



5G SPECTRUM: STATEMENT OF INTENT

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1. EXECUTIVE SUMMARY

- 1.1 The Channel Islands Competition and Regulatory Authority (CICRA) comprises the Jersey Competition Regulatory Authority (JCRA) and Guernsey Competition and Regulatory Authority (GCRA). For spectrum management purposes, and to the extent allowed by legislation, CICRA deals with the Jersey and Guernsey Bailiwicks as a single economic and social entity.
- 1.2 CICRA's role in this area is to ensure the optimal use of spectrum in the Channel Islands. It ascertains the level and nature of demand for available spectrum, and then make a recommendation to Ofcom for an award to be made. If Ofcom is satisfied that CICRA's recommendation is in line with its own duties, Ofcom will then issue spectrum licences. Where CICRA identifies that demand exceeds supply, CICRA will carry out a selection process, prior to making a recommendation to Ofcom, to ensure that the optimal use is made of spectrum.
- 1.3 CICRA has consulted on its initial Draft Statement of Intent on the allocation of spectrum for 5G, specifically in the 700MHz and 3.4 – 3.8GHz bands. CICRA's proposal was to allocate a single 5G licence in the States of Jersey and Guernsey, with an obligation to provide access to the single 5G network for other operators.
- 1.4 In their responses, stakeholders have identified a number of issues with this proposal, in particular significant inter-operability issues between 5G and 4G networks in the next 2-3 year (until standalone 5G technology becomes available) to allow existing MNOs without a 5G licence to access the proposed single 5G network.
- 1.5 CICRA has carefully assessed the arguments presented by the stakeholders and also sought independent technical advice, which has confirmed that until standalone 5G technology becomes available, it may not be possible for non-5G operators to get access to the single 5G network. Therefore, if CICRA were to proceed with its initial plan, it could distort retail competition in the Channel Islands.
- 1.6 The telecom policies in both Islands refer to network sharing and it is CICRA's intention to encourage network sharing especially mast and future radio access network developments. The proliferation of masts is a major concern for both governments and CICRA will expect all operators to demonstrate methods of protecting the environments across the Channel Islands, which will also help to reduce costs to end consumers as the 5G technology develops over the next few years.
- 1.7 In light of the above, CICRA has amended its initial proposal. This document is a final Statement of Intent that takes into account stakeholders' responses and the statements of policy by the States of Jersey and States of Guernsey.
- 1.8 CICRA's amended plan is:

- To allocate a minimum amount of 5G spectrum to all successful applicants in the States of Jersey and Guernsey without suitable spectrum, subject to a set of minimum requirements in terms of roll out of 5G services;
- Applicants will be able to apply for additional spectrum if they are prepared to make commitments that exceed the minimum requirements, subject to the proposals meeting CICRA's and relevant government's requirements relating to, for example, the protection of health and the environment;
- While the amount of spectrum issued might vary depending on the degree to which operators are willing to exceed the minimum requirements, some 5G spectrum (at least 100MHz of 3.4-3.8GHz) will be held back and allocated at a later date. This further allocation of 700MHz and 3.4-3.8 GHz spectrum will be made when 5G technology matures (after Release 16 becomes available) and when there is more clarity over demand for 5G spectrum from new use cases and applications.

1.9 CICRA intends to issue an Invitation to Tender in January 2020. A recommendation on the award of spectrum will be made to Ofcom during Q3 of 2020, with the new licences and with associated 5G rollout conditions coming into force towards the end of Q3 2020.

2. STRUCTURE OF THIS DOCUMENT

2.1 This document is structured as follows:

Section 3:	Background to this draft Statement of Intent
Section 4:	5G Spectrum allocation process in the Channel Islands
Section 5:	Issues for Consideration
Section 6:	Updated Statement of Intent
Section 7:	Next Steps
Annex A:	Legislative and Licensing Background

3. BACKGROUND TO THE STATEMENT OF INTENT

5G for the Channel Islands

- 3.1 There are currently three mobile operators operating in Jersey and Guernsey – JT, Sure and Airtel. All three operators have near-universal coverage and deliver mobile voice and data services to consumers in the Channel islands.
- 3.2 For an increasing number of consumers, mobile connectivity is now an everyday necessity. 5G is the next generation of mobile technologies and is being designed to provide greater capacity, greater reliability, and deliver extremely fast data speeds, enabling innovative new services. The first wave of commercial products is being deployed currently in a number of markets.
- 3.3 Spectrum is a critical component of wireless networks. It makes up the ‘airwaves’ that underpin communication services such as mobile, WiFi and TV. The diverse set of applications enabled by 5G will require access to different spectrum bands with different characteristics:
- Spectrum at lower frequencies, to enable 5G coverage to wide areas and deep indoors
 - Spectrum at higher frequencies with large bandwidths available, to provide the necessary capacity to support a very high number of connected devices; and
 - In the long run potentially spectrum at very high frequencies above 24GHz with very large bandwidth, providing ultra-high capacity and very low latency. Cells at these frequencies will have very small coverage. It is likely that build-out of 5G networks in millimetre wave bands will be focused on areas of high traffic demand, or to specific locations or premises requiring services with very high capacity.
- 3.4 The effective use of the radio spectrum for telecommunications purposes is a matter of public interest for the Islands and, in this context, allocation of spectrum goes beyond the interests of one or more telecommunications operators. It is important that licences to use spectrum are granted in such a way as to make the most efficient use of it and render the maximum benefit to the Islands.
- 3.5 The governments of Jersey and Guernsey have policies on the introduction of 5G in their respective jurisdictions (see below).

Government Policy Considerations

JERSEY

3.6 In 2018, the Government of Jersey published a Telecom's Strategy (Jersey's Strategy¹). Jersey's Strategy objective is to build on Jersey's current advanced telecoms network in a way that supports the ongoing development of digital infrastructure. Developed in line with Government policy and the Strategic Plan for Jersey, Jersey's Strategy set out five policy principles and recommendations.

3.7 Two policy principles are of particular relevance to the development of 5G services in Jersey:

- Policy principle 1 – Promote the path to next generation connectivity building on the current advanced digital infrastructure already in place, including by:
 - Being a fast adopter of next generation technologies that have been tested.
 - Incentivising mobile network sharing and rollout of mobile next generation technologies such as 5G.
- Policy principle 2 – Promote retail competition (not network competition) as the most effective way of delivering the benefits of next generation connectivity to consumers and businesses, including by:
 - Ensuring fair and reasonable, non-discriminatory access to the gigabit fibre network for mobile backhaul.

3.8 Jersey's Strategy recommends that government and CICRA should incentivise mobile network sharing and describes examples of the different types of network sharing which have been used in different jurisdictions. The Government of Jersey believes that telecoms operators should be able to make commercial decisions about how they provide network services in a competitive market where the health of residents is a priority, network security and resilience is assured and Jersey's environment is protected from infrastructure proliferation.

3.9 The Action Plan which has been developed from Jersey's Strategy² lists a number of actions relating to the rollout of next generation networks, including 5G. Under this heading, there is a specific action for CICRA to develop and manage a forward-looking spectrum strategy to ensure future spectrum needs are met in line with government policy.

¹ The States of Jersey Action Plan can be found at:

<https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=3377>

² <https://www.gov.je/Industry/TelecomsStrategy/Pages/JerseyTelecomsStrategyActionPlan.aspx>

GUERNSEY

- 3.10 The States of Guernsey has also published a telecoms strategy³ which includes its objectives for next generation mobile technology (5G), namely ‘the provision of next generation mobile technology in line, or earlier than the UK’.
- 3.11 While the States of Guernsey will not seek direct involvement in the technology options for 5G, it will positively influence through innovative policy and regulatory strategies:
- Deliver future networks innovatively and with optimal economics: All stakeholders will strive to cost-effectively deliver better quality networks either independently or through sharing and partnerships.
 - Drive growth in new use cases for massive IoT and critical communications services: 5G networks will support the massive rollout of intelligent IoT nodes for a multitude of scenarios and provide a competent platform to support the widespread adoption of critical communications services.
 - Ensure delivery of 5G to Guernsey at least as fast, if not earlier, than the mainland UK.
 - Develop networks to support FWA availability to those customers who do not currently have access to high speed broadband via fixed network solutions.

CICRA Policy Objectives

- 3.12 CICRA has a stated objective to support the path to next generation connectivity (5G). The Channel Islands need a legal and regulatory framework which will facilitate the development of next generation connectivity (5G).
- 3.13 CICRA is in the process of developing the regulatory and licensing framework in order to deliver 5G in line with government policy objectives. It is working with both governments and the Channel Island telecoms companies to understand the ways in which network sharing might, within the context of commercial and technological challenges faced by telecoms operators, deliver the greatest possible benefits for the Channel Islands.
- 3.14 CICRA is also working to ensure the availability of the correct backhaul products for mobile sites for all mobile operators to support government policy. Fibre backhaul is particularly important for 5G due to its ability to handle the vast amount of backhaul traffic generated by 5G networks. Regulators in other jurisdictions (e.g. the UK) are working to ensure that mobile operators have access to appropriately priced fibre backhaul, including dark fibre.

³ <https://www.gov.gg/article/165851/The-Future-of-Telecoms-Strategy>

3.15 In terms of spectrum management for the Channel Islands, CICRA's role is to manage and monitor the efficient use of spectrum and number allocation.

3.16 CICRA has previously proposed the following objectives to guide process and criteria for joint allocation of spectrum⁴ in the Channel Islands:

- To further consumers' interests in the short and long term, having regard to prices and costs, and the availability and range of services suitable to consumers' different needs;
- To promote competition as a mechanism to further its consumers' interest objective;
- To have regard to and, where it lies within its powers and is practicable, to lessen the impact of the spectrum dependent activities it regulates on the environment;
- To the extent allowed by legislation, to deal with the Jersey and Guernsey Bailiwicks as a single economic and social entity;
- To seek to ensure the processes and criteria adopted by CICRA are consistent with Ofcom's duties, including the duty to secure the optimal use of wireless telegraphy of the electromagnetic spectrum.

3.17 The first three objectives summarise the duties that CICRA has, in one form or another, in Jersey and Guernsey legislation. The last one is necessary to ensure that Ofcom is able to act on CICRA's recommendations, as they need to be made in furtherance of similar objectives to those assigned to Ofcom.

3.18 For the purposes of the spectrum relevant to this Statement of Intent, the respective roles of CICRA and Ofcom in coordinating the award of spectrum licences in the Channel Islands are as follows:

- CICRA ascertains the level and nature of demand for the spectrum. It identifies where demand exceeds supply and a selection process is needed. Eventually when the assessment and selection process is completed, it recommends an allocation to Ofcom.
- Ofcom may issue licences for spectrum use under the WTA where it is satisfied CICRA's recommendation is consistent with its own statutory duties.

4. 5G SPECTRUM ALLOCATION

Spectrum Available for Allocation

4.1 Ofcom is making new spectrum available for the development of 5G services. Details of Ofcom's work in this area can be found at: www.ofcom.org.uk/spectrum/spectrum-management. This Statement of Intent covers the future allocation of spectrum in the 700MHz and 3.4-3.8GHz bands.

⁴ By 'joint allocation', we mean that there will be a single process of allocation of spectrum in the States of Jersey and the States of Guernsey. However, the amounts of spectrum acquired by operators in Jersey and Guernsey could be different .

The 26GHz (mmWave) band is not part of this award. CICRA will consult on its allocation at a later stage.

- 4.2 Both the bands which will be awarded are likely to be used to meet increasing demand for mobile broadband services, and to invest in deploying technical advances, including 5G.

LOW FREQUENCY SPECTRUM: 700MHZ

- 4.3 700MHz spectrum has good propagation characteristics and therefore is well suited for providing mobile coverage over wide areas and indoors. Spectrum in this band can be used to improve the level of mobile coverage, including mobile voice and data coverage.

MEDIUM FREQUENCY SPECTRUM: 3.4 – 3.8GHZ

- 4.4 This has been identified as the primary band for 5G in Europe, delivering capacity for new services. The evolution of 5G in this band is expected to deliver both evolutionary and revolutionary services by providing a significant uplift in capacity and supporting low latency applications over large areas. Bands in such a range are also capable of supporting low latency applications requiring high reliability such as industrial automation and robotics. This spectrum will allow network operators to support high data rates and provide high capacity to large numbers of connected devices.
- 4.5 Some spectrum has previously been allocated to operators in this band⁵. As part of this process, it may be necessary to vary or revoke these previous allocations for spectrum management purposes (this is discussed in Section 5 below).

CICRA's Initial Proposal

- 4.6 In May 2019, CICRA issued a draft Statement of Intent on the allocation of spectrum for 5G in the 700MHz and 3.4-3.8GHz bands. CICRA proposed to award 5G Spectrum in the 700MHz and 3.4-3.8GHz bands to one operator in Jersey and one operator in Guernsey, which may be the same operator or a consortium of operators.
- 4.7 CICRA further stated that new conditions would be included in operator(s) licence to operate a 5G network and to provide services in Jersey and / or Guernsey, including an obligation to provide access to Mobile Virtual Network Operators (MVNO). Any remaining spectrum in the 700MHz and 3.4-3.8GHz bands would be issued to other operators after a period of exclusivity.
- 4.8 CICRA considered that this approach (i.e. allocating spectrum to a single operator) would be the most consistent with the governments' objectives, in particular both governments' objective to reduce the proliferation of mobile masts.

⁵ Current Channel Islands spectrum allocations can be found at:

www.ofcom.org.uk/data/assets/pdf_file/0014/100670/channel-islands-frequency-chart-january-2018.pdf

4.9 CICRA's initial view was that this allocation should not be by means of an auction. A key reason for this is that the set-up costs are of a scale more appropriate to larger markets and may not be justified in a small jurisdiction where the set-up costs are potentially disproportionate to the benefits. Another reason is that CICRA is keen to ensure operators' funds should not be diverted away from investment in networks and services that will benefit local consumers.

4.10 CICRA has received a number of responses, which are briefly summarised below.

Stakeholder Responses

4.11 All stakeholders agreed with CICRA that a comparative award process (i.e. a beauty contest) is the most appropriate approach to allocate 5G spectrum in the Channel Islands. However, most respondents disagreed with CICRA's proposal to allocate spectrum to a single operator. More specifically, stakeholders argued that:

- Network competition has delivered positive outcomes for consumers in the Channel Islands, while a single 5G operator is an unproven approach;
- There has been no discussion of pros and cons of the proposed approach vis-à-vis the alternatives (e.g. allocating spectrum to multiple operators).

4.12 Stakeholders further identified a number of technical and competition issues that needed to be resolved, such as:

- Interoperability of the single 5G network with the other operators' 4G networks:
 - The operators argued that an earlier version of 5G - non-standalone (NSA) 5G - would not work seamlessly with other operators' 4G networks, since current equipment solutions are vendor-specific.
 - For the single 5G network to work, the operators would also have to share their 4G networks, which will be challenging.
 - While Standalone (SA) 5G will not suffer from the same problem, it will not be available until 2021 (at the earliest).
- Lack of clarity with regards to an MVNO access obligation:
 - In light of the technical issue identified above, stakeholders expressed doubts that it would be possible to impose a workable MVNO access obligation on the 5G network in the short-to-medium term. Without such an obligation, retail competition in the Channel Islands could be jeopardized.
 - In the longer term, with 5G SA technology, regulated MVNO access should be possible, but it needs to be strictly regulated to ensure that the 5G network does not discriminate against its retail competitors.

4.13 For the reasons discussed above most respondents were in favour of maintaining the existing market structure and allocating 5G spectrum to multiple operators.

CICRA's Assessment

- 4.14 CICRA has reviewed the responses and carefully assessed the arguments put forward by the stakeholders. We have also commissioned independent technical advice on the issue of 5G interoperability, which has confirmed that until standalone 5G technology becomes available, it may not be practical for non-5G operators to interoperate with the single 5G network. Therefore, there is a risk that if we were to proceed with our initial proposal, retail competition in the Channel Islands could be jeopardised.
- 4.15 In light of the above, there are two potential options: (1) to postpone the spectrum allocation until the standalone 5G technology becomes available (in 2021-22), with 5G networks going live in 2022-23 or (2) to allocate spectrum to multiple operators, in order to ensure that competition in the market is preserved.
- 4.16 Option 1 is not desirable, as it would significantly delay the availability of 5G services in the Channel Islands, which would contradict the Jersey Government's objective to be a fast adopter of 5G and Guernsey Government's objective of "to deliver 5G at least as fast, if not earlier, than the mainland UK."
- 4.17 We consider that Option 2 is more appropriate as it would allow CICRA to deliver on its key objectives:
- To ensure a fast adoption of 5G in the Channel Islands;
 - To promote competition as a mechanism to further consumer interests;
 - To the extent allowed by legislation, to deal with the Jersey and Guernsey Bailiwicks as a single economic and social entity;
 - To seek to ensure the processes and criteria adopted by CICRA are consistent with Ofcom's duties, including the duty to secure the optimal use of wireless telegraphy of the electromagnetic spectrum.
- 4.18 We recognise that that CICRA has another objective – "to have regard to and, where it lies within its powers and is practicable, to lessen the impact of the spectrum dependent activities it regulates on the environment." We consider that it is possible to incorporate this objective as a criterion/minimum requirement in the comparative award process. That is, 5G spectrum will only be awarded to those operators that can demonstrate that they are able to meet or exceed the minimum requirement related to protection of the environment and other stated objectives. CICRA will also work closely with both governments to ensure that, where possible, the planning application process for new mobile masts is consistent with the policy objective of minimising the impact of 5G deployment on the environment.
- 4.19 We also recognise that the 5G technology is currently in early stages of its development, with initial use cases being mostly enhanced mobile broadband (eMBB) and fixed wireless access (FWA). Over time, as new use cases emerge, new players (e.g. verticals) might come into the market and wish to

roll out their own networks using 5G spectrum⁶. Alternatively, some of the existing operators might need more spectrum in order to provide more advanced services. In order to accommodate this future demand, we propose to hold back some of the 700MHz and 3.4GHz spectrum to be allocated at a later date. Future decisions in spectrum allocation will take into account market and technological developments and both governments objectives at the point that a decision is made to licence the spectrum.

5. UPDATED STATEMENT OF INTENT

5.1 In light of the above, CICRA has updated its Statement of Intent. In particular, we are now proposing to allocate spectrum to multiple operators using an award process, which is broadly similar to the previous 800MHz and 2.6GHz award.

Updated proposal

CICRA intends to recommend that Ofcom award 700 MHz and 3.4-3.8 GHz 5G spectrum in two stages.

Stage 1 (Current allocation): CICRA proposes to allocate a minimum amount of spectrum (40MHz of 3.4-3.8GHz spectrum per operator) to multiple operators in Jersey and in Guernsey without suitable spectrum, subject to a set of minimum requirements in terms of roll out of 5G services.

Applicants will be able to apply for additional spectrum (in the 3.4-3.8GHz and 700MHz bands) if they are prepared to make commitments that exceed the minimum requirements.

While the amount of spectrum to be issued will vary depending on the degree to which operators are willing to exceed the minimum requirements, some 5G spectrum (at least 100MHz of 3.4-3.8GHz) will be held back.

Stage 2 (Future allocations): Further allocations of 700MHz and 3.4-3.8 GHz 5G spectrum will be made when 5G technology matures and when there is more clarity over demand for 5G spectrum from new use cases and applications (e.g. from verticals).

⁶ Subject to these networks' being compliant with the planning regulations and satisfying CICRA's objective of protecting the environment.

Stage 1: Current spectrum allocation

- 5.2 For the current allocation, we propose to use a comparative award process (i.e. a beauty contest) to allocate spectrum based on operators' 5G roll out plans that demonstrate that they are capable of meeting the minimum requirements.
- 5.3 We propose to offer multiple base packages of 40MHz of 3.4-3.8GHz each. Both the existing operators (without suitable spectrum) and new entrants will be able to participate in the award. The base packages will be awarded to those applicants who can credibly demonstrate that they are able to meet the minimum requirements (discussed below).
- 5.4 In addition to the base packages, more spectrum could be awarded to those who are prepared and capable of exceeding the minimum requirements (e.g. to deliver wider coverage, faster roll-out or to offer additional services). CICRA would assess the operators' 5G roll out plans and come to a view whether additional spectrum should be awarded. This additional spectrum would not exceed 40MHz of 3.4GHz-3.8GHz and 2x10MHz of 700MHz per operator (in addition to 40MHz awarded in the base package).
- 5.5 CICRA envisages that spectrum will be awarded simultaneously in Jersey and Guernsey using an identical but separate award process. Applicants will have a choice whether to apply for identical packages or for different packages in both islands. For example, an operator could apply for a base package in Jersey (i.e. 40MHz of 3.4-3.8GHz spectrum) and for a larger package in Guernsey (i.e. a base package plus additional spectrum).
- 5.6 Minimising the impact of the mobile industry on environment is among CICRA's and both governments' key objectives. CICRA's expectation is that operators will largely re-use existing masts to deploy 5G. We anticipate that companies may wish to consider the benefits of network sharing. This is encouraged by CICRA provided that such network sharing complies with the competition law rules in each jurisdiction. Network sharing will potentially help to reduce the roll-out costs and to minimise the impact on the environment (subject to these agreements not being anti-competitive). Spectrum sharing between operators will also be permitted.

MINIMUM LICENCE CONDITIONS

- 5.7 Spectrum allocated will be subject to minimum conditions. These minimum requirements are likely to include:

- 5G mobile coverage – licensees will have to make available 5G mobile services using the acquired spectrum to at least 50% of the population, across the bailiwicks⁷, within 18 months of the spectrum award and to 70% population after 3 years.⁸
- Protection of the environment – this is one of governments of Jersey and Guernsey and, as a result, CICRA’s key considerations⁹. CICRA’s expectation is that few if any new masts will be needed in order to deliver its minimum coverage requirements. Licensees will have to set out how their 5G deployment plans will minimize the number of new masts needed, for example by enabling mast sharing, and where new masts are needed to show how they will be sympathetic to the local environment.
- Health and safety – licensees will be required to demonstrate their compliance with ICNIRP standards and will be expected to comply with any future official guidelines.
- Network security – The latest UK Telecoms Supply Chain Review sets out how telecoms operators might be incentivised to improve security standard and practices in 5G and FTTP, how security challenges posed by vendors can be addressed and how to create sustainable diversity in the telecoms supply chain. Licensees will be required to demonstrate their compliance with the security, resilience and supplier diversity requirements imposed by relevant governments (i.e. Jersey and Guernsey) and the UK.
- New services, such as mMTC and URLLC – it is important that 5G networks support new innovative services and applications (e.g. URLLC). Licensees will be asked to provide suitable commitments to deliver these new services soon after they become available in the UK (subject to demand for these services in the Channel Islands).

5.8 In order to assess whether applicants can credibly meet these minimum requirements (or any further commitments they are willing to make in order to apply for additional spectrum), applicants will be required to demonstrate:

- Technical viability – as part of the award process, applicants will have to provide their 5G roll out plans to demonstrate that they are capable of meeting the minimum roll out requirements.
- Financial viability – applicants will have to demonstrate that they are capable of financing the minimum 5G roll out requirements.

⁷ In the Bailiwick of Guernsey, this includes providing 5G coverage in Alderney, Sark and Herm

⁸ We propose to measure this using crowd-sourced data from mobile phones where coverage is defined as delivering a particular level of service, such as download speeds in excess of 10Mbits/s. We will expand upon these proposals and criteria in due course.

⁹ <https://gov.gg/article/165840/Guernseys-first-ever-Telecoms-strategy-published>,
<https://www.gov.je/PlanningBuilding/LawsRegs/SPG/AdviceNotes/Pages/TelevisionRadioAntennae.aspx>

Further, in order to ensure that licensees have strong incentives to fulfil their commitments, CICRA is proposing to use performance bonds (as in the 4G spectrum award). More details on the value of performance bonds will be provided in the Information Memorandum.

ADDITIONAL COMMITMENTS

5.9 As part of the award process, applicants will be able to apply for more spectrum (in addition to base packages) if they are prepared to make additional commitments¹⁰ which are aligned with the Governments' policy objectives. Applicants will be required to demonstrate why additional spectrum allocations would be necessary to meet these incremental commitments.

5.10 These may include for example:

- Wider coverage than the minimum required;
- Faster roll out;
- Faster minimum speed;
- A commitment to provide FWA services, in areas which currently lack high speed fixed broadband (there are 15% of the population in Guernsey who do not currently have access to high speed broadband);
- Encouraging innovation, new services and new businesses on the Islands;
- Additional benefits to consumers, including pricing;
- Mast sharing.¹¹

5.11 We expect applicants to engage with the Planning Department(s) to ensure that any commitments given will be supported by the respective planning processes. We anticipate these will be more supportive of a shared approach.

5.12 CICRA will award higher scores to those operators who can demonstrate a combination of:

- Network sharing
- A plan to provide FWA access to those customers in Guernsey who cannot currently access high speed broadband via a fixed network
- MVNO capability at a reasonable commercial wholesale rate

5.13 The exact weighting of different criteria will be communicated in the Invitation to Tender and may vary between Guernsey and Jersey.

5.14 CICRA's appointed panel of experts will evaluate the proposals and make recommendations as to whether the proposed commitments merit the award of additional spectrum.

¹⁰ Over and above the minimum licence conditions set out above

¹¹ Any communication between the operators with regards to mast sharing/ network sharing commitments need to be conducted strictly within the limits of the CI competition law.

5.15 While the amount of spectrum to be issue will vary depending on the degree to which operators are willing to exceed the minimum requirements, some 5G spectrum (at least 100MHz of 3.4-3.8GHz) will be held back to be allocated at a later date.

OTHER RELEVANT ISSUES

5.16 CICRA also proposes to use the allocation process to de-fragment the 3.4-3.8GHz spectrum band and align existing spectrum holdings between Jersey and Guernsey (where feasible). More specifically, current spectrum holders will be given an opportunity to swap their existing non-contiguous blocks for contiguous spectrum, subject to the minimum 5G licence conditions.

5.17 If an operator with an existing 3.4-3.8GHz spectrum allocation is unwilling to commit to the minimum 5G licence conditions, it would need to vacate its spectrum on the expiry of a 1-year notice period.

Stage 2: Future spectrum allocations

5.18 Any remaining 700MHz and 3.4-3.8GHz 5G spectrum, will be allocated at a later date, when 5G technology matures (e.g. operators are able to deploy 5G SA) and when there is more clarity over demand for spectrum from new players (e.g. from verticals) and from the existing operators.

5.19 CICRA expects that any spectrum allocated during the second stage will be subject to the same (or potentially stricter) minimum licence conditions as the spectrum allocated during the first stage.

5.20 We will also, in due course, bring forward proposals about how CICRA will go about allocating high band mmWave spectrum for use in providing 5G services as well as any proposals for allocating other spectrum that is made available by Ofcom for 5G and other wireless or mobile services.

6. NEXT STEPS

6.1 CICRA consulted on its original Statement of intent. There have also been various meetings and seminars with all stakeholders relating to 5G. It is CICRA's view that a reasonable timeline with the intent of providing the facility for operators to launch commercial services for 5G in early 2021 will involve the following steps.

Date	Event
November 2019	CICRA issue final joint CI Statement of Intent & draft ITT
January 2019	Assess responses from draft ITT
January / February 2020	CICRA issue ITT document for spectrum allocation
30 April 2020	Deadline for responses from ITT

July 2020	CICRA issue statutory Initial Notice (IN) tender winners
July 2020	CICRA recommend to Ofcom spectrum award
August 2020	CICRA publish spectrum award
August 2020	CICRA issue statutory Final Notice (FN) tender winner
September 2020	Licence commencement date

Dates approximate

ANNEX A: LEGISLATIVE & LICENSING BACKGROUND

UK LEGISLATION RELEVANT TO SPECTRUM LICENSING IN THE CHANNEL ISLANDS

6.2 The use of spectrum in the Channel Islands is governed by UK legislation that has been extended to Guernsey and Jersey, as well as by international agreements between the UK and other countries on the use to which various bands of radio spectrum can be put and the avoidance of interference across borders.

6.3 The licensing of spectrum, in the UK and in the Channel Islands, is carried out by the Office of Communications (Ofcom), by virtue of the powers given to it by the Wireless Telegraphy Act 2006 (WTA) and the Communications Act 2003. Ofcom's principal and secondary duties are in Section 3 of the Communications Act 2003 ('General duties of Ofcom'), which provides that:

- (1) *It shall be the principal duty of OFCOM, in carrying out their functions—*
 - (a) *to further the interests of citizens in relation to communications matters; and*
 - (b) *to further the interests of consumers in relevant markets, where appropriate by promoting competition.*
- (2) *The things which, by virtue of subsection (1), OFCOM are required to secure in the carrying out of their functions include, in particular, each of the following—*
 - (a) *the optimal use for wireless telegraphy of the electro-magnetic spectrum;*

6.4 Moreover, Section 3 of the WTA ('Duties of OFCOM when carrying out functions') further specifies Ofcom's duties as follows

- (1) *In carrying out their radio spectrum functions, OFCOM must have regard, in particular, to—*
 - (a) *the extent to which the electromagnetic spectrum is available for use, or further use, for wireless telegraphy;*
 - (b) *the demand for use of the spectrum for wireless telegraphy; and*
 - (c) *the demand that is likely to arise in future for the use of the spectrum for wireless telegraphy.*
- (2) *In carrying out those functions, they must also have regard, in particular, to the desirability of promoting—*
 - (a) *the efficient management and use of the part of the electromagnetic spectrum available for wireless telegraphy;*
 - (b) *the economic and other benefits that may arise from the use of wireless telegraphy;*
 - (c) *the development of innovative services; and*
 - (d) *competition in the provision of electronic communications services.*