



# Pan-Channel Island Second Consultation on award of 800 MHz and 2.6 GHz Spectrum

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## Consultation Document

### Channel Islands Competition and Regulatory Authorities

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## Introduction

CICRA<sup>1</sup> (the Channel Islands Competition and Regulatory Authorities) consulted in July 2013 on the appropriate method of allocating available spectrum – specifically newly available 800 MHz and 2.6 GHz spectrum – for the purpose of enabling the provision of LTE services<sup>2</sup> in the Channel Islands. CICRA thanks the respondents to that consultation; their comments are valuable in helping CICRA develop its work.

These responses and subsequent correspondence with parties, in particular, indicate there is likely to be excess demand for LTE spectrum<sup>3</sup>. CICRA is therefore engaging in this second consultation in which it proposes an approach for carrying out a comparative evaluation to progress the award of this spectrum.

CICRA, similarly to Ofcom, has duties under the respective telecommunications regulatory legislation in Jersey and Guernsey to, amongst other things, protect the interests of consumers, contribute to and further the economic interests of the Bailiwicks, and promote competition where appropriate. In sectors such as telecommunications where technology, products and markets are evolving very fast, the promotion of competition is particularly able to stimulate innovation that can bring benefits for customers.

In proposing the approach set out in this consultation document, CICRA recognises that in seeking to achieve enhanced competition and improved outcomes for the economies and consumers of the Channel Islands, this does not necessarily imply that an increased number of market participants will deliver these outcomes. However, in a context where LTE spectrum represents a potentially significant development in the provision of telecom services, it is also appropriate that the process for recommending such spectrum should allow the opportunity for all market players, both current and potential, to acquire LTE spectrum on their merits, while seeking to guard against inefficient competition.

The award of LTE spectrum is within the context of several complementary workstreams undertaken by CICRA in the interests of maximising economic and consumer benefits in the Channel Islands. Regulatory initiatives in telecoms include scrutiny and challenge of prices to consumers where they are not reflective of

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<sup>1</sup> *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 Decision are to each of the JCRA and GCRA*

<sup>2</sup> *As the spectrum under consideration for allocation may be used for a variety of services – mobile or fixed or hybrid – the term ‘LTE’ is used to describe, generically, the services that the use of LTE or 4G standards allows on spectrum that support LTE standards.*

<sup>3</sup> *Defined here as the 800 MHz and 2.6 GHz bands.*

efficient costs. Price controls as well as other controls seek to achieve that. The quality of service delivered by providers also needs to meet appropriate standards, and there is a specific workstream that CICRA has initiated to address any potential shortfalls in this area. A regulatory environment that fosters and promotes innovation in a fast-changing sector is also vital since often market entry and competition can deliver this objective. CICRA has previously promoted competition through facilitating entry into the mobile market by new entrants and implementing mobile number portability. The award of LTE spectrum complements all of these initiatives, in particular the need to bring the benefits of innovation in wireless technology to the islands, while improving the competitive playing field. The potential for change in the market that LTE technology presents is especially relevant as more advanced wireless services are likely to become available, potentially substituting fixed telecom services as a result. This has implications for how people use their mobile devices and the scope and access to telecoms services generally.

In developing this second consultation, CICRA relied in particular on the responses it received, the Analysys Mason report published with the first consultation in July and the analysis contained in various Ofcom documents leading to its spectrum auction in early 2013 – primarily the January and July 2012 documents.

This consultation document sets out the spectrum portfolios that CICRA proposes to offer to operators interested in acquiring LTE spectrum through a recommendation by CICRA to Ofcom. It also discusses the criteria CICRA is proposing to use to select between applications for this spectrum and the minimum requirements for participation in the award process.

Comments are invited to comment on the issues set out and CICRA's proposed approach. Following an assessment of responses to this consultation, CICRA will proceed to finalise the spectrum award process and invite binding expressions of interest for the available LTE spectrum.

## 1. Structure of the Consultation

The consultation document is structured as follows:

Section 2	Describes the legal bases for CICRA's role (with the JCRA and the GCRA having their own separate legal basis in each jurisdiction) in the allocation of spectrum for telecom purposes as well as the role of UK legislation in this area.
Section 3	Outlines the process which CICRA is proposing to use in determining the allocation of the available LTE spectrum to successful applicants.
Section 4	Describes, in greater detail, key elements of the process CICRA proposes, including the proposed conditions that telecommunication operators would need to satisfy in order to participate in the award process.
Section 5	Describes the criteria that CICRA proposes to use in selecting successful bidders for the spectrum bundles on offer (see also Annex A).
Section 6	Discusses the new licence condition that CICRA proposes to add to the licences of successful applicants.
Section 7	Sets out the likely timetable for the rest of the process.

Interested parties are invited to submit comments to CICRA in writing or by email on the matters set out in this paper to either of the addresses below.

All comments should be clearly marked "Pan Channel Island Second Consultation on award of 800 MHz and 2.6 GHz spectrum" and should arrive by close of business on Tuesday 4th February 2014.

Guernsey Competition and Regulatory Authority Suites B1 & B2, Hirzel Court St Peter Port Guernsey GY1 2NH  Email: <a href="mailto:info@bicra.gg">info@bicra.gg</a>	Jersey Competition Regulatory Authority 2 <sup>nd</sup> Floor, Salisbury House 1-9 Union Street St Helier Jersey JE2 3RF  Email: <a href="mailto:info@bicra.je">info@bicra.je</a>
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In line with CICRA's consultation policy, it intends to make responses to the consultation available on the CICRA website. Any material that is confidential should be put in a separate annex and clearly marked as such so that it may be kept confidential. CICRA regrets that it is not in a position to respond individually to the responses to this consultation.

## 2. Legislative and Licensing Background

### *Legislative background and regulatory duties in the Channel Islands*

The legislative bases for this consultation in Jersey are provided by the Competition Regulatory Authority (Jersey) Law 2001 and the Telecommunications (Jersey) Law 2002. In Guernsey, the relevant legislation is The Regulation of Utilities (Bailiwick of Guernsey) Law, 2001<sup>4</sup> and The Telecommunications (Bailiwick of Guernsey) Law, 2001.

The duties of the JCRA in the telecommunications sector are defined in Article 7 of the Telecommunications (Jersey) Law 2002; the duties of the GCRA in the telecommunications sector are defined in Section 2 of The Regulation of Utilities (Bailiwick of Guernsey) Law, 2001. In addition, there is scope for the States of Guernsey and Jersey to give directions to the GCRA and the JCRA respectively. Any decision resulting from this consultation will be based on relevant laws and duties of the GCRA and the JCRA respectively.

### *UK Legislation relevant to spectrum licensing in the Channel Islands*

The use of spectrum in the Channel Islands is governed by Orders in Council extending certain provisions of United Kingdom (UK) legislation to the Bailiwicks, as well as 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. The licensing of spectrum, in the UK and in the Channel Islands, is carried out by Ofcom, the UK communications regulator, by virtue of the powers given to it by the Wireless Telegraphy Act 2006 (WTA) and the Communications Act 2003<sup>5</sup>.

CICRA does not have authority to allocate spectrum in the Channel Islands but may determine a proposed allocation of spectrum, which it then forwards to Ofcom as a recommendation, for Ofcom to issue spectrum licences with powers held under the WTA. These licences are referred to here as WTA licences to distinguish them from the operating licences that CICRA issues to telecommunications operators in Jersey and Guernsey. CICRA must however determine proposed spectrum allocations in a way that would satisfy Ofcom's own statutory duties if its recommendations are to be accepted by Ofcom.

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<sup>4</sup> Amended by *The Guernsey Competition and Regulatory Authority Ordinance, 2012*

<sup>5</sup> For the Channel Islands, as and to the extent that these Acts are extended to Jersey and Guernsey respectively by Orders in Council.

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;*
  - (...)

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.*

For the purposes of the spectrum relevant to this consultation, 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 which is on offer and recommends an allocation based on its final decision. Methods



such as a call for expressions of interest or an invitation to bid, in particular, could identify whether demand exceeds supply and a selection procedure is needed. When the assessment and selection procedure is completed, a recommendation is provided to Ofcom; and

- Ofcom may issue licences for spectrum use under the WTA where it is satisfied CICRA's recommendation is consistent with its own statutory duties.

For this reason, one of the objectives proposed by CICRA in its first consultation was:

- 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 for wireless telegraphy of the electro-magnetic spectrum.

### 3. Spectrum Allocation Process

In its July 2013 consultation, CICRA proposed the following four objectives to guide it when determining spectrum allocations<sup>6</sup>:

- to further consumers' interests in the short and long term, having regard to prices and costs, the availability and range of services suitable to consumers' different needs;
- 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 of the spectrum-dependent activities it regulates on the environment; and
- to the extent allowed by legislation, to deal with the Jersey and Guernsey Bailiwicks as a single economic and social entity.

Responses received supported this group of objectives, which will now inform CICRA's work. In particular, there was clear support for a joint allocation process applicable to both Jersey and Guernsey, encouraging CICRA to determine an allocation process that applied to the Channel Islands essentially as a single entity.

CICRA is of the view that its selection procedure for spectrum allocation recommendation to Ofcom should: promote investment in networks and services; seek to ensure islanders and visitors have access to advances in wireless technologies; promote competition across a wide range of telecoms markets to the extent that LTE technology lends itself to that aim; and foster competition that supports innovation and protects the environment. These are reflected in the minimum requirements in section 4 and evaluation criteria in section 5

**Q1: Views are sought on whether the objectives as set out remain appropriate for informing the award process for LTE spectrum?**

#### *Use of a selection procedure*

As already noted, CICRA has received indications from respondents to its July consultation that lead it to conclude demand for LTE spectrum is in excess of what is available. A competitive award process which provides a fair opportunity for market players to compete for spectrum in delivering the objectives set out in this document is therefore required.

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<sup>6</sup> A fifth objective in the July consultation ensured that the process followed by CICRA would produce an outcome that was acceptable by Ofcom so that it could issue licences under the WTA according to CICRA's recommendation. This is now included in the previous section as it relates to the legal framework applicable to CICRA's work.

Specific issues inform CICRA's view that a comparative selection procedure rather than an auction should be used to recommend LTE awards.

Reducing the cost of acquiring LTE spectrum increases the scale of funds available to invest in networks and services and such investment benefits islanders. CICRA wishes to minimise the extent to which funds are diverted into the competitive process itself and away from such investment. Also, as set out in CICRA 13/38, the Economic Development Department in Jersey and the Commerce and Employment Department in Guernsey have together set out their view that the award of spectrum by CICRA should not have a purpose of raising funds and any monies raised should cover the costs of the allocation process only. Respondents to CICRA's July consultation have also supported a comparative evaluation process rather than an auction.

The size of the Channel Island economies results in lower economies of scale for operators, increasing the importance of minimising the extent to which potential investment funding is expended on the competitive process itself.

As expanded on below, CICRA wishes to use the award of LTE spectrum as an opportunity to improve the competitive playing field in terms of the amount and type of spectrum to which operators have access in order to compete with each other. Since the price applicants pay for spectrum in an auction is likely to have a bearing on their willingness to support such aims, achievement of those aims seems better achieved through a comparative evaluation process than an auction, which can give greater weight to the wider interests of the economy and consumers. A similar argument applies to the aims of aligning and defragmenting of spectrum holdings across the two jurisdictions.

For these above reasons in particular, it appears appropriate to carry out a comparative award process rather than an auction.

In proposing the approach set out in this document, CICRA recognises that in seeking to achieve enhanced competition and improved outcomes for the economy and consumers in the Channel Islands, this does not necessarily imply that an increased number of market participants will deliver these outcomes.

Ofcom's UK award process for the LTE spectrum relevant to this CICRA consultation was carried out through a spectrum auction so as, ex-ante, to reserve spectrum for a fourth telecommunication operator. CICRA is not proposing to follow Ofcom's lead in this respect. Instead CICRA proposes to use a comparative evaluation process to determine how spectrum should be allocated in the interests of achieving the objectives set out above.

In a context where LTE spectrum represents a potentially significant development in the provision of telecom services it is also in CICRA's view appropriate that the process for recommending such spectrum should allow the opportunity for all market players, both current and potential, to acquire LTE spectrum on their merits, while seeking to guard against inefficient competition.

This selection procedure is explained further in the next section.

### ***Re-balancing, Alignment and Defragmentation of spectrum***

Whereas CICRA is of the view that the promotion of competitive telecommunication markets does not depend on an equal distribution of spectrum between competing operators, CICRA also considers that the extent of present imbalances between operators' spectrum holdings is not conducive to the achievement of the objectives set out above or the duties on CICRA and Ofcom in this area; in particular, the promotion of competition between operators and the efficient use of spectrum. It consulted on a re-balancing in its first consultation. The views on this aspect are set out in Annex D. CICRA proposes in this document that its spectrum allocation process provides an opportunity to re-balance some of the spectrum holdings which, historically, have favoured incumbents in Jersey and Guernsey in order that they may be made available at a future stage to promote its objectives in this area.

CICRA also proposes, to the extent feasible, to use the allocation process to de-fragment and align<sup>7</sup> existing spectrum holdings between Jersey and Guernsey, without this process, of itself, changing the overall spectrum allocation of telecommunication operators. The size of contiguous blocks of spectrum has a bearing on the capacity and utility of that spectrum to operators. The improvement in efficiency of spectrum use arising from such defragmentation together with alignment between the jurisdictions will facilitate improvements in economies of scale and scope. This will benefit consumers and enhance the overall efficiency of the economy.

CICRA further proposes to give greater freedom to spectrum holders in the choice of technology they may deploy on the various spectrum bands they hold, through relevant changes to telecoms licences in Guernsey (and to recommend to Ofcom that it does the same with respect to spectrum in the Channel Islands). This will

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<sup>7</sup> *In the rest of this document, CICRA may refer to 'rationalisation of spectrum' to mean the de-fragmentation and the alignment of spectrum holdings, the result of which is that operators' holdings are in contiguous blocks and aligned across Jersey and Guernsey to the extent that operators' holdings in each island are of same magnitude.*

provide further freedom and flexibility in spectrum use for operators that will improve the utilisation and efficiency of their overall spectrum holdings.

### *Two-stage allocation process*

In consideration of the above issues, CICRA proposes that the allocation process most likely to enable it to satisfy its objectives is one that:

- organises portfolios of LTE spectrum bands, or 'spectrum bundles', similar in effect to the portfolios designed by Ofcom for its allocation of 800 MHz and 2.6 GHz spectrum, to the extent this is consistent with CICRA's objectives; and
- is implemented in two stages.

The two-stage approach set out below is intended to achieve the above objectives by reconciling the challenges of awarding LTE spectrum that is limited, where the provision of 'high quality' services requires sufficiently large awards of LTE spectrum (800 MHz in particular), and where vigorous competition will benefit the Channel Islands, bringing innovation and choice.

The approach therefore seeks to avoid a regulatory framework that either risks promoting inefficient competition that weakens all market players or undermines the full potential that competition brings to the marketplace through overly prescriptive outcomes.

Informing the mix of spectrum made available as part of these awards is the technical characteristics of the 800 MHz spectrum in particular, which make it substantially more valuable (for instance for 'deep indoors coverage') than higher frequency spectrum.

The first stage of the award is intended to select two operators who by virtue of their applications indicate a credible commitment to providing high quality services. The mix of spectrum made available reflects CICRA's intention in making such awards. Operators applying for this award will be required to achieve one of the two highest scores in the evaluation of their bids by CICRA based on commitments made against criteria set out in the Tender Document.

The evaluation of applications that have not been successful in the first stage or that chose to apply for only the second stage award would be undertaken in a separate process. This second stage award process will comprise a different mix of available spectrum with a different weighting given to evaluation criteria than the first award process. In particular, the 800 MHz band allocations are smaller than those for the First Award Stage.

Different spectrum bands require different investments in order to produce similar services. Moreover, it is apparent that 800 MHz spectrum is in greater demand than 2.6 GHz spectrum, given the results of award processes in other jurisdictions and the indicative demand of operators in the Channel Islands. The successful applicants in the second stage of the award process would therefore need to overcome the challenges posed by smaller lots awarded in ranges below 1 GHz through greater reliance on spectrum in the higher bands<sup>8</sup>.

The work of Analysys Mason and Ofcom indicates that, with sufficient spectrum above the 1 GHz level, and additional network investment, applicants that are successful in the Second Award Process can deliver services to a standard comparable to that required of the successful applicants in the first stage of the award process. For this reason a greater amount of 2.6 GHz spectrum needs too be made available for the Second Stage Awards.

If the number of applicants for the Second Award Process is no more than two, CICRA may at its discretion proceed directly to a recommendation to Ofcom for these allocations, which will therefore ensure they become available shortly after the allocation of the first two lots under the First Award has been determined. Otherwise, CICRA will run a second selection procedure. If one of the second lots is not allocated, for lack of demand by a suitably qualified operator, CICRA will keep it available for a potential new entrant and review the situation at an appropriate time<sup>9</sup>.

### *Spectrum subject to CICRA's allocation process*

CICRA has taken note of Ofcom's discussions of the bands of spectrum included in the design of its auction for 800 MHz and 2.6 GHz spectrum, as reported in Ofcom's consultation of January 2012, its statement of July 2012 and in supporting annexes. CICRA also took note of the Analysys Mason report commissioned by the States of Jersey and Guernsey which was published in March 2013 but, essentially, predates the outcome of Ofcom's auction.

As noted above, Ofcom took a holistic approach in assessing how best to discharge its duties when allocating the newly-available 800 MHz and 2.6 GHz spectrum. Starting from a consideration of how to obtain maximum benefit for customers and the economy, Ofcom considers the bundles of spectrum holdings – including both

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<sup>8</sup> *The recent rollout of 4G services in the UK by EE for example is evidence that, if sufficient over-1 GHz spectrum is available, then a 2x5 MHz award of 800 MHz band spectrum combined with this spectrum can compensate for the reduced 800 MHz block size.*

<sup>9</sup> *By then, it is likely that more spectrum will have become available in various ways and spectrum demand may have also evolved.*

existing and newly-available spectrum – that would promote vibrant and innovative markets for spectrum-based services. This approach, which CICRA believes is likely to deliver similar benefits to the Channel Islands, required Ofcom to take account of a range of spectrum bands together; namely the 800, 900, 1800, 2100 and 2600 MHz spectrum.

CICRA proposes to follow the same broad principle in its approach but, in order to simplify its allocation process, it will take account of four spectrum bands only: 800, 900, 1800 and 2600 MHz. In CICRA's view, the 2100 MHz spectrum band need not be considered to the same extent as the others because the current allocation of this spectrum is fairly balanced among existing operators, it is not aware that any operator, existing or potential, would express interest for additional spectrum in this band and, in any event, some spectrum is un-allocated and available.

CICRA describes the four spectrum bands below. As Ofcom has done, CICRA is keeping to the band plans determined for Europe; these plans, in particular, determine whether spectrum is available in pairs (for Frequency Division Duplexing or FDD) or in blocks for Time Division Duplexing (TDD). Further technical details may be obtained from the Analysys Mason report or Ofcom documents, for instance its July 2012 statement<sup>10</sup>.

The spectrum that is currently allocated can be used by telecommunication operators for a specific purpose only (typically, 2G or 3G mobile services), under the WTA licences held by operators, and, in Guernsey, the mobile telecommunications licences. This restricts the ability of telecommunication operators to optimise the use of the spectrum they have. It has been CICRA's long standing policy that it favours the technological neutrality of all spectrum in use in the Channel Islands; however, it does not intend to facilitate this neutrality until spectrum is aligned across islands, de-fragmented and spectrum allocation is more balanced between operators. CICRA sees the allocation of LTE spectrum as the process that will enable all operators to move to technology neutrality.

Ofcom negotiates memoranda of understanding in respect of the Channel Islands' international obligations with respect to spectrum use and the avoidance of interference. This is particularly relevant given the close proximity of the Channel islands to France. It is CICRA's understanding that these negotiations are underway and it would anticipate any relevant memoranda of understanding to have been finalised prior to issuing the invitation for bids.

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<sup>10</sup> <http://stakeholders.ofcom.org.uk/binaries/consultations/award-800mhz/statement/statement.pdf>

## **800 MHz band**

The spectrum available in the 800 MHz band consists of 2 x 30 MHz of spectrum (paired spectrum suitable for downlink at 791-821 MHz and uplink at 832-862 MHz). None of this spectrum is currently allocated. It can be used in blocks that must have a minimum size of 5 MHz (in 2 x 5 MHz pairs) to support LTE services and, with current technologies, needs to be of 10 MHz (2 x 10 MHz pairs) to permit the provision of best quality data services. Ofcom has allocated this spectrum in blocks of 2 x 10 and 2 x 5 MHz, as it believes that these package sizes are “consistent with likely productive uses and known market demand” and “aligned with prospects for future use”<sup>11</sup>.

## **900 MHz band**

The total spectrum available for telecommunication services in FDD pairs in the 900 MHz band is 2 x 34.8 MHz (paired spectrum suitable for downlink at 925.1-959.9 MHz and uplink at 880.1-914.9 MHz). Of this spectrum, 2 x 5 MHz is held by Airtel in both islands, Sure holds 2 x 5 MHz in Jersey and nearly 2 x 20 MHz in Guernsey, while JT has nearly 2 x 25 MHz in Jersey and nearly 2 x 10 MHz in Guernsey. This spectrum is currently allocated for 2G (GSM) use only.

The present allocation is in some cases fragmented, not aligned across the Channel Islands and unbalanced in favour of the original incumbent telecommunication operators in each jurisdiction, for historical reasons. CICRA therefore consulted in its first consultation on the feasibility and desirability of a cap on the total 800 and 900 MHz spectrum that any operator could hold (a sub-1 GHz cap). While one incumbent operator objected to the implied reduction in its 900 MHz holding if it wanted to acquire 800 MHz spectrum, other respondents agreed with the proposal. CICRA notes that Ofcom imposed a cap for sub-1 GHz spectrum of 2 x 27.5 MHz and considered it to be the minimum constraint it needed to impose “to avoid very asymmetric distributions of spectrum”.

CICRA proposes to impose a cap of 2 x 25 MHz on sub-1 GHz spectrum for successful applicants for the First and Second Stage Awards. Commitment to the divestment of some 900 MHz spectrum may be necessary to comply with the cap in view of the 800 MHz allocated to successful applicants. Applicants will also be required to use reasonable endeavours to facilitate the defragmentation of existing operator holdings to achieve contiguous blocks in the 900 and 1800 MHz bands, and where feasible, alignment between the Channel Islands.

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<sup>11</sup> <http://stakeholders.ofcom.org.uk/binaries/consultations/award-800mhz/statement/statement.pdf>



The 900 MHz spectrum that may be released by the operation of a sub-1 GHz cap will be available for allocation by CICRA at the same time as, or shortly after, this spectrum band is rationalised. Recommendations would then be made following the outcome of the First and Second Stage awards. Depending on demand, it may be allocated in such a way as to lead to an improvement in the balance of spectrum holdings in both islands (if allocated to one of the historical incumbents) or to other operators. In any case, it is likely that, after rationalisation, the spectrum will be made technology-neutral.

### **1800 MHz band**

The total spectrum available for telecommunication services in FDD pairs in the 1800 MHz band is 2 x 71.6 MHz (paired spectrum suitable for downlink at 1805.1-1876.7 MHz and uplink at 1710.1-1781.7 MHz). Of this spectrum, 2 x 5 MHz and 2 x 10 MHz are allocated to Airtel and Sure respectively in both islands and 2 x 11.6 is allocated to JT in Jersey (2 x 10 in Guernsey). The allocations are fragmented in some cases and not aligned across islands. If these were rationalised, without changing total amounts available to each operator, there would be between 2 x 40/50 MHz of spectrum available to expand the capacities of existing operators or to allocate to new operators. The spectrum that is currently allocated is for 2G (GSM) use only.

As the 1800 MHz spectrum band is important for the provision of LTE and existing services, it is CICRA's intention to engage in its rationalisation as soon as the 800 MHz and 2.6 GHz spectrum is allocated so that, if there is justified demand for it, new 1800 MHz spectrum can be allocated. Both the newly-allocated bands and the existing holdings of 1800 MHz spectrum would then be made technology-neutral.

### **2600 MHz (2.6 GHz) band**

The total spectrum available for telecommunication services in the 2.6 GHz band is 2 x 70 MHz (paired spectrum suitable for downlink at 2620-2690 MHz and uplink at 2500-2570 MHz). There is also 2 x 50 MHz of unpaired spectrum that is suitable for both uplink and downlink. As CICRA noted in its July 2013 consultation document, the JCRA made recommendations in 2009 to Ofcom in this band.

A decision in 2011 by the JCRA to revoke this recommendation in respect of 2x20 MHz to Clear Mobitel (Jersey) Limited was quashed on procedural grounds by the Royal Court in Jersey. However, the Court left it open to the JCRA to review and, potentially, to withdraw the recommendation. It said, in particular: "In our judgement, allocation of the Spectrum lies very much in the field of pure policy. (...) There is therefore a strong public interest, in what is a very technical field, in achieving the most effective use of the spectrum. (...) we are of the clear view that there are valid public interest reasons for the JCRA's change of mind which outweighs any unfairness to Mobitel."

CICRA is fully committed to complying with the Court judgment if it needs to consider revoking its 2009 recommendation. This would entail, in particular, taking relevant considerations into account and engaging in good faith with Clear Mobitel. However, before coming to this stage, CICRA must ascertain what the public interest is and whether it would be necessary to require a change to its 2009 recommendation, as this may not be the case. A competitive process for all 800 MHz and 2.6 GHz spectrum with the aim of meeting the stated aims and objectives for LTE awards is in CICRA's view the most transparent and fair basis on which to assess whether there is a strong public interest in maintaining, revising or withdrawing the current recommendation of 2.6 GHz spectrum to Clear Mobitel. Without prejudging its stance on that matter, CICRA considers the proposed allocations discussed in this consultation should be based on the assumption that the full 2 x 70 MHz of 2.6 GHz spectrum may be available for allocation.

### *Proposed spectrum bundles*

Ofcom's various consultations and its July 2012 regulatory statement makes it clear that spectrum allocation needs to be considered in the round. Like Ofcom, CICRA will take a portfolio approach, looking at the various combinations of spectrum bands that could enable vigorous competition in the markets for the provision of a range of LTE services to customers, as well as the continued provision of 2G and 3G services.

CICRA, like Ofcom, is therefore taking into consideration overall spectrum presently available to existing operators to provide 2G and 3G services, such as 900 and 1800 MHz bands, as well as the newly available LTE spectrum. Moreover, the 1800 MHz band, provided operators are allowed to use it for LTE purposes, is spectrum that lends itself to large data-handling capacity, as is the 2.6 GHz spectrum band.

CICRA therefore proposes that its allocation process should make available four spectrum lots below:

- Bundle A: 2 lots, each comprising 2 x 10 MHz in the 800 MHz band and 2 x 10 MHz in the 2.6 GHz band
- Bundle B: 2 lots, each comprising 2 x 5 MHz in the 800 MHz band and 2 x 25 MHz in the 2.6 GHz band

As described above, CICRA proposes to allocate the Bundle A lots in the first stage of its two-stage allocation process, reflecting the key role that 800 MHz spectrum will have in enabling the provision of high quality LTE services in the Channel Islands. To this end, CICRA has set out in the attached Draft Tender Document evaluation criteria for the award of Bundle A spectrum in the First Award Process, which it proposes serve the public interest. Those applications with the two highest scores

under the First Award Process would each be offered Bundle A spectrum lots under these proposals.

Bundle B spectrum would be allocated in a subsequent selection procedure under the evaluation criteria set out in the Tender Document, shortly after the first.

Under the proposed approach, if all four lots are taken up, all available 800 MHz spectrum would be allocated, as would all paired 2.6 GHz spectrum.

**Q2: Views are sought on whether the proposed two-stage award approach meets CICRA's objectives as set out?**

**Q3: Views are sought on whether the amount and mix of spectrum in each lot is consistent with the purposes of making these award?**

## 4. Selection Procedure Rules and Conditions

The purpose of this section is to describe, in detail, the rules that CICRA proposes to follow when running the selection procedure.

### *Allocation Process - General*

CICRA proposes to use the allocation process to:

- determine which operators should receive the LTE spectrum and how much they should have
- provide four lots of spectrum to enable the provision of LTE services to, potentially, four operators without prescribing there should be four providers of LTE wireless services in the Channel Islands.
- Where feasible address the imbalance in spectrum in each of Guernsey and Jersey that results from the historic allocation of particularly large amounts of spectrum to the incumbents, JT in Jersey and Sure in Guernsey
- de-fragment existing spectrum holdings and align them between Jersey and Guernsey without changing the total allocation available to each existing holder of spectrum licences.

As explained in Section 3, CICRA proposes to run a selection procedure to determine the two operators that qualify for Bundle A spectrum. Once the two Bundle A spectrum lots are allocated, CICRA will review demand for the remaining spectrum available in Bundle B under the Second Award Process and determine their allocation – by direct allocation or through a selection procedure – shortly after recommending an allocation of the spectrum available in the First Award Process to Ofcom.

The selection procedure run by CICRA will rank applicants according to a number of criteria to which CICRA gives appropriate weights. CICRA is consulting on these criteria and weights, which are set out in the draft Tender Document in Annex A and described in the next section.

### *Selection Procedure – Minimum Requirements*

This consultation document has noted that CICRA does not wish to promote inefficient competition that weakens all market players. Minimum requirements will therefore be stipulated that provide safeguards that applications are both credible and substantial. Applicants will in addition be required to commit to address risks of interference from the LTE spectrum and participate in improving the wider competitive playing field, in circumstances where commercial incentives may not necessarily align with such improvements that can benefit the wider economy and

its consumers. In addition, commitment to minimise environmental impact is important to islanders and the minimum requirements reflect that also.

CICRA proposes that an operator that applies for one of the lots on offer would need to agree to be bound by the requirements below. For the avoidance of doubt, it is proposed that it would be a condition of participation to the allocation process of 800 MHz and 2.6 GHz spectrum that an operator agrees to satisfy all relevant requirements.

- Requirement 1** Applicants accept they will obtain the same allocation of 800 MHz and 2.6 GHz spectrum in both Jersey and Guernsey, with the same conditions attached to each relevant WTA licence.
- Requirement 2** Applicants must pay all the fees required for application by transfer to a designated bank account within five days of the deadline for applications.
- Requirement 3** Applicants must agree to use any allocated LTE spectrum to support services capable of delivering a data download speed of 2Mbps both outdoors and at some indoor locations within the vast majority of premises throughout the Bailiwicks, provided that there are few other users using the service simultaneously in the vicinity<sup>12</sup>.
- Requirement 4** Successful applicants will commit to a programme of customer information and interference mitigation (filters, etc.) to protect users of Digital Terrestrial Television (DTT) services<sup>13</sup>.
- Requirement 5** Successful applicants will commit to contributing an amount to be determined per MHz of their 2.6 GHz spectrum holding to the States of Jersey to mitigate interference with the airport radars of Jersey Airport<sup>14</sup>.
- Requirement 6** Applicants accept that allocations of new 800 MHz spectrum will be conditional on a 2x25 MHz cap being imposed on all spectrum holdings below 1 GHz in each Bailiwick.
- Requirement 7** Applicants commit to participating in good faith and on a reasonable endeavours basis to the de-fragmenting and re-aligning of the spectrum holdings in the 900 and 1800 spectrum bands to maximise the size of potential contiguous blocks of spectrum in each band held by each operator.

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<sup>12</sup> *The Compliance Verification Methodology will be consistent with that used by Ofcom*

<sup>13</sup> *An appropriate sum of money based on an assessment concluded before the Invitation to Tender is issued will be collected via payment into a designated account by CICRA when an operator applies for the 800 MHz spectrum, of which the totality will be returned if the operators is unsuccessful and a proportion may be returned if the operator is successful, according to the demands of interference mitigation.*

<sup>14</sup> *The estimate is £50k attributable to the whole 2x70 MHz of 2.6 GHz spectrum, being the replacement cost of the airport radar of Jersey Airport. The appropriate sum of money will be collected by CICRA via payment into a designated account when an operator applies for the 2.6 GHz spectrum, of which the totality will be returned if the operator is unsuccessful.*

- Requirement 8** Applicants for Bundle A lots must present a roll-out plan for the intended network/service for both Guernsey and Jersey. The roll-out plan must as a minimum meet the following target dates for the LTE service:
- Commercial launch in both Jersey and Guernsey not later than 2 years from Recommendation made by CICRA to Ofcom
  - Service offered on the 4 main islands of Guernsey and the island of Jersey, and in all parishes, not later than 3 years from Recommendation made by CICRA to Ofcom
  - 80% of the population (by domicile) in each of Jersey and the Bailiwick of Guernsey covered not later than 4 years from Recommendation made by CICRA to Ofcom
- Requirement 9** Applicants must present their business projections for the intended LTE services in the form of a business plan covering the first seven years following the grant of the WTA licence. The documentation supporting the application must include:
- the audited financial statements of the applicant's business for the past three years; or
  - the audited financial statements of the investing entities providing the financing for the intended LTE services (in case the applicant was established for the purpose of this project), together with a letter of commitment from the investing entities consistent with the business plan.
- Requirement 10** Applicants must commit to minimising the environmental impact of their activities connected with the new spectrum, in particular to the sharing of masts where feasible and best practice in terms of managing mast emissions.
- Requirement 11** Applicants accept that the licences in Jersey and Guernsey allowing applicants to provide LTE services in those jurisdictions will contain a condition that spectrum issued to the licensee will be returned to Ofcom if it is not used in the provision of LTE services (as defined above) by end of 2016.
- Requirement 12** Applicants are required to submit supporting documentation that establishes their independence<sup>15</sup>.

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<sup>15</sup> 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 LTE 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.

### *De-fragmenting and re-aligning existing spectrum holdings*

The process of de-fragmenting spectrum and re-aligning holdings between Jersey and Guernsey applies to the 900 MHz and 1800 MHz spectrum. As some of these holdings may change hands or become available to telecommunication operators other than their current holders, CICRA cannot anticipate, at this stage, the process that will be required. However, it is CICRA's intention that a recommendation from CICRA to Ofcom, and therefore Ofcom's WTA licences, will not be issued until agreement on the de-fragmenting and re-alignment process is concluded.

**Q4: Views are sought on the above minimum requirements, whether this is the appropriate set of issues to include and if the strength and clarity of the requirements is adequate?**

## 5. Evaluation criteria

The six criteria on which CICRA proposes to base the evaluation of applications made for both the First and Second Award Process are set out in the Table below with the weights attached to each criterion for both award processes.

- **Coverage** – The extent of coverage provided by LTE services using the new spectrum allocations, 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 section 4.
- **Quality of service** – Commitment in terms of minimum, average and peak speeds as well as other aspects of service quality related to the delivery of LTE 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.
- **Credibility of Business Plan** – Scores will be based on the strength and credibility of business plans which should be supported by providing thorough and time-specific information in at least the following four areas:
  - Income
  - Levels of OPEX and CAPEX.
  - Market assumptions.
  - Financial strength of applicant, covering the timing of fund raising, sources of funds and nature of commitment by providers of capital.
- **Promotion of Protection of the Environment** – The Applicant’s approach to promote protection of the Guernsey (including Herm, Sark and Alderney) and Jersey environment will inform scores. The applicant scores will be based on the extent to which their approach goes beyond their adherence to the existing rules and regulations regarding Guernsey’s and Jersey’s environmental protection practices.
- **Providing effective Competition and greater Consumer choice** – Scores will be informed by the extent to which the application sets out how the proposed business proposition will effectively contribute to the competitiveness of the market and improved outcomes for consumers.
- **Performance Guarantees** – The strength of support given by applicants to the commitments they make will inform scores. The relevance, scope, scale and ease of verifying those commitments, and whether commitments are supported by performance bonds or other forfeiture if they are not achieved, will be given significant weight in scoring applications<sup>16</sup>.

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<sup>16</sup> Applicants are themselves responsible for making the nature and extent of each of their commitments clear to the readers of the applications. In the event of ambiguous or vague submissions being contained in an



First Award Process Weights	Second Award Process Weights	Evaluation Criteria
25%	5%	Coverage
25%	10%	Quality of service
15%	20%	Credibility of Business Plan
8%	15%	Promotion of Protection of the Environment
12%	30%	Promotion of Competition
15%	20%	Performance Guarantees

**Q5: Views are sought on whether the six evaluation criteria are the most appropriate for delivering on the objectives set out in this document and on the proposed weights in terms of whether they appropriately guide the award of spectrum?**

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application, these will be narrowly construed by CICRA and the applicant will receive fewer points or no score as a result.

## 6. New Licence Conditions

Where an applicant is successful in obtaining a WTA licence through the allocation process, CICRA intends to incorporate conditions into the applicant's telecommunications licences in Jersey and Guernsey (administered by CICRA), based on the commitments contained in the applicant's application. Without prejudice to the generality of the foregoing, CICRA may refuse to recommend LTE spectrum, or may withdraw a spectrum recommendation to Ofcom, in circumstances where a WTA licence has been offered to an applicant but where the applicant does not accept the incorporation into its telecommunications licence of conditions reflecting any binding commitment contained in the applicant's application.

CICRA believes it is important that all spectrum allocated in the Channel Islands is fully used by the holders of Ofcom's WTA licences. It therefore intends to use its power over telecommunications licences in Jersey and Guernsey to ensure that spectrum must be relinquished if it is not in use. CICRA will consult the industry to determine the parameters, and their measurement, which will indicate whether spectrum is not, or not sufficiently, in use.

It appears that Ofcom's practice is such that it can withdraw a WTA licence from an operator only if this operator loses the telecommunications licence that enables it to offer services using the spectrum for which it had the WTA licence. The operation of a 'use it or lose it' policy therefore requires CICRA to add a licence condition to all telecommunications licences in the Channel Islands held by operators who are successful in obtaining an allocation of 800 MHz or 2.6 GHz spectrum. As stated in Minimum Requirement 11, this licence condition is a requirement for applicants that intend to use LTE spectrum. If CICRA found that some LTE spectrum was not in use it could, subject to the parameters on which it will consult, withdraw the telecommunications licence that allows an operator to have a WTA licence. When Ofcom has, then, withdrawn the WTA licence, the spectrum may become available for another operator that may make better use of it for the benefit of the Channel Islands.

**Q6: Views are sought on the above, in particular whether respondents are in agreement with this proposal and any issues this raises for operators?**

## 7. Next Steps

Once CICRA has received responses to this consultation document, it will issue a final Tender Document and invite formal expressions of interest. CICRA expects to be able to do so at the end of the first quarter of 2014, with the deadline for receipt of expressions of interest by the end of April 2014. CICRA anticipates making a recommendation to Ofcom by the end of the second quarter of 2014.

**Q7: Views are sought on the draft tender document in Annex A and whether the specific elements raise issues for respondents?**

**Q8: Respondents are asked to comment on any other issues they wish to raise arising from the matters set out in this consultation?**

## **Annex A – Draft Tender Document**

### ***Part 1 Details of the Competition***

This Draft Tender Document is publicly available on CICRA's website ([www.cicra.gg](http://www.cicra.gg)) to all parties interested in a competition for the award of the available 800 MHz and 2.6 GHz spectrum bands (hereafter referred to as the "LTE spectrum") in Guernsey and Jersey. The final Tender Document will be available from CICRA on the date of the planned launch of the competition. Acquisition of the final Tender Document is a prerequisite for participation in the competition. However, submission of an expression of interest based on this Draft Tender Document is neither a requirement for participation in the competition, nor an entitlement to participate in the competition.

Spectrum awards will be identical across the two jurisdictions. While separate recommendations and, where relevant, licences will be issued for each jurisdiction, all applications for LTE spectrum must therefore be on a pan-Channel Island basis.

#### ***1. Objectives of the Competition***

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 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 of the spectrum-dependent activities that CICRA regulates on the environment; and
- to the extent allowed by legislation, to deal with the Jersey and Guernsey Bailiwicks as a single economic and social entity.

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 promote the health of the telecoms markets in the Channel Islands through a fairer and more competitive market for wireless services,

achieved through:

- Establishing a more even playing field for competing providers by re-balancing historic allocations of spectrum now biased in favour of incumbents in each island;
- Increasing the amount of spectrum available to providers so they can provide more advanced wireless services; and
- Potentially extending facilities-based competition so that wireless services can provide competition in a wider range of telecoms markets than at present.

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 services.

In the event that the available LTE spectrum is not awarded as a result of this competition, CICRA reserves the right to initiate a new competition for the grant of any remaining LTE spectrum (combined or on a standalone basis) at a later stage in order to promote the above objectives.

## ***2. Number and Scope of Allotted Spectrum Awards***

There are four spectrum awards provided for under this comparative evaluation procedure which the GCRA and JCRA will recommend to Ofcom to award on conclusion of this competition.

- Bundle A : 2 lots, each comprising 2 x 10 MHz in the 800 MHz band and 2 x 10 MHz in the 2.6 GHz band
- Bundle B: 2 lots, each comprising 2 x 5 MHz in the 800 MHz band and 2 x 25 MHz in the 2.6 GHz band

These four awards will grant the holders rights to operate and provide spectrum-based services on a Bailiwick-wide basis together with appropriate licences issued by the GCRA and the JCRA, respectively, in Guernsey and Jersey.

## ***3. Additional Licensing Requirements***

The successful applicants will obtain from the GCRA and JCRA a recommendation (the "Recommendation") to the Office of Communications ("Ofcom") for the allotted LTE spectrum bands and, where necessary, the relevant telecommunications licences in each jurisdiction. The Recommendation to Ofcom will enable the successful

applicants to apply to Ofcom for a Wireless Telegraphy (“WT”) licence which they must obtain to use frequency spectrum.

Whereas this competition is for the granting of LTE spectrum under the relevant Telecoms Laws in Guernsey and Jersey, successful Applicants will need to obtain WT Licences from Ofcom in order to commence services. As such, any person establishing or using any station for wireless telegraphy or installing or using any apparatus requires a WT licence from Ofcom unless specifically subject to an exemption regulation.

Ofcom will issue licences similar to those it issues in the UK but it will amend all relevant licence conditions and parameters (e.g. spectrum bands, geographical scope and fees) to ensure that these are appropriate to the two jurisdictions.

Hence, in order to operate and use the allotted LTE frequency spectrum in the Channel Islands for the provision of networks and services, an Applicant must either have or obtain both a WT licence from Ofcom and a relevant licence from the GCRA or the JCRA. In practice, if the successful Applicants either already have a relevant licence or have taken up the licence(s) granted by CICRA, they must apply for a WT licences(s) from Ofcom in accordance with the procedures and rules set by CICRA. 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.

#### ***4. Available Frequency Spectrum***

Ofcom has identified the following available LTE frequency spectrum:

- 2x30 MHz of paired 800 MHz spectrum
- 2x70 MHz of paired 2.6 GHz spectrum

It should be noted that Ofcom is in the process of negotiation a Memorandum of Understanding with the French Authorities that may have a bearing on the technical specifications of the spectrum available in the Channel Islands. CICRA will communicate these conditions as soon as they are available and, in any event in the final Tender Document.

#### ***5. Licence Duration***

The LTE relevant Licences will allow for provision of services using LTE spectrum with no term limits except those applied by Ofcom, and will include a 3-year notice period for operators with these licences.

## 6. *Spectrum Allocation Method: LTE Awards*

The LTE spectrum available 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 the final Tender Document.

Part 2 of this document provides a detailed description of the evaluation and selection procedure.

## 7. *Minimum Requirement: LTE Spectrum Awards*

Only those applicants who comply with the following minimum requirements of the competition shall be considered for the granting of the LTE Licence Recommendations.

An operator that applies for one of the lots on offer agrees to be bound by the requirements below. For the avoidance of doubt, it is proposed that it is a condition of participation to the allocation process of 800 MHz and 2.6 GHz spectrum that an operator agrees to satisfy all relevant requirements.

- Requirement 1** Applicants accept they will obtain the same allocation of 800 MHz and 2.6 GHz spectrum in both Jersey and Guernsey, with the same conditions attached to each relevant WTA licence.
- Requirement 2** Applicants must pay all the fees required for application by transfer to a designated bank account within five days of the deadline for applications.
- Requirement 3** Applicants must agree to use any allocated LTE spectrum to support services capable of delivering a data download speed of 2Mbps both outdoors and at some indoor locations within the vast majority of premises throughout the Bailiwicks, provided that there are few other users using the service simultaneously in the vicinity<sup>17</sup>.
- Requirement 4** Successful applicants will commit to a programme of customer information and interference mitigation (filters, etc.) to protect users of Digital Terrestrial Television (DTT) services<sup>18</sup>.

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<sup>17</sup> *The Compliance Verification Methodology will be consistent with that used by Ofcom*

<sup>18</sup> *An appropriate sum of money based on an assessment concluded before the Invitation to Tender is issued will be collected via payment into a designated account by CICRA when an operator applies for the 800 MHz spectrum, of which the totality will be returned if the operators is unsuccessful and a proportion may be returned if the operator is successful, according to the demands of interference mitigation.*

- Requirement 5** Successful applicants will commit to contributing an amount to be determined per MHz of their 2.6 GHz spectrum holding to the States of Jersey to mitigate interference with the airport radars of Jersey Airport<sup>19</sup>.
- Requirement 6** Applicants accept that allocations of new 800 MHz spectrum will be conditional on a 2x25 MHz cap being imposed on all spectrum holdings below 1 GHz in each Bailiwick.
- Requirement 7** Applicants commit to participating in good faith and on a reasonable endeavours basis to the de-fragmenting and re-aligning of the spectrum holdings in the 900 and 1800 spectrum bands to maximise the size of potential contiguous blocks of spectrum in each band held by each operator.
- Requirement 8** Applicants for Bundle A lots must present a roll-out plan for the intended network/service for both Guernsey and Jersey. The roll-out plan must as a minimum meet the following target dates for the LTE service:
- Commercial launch in both Jersey and Guernsey not later than 2 years from Recommendation made by CICRA to Ofcom
  - Service offered on the 4 main islands of Guernsey and the island of Jersey, and in all parishes, not later than 3 years from Recommendation made by CICRA to Ofcom
  - 80% of the population (by domicile) in each of Jersey and the Bailiwick of Guernsey covered not later than 4 years from Recommendation made by CICRA to Ofcom
- Requirement 9** Applicants must present their business projections for the intended LTE services in the form of a business plan covering the first seven years following the grant of the WTA licence. The documentation supporting the application must include:
- the audited financial statements of the applicant's business for the past three years; or
  - the audited financial statements of the investing entities providing the financing for the intended LTE services (in case the applicant was established for the purpose of this project), together with a letter of commitment from the investing entities consistent with the business plan.
- Requirement 10** Applicants must commit to minimising the environmental impact of their activities connected with the new spectrum, in particular to the sharing of masts where feasible and best practice in terms of managing mast emissions.
- Requirement 11** Applicants accept that the licences in Jersey and Guernsey allowing applicants to provide LTE services in those jurisdictions will contain a condition that spectrum issued to the licensee will be returned to Ofcom if it is not used in the provision of LTE services (as defined above) by end of 2016.

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<sup>19</sup> The estimate is £50k attributable to the whole 2x70 MHz of 2.6 GHz spectrum, being the replacement cost of the airport radar of Jersey Airport. The appropriate sum of money will be collected by CICRA via payment into a designated account when an operator applies for the 2.6 GHz spectrum, of which the totality will be returned if the operator is unsuccessful.



**Requirement 12** Applicants are required to submit supporting documentation that establishes their independence<sup>20</sup>.

## 8. Evaluation Criteria and Weights

The comparative evaluation for the award of LTE spectrum will be carried out by assessing the eligible Applications against six criteria. However, if Applications do not comply with the minimum requirements, then they will not be considered to be eligible.

The six criteria CICRA proposes to base the evaluation of applications made for both the First and Second Award Process are set out in the Table below with the weights attached to each criterion for both award processes.

- **Coverage** – The extent of coverage provided by LTE services using the new spectrum allocations, 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 section 4.
- **Quality of service** – Commitment in terms of minimum, average and peak speeds as well as other aspects of service quality related to the delivery of LTE 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.
- **Credibility of Business Plan** – Scores will be based on the strength and credibility of business plans which should be supported by providing thorough and time-specific information in at least the following four areas:
  - Income
  - Levels of OPEX and CAPEX.
  - Market assumptions.
  - Financial strength of applicant, covering the timing of fund raising, sources of funds and nature of commitment by providers of capital.

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<sup>20</sup> 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 LTE 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.

- **Promotion of Protection of the Environment** – The Applicant’s approach to promote protection of the Guernsey (including Herm, Sark and Alderney) and Jersey environment will inform scores. The applicant scores will be based on the extent to which their approach goes beyond their adherence to the existing rules and regulations regarding Guernsey’s and Jersey’s environmental protection practices.
- **Providing effective Competition and greater Consumer choice** – Scores will be informed by the extent to which the application sets out how the proposed business proposition will effectively contribute to the competitiveness of the market and improved outcomes for consumers.
- **Performance Guarantees** – The strength of support given by applicants to the commitments they make will inform scores. The relevance, scope, scale and ease of verifying those commitments, and whether commitments are supported by performance bonds or other forfeiture if they are not achieved, will be given significant weight in scoring applications<sup>21</sup>.

First Award Process Weights	Second Award Process Weights	Evaluation Criteria
25%	5%	Coverage
25%	10%	Quality of service
15%	20%	Credibility of Business Plan
8%	15%	Promotion of Protection of the Environment
12%	30%	Promotion of Competition
15%	20%	Performance Guarantees

Applications not including details of proposals to satisfy these criteria will not be considered in the evaluation phase of the competition. The relative importance of each criterion is indicated by the attached weight.

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<sup>21</sup> Applicants are themselves responsible for making the nature and extent of each of their commitments clear to the readers of the applications. In the event of ambiguous or vague submissions being contained in an application, these will be narrowly construed by CICRA and the applicant will receive fewer points or no score as a result.

## **9. Standards**

Various technology standards are being developed for the provision of services on LTE spectrum. CICRA does not intend to be prescriptive as to the standards that operators should use. It is content, therefore, to prescribe a minimum floor for the quality of service that operators must achieve when they use LTE spectrum to provide services as set out in the minimum requirements. In this way, CICRA guarantees that the scarce LTE spectrum is used to the best advantage of the Channel Island consumers.

## **10. Application Fee and Other Fees**

Applicant should note there are a number of fees payable in relation to the spectrum award(s) offered. These fees consist of both one-off and recurring charges. Payment of the application fee and deposit is a minimum requirement of this competition. These fees are described below:

### **10.1 Application Fee**

All applicants will be required to pay the application fee of £10,000, which will be non-refundable. A single application fee is required only (i.e. not two separate application fees) for this pan-Channel Island award process. CICRA must receive payment to a designated account within five working days of the application deadline.

### **10.2 Deposit Fee**

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 their application.

However, only the successful applicants shall be liable for the deposit fee, so that in the event that an applicant is not offered the licence, the deposit will be refunded and no further fees will become due. Should an applicant be awarded and then decline a licence offer, the applicant will be liable for the full deposit.

### **10.3 Mitigation Fees**

CICRA will determine the fees that holders of 800 MHz spectrum will need to pay on application to ensure that the cost of mitigating interference to DTT is sufficiently covered. The Mitigation Fee for applicants for Bundle B only will be half of that paid by those who apply for Bundle A, reflecting the lower amount of 800 MHz spectrum in Bundle B. An applicant for Bundle A that obtains an allocation of Bundle B will have half its Mitigating Fee refunded immediately. An unsuccessful applicant will have all its Mitigation Fee refunded. All successful applicants may receive a refund, pro rata, of their Mitigation Fees if mitigation costs turn out, in due course, to be less than anticipated when the Mitigation Fee was determined.

CICRA will determine the fees that applicants for 2.6 GHz spectrum in Jersey will need to pay to ensure that holders of 2.6 GHz spectrum make the contribution expected of them to the cost of installing filters on the Jersey Airport radars.

#### ***10.4 Performance Bonds***

Bonds may be offered against commitments made under each Evaluation Criterion. The Performance Bonds should comprise written guarantees submitted to CICRA as part of the application as a condition of being awarded LTE spectrum that ensure payment of a sum not exceeding a stated maximum in the event the successful applicant fails to deliver on the commitments in its application under the relevant evaluation criterion.

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

#### ***10.5 Annual Radio Frequency Fee***

Ofcom has indicated that holders of WT licences will be liable to pay an annual licence fee to cover the costs of radio frequency management activities to Ofcom.

#### ***10.6 Annual Licence Fee to CICRA***

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.

## **Part 2 The Applicant and Licensing Procedure**

### **11. Requesting the Final Tender document and Registration**

All applicants will be required to register with CICRA when requesting a Final Tender Document. For the avoidance of doubt, registration is a prerequisite for participation in the competition. There are no obligations associated with the purchase of the document.

In order to facilitate communication between potential applicants and CICRA, a certificate of registration, included in print at Appendix 1 must be completed and forwarded by email to [ ] within three working days of receipt of the Tender Documentation. All correspondence between CICRA and the potential applicant will be through the contact person (or his/her substitute) designated in accordance with the certificate of registration.

### **12. Questions Relating to the Tender Document**

Potential applicant registering for the competition may submit written questions via email to [ ]. Only questions concerning the Tender Document will be dealt with. Accordingly, CICRA will not provide any further information about matters such as the evaluation process and methodology, other than the information made available in this Tender Document.

Only questions forwarded by email will be accepted. Any questions from parties who have not registered with CICRA will not be answered. The final deadline for the submission of questions is close of business on [ ]. Questions received after this deadline will not be answered.

CICRA will share the answers to any questions received with all parties that have registered to receive the Tender Document. CICRA however, will not disclose the identity of the party posing the question, except where he may be legally obliged to do so.

### **13. Submission of Applications**

A sealed Application for the LTE spectrum shall be submitted no later than close of business on [ ] to either:

Guernsey Competition and Regulatory Authority Suites B1 & B2, Hirzel Court St Peter Port Guernsey GY1 2NH  Email: info@cicra.gg	Jersey Competition Regulatory Authority 2 <sup>nd</sup> Floor, Salisbury House 1-9 Union Street St Helier Jersey JE2 3RF  Email: info@cicra.je
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Applications received after this deadline will not be considered and will be returned. Any requests by the applicant for an extension to the time period allowed for the preparation of an application will not be accepted.

The application shall be addressed as stated above and shall be clearly marked:

**APPLICATION: LTE SPECTRUM – CICRA AWARD PROCESS**

An application shall also be clearly marked with the applicant’s name and address. An application should comprise five paper copies, including supporting document. In addition, electronic copies of the application should be submitted. In case of discrepancies, the paper version shall take precedence.

An application shall be accompanied by a completed Declaration for the submission of an application (see Appendix [2]) and make payment into an account designated by CICRA within 5 days of the application deadline, which will separately identify payment of the application fee of £10,000 and the deposit fee of £40,000.

The opening of the applications that have been submitted within the specified time will take place at a closed meeting at CICRA’s offices on the day of delivery.

**14. Publication of Names of Applicants, but not of Applications**

CICRA may announce such limited information about the applicants as deemed appropriate following the deadline for receipt of application. Each applicant should indicate in a covering letter to the application its preference as to how it may be described.

As a minimum the same information on all the applicants will be published. Information contained in the applications will be treated as confidential and will not be disclosed, except where CICRA is required to do so in order to comply with its statutory obligations and/or where CICRA is required by operation of law to do so.

## **15. Provision of Further Information from Applicants**

CICRA reserves the right to request an applicant to submit further material and documentation, in addition to the information already provided in their application within such time and in such format as CICRA may stipulate. Specifically, if the applicant does not fulfil the requirements of the tender, the Applicant will be given 5 working days from the date of the written notice to the applicant of such non-compliance to rectify the application.

## **16. Evaluation of the Applications**

All applications which are received before the deadline will be subjected to a three-stage evaluation process as follows:

### **16.1 Stage 1: Admittance Test**

All applications must pass an admittance test in order to distinguish those Applicants which are eligible for the award of the LTE licence i.e. by identifying those applications which comply with the rules of the competition.

The applicants intending to present an application for the offered LTE spectrum must comply with a number of formal instructions which will be checked by CICRA at the time of receiving the applications.

1. The application must carry the identity of the applicant and properly marked on the outside: **“APPLICATION : LTE SPECTRUM – CICRA AWARD PROCESS”**
2. The application must be submitted prior to the deadline as set out in the Tender Document by the applicant’s representative (cf. Annex x)
3. Upon receipt and verification of compliance with the requirements, CICRA will issue a signed receipt to the applicant’s representative.
4. If the applicant’s representative is not authorised to accept the signed receipt (if, for example, the application is delivered by courier) CICRA will email a copy of the signed receipt to the applicant.
5. Checks will be carried out by CICRA to ensure the application has not been tampered with
6. The application must clearly indicate whether the applicant wishes to apply for LTE spectrum under the First Award Process, the Second Award Process, or both. If the applicant indicates ‘Both’ then, if unsuccessful in the First Award Process, the application will be evaluated under the Second Award Process.
7. The submission must comprise five paper copies of the application, including supporting documentation. Furthermore, electronic copies of the application must be provided.

8. The submitted material must include a completed Declaration for the Submission of an Application as presented in Appendix 2 of the Tender Document.

### ***16.2 Minimum Requirements***

Applications must meet the Minimum requirements set out in section 7 of this Tender Document.

Only those applications that:

- Meet the criteria of the admittance test; and
- fulfil the minimum requirements at the time of submission, or
- fulfil the minimum requirements within one week of the notification from CICRA where such a period is granted to rectify a non-compliant application

will be considered and deemed eligible to participate in the comparative evaluation process

### ***16.3 Comparative Evaluation***

All eligible applicants will be evaluated against the criteria set out in section 8 regardless of the number of applicants.

The evaluation will be based on the eligible applicant submissions in relation to a set of predefined evaluation criteria for the award of LTE spectrum, as described in section 8.

The award of LTE spectrum will take place under two separate processes. The First Award Process comprises a different weighting system to that of the Second Award Process, but both Award Processes will have the same criteria categories on which applications will be assessed.

The purpose of the comparative evaluation (the detailed evaluation of the applications) for the First Award process is to identify the two highest scoring applicants based on the evaluation results. In this context the received applications are tested against the evaluation criteria and the applicants identified as the two highest scoring applicants in this First Award Process may receive an offer of the designated spectrum lots available for the award.

Furthermore, the comparative evaluations of the applications as part of the First Award Process will comprise both quantitative and qualitative assessments. The applicants will be subjected to a scoring system for each criterion comprising marks according to a five point scale, 0 being the lowest mark and 4 being the highest mark. An applicant's score for each criterion will be weighted and then summed. Guidelines for the calculation of scores are presented below.



Once the First Award Process has identified the two highest scoring applicants, all parties will be informed of the outcome and the Second Award Process will commence.

Where applications clearly indicated they were made either under the Second Award Process, or both and, in the latter case, if unsuccessful in the First Award Process, applications will be evaluated under the Second Award Process. Should there be more than two applicants those applications for the Second Award Process will be (re)scored using the altered weightings indicated for this process under each evaluation criterion.

If there are more than two applicants for the Second Award Process, the evaluation process will follow the same procedure as set out for the First Award Process, but as indicated, with a different set of weights applied to the evaluation categories. If two or fewer applicants remain and they have satisfied the Minimum Requirements then a direct award will be made to the remaining applicants. All participants in the Second Award Process will be informed of the outcome.

Where an award is offered to the successful applicants CICRA intends to incorporate conditions into the licence based on the commitments contained in the applicant's application. Without prejudice to the generality of the foregoing, CICRA may refuse to grant a licence in circumstances where an award has been offered to an applicant but where the applicant does not accept the terms and conditions of the licence, including the incorporation into that licence of any binding commitment contained in the applicant's application.

The results of the competition will be communicated to each applicant in the form of a summary report comprising the result of the evaluation with respect to each applicant's individual application (however no comparative analysis or comparative reasons for success or rejection will be given).

### ***17. Announcement of the Successful Applicants***

CICRA intends to announce the successful applicants no later than [date]. All applicants will be notified in writing of the results of the competition.

### ***18. Award of Licence***

It is the intention of CICRA to conclude the award process with the successful applicants as quickly as possible after the announcement of the results of the evaluation process. CICRA intends to make the recommendations to Ofcom by [date]. Details of the successful applications and the relevant licence(s) will be made publicly available from CICRA's website, subject to the protection of any information deemed to be confidential by CICRA.

## **19. Overview Timetable**

An overview of key milestone in the course of the competition process is provided below:

<b>Date</b>	<b>Event</b>
By end of Q1 2014	Launch of competition – Tender document is available
TBA	Deadline for submission of questions on the Tender Document
TBA	Deadline for submission of applications
TBA	Results of First Award Process announced and Recommendations made to Ofcom
TBA	Results of Second Award Process and Recommendations made to Ofcom

CICRA reserves the right to alter the above timetable.

## **20. Structure, Content, Size and Language of the Applications**

The structure, content, size and language of the application shall follow the requirements prescribed in this section. Applicants that have indicated they wish to apply for LTE spectrum under both the First Award Process and the Second Award Process may submit a separate application for each Award Process, or a single application for both. Where application is made for the First Award Process and is one of the two top ranked scored they will not be considered for the Second Award Process. Where the applicant is unsuccessful for the First Award Process their application will then be considered under the Second Award Process if they have so indicated.

### **20.1 Structure and Content**

The various elements of the application shall be inserted in separate parts referring to the headings indicated below:

- Part 1: Executive summary
- Part 2: General information on the applicant and the application
- Part 3: Competence and experience of the applicant

- Part 4: Business Plan
- Part 5: Commercial aspects
- Part 6: Technical aspects for LTE
- Part 7: Financial aspects
- Part 8: Performance guarantees for LTE
- Part 9: Other aspects and supplementary information
- Part 10: Mandatory tables

The application shall follow the structure and order stated above. Where relevant, the applicant shall complete all mandatory table and text boxes. These and all other submissions will be subjected to the comparative evaluation and may be reflected in the conditions of the relevant licence, in the event that the applicant is successful.

The application shall include an electronic submission with the mandatory tables set as out in Appendix 3 with all the mandatory tables completed. The electronic submission with the relevant templates will be provided to all registered applicants for the Tender Document. The data structure on this electronic submission must not be altered, nor may the order of the tables be altered.

### ***20.2 Size***

Each application for a licence shall not exceed 100 standard pages (A4 format) of 2,000 keystrokes, excluding annexes, supplementary information and coverage maps. For illustration of the network architecture and coverage maps, a paper format larger than A4 may be used. Material beyond this will not be included in the evaluation.

### ***20.3 Language***

The application, any questions asked and the replies shall be written in English, which will be the binding language.

## ***21. Additional considerations for applicants***

CICRA reserves the right not to award the available licence and/or reserves the right to supplement, suspend, terminate or otherwise alter this competition. If there are factors which in the opinion of CICRA prevent a full and informed comparison, including but not limited to lack of suitable applications or similarities in application

which cannot be explained as a coincidence, CICRA reserves the right to cancel the competition. If there is evidence of collusion, CICRA will take appropriate action.

Granting of a Licence, if it is required, is dependant upon the successful applicant's incorporation under the Guernsey and/or Jersey Law. There is no requirement for applicant to be incorporated in either jurisdiction at the time of submission of the application.

CICRA does not accept any liability for any expenses arising in connection with the preparation and submission of the application, nor the expenses arising in connection with all prior or later enquiries in relation to this competition.

Although every care has been taken in preparing the Tender Document, no representations, warranty or undertaking, expressed or implied, in respect of any error or misstatement, is or will be made or given, and no responsibility or liability will be accepted by CICRA or by any of his officers, employees, servants, agents or advisers as to the accuracy or completeness of this document or any other written or oral information made available to any interested party or its advisers concerning this document, and any liability howsoever arising (including in respect of this tender process) is expressly disclaimed. No information contained in this document shall form the basis for any warranty or representation by or term of any contract with CICRA. CICRA makes no representations and warranties in respect of the viability of the market or accuracy of the contents of this tender Documentation so that applicants and potential applicant are responsible for their own verification and due diligence.

### **Appendices**

- Appendix 1: Certificate of Registration
- Appendix 2: Declaration for the submission on an application
- Appendix 3: Electronic versions - Content and structure requirements for an application

## Annex B - Letter from the States of Jersey and States of Guernsey



Economic Development Department



Andrew Riseley  
Chief Executive  
CICRA  
2<sup>nd</sup> Floor  
Salisbury House  
Union Street  
St Helier  
JE2 3RF

01 May 2013

Dear Andrew

### **Award of 800 MHz and 2.6 GHz spectrum**

As you will recall, in December 2011 the Economic Development Department in Jersey and the Commerce and Employment Department Board in Guernsey formally requested the JCRA and OUR to run the process of spectrum allocation in the 800MHz and 2.6GHz bands on behalf of our departments.

Following this request, the Jersey Competition Regulatory Authority (JCRA) and the Office of Utility Regulation (OUR) initiated a joint consultation on the allocation of radio spectrum to telecommunications operators in the Channel Islands.

This consultation was deferred on request from our Departments. The deferral was to allow us to give more thought to the issues relating to the use of the available spectrum and the policies that should be followed in its allocation. To assist with this we commissioned the consultants Analysys Mason to conduct an assessment of the spectrum requirements for fourth-generation (4G) services in the Channel Islands and to advise on the appropriate framework for 4G spectrum award.

The Commerce and Employment Department Board and the Department of Economic Development have now given matters relating to spectrum allocation for 4G services further consideration and have reached an agreed policy position. Key elements of this position are that:

- We expect the roll-out of 4G services will deliver benefits to mobile consumers in the Channel Islands, as well as to the economies of Guernsey and Jersey.
- We are agreed that it will be beneficial to operators and consumers if spectrum used for 4G services in the Channel Islands is aligned with that of the UK and France (800MHz, 1800MHz and 2.6GHz).
- We expect that the benefits of this spectrum should be sufficient to allow licensees to meet the cost of the roll-out of services including mitigating potential interference to digital terrestrial television (DTT) and air traffic control (ATC) radar.

1 of 2

- We also consider it is appropriate to review opportunities to re-organise existing 900MHz and 1800MHz assignments. We recognise that re-organisation may be more difficult in the 900MHz band, given the more limited amount of bandwidth available. Hence consideration should be given to the best approach for dealing with sub 1GHz spectrum.

As a separate matter, in recognition of the fact that radio spectrum is a limited Island resource which is utilised for commercial gain by the mobile network operators, Guernsey's Commerce and Employment Department Board is considering the introduction of an annual charge on spectrum usage. This charge would be in the order of 5% of operators' revenue arising from all activities which utilise spectrum for telecommunications purposes in Guernsey – including, but not limited to, 2G, 3G, 4G and fixed wireless access services. The Commerce and Employment Department is in the process of consulting with the industry on this specific matter and will advise CICRA of the Board's final decision in due course.

The Economic Development Department of Jersey is not seeking to raise revenue above and beyond that necessary to offset costs and to mitigate any potential interference. Its primary policy goal is to ensure the island can take full advantage of the benefits offered by 4G.

Therefore, we are now writing formally to ask CICRA to recommence the process of spectrum allocation on behalf of our Departments. In doing so we have in mind the respective, but broadly similar, duties of both the Minister/States and the Authority/Director General under:

- a) Article 7 of the Telecommunications (Jersey) Law 2002; and
- b) section 2 of The Regulation of Utilities (Bailiwick of Guernsey) Law, 2001

to further, among other things, the interests of consumers and the economic well-being of each Island.

As part of this process CICRA should consider approaches for mitigating interference to DTT and ATC radar. CICRA should also take into account, as appropriate, the report delivered by Analysis Mason.

We look forward to continuing to work with you in this important and valuable area.

Yours sincerely



**Senator Alan Maclean  
Minister for Economic Development  
States of Jersey**



**Deputy Kevin Stewart  
Minister, Commerce and Employment  
Department  
States of Guernsey**



## **Annex D – Summary of responses to CICRA July consultation**

Respondents were Sure; Airtel; Clear Mobitel (CM); JT; a telecommunication consultant who also is Clear Mobitel's company secretary (TC); Guernsey Airport (GA) and Guernsey Water (GW).

### **A. CICRA's five objectives, including whether to deal with Jersey and Guernsey as a single entity**

Respondents commented as follows:

- Sure supports the principle that there should be a pan-Channel approach for spectrum allocation
- Airtel thought it was important that there should be a 'use it or lose it' clause in spectrum licences
- CM The regulator should be guided by the main principle of promoting active competition growth.
- JT agrees that CICRA should seek to align spectrum between Jersey and Guernsey.
- TC: Legislation differs between the Islands and it may not be possible to use the same allocation process; also, the licensing method is different in Guernsey (technology-specific) from that in Jersey; in any case, competition should be the overriding objective. CICRA need not make allocations simultaneously between the two islands even if there is considerable benefit in coordinating allocations between the two islands.
- TC: Jersey consumers are at the mercy of JT, the only wholesale provider of broadband over its fixed network, and pay for one of the most costly broadband services in Europe. Clear Mobitel should have an opportunity to introduce competitive services as soon as practicable.
- GA very much supports CICRA's fifth objective – to act consistently with Ofcom's duties – as it provides it with re-assurance concerning interference since Ofcom is the body which governs and releases frequencies for use at the Airport. Any 4G roll-out must be conducted under the guidance of Ofcom's 'Notice of coordination procedure required under spectrum access licences for the 2.6 GHz band'.
- GW: In its response, Guernsey Water drew CICRA's attention to the fact that it is replacing broadband with radio communications to operate its essential services (telemetry called SCADA). It has Ofcom's agreement to connect its



100 Guernsey sites in this way but CICRA needs to be aware that its ability to communicate effectively is crucial.

#### **CICRA's assessment and conclusion**

CICRA is pleased with the support it is receiving for the set of pan-Channel Island objectives it proposed and, in particular, for its policy objective of conducting a joint process in both Jersey and Guernsey. It intends to abide fully by the differing legislation applicable in each island and believes that a joint approach can be consistent with it.

It notes the legitimate concerns expressed by Guernsey Airport and Guernsey Water, which are, no doubt, also experienced by similar organisations in Jersey. For the avoidance of doubt, Ofcom has complete responsibility – and CICRA has none – concerning the management of spectrum and interferences associated with its use except for the responsibility put on CICRA by the States of Jersey and Guernsey, namely that of facilitating the collection of a levy to fund airport radar filters and to mitigate interferences to DTT. Any technical prescription concerning the building of networks using any spectrum issued by Ofcom, such as the siting of antennae, their power, direction, etc. are entirely Ofcom's responsibility.

#### **B. Impact of JCRA 2009 recommendation – commercial decisions, technological developments, benefit of pan-Channel Island approach and scale of available 2.6 GHz spectrum**

Respondents commented as follows:

- Sure: The recommendation of allocation 2.6 GHz spectrum to Clear Mobitel should not be allowed to stand. The current consultation is the opportunity to uphold the principle of fairness cited by the Royal Court and re-start the process of allocating the 2.6 GHz spectrum and to take account of technology developments since 2009.
- Airtel thought the recommendation to allocate 2.6 GHz spectrum to Clear Mobitel should not stand in the way of the allocation of the rest of the spectrum or spectrum allocation generally.
- CM: CICRA consultation continues the process whereby the JCRA made a recommendation to allocate some 2.6 GHz spectrum to CM in 2009. In 2009, the Jersey allocation of 2.6 GHz spectrum was made after public consultation and provided commercially usable block to the operators with genuine interest.
- CM started investing despite not having an Ofcom licence and, when this was delayed because of technical issues, CM worked with Ofcom on testing and

investigating interferences with radars. Despite Ofcom's concerns, CM believes the allocation process was fair, transparent and competitive.

- CM: The JCRA's decision to withdraw its recommendation came as a surprise. CM challenged the JCRA and the court decided in CM's favour, determining that the JCRA should engage with CM in good faith and negotiate with CM under direction from the Court. CM has been waiting for the JCRA to engage with it and it hopes that due legal process shall now be carried out. Now that CICRA is proposing further distribution of spectrum, CM will engage in bone fide discussions regarding its re-instated 2.6 GHz spectrum allocation.
- CM: In view of the fact that there should be sufficient sub-1 GHz spectrum (including 900 MHz) and Ofcom has made 1800 technologically-neutral, CM considers its 2.6 GHz allocation will not have a detrimental effect on existing or future allocations.
- JT: Since a recommendation was made for an allocation of 2.6 GHz spectrum to Clear Mobitel, technology and its availability have changed. CICRA needs to consider spectrum requirements of other operators also.
- TC: The JCRA allocation of 2.6 GHz spectrum to Clear Mobitel in 2009 was made following a public consultation and was unilaterally withdrawn by the JCRA. The spectrum allocated in 2009 could not be used because of technical problems identified by Ofcom, namely potential interferences with the legacy airport radar system using 2.7 GHz. CM appears to be the only operator that has made decisions on the basis of the 2009 allocations. However, the 2.6 GHz spectrum has limited utility and little consequence for the deployment of wireless broadband in Jersey.

#### **CICRA's assessment and conclusion**

CICRA intends to be fully compliant with the judgement of the Royal Court. The purpose of this and the previous consultations, in particular, is to identify the public interest in the allocation of 2.6 GHz spectrum and determine whether it is consistent with the 2009 recommendation of an allocation to Clear Mobitel. The concept of 'public interest' was used by the Royal Court to open up the possibility for the JCRA that the recommendation could be withdrawn after due process, if it was in the public interest to do so.

CICRA does not wish to pre-judge the expressions of interest for the 2.6 GHz spectrum it expects it will be receiving early in 2014. It notes that they may be different from those received by the JCRA in 2009, with the possible result that the best use of this spectrum in the interest of the Channel Islands requires a different allocation from that recommended for Clear Mobitel in 2009. Reasons for change include:

- Uncertainty as to the compatibility between telecommunication use in the 2.6 GHz band and radar use in the 2.7 GHz have been lifted
- Standards for telecommunication in the 2.6 GHz band are now well established
- Manufacturers have, therefore, developed a range of equipment consistent with these standards in the 2.6 GHz band.
- There is now wide-spread experience of telecommunication activity in the 2.6 GHz band and of building various networks relying on this band.

CICRA believes that the allocation process it is proposing will result in a set of recommendations on spectrum allocation that are in the public interest. This result will be the basis on which it will engage in good faith with Clear Mobitel if it needs to maintain, revise or withdraw the 2009 recommendation in keeping with the public interest.

**C. Incumbents' current spectrum holdings, award to provide caps on new and existing holdings including sub-1 GHz cap, de-fragmenting and rationalisation of existing holdings**

Respondents commented as follows:

- Sure: CICRA should work to remove inequalities in spectrum holding; equal spectrum distributions would promote a level playing field between mobile operators and support sustainable competition.
- Sure: CICRA should review allocations in the 900 MHz band; Sure would be prepared to give some of its 900 MHz spectrum in exchange for 800 MHz spectrum if JT was put under a similar obligation.
- Sure does not agree there should be a cap on sub-1 GHz spectrum as the 900 MHz band is not suitable for 4G (lack of equipment). It considers this is too 'simplistic' an approach.
- Sure: There should be technology neutrality for all relevant spectrum and general harmonisation with spectrum uses in other jurisdictions.
- Airtel strongly supported CICRA's objective of aligning and de-fragmenting spectrum within and between Jersey and Guernsey; alignment between islands would provide economies of scale that would lower costs to the benefit of customers.
- Airtel: It was a prime importance that CICRA should set a cap for sub-1 GHz spectrum and aim to an equitable distribution of spectrum between all three operators; the cap should be set at 2 x 20 MHz for 800 and 900 MHz together

- Airtel: A cap would make it possible for all operators to migrate all their UMTS services to 900 MHz; this would deliver spectral efficiency and better coverage [as presently UMTS is in 2100 band]
- Airtel: Allocations should be for minimum block of 5 MHz (whatever the spectrum band) with CICRA raising increasing charges for additional spectrum
- CM: Incumbent operators have large allocations of sub-1 GHz and 1800 spectrum, which give them a significant advantage, particularly if these allocations became technology-neutral, as intended by Ofcom. CM therefore supports the principle of capping spectrum, particularly sub 1 GHz but not only this spectrum. Capping is essential to promote effective competition and to support innovation. Some operators are not deploying services on all the spectrum they have.
- CM: A considerable amount of sub-1 GHz spectrum has already been allocated to former incumbent operators. The new sub-1 GHz spectrum should be distributed to operators prepared to invest in the Channel Islands and in such a way as to balance sub-1 GHz spectrum between operators.
- JT: Current 900 MHz JT licences allow the provision of GSM services only (2G). This spectrum has been liberalised for 3G use in other countries but is unlikely to be used for LTE. Incumbent operators in Jersey and Guernsey should be allowed to recoup their GSM investment and this spectrum should not be considered as part of the LTE process.
- JT: 2G (GSM) services contribute to a significant part of JT's income and JT has no plan to close its GSM network down. GSM services use up all the 900 and 1800 MHz spectrum JT is allocated now and JT does not think that any of the existing allocation could be re-allocated to LTE.
- JT: The total spectrum available for mobile services in all five frequencies (800, 900, 1800, 2100 and 2600 MHz) is 2 x 270 MHz, not counting TDD use. Around 2/3 of this frequency has not yet been allocated and should be available now for allocation.
- JT believes spectrum caps may be relevant when spectrum is awarded by auction but not when a regulator makes an allocation. A cap might limit a regulator's options. Also, as 800 and 900 spectrum bands are not substitutable, JT does not see the need for a sub-1 GHz spectrum cap. Moreover, if a sub-1 GHz was in place, JT would be disadvantaged as a LTE supplier because of the amount of 900 spectrum it needs for GSM services.
- TC: As much of the spectrum available in the 900 and 1800 MHz bands is held by a single operator, it would be totally disproportionate to permit technology neutrality on this network and capping the spectrum available to operators is a fair way to distribute this scarce resource. Capping, however,

could be challenged through the courts by litigious operators. It would be in the best interest of customers to rationalize all spectrum across the Islands.

#### **CICRA's assessment and conclusion**

The allocation of the new 800 MHz and 2.6 GHz spectrum will not fulfil its potential of promoting vibrant innovative telecommunication markets if the allocation of existing spectrum stays materially un-balanced. The benefits of competition – innovation, responsiveness to customer needs, appropriate quality, efficient and low costs – are unlikely to arise if, overall, spectrum allocation stays biased towards the historical incumbents.

The application of one or several caps is the method that leaves operators, including the incumbents, with the maximum choice over the portfolio of spectrum with which they can operate, thereby promoting efficiency in the use of spectrum, which is an increasingly scarce resource.

CICRA notes that, of the two incumbents, Sure views the prospect of a sub-1 GHz cap with equanimity. CICRA believes that, if Sure can optimise its network with a sub-1 GHz cap, so can JT. A sub-1 GHz cap is also the approach used by Ofcom.

CICRA also notes that, even with a sub-1 GHz cap, JT and Sure will retain the lion's share of the 900 MHz spectrum. Moreover, the rationalisation of the 1800 MHz spectrum will make additional spectrum available for which JT and Sure may apply if the need arises.

#### **D. Use of incumbents' fixed networks**

Respondents commented as follows:

- CM: Wireless broadband relies on backhaul provided by incumbent operators, particularly in rural areas, and it is too expensive. This is also of concern for new entrants.

#### **CICRA's assessment and conclusion**

CICRA has a regulatory framework that can give access to the networks of other operators in certain circumstances, for operators of spectrum based networks. These agreements may promote investment, by either the operators providing or requiring access.

#### **E. Environmental concerns regarding masts influence and their on CICRA's decisions**

Respondents commented as follows:

- Sure: Mast sharing imposes additional burdens on the operator that first builds a mast if it has to be designed to cater for more than one user. Rural masts, in particular, are less likely to be acceptable if they are shared as sharing causes them to be bigger and more intrusive.
- Sure: More cells and masts also require more support infrastructure (power, cable...)
- Airtel: The environmental impact of masts should be minimised; by not increasing the number of operators beyond three, CICRA would help achieve environmental protection; as current operators could use their existing masts, the speed of implementation of 4G networks would be accelerated if spectrum was allocated to the them only. But Airtel also noted that, for full effectiveness, LTE will require larger and more numerous antennae than now.
- CM: Local authorities have already determined acceptable mast designs, which could also be used for LTE. Operators will need to work closely with the islands' planning authorities to minimize the visual impact of new masts. Moreover, recent research indicates that the health hazards caused by mast are less than originally thought.
- JT: Existing mast sites should be used for LTE deployment and the number of new mast sites should be limited. CICRA should therefore consider the environmental impact of a new operator. As there is a trade-off between the number of masts and the amount of spectrum available, JT needs a lot of spectrum so as to provide a good service without increasing the number of its masts.
- TC: In Jersey, where 3G networks were deployed by means of relatively short mobile transceiver masts, 4G network are likely to be developed in a similar way. This may favour existing operators, which can upgrade their sites. This may also result in differences between the impact of environmental considerations in Jersey and Guernsey.

#### **CICRA's assessment and conclusion**

It would be extremely prescriptive and it would impose a heavy regulatory burden on telecommunication operators to determine, ex-ante, what an acceptable environmental impact could be. This would severely constrain certain operators, and would need strong and clearly evidenced justification to proceed on such a basis.

CICRA has therefore decided not to impose minimum environmental standards, which are to be designed and implemented by the relevant environmental departments in the States of Jersey and Guernsey. Instead, the environmental effect of new antennae and masts, and how operators can mitigate or eliminate it, will be one of the criteria used by CICRA to rank applications for the new

spectrum. In this way, the environmental impact of an operator's proposal is not determinant but is recognized.

#### **F. Value of auction approach and appropriate competitive selection process**

Respondents commented as follows:

- Sure: Spectrum should not be allocated by means of an auction, nor by means of a comparative selection process, but by means of a direct award. A direct award is consistent with allocating spectrum to four operators as there is enough spectrum for four.
- Sure: CICRA, while making a direct award, could impose performance constraints on operators by including them in licence conditions (as has been done in the IoM, who are proceeding ahead of the Channel Islands).
- Airtel: Allocation of spectrum in the Channel Islands should not be by means of auctions
- CM: An allocation of spectrum by means of auction would have costs that far outweigh likely revenue. A beauty parade is an alternative and CM would be happy to provide further business plans as a basis for selection. A beauty parade was the method used by the JCRA in 2009.
- JT: Spectrum should be allocated by means of a beauty parade, which has worked well in the past, not an auction. Operators need some certainty as to what frequencies are and will become available so that they can plan their investments. Spectrum should be allocated to operators with a viable business case and intents to be long-term market participants in the Channel Islands.

#### **CICRA's assessment and conclusion**

Section 3 of CICRA's consultation document considers this key issue and matters raised.

#### **G. Encouragement of a fourth operator**

Respondents commented as follows:

- Sure does not believe it is necessary to encourage a fourth mobile operator as the market is already very competitive and a fourth operator, by reducing the amount of spectrum available to each operator, could risk reducing the quality of service available to mobile customers and have an adverse environmental impact. CICRA has a responsibility to ensure that competition is sustainable.
- Airtel: There should not be more than three mobile service providers – the Channel Island markets are too small – and the 800 MHz bands, with their better propagation characteristics, should be reserved for them. With four

operators, there is a risk that the spectrum available to each would be too fragmented.

- CM: As licences were issued to four operators in Jersey in 2005 (including Marathon), CM believes that the situation still warrants the existence of a fourth operator absent any activity by Marathon. CICRA should distribute spectrum so as to allow for a fourth operator.
- JT believes there is a limit to the number of operators in a small market like the Channel Islands; there should not be more than three. It sees a trade-off between investment, which are rather inflexible, and competition.
- TC: The Channel Islands are spectrum-rich, the population served is much smaller than in the UK and it should therefore be possible to serve possibly more operators than in other jurisdictions
- GA: Risks of interference increase with the number of operators and Guernsey Airport does not agree that CICRA should seek to encourage a fourth operator.
- GA is concerned that operators may compete for passengers on arrival in Guernsey and this competition may increase the risk of interference. It wishes that CICRA consider granting a single exclusive 4G licence at the airport, which could limit signals and the need to control them, as well as giving a positive commercial return to the airport.

#### **CICRA's assessment and conclusion**

CICRA has noted that Ofcom has deliberately chosen to reserve a bundle of spectrum so as to ensure that a credible fourth operator could compete in UK markets. However, CICRA has determined that it should not be prescriptive in this matter. It has therefore not mandated that there should be a fourth operator.

As indicative demand exceeds availability of the 800 MHz spectrum, on the basis of informal expressions of interest received following CICRA's earlier consultation, a selection procedure has to be put in place before CICRA can recommend an allocation to Ofcom. The cost of a selection procedure has to be incurred whether the outcome is that three or four operators receive some of the new spectrum.

CICRA has decided to be as non-prescriptive as possible concerning the number of operators that should receive the new spectrum.



## **H. Impact of a spectrum charge by the States of Guernsey**

Respondents commented as follows:

- Sure is concerned by the proposal to levy a charge in Guernsey, which will be counter to the objective of protecting consumers' interests, particularly as radio spectrum is not a scarce resource in the Channel Islands and the charge would have to be passed to mobile customers.
- Airtel: Additional charges like the levy anticipated in Guernsey or payments for airport radar filters in Jersey or payments for DTT mitigation defeat the objective of providing new improved services in the Channel Islands
- CM: The charge proposed by the States of Guernsey is a matter of fiscal policy that commercial operators must consider in their business plans. CM does not believe this charge should affect the way CICRA runs its spectrum allocation process.

### **CICRA's assessment and conclusion**

CICRA notes the decision in principle of the Board of the Commerce and Employment Department. It believes that competitive pressures among operators with spectrum-based networks will ensure that the amount of the charge that is passed to customers is minimised.

## **I. Respective roles of mobile broadband and fixed wireless services**

Respondents commented as follows:

- Sure believes that 4G/LTE can play a key role in bringing wireless competition to fixed broadband services, as well as providing mobile broadband and high speed data services to inbound roamers
- Airtel: Mobile and fixed wireless technologies are converging. With sufficient capacity, LTE can compete with fixed services. For wireless broadband services, Airtel believes it is prudent to focus on a single alternative technology.
- CM: CICRA should distribute spectrum so as to allow for a fourth operator. This will allow competition to the virtual monopoly by incumbents on fixed line products, including the provision of mobile broadband services and fixed wireless services. CM believes it can be a firm competitor to fixed technologies.
- JT strongly supports technology neutrality. Fixed and mobile networks are complementary to a large extent and provide a choice to customers, even if the substitutability of mobile for fixed may be less when it comes to broadband than it has been for calls. JT does not think there is a connection with local loop issues.

- TC: Wireless broadband can be developed as fixed and mobile services; the WiMax technology has been deployed since 2006 and is available and proven. Moreover, it can be co-located on the 2G and 3G masts.

#### **CICRA's assessment and conclusion**

The diversity of responses indicate that the new spectrum is likely to encourage innovation and diversity in the provision of spectrum-based services.

#### **J. Joint or separate award of 800 MHz and 2.6 GHz spectrum; if joint, desirable combination of spectrum**

Respondents commented as follows:

- Sure: In keeping with harmonisation elsewhere, CICRA should also make the 1800 available for 4G use as it supports the greatest number of LTE smartphones – band allocations need to be reviewed to de-fragment them otherwise JT would have an unfair advantage. In this sense, Sure is prepared to support a cap on certain spectrum allocations.
- Airtel: The 2.6 GHz spectrum should be reserved for the creation of small cells where a 4G network built with larger cells is congested.
- CM supports the approach of allocating spectrum simultaneously in both islands. It urges CICRA to release spectrum as technology-neutral. It also suggests that CICRA should offer a similar breakdown of 'packages' of spectrum as Ofcom has done. But it would be counter-productive to offer bundles of 800 MHz and 2.6 GHz spectrum together. There should be packages in each spectrum band.
- JT: CICRA should consider usage and availability of all these bands when determining an allocation of 800 MHz and 2.6 GHz bands. It should ensure the allocation is balanced between high and low frequencies. Blocks of 5 MHz are too small to allow best use of LTE frequencies; paired block of 20 MHz (= 2 x 20 MHz) permit maximum data speeds with LTE. 2 x 20 MHz should be minimum assignment with provision for 2 x 40 MHz in the next 3-5 years. If blocks are very far from each other, this causes significant losses in performance.

#### **CICRA's assessment and conclusion**

The approach set out in this consultation assesses these issues and CICRA's proposals.

#### **K. Trading in spectrum licences**

Respondents commented as follows:

- Sure is not opposed to spectrum licence trading but has a number of concerns, namely that unsustainable entry should not be encouraged and trading should not lead to unbalanced spectrum holdings.
- Airtel: Licence trading should be allowed but subject to regulatory clearance and with safeguards to ensure that trading did not result in an unbalanced allocation of spectrum that would distort competition
- CM does not believe that spectrum trading would stimulate the market as it is incumbents who have spare spectrum in ranges that are useful for LTE and it is likely incumbents would not wish to trade since the cost of holding spare spectrum is less than the benefit of keeping competitors out of the market. CM believes spectrum caps are more likely to be effective.
- JT is in favour of 'use it or lose it' conditions in spectrum licences, perhaps with a 24 month limit. JT is not in favour of spectrum trading as it could create windfall profits. A 'use or lose it' clause would make spectrum trading unnecessary.
- TC: CICRA should ensure that operators use the spectrum they receive as soon as possible and publish guidelines on expected speed of use

#### **CICRA's assessment and conclusion**

The legal framework requires revision if spectrum trading is to come into effect in the Channel islands. CICRA is pursuing this area with the relevant legal departments and regulatory bodies. Given the timescales involved for such a process it appears to CICRA that spectrum caps and imposing 'use it or lose it' obligations are the most appropriate in the circumstances.

#### **L. Should the cost of Jersey radar filters be paid by Jersey operators only and which spectrum bands should make holder liable to pay**

Respondents commented as follows:

- Sure: Concerning the mitigation of interferences to Jersey radars, Sure believes that French activity may also cause problems and, therefore, it should not be the sole responsibility of Jersey mobile operators to pay for radar filters.
- Airtel: Additional charges like the levy anticipated in Guernsey or payments for airport radar filters in Jersey or payments for DTT mitigation defeat the objective of providing new improved services in the Channel Islands
- CM believes the issue of interference with radars is now resolved and it can use its 2.6 GHz allocation in Jersey to start service as soon as possible, even if technology has moved on and many operators prefer to use the 800 MHz band. There is likely to be some interference from French activities in Normandy and it is up to the airport to protect their systems.

- JT: On possible interferences, JT believes that telecom operators should not pay for deficiencies in radar equipment and knows of no other jurisdiction where they would. It thinks there is no benefit in modelling the impact of 800 MHz use on DTT or surveying the extent to which DTT is used. Mitigation of interferences could be dealt with by forming a team of telecom operators or by commissioning an external party, such as a local TV aerial company, as was done for interferences caused by the 900 MHz spectrum.
- TC: Since the potential for telecommunication use of the 2.6 GHz was known as early as 2009, it is surprising that the Jersey radars were not upgraded when they were replaced since then. As there is a chance of interference arising from activity in France in any case, ACS sees no justifiable reason for compelling local telecommunication operators to fund a radar upgrade. But, if a political decision is taken that they should do so, it should affect the operators using 2.6 GHz spectrum only.
- TC: Issues of interference between France and the Channel Islands should be resolved by the Memoranda of Understanding that Ofcom negotiates with France.
- GA: The proposed spectrum allocation is in a band currently used by Aviation Radars in Guernsey and Jersey. New radars are being commissioned but the old ones will not be decommissioned, as an estimate, before June 2014. Even with new radars, Guernsey Airport understands that UK airfields are imposing exclusion zones to add a further layer of protection from interference.
- GA: It is imperative that the 10 MHz band at the top end of the 2.6 GHz spectrum remains as a guard band and is never used.
- GA: The location and distribution of masts will have to be considered carefully to take into account Radar Safeguarding as well as general Aerodrome Safeguarding rules.
- GA: The costs of upgrading Jersey Airport radars should be borne by Jersey telecommunication operators only, and it should be borne by those using the 2.6 GHz spectrum.

#### **M. Approach to potential DTT interference**

Respondents commented as follows:

- Sure: Interferences to DTT services must be addressed by the telecommunication operators as and when they arise. The costs of filters should be shared between spectrum holders if spectrum is evenly distributed in the 800 MHz band.
- Airtel: Additional charges like the levy anticipated in Guernsey or payments for airport radar filters in Jersey or payments for DTT mitigation defeat the objective of providing new improved services in the Channel Islands

- CM: Concerning interference with DTT, CM believes it should be dealt with when it happens and it is appropriate that holders of 800 MHz spectrum should fund the required filters.
- JT: On possible interferences, JT believes that telecom operators should not pay for deficiencies in radar equipment and knows of no other jurisdiction where they would. It thinks there is no benefit in modelling the impact of 800 MHz use on DTT or surveying the extent to which DTT is used. Mitigation of interferences could be dealt with by forming a team of telecom operators or by commissioning an external party, such as a local TV aerial company, as was done for interferences caused by the 900 MHz spectrum.
- TC: Operators using 800 MHz spectrum should contribute to a fund that would be used to resolve problems of interference with DTT but it is not clear who should deal with interference, noting that expertise for investigation is with the BBC.

#### **CICRA's assessment and conclusion**

Interference is a significant issue that involves several key stakeholders. The proposals in this consultation reflect CICRA's understanding of the present position. This is however subject to agreement with the relevant States departments as well as other regulatory authorities with jurisdiction in this area.