



PAN-CHANNEL ISLAND AWARD OF 5G SPECTRUM

INVITATION TO TENDER

DRAFT

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PART A: DETAILS OF THE COMPETITION

1. Introduction

- 1.1 This Tender Document invites bids from interested parties for the award of radio spectrum to be used in the provision of 5G services¹ in the Channel Islands, namely the Bailiwicks of Guernsey and Jersey. The invitation to bid comes from CICRA, the Channel Islands Competition and Regulatory Authorities².
- 1.2 This invitation to bid reflects a practice established between Ofcom (the independent regulator and competition authority for the UK communications industries) and CICRA for the allocation of spectrum in the Channel Islands whereby Ofcom consults CICRA for advice about the level and nature of demand for the 5G spectrum in the Channel Islands. The allocation is dealt with by way of a call for expressions of interest by CICRA and is carried out by CICRA in an open, non-discriminatory and transparent selection process on behalf of Ofcom.
- 1.3 Following this selection process, CICRA makes a recommendation to Ofcom as to how it considers the specified spectrum should be allocated; and, Ofcom may act on the recommendation and grant Wireless Telegraphy Act licences ('WTA Licence') for spectrum use under the Wireless Telegraphy Act 2006 provided it is satisfied CICRA's recommendation is likely to be consistent with its own statutory duties. To provide 5G services in the Channel Islands, operators will be required to hold both a valid WTA licence and a valid Jersey or Guernsey Telecommunications Act licence issued by CICRA ('operating licence'). This is explained in more detail at Section 4.
- 1.4 The Tender Document sets out the spectrum to be made available in the 700MHz and 3.4 – 3.8GHz bands by CICRA, the process that CICRA will use to award the spectrum, and the terms and conditions for the operators wishing to take part in the award.
- 1.5 Spectrum awards will be separate across the two jurisdictions in amount and in location within each spectrum band. Separate recommendations and licences will be issued for each jurisdiction.

¹ As the spectrum under consideration for allocation may be used for a variety of services – mobile or fixed or hybrid – the term '5G' is used to describe, generically, the services that the use of 5G standards allows on spectrum that support 5G standards.

² The Jersey Competition Regulatory Authority (JCRA) and the Guernsey Competition and Regulatory Authority (GCRA) are together referred to as CICRA and unless otherwise stated, all references to CICRA in this Tender Document are to each of the JCRA and GCRA

2. Objectives of the Competition

2.1 The spectrum allocation process has the following main objectives:

- 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 secure the optimal use of spectrum for wireless telegraphy;
- to promote competition as a mechanism to further the consumer interest objective;
- to have regard to and, where it lies within its powers and is practicable, to lessen the impact on the environment of the spectrum-dependent activities that CICRA regulates.

2.2 To support the above four objectives the allocation process will seek:

- to facilitate the provision of progressive wireless technology services, including mobile services, that increase the benefits to consumers to the maximum extent possible; and
- to support the development of the telecoms markets in the Channel Islands through a fair and competitive market for wireless services.

2.3 CICRA has also determined that its statutory duties to promote the interests of consumers and the economic and social development of the Bailiwicks are best furthered by ensuring the provision of high-quality telecommunications services.

2.4 Not all of the spectrum in the relevant bands will be awarded as a result of this competition. CICRA reserves the right to initiate a new competition for the grant of any remaining spectrum in these bands (combined or on a standalone basis) at a later stage in order to promote the above objectives.

3. Governments' Policy Objectives

JERSEY

3.1 In 2018, the Government of Jersey published a Telecom's Strategy (Jersey's Strategy"), 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. 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

3.2 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.

3.3 The Action Plan which has been developed from Jersey's Strategy 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.

GUERNSEY

3.4 The States of Guernsey has also published a telecoms strategy 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.

3.5 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

4. Spectrum Available for Award

4.1 The following 5G spectrum is available in the relevant bands:

- Up to 400MHz of unpaired spectrum in the 3.4-3.8GHz. The actual amount to be awarded depends on the bids and on the ability to clear existing users from the band as explained in more detail below.
- Up to 2x30 MHz of 700MHz spectrum depending on the demand for this band reflected in bids.

5. Licensing Requirements

5.1 In order to provide wireless telegraphy services in Jersey and Guernsey, operators will be required to hold:

- a valid Wireless Telegraphy Act licence issued by Ofcom which allows the use of specific spectrum bands (the **WTA Licence**); and
- a valid Jersey or Guernsey telecommunications licence issued by the JCRA or GCRA as appropriate, which is required for the provision of telecommunications services in each jurisdiction (the **Local Operating Licence**).

5.2 For ease of reference when referring to these two types of licence collectively, we have referred to them as the 5G Licences. In order to use the allotted 5G spectrum in the Channel Islands for the operation of networks and the provision of services, an applicant must either have or obtain a relevant operating licence from the GCRA or the JCRA and obtain a WTA licence from Ofcom.

5.3 The successful applicants will obtain from CICRA 1) a recommendation (the “Recommendation”) to Ofcom for the allotted 5G spectrum bands and 2) where necessary and subject to satisfying standard requirements, the relevant operating telecommunications licences in each jurisdiction.

WTA LICENCE

5.4 Whereas this competition is run by CICRA under the relevant Telecoms Laws in Guernsey and Jersey, successful applicants will need to obtain Wireless Telegraphy Act (“WTA”) Licences from Ofcom in order to commence services. Any person establishing or using any station for wireless telegraphy or installing or using any apparatus requires a WTA licence from Ofcom unless specifically subject to an exemption regulation.

5.5 Ofcom may act on the recommendation and grant Wireless Telegraphy Act licences (‘WTA Licence’) for spectrum use under the Wireless Telegraphy Act 2006 provided it is satisfied that CICRA’s recommendation is likely to be consistent with its own statutory duties. If Ofcom does act on CICRA’s recommendation and grants a WTA Licence, it will issue licences similar to those it issues for Public Wireless Networks in the Channel Islands with technical parameters to reflect the inclusion of 5G technologies. [Where appropriate, Ofcom will vary existing licences in relevant frequency bands for new spectrum allocations and technology.]

5.6 The recommendation to Ofcom will be taken by Ofcom to be, in effect, applications for the WTA licences which applicants must obtain to use frequency spectrum. With its Recommendation, CICRA

will support any successful applicant in finalising this stage in the overall process. However, CICRA accepts no responsibility for any delay or difficulties encountered by successful applicants in obtaining the necessary licence from Ofcom.

5.7 Spectrum fees under the Wireless Telegraphy Act will be set by Ofcom.

LOCAL OPERATOR LICENCE

5.8 Successful applicants without a Local Operating Licence will be required to obtain a licence in the relevant jurisdiction and comply with its conditions, including intercept requirements³ imposed by the relevant authorities in Guernsey and Jersey.

6. Spectrum Allocation Method

6.1 The spectrum available for this award process shall be allocated by way of an open competition based on a comparative selection method (“beauty contest”), which allows for the evaluation of applications against a set of evaluation criteria reflecting the duties of the GCRA and JCRA under the Regulation, Laws and the objectives described in this Tender Document.

6.2 Both existing operators and new entrants will be able to participate in the award. Applicants will have to submit separate applications for acquiring spectrum in the Bailiwick of Jersey and in the Bailiwick of Guernsey.

6.3 Applicants will be able to apply for:

- Minimum base packages, which will comprise of 40MHz of 3.4-3.8GHz spectrum; and
- Additional spectrum – up to 40MHz of 3.4GHz-3.8GHz and 2x10MHz of 700MHz per operator (in addition to 40MHz awarded in the base package).

MINIMUM BASE PACKAGES

6.4 Minimum base packages will be awarded to any successful applicant who can demonstrate that they are able to meet the minimum requirements (set out in Section 7 below) and who currently do not have 3.4-3.8GHz spectrum.

6.5 Operators with existing 3.4-3.8GHz spectrum who wish to continue offering services, will need to participate in the process in order to demonstrate that they are able to meet the minimum requirements. Such operators will then have replacement licences issued for their current holdings, or equivalent holdings (for example as single contiguous holding rather than ‘paired’ blocks).

³ Providers of 5G services may have to bear the full cost of facilitating legal interceptions on their 5G networks. They are expected to minimise the cost of acquiring such facility when negotiating with their suppliers of network equipment and services.

6.6 For operators with existing 3.4-3.8GHz spectrum holding who do not participate in the process or who are unable to commit to the minimum requirements (set out in Section 7 below), CICRA propose to issue a notice for the operator to vacate the relevant spectrum on the expiry of a 1-year notice period.

ADDITIONAL SPECTRUM

6.7 In addition to the base packages, additional spectrum will be awarded to successful applicants who clearly demonstrate that they are prepared and capable of exceeding the minimum requirements and hence further meet the Government's objectives (as stated in Section 3 above). To this end, operators may submit 'enhanced' bids with additional commitments which exceed the minimum requirements (e.g. to extend mobile coverage beyond the minimum required), and for which additional spectrum will be required to meet these commitments. In Section 8 below, CICRA sets out evaluation criteria and weights that will be used to rank enhanced applications.

6.8 These criteria and weights will vary by jurisdiction, in line with the Governments' specific objectives. In particular, in the Bailiwick of Guernsey, one of the Government's objectives is to deliver superfast broadband to those households which are currently outside the coverage for FTTC services. Therefore, applicants are encouraged to make enhanced bids committing to delivering FWA services to the specified households.

6.9 Alternatively, applicants could make different commitments.

6.10 All in all, applicants will be allowed to submit up to three applications in order to acquire 5G spectrum in the States of Guernsey and up to two applications in order to acquire spectrum in the States of Jersey. For the avoidance of doubt, only one application will be successful in each jurisdiction.

6.11 In order to acquire spectrum, an applicant can submit:

- An application for a minimum base package, subject to a commitment to meet the minimum requirements; and/or
- An enhanced application for additional spectrum, subject to a commitment to exceed the minimum requirements, which is different from providing FWA.

6.12 In addition, applicants can submit an application for additional spectrum in Guernsey, subject to a commitment to deliver FWA to the specified households (in order to achieve the Guernsey Government's specific objective).

6.13 There is no requirement to submit applications for the full set of potential outcomes. For example, in the case that an applicant considers that it is not feasible to meet the minimum requirements using the base package an applicant could choose not to apply for a minimum base package, but only to apply for an enhanced package (up to 80MHz of 3.4-3.8GHz and up to 2x10MHz of 700MHz in total).

6.14 There is also no obligation to award additional spectrum above the base package to any applicant, if CICRA is of the view that the request for additional spectrum above a base package is not adequately justified by the improvements compared to the minimum requirements.

7. Minimum Requirement: 5G Spectrum Awards

7.1 The evaluation for the award of 5G spectrum will be carried out by first assessing whether applications satisfy the minimum requirements set out below. All applications that successfully demonstrate that they can meet the minimum criteria using the base package of spectrum will be offered at least this package of spectrum. Spectrum will not be awarded to operators who fail to commit to meeting minimum conditions.

7.2 These minimum requirements are:

Requirement 1	Applicants must have sufficient expertise in the commercial operation of wireless networks to demonstrate that they will be able to meet the minimum requirements.
Requirement 2	Applicants must pay all the fees (and performance bonds if applicable) required for the application, as set out in section 12, by transfer to a designated bank account within five days following the deadline for applications
Requirement 3	<p>Successful applicants shall provide and thereafter maintain, <u>using the acquired spectrum</u>, an electronic communications network that is capable of providing, for at least 90% of measurements, a mobile telecommunications service with a downlink speed of not less than 10 Mbps and an uplink speed of not less than 2 Mbps to users in an area within which at least 50% of the population of the Bailiwick live by no later than March 2022 (18 months from the award) and at least 70% of the population of the States live by no later than September 2023 (3 years from the award)</p> <p>It is proposed to measure this using crowd-sourced data from mobile devices.⁴ This has many advantages including accurately reflecting real-world experience. Coverage will therefore need to be provided where there are users, including within buildings and vehicles and measurements will be made both indoors and outdoors in approximate proportion of the use of the phone in these environments.</p>

⁴ We recognise that there are many details that will need to be agreed on the crowd-sourced methodology such as the time horizon to average data across, the data provider to be used, and the detailed metrics that will be assessed. Once the winning bidders have been confirmed we will convene a workshop to discuss these issues with all parties involved. Following that workshop we will issue a detailed methodology

Requirement 4	Applicants with existing spectrum in the bands agree to work in good faith with CICRA in de-fragmenting and re-aligning the spectrum holdings in the 3.4-3.8 GHz spectrum band and to use their best endeavours to achieve contiguous spectrum allocations across the Channel Islands.
Requirement 5	Applicants must present their licence application in the format specified in section 23 of this Tender Document.
Requirement 6	<p>Protection of health and the environment is among the Governments' key objectives. Successful applicants must demonstrate that their approach minimises the environmental impact of their activities connected with the new spectrum, and in particular agree to share facilities with other operators (unless there are demonstrable technical reasons why sharing is not feasible)⁵.</p> <p>Successful applicants are also required to comply with the ICNIRP guidelines, or any new official guidelines supported by the UK or local governments</p>
Requirement 7	Successful applicants 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.
Requirement 8	Applicants are required to submit supporting documentation that establishes their independence from other applicants ⁶ .

7.3 Further, in order to ensure that licensees have strong incentives to fulfil their commitments, CICRA is proposing to use performance bonds (the requirements are set out in Section 12 below).

⁵ Subject to any network sharing complying with the competition laws in each jurisdiction

⁶ CICRA requires that participants in the competition are independent entities whose policy and operational decision making are not influenced by any shareholder common with other applicants or any other connections. A determination as to whether two or more persons submitting application are associated applicants shall be at the discretion of CICRA. No more than one member of any associated applicant group may participate in the competition. If after the competition, CICRA determines that the holder of the 5G spectrum was an associated applicant during the competition, CICRA reserves the right to take such actions as considered appropriate by CICRA, including the withdrawal of its recommendation or the revocation of a licence in accordance with the process and procedures set out in the telecommunications legislation. Changes in an applicant's ownership circumstances during the course of the competition (i.e. from submission of applications to the grant/refusal of the licence) which may result in association of two or more applicants in the competition shall be immediately communicated to CICRA.

8. Evaluation Criteria and Weights

8.1 Applicants who wish to acquire spectrum in addition to the base package in the States of Jersey and/ or in the States of Guernsey will need to submit additional applications (separately for each jurisdiction). They will would need to specify the amount of spectrum required (up to 80MHz of 3.4-3.8GHz spectrum and up to 2x10MHz of 700MHz spectrum in total) and offer additional commitments against as the following criteria:

Criteria	Evaluation	Weight
Mobile Coverage	The extent of mobile 5G population coverage and the timescales over which these will be delivered, will inform scores under this evaluation criterion. No scores will be given for only meeting any minimum coverage requirement, set out in Requirement 3. The maximum score will be attained for a substantiated commitment to deliver 100% demographic and geographic coverage including coverage of a reasonable amount of sea territory around the Islands by the end of the 24 month period from the date of the award by CICRA.	40%
Quality of Service	Commitment in terms of minimum, average and peak download and upload speeds as well as other aspects of service quality related to the delivery of 5G services will inform scores under this evaluation criterion. The timescales for delivering these commitments and the ability to substantiate their achievement will also inform CICRA's scoring of applications.	20%
Protection of the environment	The applicant's approach to promote protection of the Guernsey (including Herm, Sark and Alderney) and Jersey environment by minimising the number of masts and by increasing mast sharing ⁷ will inform the score. The applicant scores will be based on the extent to which their approach goes beyond the minimum requirement 6.	25%
Innovative 5G services	It is important that 5G networks support new innovative services and applications (such as mMTC and URLLC). Applicants are invited to specify the services they would provide and make	15%

⁷ Subject to any network sharing complying with the competition laws in each jurisdiction

	commitments to deliver these new services soon after they become available in the UK (subject to demand for these services in the Channel Islands).	
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8.2 Applications not including proposals relating to these criteria will not be considered in the evaluation phase of the competition. Where appropriate, the proposals made for each evaluation criterion will be incorporated in the licence conditions attached to the spectrum award.

9. Applications to provide FWA services in Guernsey

9.1 In addition, in Guernsey, applicants can apply to provide FWA services to the households which currently lack Fibre-to-the-Cabinet (FTTC) broadband (c. 15% of Guernsey’s population) in return for additional spectrum (up to 40MHz of 3.4-3.8GHz spectrum and up to 2x10MHz of 700MHz spectrum, in addition to a base package).

9.2 The same criteria will apply as above, with the only difference being that the mobile coverage criterion will be replaced with:

- Provision of FWA services to the specified households in the States of Guernsey – this would involve a commitment to deliver FWA services to the specified households.

9.3 The weights for assessing these applications will be as follows:

Evaluation Criteria for FWA Proposals	Weights
FWA services	55%
Quality of service	15%
Protection of the Environment	20%
Innovative 5G Services	10%

9.4 For the avoidance of doubt, while applicants are allowed to submit up to two applications for additional spectrum in the States of Guernsey – one to provide FWA services and another one against the more general evaluation criteria (set out in Section 8 above), only one of these applications may be deemed to be successful.

10. Selection Procedure

10.1 The selection process will be as follows:

- (i) All applications will be assessed as to whether they meet the minimum requirements. Any applications that fail to meet the minimum requirements will be rejected;
- (ii) Any applications for the FWA option in Guernsey will be scored against the criteria set out above. If CICRA is of the view that one or more applications scores sufficiently to justify the award of additional spectrum, the application that scores highest will be accepted;
- (iii) All applications for additional spectrum, except from any applicant for Guernsey who has had their FWA application accepted, will be scored against the criteria set out above. If CICRA is of the view that one or more application scores sufficiently to justify the award of additional spectrum, these applications will be accepted, subject to available spectrum, in each jurisdiction. In the case that applications exceed the available amount of spectrum in each jurisdiction, applicants with the lowest score(s) will be assigned the minimum package where they have applied for this package (or no spectrum if they have not) until demand is below available supply;
- (iv) Applicants who have submitted an application for the base package who have not been successful in an application for additional spectrum, will be awarded this base package.

11. Licence Duration

11.1 The 5G relevant operating Licences granted by CICRA will allow for the provision of services using 5G spectrum with a term limit of 20 years. These licences will include a 3-year notice period before the term limit.

12. Application Fee and Other Fees

12.1 Applicants should note that there is a number of fees payable in relation to the spectrum award offered. These fees consist of both one-off and recurring charges. Payment of the application, deposit and mitigation fees is a minimum requirement of this competition (Requirement 2). These fees are described below:

APPLICATION FEE

12.2 All applicants will already have paid the application fee of £10,000 in order to obtain this Tender Document, which is non-refundable.

DEPOSIT FEE

12.3 In order to cover the costs of the competition, each applicant must make a payment to CICRA into a designated account within five working days of the application deadline for £40,000 as a deposit with

its application. Applicants will be informed of the designated account in advance of the application deadline.

12.4 However, only the successful applicants shall be liable for the deposit fee, so that, in the event that an applicant is not successful in obtaining a recommendation to Ofcom, the deposit will be refunded inclusive of any accrued interest. Should an applicant be awarded and then decline an award, the applicant will be liable for the full deposit.

PERFORMANCE BONDS

12.5 All applicants who apply for 5G spectrum will have to pay to CICRA a fixed amount of £250,000 as a performance bond per jurisdiction⁸. This amount will not be reimbursed in the event the successful applicant fails to deliver on its commitments in a given jurisdiction (either the minimum requirements if the applicant applies for a base package or enhanced commitments if the applicant applies for additional spectrum).

12.6 These performance bonds should be submitted as separately designated payments into a designated account within five working days of the application deadline.

12.7 However, in the event that an applicant is not successful in obtaining 5G spectrum, all performance bonds will be refunded inclusive of any accrued interest and no further fees will become due.

WTA LICENCE FEES

12.8 Beside the fees set out above, there will also be a separate annual fee for the WTA Licence, which are set by Ofcom.

ANNUAL LICENCE FEE TO CICRA

12.9 In accordance with the Telecommunications Laws in each jurisdiction, CICRA will impose on holders of Licences an annual licence fee to cover CICRA's costs of regulatory activities. Annual licence fees are set on the basis of relevant turnover of the licenced business as set out by CICRA.

13. Unallocated spectrum

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

⁸ One performance bond for the Bailiwick of Jersey and another one – for the Bailiwick of Guernsey.