



**JT's Response to CICRA Pan-Channel Island Consultation
on 800 MHz and 2.6 GHz Spectrum Awards**

Non – Confidential Response

04 February 2014

1 INTRODUCTION

This response is provided by JT (Jersey) Limited and JT (Guernsey) Limited referred to jointly as JT. JT welcomes the opportunity to provide its views on this very important topic of LTE spectrum.

JT responded at length to CICRA's July 2013 consultation and has had several discussions with CICRA regarding the 4G spectrum award process. This response is provided as a follow on to JT's previous consultation response and provides JT's comments and views on the consultation questions.

1.1 ANSWERS TO CONSULTATION QUESTIONS

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

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

- 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.

JT has no further comments on these objectives and believe that they are still valid. JT agrees with CICRA's 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. While we appreciate that the above objectives are in part driven by a mesh of legal requirements in Jersey and Guernsey, it remains the case that statute takes precedence.

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

The consultation states:-

"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.

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 to be made available for the Second Stage Awards.”

The consultation includes the footnote:- “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.”

JT disagrees with this statement. 2.6 GHz does not compensate for lack of 800 MHz spectrum and this is evident from what has happened in the UK. In the example of EE in the UK, EE have 45 MHz of 1800 spectrum (which provides much superior coverage than 2.6GHz) and 35 MHz of 2.6 GHz spectrum for their hot spot deployment. The 45 MHz of 1800 spectrum allows EE to deploy LTE Advanced at 300 Mb/s (which requires at least two contiguous blocks of 20 MHz). This option would not be possible with Bundle A which would therefore compromise the speed of the service that can be offered. Bundle B would allow an operator to run LTE advanced at 300 Mb/s if the 1800 MHz spectrum was resolved but would still leave the operator with a compromised 800MHz allocation.

UK Spectrum Awards

UK MOBILE	4G-800 MHz	900 MHz	1800 MHz	1900 MHz	2100 MHz	2600 MHz	2600 MHz
	FDD	FDD	FDD	TDD	FDD	TDD	FDD
	2 x	2 x	2 x	1 x	2 x	1 x	2 x
Vodafone	10	17.2	5.8	0	15	25	20
Telefonica (O2)	10	17.2	5.8	5	10	0	0
EE (Orange + T-Mobile)	5	0	45	10	20	0	35
Hutchison 3G UK "3"	5	0	15	5	15	0	0
Niche (BT)	0	0	0	0	0	20	15

CICRA states that the two stage approach “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 market place through overly prescription outcomes.”

It however does not allow existing players to gain access to industry viewed minimum spectrum holdings of 2 x 10 800MHz and 2 x 20 2.6GHz as CICRA has deemed that 4 lots of spectrum should be available for award therefore determining that there is room for a 4th player in the market. This opinion is not shared by the existing mobile operators who are challenged by the existing market conditions and is only supported by Clear Mobitel.

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

In JT's opinion, the spectrum proposals have been devised with the aim of bringing in a fourth LTE operator which we do not believe to be in the best interests of the Channel Islands or its mobile customers. It will lead to reduced investment from the existing operators and a high environmental impact from the new entrant.

The allocations in each stage don't make sense for an operator to deploy a high quality / high capacity network. It is vital that sufficient low band (sub 1 GHz) and high band (2600 MHz) is provided as a pair. However Bundle A offers sufficient sub 1 GHz together with an insufficient allocation of high band whilst the Bundle B offers a large amount of high band with insufficient low band.

As commented on in our previous consultation response, provision of 2 x 5 MHz allocations of 800MHz is not technically efficient and will lead to a compromised and poor quality service for the customers of the operators that received that allocation.

The proposed 25 MHz of 2.6 GHz in Bundle B also does not make sense as in practical terms this would be utilised as a 20 MHz block therefore leaving the remaining 5 MHz under-utilised. It would be more sensible to allocate 20 MHz of 2.6 GHz.

With the above in mind, if there is a requirement to facilitate 4 operators, a better approach would be the following:

Allocation 1 : 800 MHz (2 lots of 10 MHz) + 2600 MHz (2 lots of 20 MHz)

Allocation 2: 800 MHz (2 lots of 10 MHz) + 2600 MHz (2 lots of 20 MHz)

Allocation 3: 800 MHz (1 lot of 5 MHz) + 2600 MHz (1 lot of 20 MHz)

Allocation 4:- 800 MHz (1 lot of 5 MHz) + 2600 MHz (1 lot of 10 MHz)

This would allow three bundles (allocations 1, 2 and 3) that would facilitate sufficient bandwidth for LTE Advanced once 1800MHz spectrum is also allocated. Allocation 3 would be no more compromised than the existing Bundle B and allocation 4 would be sufficient for a smaller scale deployment and hence allow for a 4th operator.

A sub 1 GHz spectrum cap of 2 x 25 MHz is at odds with the sub 1 GHz cap set in the UK which was 2 x 27.5 MHz. This was seen as fair and proportionate in the UK market with 5 operators, so should also be fair and proportionate in a smaller market with the potential for 4 operators. JT would like to understand why CICRA see the need to reduce the cap to 2 x 25 MHz for the Channel Islands.

The consultation recognised that 1800 MHz spectrum is important for the provision of LTE and CICRA has stated that this intention is to rationalise the 1800 MHz as soon as the 800 MHz and 2.6 GHz is allocated however to successfully deploy an LTE system with high quality / capacity, a number of layers are required and 1800 MHz is an integral part of this.

It is difficult enough to design and hence procure a network without knowing how much 800 MHz or 2600 MHz spectrum will be available; it becomes impossible to do so without knowing what 1800 MHz spectrum will be available for LTE. This will result in delays in procurement and deployment and will therefore impact on JT's ability to bring 4G services to the Channel Islands.

It is therefore crucially important that 1800 MHz is allocated at the same time as the 2.6 GHz and 800 MHz.

As stated in the previously consultation, the 1800 MHz band is one of the key bands when launching new services, such as LTE. The main reasons for this are the propagation characteristics of the band and the potential capacity gain of the band. As the GSM traffic declines along with the increase in LTE, JT plans a gradual migration of frequencies from GSM to LTE.

JT's current assignments in the 1800 MHz band are sufficient for GSM traffic today. However, JT needs a total of 2 x 20 MHz in this band to also support LTE traffic and to facilitate deployment of LTE Advanced 300Mb/s which requires two contiguous 20MHz blocks. Keeping in mind that contiguous assignments maximise the efficiency of use of a scarce resource JT sees that it should be assigned a contiguous block of 2 x 20 MHz in the 1800 MHz band.

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

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.

JT agrees with this requirement.

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.

JT agrees with this requirement.

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.

JT agrees with this requirement.

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.

JT agrees with this requirement.

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.

While we don't fully agree that mobile operators should be required to contribute to fund a change out in Jersey Airport's radar, we accept this requirement. Costs for this should be made clear now and a financial cap should be applied to ensure that operators are clear on the extent of the funding.

Requirement 6 Applicants accept that allocations of new 800 MHz spectrum will be conditional on a 2 x 25 MHz cap being imposed on all spectrum holdings below 1 GHz in each Bailiwick.

JT does not support a 2 x 25 MHz cap and believes that a 2 x 27.5 MHz cap as per UK should be implemented. A cap as low as 25 MHz will have a detrimental effect to the ability of JT to carry the high proportion of GSM traffic that it does, with an acceptably high quality, causing degradation to existing customers service, resulting in more dropped calls, reduced ability to set up a call and reduced coverage Island wide. GSM sites will interfere with one another as the number of channels available for frequency planning will be reduced. JT currently has a target of less than 1% dropped calls however, the impact of a reduction in 900 MHz spectrum could increase this to 2%. The effect of a 2 x 25 MHz cap would be heightened in Jersey, due to having to interwork with the French Operators frequencies being broadcast a short distance away and Jersey's challenging geographic properties. As stated in our previous consultation response, GSM networks are still used for the majority of voice mobile calls made in the Channel Islands, and as such an extremely important service to consumers.

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.

JT will 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. However, it is concerned that in the short and medium term its customers in Jersey will be affected by reduction in 900 MHz spectrum and believes a 2 x 27.5 MHz cap as per the UK should be implemented.

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

JT disagrees that Bundle A only should have coverage requirements. Applicants of Bundle B should be subject to the same coverage and roll out requirements of Bundle A. As currently structured, winners of Bundle B would be able to offer a niche service covering small areas of the Channel Island (ie St Helier and St Peter Port) which is not spectrally efficient and would allow the new entrant to operate under different regulatory conditions to that of winners of Bundle A which we consider to be unfair.

In addition, Winners of Bundle B will have 25 MHz of 2.6 GHz which is a considerable allocation of spectrum and is excessive for the requirements of niche deployment. We agree that if the structure of the awards change in line with JT's proposal, it would be appropriate for the winner of allocation 4, to not have any coverage requirements as the smaller spectrum allocation would then match the reduced coverage area.

Also crucially, if minimum roll outs are required then permitted development rights will be necessary from the Planning Department to support the roll outs. If the licence sets minimum obligations on roll out it may well not be possible to achieve these if permission cannot be obtained for minor alterations or additions to existing mobile sites. The full planning permit process should still be followed for any new structures or sites in order to minimise and control environmental impact.

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.

JT agrees with this requirement. It is important that spectrum awards go to operators with a viable business case and those that are intent on remaining in the Channel Islands market for the long term.

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.

JT agrees with this requirement.

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.

JT agrees with this requirement.

Requirement 12 Applicants are required to submit supporting documentation that establishes their independence.

JT agrees with this requirement.

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?

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

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 applications¹⁶.

JT agrees with the weightings proposed.

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

JT supports CICRA's view that spectrum is a scarce resource and should be fully utilised by holders of Ofcom's WTA licences and as such spectrum should be relinquished if not used. The use of a licence condition to ensure that operators successful in obtaining an allocation of 800 MHz and 2.6GHz utilise this spectrum is an appropriate method to ensure that spectrum is used.

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

JT would like to understand in more detail the idea of performance bonds and how this system will work. From the description on page 36 it is our understanding that a sum of money would be paid on entering the competition and that this money would be held by CICRA in case the applicant fails to deliver on a commitment in the application. The consultation mentions "a stated maximum" but does not provide any detail on the maximum.

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

No further comments.