that setting a market-based reserve price is warranted as it ensures that licence fees are reflective of the value of the services to be provided. It is also appropriate in this instance to set reserve prices at a level that would dissuade frivolous or speculative bidders from taking part in the award process as this would likely only inflate the fees that other bidders would incur. Thus the Authority must strike a balance when setting a reserve price between these considerations and the need to avoid restricting demand. The Authority considered various approaches to setting the reserve price and was of the view that it was most appropriate to use benchmarking to determine a reserve price.

4.3. The methodology and initial benchmark set out below should answer some of the queries posed by operators in their response to the previous consultation which set out principles that would apply when setting a reserve price. Specifically, Sure raised a number of concerns including:

- The jurisdictions that are to be included in the benchmark;
- The inclusion of data from jurisdictions that have used auctions rather than beauty contests;
- How the reserve price, expressed as a fee per MHz per population, would be applied;
- How the reserve price would be applied in the case there is excess demand; and,

- The interaction between the fees for the Communications Bill licence, determined by this award, and the fees for Ofcom's Wireless Telegraphy Act licence.

B. Methodology

- 4.4. The Multi-Band Spectrum Award Consultation 2020 acknowledged that there can be a high degree of uncertainty as to the true value of the spectrum and that one single party does not have sufficient information to decide what it should be. Many other jurisdictions have used market-based competitive award processes, typically auctions, to determine both access and level of fees for access to the spectrum and provision of services in the 700MHz Band, 3.6GHz Band, and other substitutable bands. The Authority is of the view that the most appropriate way to determine a reserve value for the spectrum is to benchmark against these award processes.
- 4.5. There are two points relating to the benchmarking analysis that the Authority wishes to highlight upfront. First the aim is to choose a starting point that is likely to represent the minimum an operator would expect to pay to access the spectrum, while being at a level that would discourage speculative bidding. Secondly, Sure claimed there is a degree of uncertainty in the Authority's benchmarking exercise due to the limited sample size, jurisdictions included within the sample, and the variety of potential uses of this spectrum. The Authority disagrees and notes it is using all of the appropriate data available in its benchmark; it should be kept in mind that ultimately the aim of the benchmarking process is to ensure that licence fees are determined in a fair, reasonable, and non-discriminatory manner.
- 4.6. The benchmarks the Authority have used are national averages expressing a price/MHz/pop for the entire country. Calculating benchmarks on a per capita basis is a standard approach and there is no reason why this should not apply to the Isle of Man. All prices have been adjusted to pounds sterling based on the rate that was applicable at the time of the award.
- 4.7. In respect of the 700 MHz band the Authority, due to the limited amount of data available, has included data from the comparable 800MHz spectrum band. The Authority believes that using available data from the last 5 years in determining a benchmark for both bands is appropriate. Using data from periods prior to 2015 risks skewing the benchmark as the Bands and the services provided in them was viewed differently by operators than from today; however advances LTE (4G) and 5G services were firmly in the minds of operators from 2015 onwards. The observed mean when

including the 800MHz Band is very similar to the 700MHz Band only and has made no difference to its recommendations, it simply confirms the validity of the valuations.

- 4.8. The Authority excluded awards where it believed that there was insufficient spectrum made available to bidders to provide a true comparable value of the services that the Authority intends to licence. On this basis Poland and Turkey were excluded from the 700MHz sample analysis as they only released 10 & 20MHz respectively.
- 4.9. Given limited sample sizes the analysis was also careful to exclude outliers, by excluding values which were outside one standard deviation from the mean, to avoid awards that typically had reduced spectrum availability from skewing the outcome. On this basis the Authority classified France and Sweden in the 700MHz category and Italy in the 3.6GHz, as outliers and as such they are excluded from the calculation of the reserve price for these categories.
- 4.10. The reserve price has then been determined as being the mean of the remaining sample.

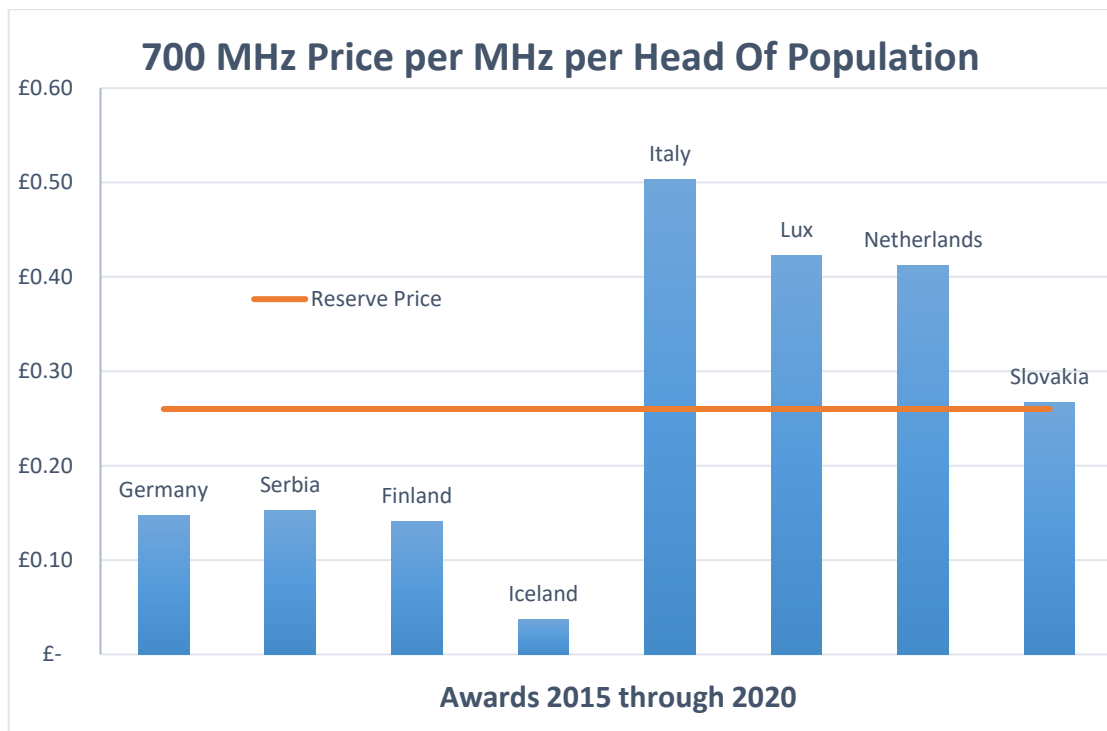


Figure 3 - 700 MHz Award Outcomes

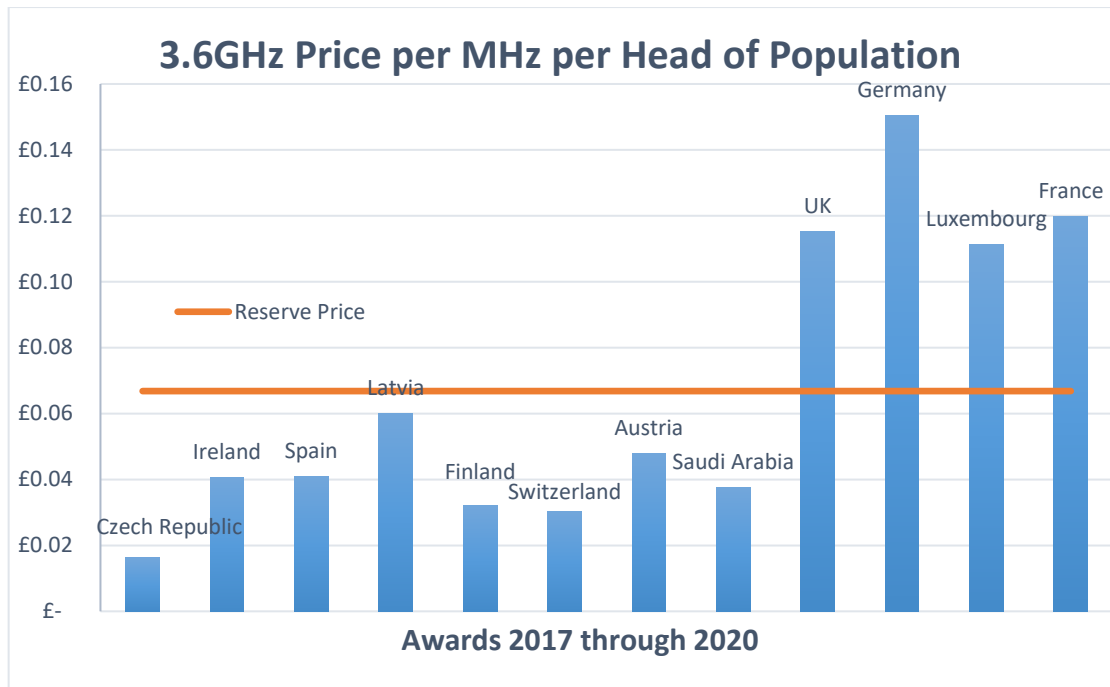


Figure 4 - 3.6 GHz Award Outcomes

4.11. Taking into account the benchmarking analysis completed to date, the Authority is of the view that the following reserve prices would apply:

- £120,805 Per Block of Paired Spectrum (2x5 MHz) in the 700MHz range (£0.29*83,314¹²*5)
- £55,669 Per 10MHz Block in the 3.6 GHz range (£0.067*83,314*10)

It should be noted that the above represent the licence fees that would be applicable over the lifetime of the licence. The duration of licences will be subject to consultation as part of the draft Information Memorandum. In this instance the Authority is of the view that up-front fees do not represent the best outcome; it is of the view that it is preferable to incentivise the return of unused spectrum by operators.

4.12. In relation to the suggestion that larger jurisdiction awards should be excluded from the analysis, the Authority is not aware of any objective justification for doing so. It does however acknowledge that there are differences in scale between jurisdictions that do need to be accounted for; the generally applicable method for this is the fee/MHz/head of population approach. The Authority's analysis using this methodology shows no significant correlation between the population of a jurisdiction and the fees

¹² Total Resident Population of the Island based on data taken from the most recent Isle of Man census conducted in 2016. <https://www.gov.im/media/1355784/2016-isle-of-man-census-report.pdf>

applied. The Authority therefore sees no merit in excluding any jurisdiction based on its population.

4.13. The Authority has limited its benchmark to other jurisdictions that have used an auction-based award process as it is of the view it would be inappropriate to include comparative analysis based awards in the mix. In an auction process that parties are bidding in an open manner for defined lots, the value of which is inherently in the lot itself. In a beauty contest bidders typically have discretion to 'add value' to their bid by varying their commitments, or can offer commitments greater than the baseline for reduced cost. It is therefore not possible to compare the outcomes of an auction process with those of a beauty contest in a like-for-like manner.

4.14. To clarify, the Authority has not wilfully excluded any jurisdictions from its benchmark, all jurisdictions that have completed auction-based award processes for the 700 MHz and 3.6 GHz Bands, or substitutable bands, for which there is sufficient reliable data available have been included. As outlined above, the benchmarking exercise is an ongoing process and as new data becomes available it is included.

4.15. The final issue raised by Sure was in relation to the application of the fee/MHz/population fees. It appears to argue that the fee should be restricted to the population that would be covered by services provided using the 700 MHz and 3.6 GHz bands. The licence that would be issued by the Authority covers the Isle of Man in its entirety, there are currently no regional licences in effect nor does the Authority intend to introduce them. A successful bidder would be entitled to provide services throughout the Island for the duration of the licence, should an operator choose to limit their service to certain parts of the Island; that is a commercial decision for them to make. In practice, monitoring compliance with, and calculating fees associated with a licence in the manner proposed by Sure, i.e. based on population served, is unworkable and would add unnecessarily to the administrative burden on the operator.

5 Transition Issues

- 5.1. While the Authority has already outlined its reasoning for issuing new Licences that would have the effect of re-assigning spectrum that is already in use and, while it is a necessary and worthwhile exercise, there is still potential for disruption to consumers and services as a result. The Authority intends to implement a number of measures that are designed to mitigate any risk of disruption stemming from the spectrum award process. This is of interest to those in the 3.6 GHz band as the 700 MHz band has already been cleared and so there will be no need for transition.
- 5.2. The number of consumers reliant on services in the 3.6 GHz band is relatively small in the context of the overall market, but the importance of broadband connectivity has been highlighted during the recent Covid-19 pandemic. It is therefore incumbent on all involved in the award process; the Authority, successful bidders; and incumbents, to ensure that customers have access to services to the greatest extent possible. The natural conclusion is therefore that all would benefit from an orderly and clear transition process.

A. Objectives

- 5.3. The first step in putting in place a robust transition process is to identify the high-level objectives that the Authority is working to achieve. These are to:
 - a) Ensure that consumers are not unnecessarily left without a service during the re-farming process;
 - b) Allow for the rollout of new services and technologies based on market demands; and,
 - c) Ensure that the spectrum is managed and used in an efficient manner.
- 5.4. Some level of disruption is to be expected, for example it may be necessary for a service provider to have outages while migrating from one portion of spectrum to another, or there may be a need to replace equipment in a consumers premises; however this may be kept to a minimum through the implementation of effective transition plans.

- 5.5. It is noted that a possible outcome is that an incumbent in the band does not win access to spectrum during the award process. Should such a situation arise the Authority envisages that there would be no requirement for them to cease services until the successful bidder is in a position to begin providing services. This would mean that consumers may have to switch provider should their provider not prove successful in the award process, but that they would not be left without a service at any point.
- 5.6. There are many different possible outcomes from the spectrum award, and it would not be practical to consider them all and then formulate a transition plan for each possibility, however it is possible to set out the high-level principles that the Authority would use when dealing with the issue.

B. Transition Principles

- 5.7. The Authority will work with incumbents¹³, and successful bidders to implement the transition plan, or plans, that best fit within the objectives outlined above to help ensure the best outcomes for consumers and competition. The following principles would form part of the Information Memorandum associated with the award process and would be considered binding on all parties.
- a) Parties shall act in good faith at all times and work to achieve a smooth and orderly transition from the current band arrangements to those determined by the award process;
 - b) Parties shall be cognisant of the different economies of scale and resources that may exist between parties to an agreement;
 - c) Service shall not be unnecessarily curtailed;
 - d) It is possible for a single party to hold more than one licence to access spectrum in different parts of the band, such arrangements would only be for a limited duration;
 - e) All parties to a Transition Plan shall ensure that consumers are kept informed of any changes or activities that may affect them, and,

¹³ It is possible that a single party may fall into the category of both incumbent and successful bidder, for example they may be successful in gaining access to spectrum during the award, but that it is different to the holdings they currently enjoy.

- f) Transition plans would only be in place for the minimum duration required to effect the required changes to the spectrum.
- 5.8. The Authority acknowledges that this is an area that is likely to cause confusion and concern, therefore making it clear from the outset how such plans would be formulated is important.
- 5.9. At the conclusion of the award process there will be a defined period of time during which incumbents and successful bidders will have the opportunity to directly negotiate a Transition Plan that is in line with the above principles and objectives. This would include commencement dates, milestones, and conclusion dates and would then be submitted to the Authority for approval¹⁴. This 'approval process' is simply in place to ensure that different Transition Plans do not contradict each other or inadvertently result in negative outcomes for consumers or competition; as a general rule any plans agreed between parties would be viewed as being approved unless shown to have issues associated with them.
- 5.10. At the end of this period, should there be any parties that have been unable to agree a Transition Plan, the Authority will directly lead discussion between parties to put in place a plan that is in line with the stated objectives and principles. Such plans would be binding on all parties and failure to adhere to them could result in forfeiture of associated licences and/or spectrum rights of use.
- 5.11. The Authority would then work with all parties to monitor agreed milestones, address any unforeseen issues that may arise, and liaise with consumers, or any other interested parties as may be required, until transition activities have been concluded.

Example

- 5.12. To illustrate the above by way of example, consider two parties:

Party A is an incumbent in the band and is also a successful bidder in the award process, however the spectrum they have obtained access to is different to that which they currently have access to; and,

Party B has been successful in obtaining access to spectrum during the award process and has not previously held a licence to operate in the band. The spectrum that they have obtained is currently being used by Party A.

¹⁴ The Authority notes at this point that in principle approval

- 5.13. Party B is not in a position to commence providing Island-wide services immediately and intends to rollout services in limited geographic areas on a phased basis commencing with the more populated areas on the Island, such as Douglas, Ramsey, Castletown, and Peel.
- 5.14. In such a scenario it could be possible for both parties to agree to a plan where Party A will have migrated from their existing spectrum to their new spectrum in the areas identified as priority rollout areas by Party B within an agreed timeframe, while continuing to operate in their existing spectrum in areas that would be unaffected. Once the initial phase has been completed a second phase of migration, similar to the first, can then occur where only areas that Party A wishes to rollout are impacted. There could then be a third and final phase whereby migration occurs in any remaining areas.
- 5.15. Throughout the process the Authority would monitor progress on both sides and ensure that progress is maintained and that consumer disruption is kept to a minimum. The process outlined above could have been agreed directly between the parties or in collaboration with the Authority, but it can be seen that it would allow for an orderly transition process that does not put any undue burdens on the parties involved while achieving the stated objectives.

C. Conclusion

- 5.16. The Authority acknowledges that it is difficult to put in place measures that would be effective without knowing the outcome of the award process, but at the same time recognises the need to provide certainty to potential bidders, band incumbents, and consumers. There is a risk of disruption to or loss of service, but the intention is to mitigate it as much as possible.
- 5.17. The preferred outcome for all would be to have directly agreed plans between all parties but it may not always be possible to achieve that; with that in mind the Authority is committed to working to achieve transition in as orderly and efficient manner as possible and would use all of the regulatory tools at its disposal to achieve it.
- 5.18. Further detail will form part of the Information Memorandum for the award process and the Authority welcomes any observations that interested parties may have on transition arrangements in the intervening period.

6 Next Steps

- 6.1. The Authority is inviting responses by 19th February 2021.
- 6.2. When submitting any views please indicate if you are responding on behalf of an organisation. To ensure that the process is open and transparent, responses can only be accepted if you provide your name with your response. Unless specifically requested otherwise, any response received may be published either in part or in its entirety. Please mark your response clearly to confirm if you wish your response and name to be kept confidential. Confidential responses will be included in any statistical summary and numbers of comments received.
- 6.3. If you think your response should be kept confidential, please specify which part(s) this applies to and explain why. Please clearly mark any confidential sections. If asked to keep part or all of a response confidential, the Authority will treat this request seriously and try to respect it. However, sometimes the Authority may be required to make publically available all responses, including those that are marked as confidential, in order to meet legal obligations.
- 6.4. All information in responses, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2015 and the Data Protection Act 2018).
- 6.5. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding.
- 6.6. The purpose of this consultation is not to be a referendum, but an exercise to gather sufficient evidence with which to make the most informed decision possible. In any consultation exercise the responses received do not guarantee changes will be made to the Authority's proposals. Responses will be fully considered before the Authority publishes any Decision(s). As such it is important for respondents to ensure they have included sufficient rationale, objective justification, and/or evidence in their responses.
- 6.7. If you wish to discuss the issues and questions raised in this consultation, or simply seek clarification, please contact the Authority.
- 6.8. This consultation can be viewed on the Government Consultation Hub <https://consult.gov.im> or through the Authority's web page www.iomcc.im

6.9. Following the closing date all responses will be considered. The Authority will prepare and publish a summary of the responses and its consideration of the responses received, and any further consultation and/or decision(s).

Contact Details

Kim Oliphant
Communications Authority
Ground Floor, Murray House
Mount Havelock
Douglas, Isle of Man
IM1 2SF
Tel: 01624 677022
Email: cc@iomcc.im
Web: www.iomcc.im