



Response to Pan-Channel Island Consultation on
800 MHz and 2.6 GHz Spectrum Awards

August 2013

Introduction.

This current consultation is a continuation of a process that began some for years ago when both islands under their respective regulatory authorities ran a consultation on the distribution of 2600 MHz spectrum. The Guernsey consultation remained moribund but in Jersey the JCRA proceeded to the issuing of recommendations to Ofcom on the size and type of spectrum packages to those operators that had expressed an interest. Clear Mobitel (Jersey) Limited ('CMJ') received a recommended allocation and it was on that basis that it started to invest money in the island to establish an independent network.

Subsequently, after the amalgamation of the two regulatory bodies into its current form under CICRA, it was decided to withdraw these recommendations and a letter to this effect was sent to the operators. On the basis that it had fairly received its package, CMJ sought to challenge this unilateral action by the regulator through the Royal Court of Jersey. In this respect the judgment went in favour of CMJ and since then it has awaited contact from the regulator to negotiate this matter under direction of the Court.

CMJ notes that this matter has again been raised in this paper and it now hopes that the due legal process shall be carried out subsequent to this consultation.

Responses to Consultation.

Q1.

CMJ is a company that has much experience in wireless technology and recognizes that the development of competitive broadband services in the Channel Islands will provide the business community with services to help stimulate growth over the foreseeable future.

CMJ welcomes the release of this important technology free spectrum that will enable the development of competitive services in the islands for the benefit of all telecommunications users. CMJ also welcomes the approach of allocating spectrum simultaneously across both islands since this will lead to a more efficient use of spectrum and deployment of networks.

Q2. & Q3.

CMJ is aware that there already exists a considerable amount of sub 1GHz spectrum in use across the islands and that this is largely in the gift of the former incumbent operators or their successors. Sub 1GHz spectrum is an important asset for the development of future broadband wireless networks and the authority should ensure that to stimulate competition to the benefit of the consumer that this new spectrum should be distributed as far as is possible to operators that are willing to make investment in the islands. The regulator should also ensure that there is as little distortion in the market as possible by distributing the available packages in this band to

those operators that currently do not have, or only have, small allocations of sub 1GHz spectrum.

In Jersey in 2009 the 2600 MHz band spectrum allocation was made following a public consultation and the JCRA allotted spectrum packages in commercially usable lots to those operators that had expressed a genuine interest. The JCRA also stated that supply did not exceed demand whilst providing those with genuine programmes for efficient use of said spectrum with workable allocations.

Following this process, CMJ received an allocation and this was one of the spectrum lots recommended to Ofcom for licensing. CMJ received an allocation on this basis and commenced making network investment on the understanding that the licence would rapidly follow. However, it soon became clear that Ofcom had identified some technical issues with this spectrum and delayed licensing until these matters were resolved. CMJ was happy with this process and indeed worked with Ofcom on testing and investigating the possible interference with airport radar systems.

CMJ was therefore surprised when the JCRA subsequently and unilaterally withdrew these allocations in 2010. CMJ would point out that not all the available spectrum was in fact allotted and that the TDD part of the spectrum remains available. Having commenced making network investment on the understanding that it would be receiving a license for its allocation, CMJ challenged the JCRA through the Royal Court¹ which determined in its judgement that the JCRA should engage with CMJ in good faith to resolve the matter.

CMJ vigorously stands by the process leading to the allocation it received from the JCRA and the subsequent re-instatement of the allocation by the Court. Further, it is the company's view that the consultation was correctly carried out by the JCRA at the time and that CMJ complied fully with the requirements of both the regulator and the consultation process. Since CICRA is now proposing further distribution of spectrum, CMJ looks forward to engaging with it in bona fide discussions regarding its Court-reinstated allocation in the 2600MHz band.

While the JCRA's case [as presented to the Court] was based on concerns that Ofcom was unhappy with the method of allocation used in the 2009 consultation, CMJ remains convinced that the process was indeed fair and transparent and that the basic principles of competition in the telecommunications market in Jersey were followed clearly. These were outlined in correspondence from the JCRA to Ofcom at the time.

The allocation of 2600 MHz spectrum was consulted on in Guernsey in 2008 and again in 2010. However it never progressed past the consultation stage even though one of the options considered by the Guernsey regulator was to align spectrum allocations across the islands, following the JCRA's lead. CMJ welcomes the approach of allocation across both islands concurrently. This would benefit users as well as making the development of wireless networks more efficient.

¹ See: http://www.jerseylaw.je/Judgments/UnreportedJudgments/Documents/Display.aspx?url=2011/11-09-22_Clear_Mobitel-v-JCRA_181.htm

While subsequent concerns regarding interference with radar systems which are a matter of public safety may have delayed any distribution of licenses, the matter is now resolved and CMJ hopes that it will be able to use that allocation in Jersey to start services as soon as practically possible.

CMJ acknowledges that technology has move on since 2009 but remains keen to begin operations on its allocated spectrum as soon as possible. Many operators may in fact prefer the 800 MHz spectrum because of its better propagation performance. In addition, the availability of the 800MHz band will ensure that there should be sufficient sub 1 GHz spectrum (*taking into account current allocations in the 900MHz band*) for all parties.

CMJ maintains that the allocations made by the JCRA in 2010 remain valid and that it is well placed to develop its network as soon as licensing is finally received. CMJ notes that the existing incumbent operators have large allocations of spectrum in the 900 MHz and 1800 MHz bands and that Ofcom has already permitted technology neutral development on the latter. CMJ therefore does not consider that its current allocation will have any detrimental effect on either the new distribution or the existing allocations in the market. The main principle that the regulator should follow is that of ensuring active growth of competition in the market to ensure that consumers get value for money and a wide choice of provider.

Q4.

CMJ recognizes that high amounts of sub 1 GHz spectrum is held by the former incumbent operators or their successors. This spectrum is not currently defined as technology neutral by Ofcom but CMJ does not expect this status to continue indefinitely. However, when this situation does eventually change, these operators will have a distinct market advantage.

In addition, both the former incumbents also hold substantial quantities of 1800 MHz band spectrum which has been re-designated by Ofcom and in the UK operator Everything Everywhere (EE) has already deployed LTE services over this spectrum. This will give those operators a further distinct market advantage.

With the deployment of wireless broadband services, backhaul is a concern for operators. In both islands there will be a reliance on the incumbents' networks for providing this. Currently the cost of on-island backhaul is too high on both islands and there is no alternative network in most rural locations.

Backhaul off-island is also a concern for new entrants that have no direct connection to tier 1 internet access and thus reliant on the third party services of the incumbent providers.

CMJ notes that when 3G services were deployed in the islands, there was considerable concern over the possible carcinogenic effects of high frequency wireless transmissions. The most recent International Agency Research on Cancer report² which has reduced the risk to "possible". Further, a report from Denmark indicates that there is no discernable rise in cancer rates among

² See: http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf

mobile phone users³. These reports should go some way to assure the public in both islands that there is little health hazard presented by wireless broadband.

On both islands there is a concern regarding the position and type of tower or mast used by wireless operators. There are few sites on either island that can be shared by operators. During the build-out of the 3G networks earlier in the century, local planning authorities defined the types that are acceptable. It is likely that similar designs would be suitable for LTE networks.

CMJ would welcome the early distribution of spectrum in order that consumers can benefit from a real choice in advanced wireless services as soon as possible. CMJ acknowledges that the islands are small jurisdictions, but also considers that the local markets are of sufficient maturity now to support further competition on both fixed and mobile services. The current dominance in broadband services by the incumbents on both islands stifles competition and CMJ is of the view that consumers would welcome alternative options for both services and pricing.

Spectrum in the islands is managed by Ofcom and it is CMJ's understanding that an auction approach to distribution would be unattractive for Ofcom. The size of the islands would likely mean that the cost of running an auction would far outweigh any likely revenues. An alternative approach to distribution must therefore be considered. In some jurisdictions a 'beauty parade' is used as an option, in which each interested party provides a business plan for assessment by the regulator. CMJ has already provided substantive business plans in previous consultations and would be happy to use this as a basis for selection. Whatever process is finally adopted by the authorities, it must be open and transparent.

Q5.

In the Channel Islands there are currently three mobile providers, each represented on both islands. In 2005 spectrum licenses were issued to 4 operators and the current holder of the fourth licence, Marathon Telecom Limited, has not as yet started operating.

Given that in 2005 the local regulatory authorities were of the view that four operational licenses were viable, CMJ would therefore assume that the situation has not radically changed over the intervening years, particularly since in that time the population has grown and users' expectations have changed, demanding more mobile services. Absent the entry of Marathon into the local market, then CMJ concludes that there is an opportunity for an innovative new operator to provide services in the islands.

Consequently, CMJ forms the opinion that the current distribution should be structured in order to enable another operator to enter the market.

³ Use of mobile phones and risk of brain tumours: update of Danish cohort study
<http://www.ncbi.nlm.nih.gov/pubmed/22016439>

Q6.

As a result of the pre-liberalization of the local telecommunications markets, most of the sub 1GHz spectrum was allocated to the former incumbents in both islands. Although the OUR managed to persuade Sure in Guernsey to release a small amount of spectrum, it is unlikely that the remainder will be available to other operators since both incumbents have licenses in perpetuity for this spectrum. As noted earlier, these same operators also hold substantial allocations of the 1800 MHz band. These holdings give these operators a considerable technical and more importantly competitive advantage over new entrants on both islands.

In the UK, Ofcom has already re-designated the 1800 MHz band used by the UK operator EE as technology neutral and has recently released a statement affecting the 900 MHz, 1800 MHz and 2100 MHz bands⁴. Thus should this be extended to the islands then the former incumbents will be ideally placed to enter the 4th generation mobile (LTE) market. This could have a seriously detrimental effect on new entrants that only have sufficient quantities of this spectrum to provide 2G services.

CMJ is therefore fully supportive of the idea of spectrum capping (particularly in sub 1 GHz bands) to enable the fairer allocation of spectrum between operators in order to create a more even playing field. Effective competition in the wireless market could be harmed if this is not the case. Such capping is essential in CMJ's view to facilitate the fostering of competition in the Channel Islands mobile marketplace. If capping is not introduced as a fundament of the release of the next round of spectrum in the islands, this would reduce competition and consequently consumer choice and potentially suppress innovation in this sector.

Q7.

As already noted in the consultation, the 800 MHz and 2600 MHz bands are not the only available spectrum packages. There is also spectrum available in the higher bands and in addition some operators that already hold licenses in these bands are not deploying services on them. This in CMJ's view is an inefficient and wasteful use of a valuable, scarce natural resource that belongs ultimately to the people of the Channel Islands.

With this in mind, CMJ would be fully supportive of including both the present packages in any capping exercise in order that there is a fair allocation of available spectrum for all new entrants is implemented by CICRA.

Q8.

In an ideal world a full rationalization of the spectrum across the Channel Islands would ensure that this asset was used efficiently and for the promotion of competition to benefit the consumer. However, as already noted, the former incumbent operators hold perpetual licenses

⁴ <http://stakeholders.ofcom.org.uk/binaries/consultations/variation-900-1800-2100/statement/statement.pdf>

on some of this spectrum which gives them a considerable commercial advantage. It is therefore unlikely that these operators would surrender this spectrum as it would weaken their market dominant position.

CMJ would support any initiative that would seek to ensure a more efficient and fairer distribution of these valuable assets.

Q9.

The Guernsey Department of Commerce and Employment has already consulted on the possibility of a charge on wireless spectrum used in Guernsey by telecommunications operators.

While the method of charging is as yet unclear, CMJ understands that this is a matter of fiscal policy by the States of Guernsey and therefore must be taken into consideration by commercial operators in their business plans.

The proposed charge would, in CMJ's view, make no difference as to how CICRA should run the process of spectrum distribution across the islands. The regulatory authority should stand independent of government and different fiscal policies should have no influence on the way it exercises its duties.

Q10.

When CMJ entered the Channel Island market in 2009 its stated aim was to provide consumers with an alternative, highly competitive provider for services typically provided by fixed line operators. The current position in both islands is that the former incumbents maintain a virtual monopoly over fixed line products. The spectrum packages being offered in this consultation will enable new entrants to offer compatible services and in addition be able to offer mobile broadband services alongside any fixed wireless products using hybrid technology such as WiMAX.

Modern wireless networks can offer products that are highly comparable with fixed line products. CMJ hopes to enter the market as a firm competitor to fixed technologies in order to stimulate innovation and competition.

CMJ urges CICRA to release this spectrum as technology neutral so that operators themselves can tailor their networks to best meet consumer demands. There should be no distinction made between the different packages of spectrum from the delivery of services viewpoint.

Q11.

Aside from concerns over health which have already been mentioned above, planning considerations have been an important part of the development of wireless services in the islands.

The operators need to work closely with the islands' planning authorities to ensure that the visual impact of new mast sites is minimized. During the development of 3G networks on the islands agreement on the type of mast to be used by operators was determined. The design of those masts is entirely compatible with LTE network development.

Q12.

In the UK Ofcom published⁵ a breakdown of the available packages prior to the 4G auction. CMJ would suggest that a similar breakdown of packages should be adopted by CICRA.

The consultation proposes that spectrum caps may be used, a policy with which CMJ fully concurs as set out above. In light of this policy it would counterproductive to offer bundles of 800 MHz and 2600 MHz together. CMJ would prefer to see commercial size packages in each band made available for operators to make their own business case. CMJ would point out that there is still the outstanding issue of its previous 2600 MHz band allocation in Jersey to be resolved.

CMJ fully supports the principle of providing a clear business case and time to market for those operators making a bid for allocation(s). In the previous consultation, CMJ made its proposed operation very clear and concise.

Q13.

CMJ understands that the present situation in the Channel Islands is that spectrum trading was excluded from the Orders in Council that extended the relevant UK legislation to the islands.

The principle behind spectrum trading is that this scarce resource should not be withheld from providing telecommunications services because of failure of the holder to come to market or so operators that have specialized in specific technologies are able to release or obtain spectrum that might otherwise remain unused.

Although spectrum trading has been available in some jurisdictions for many years, experience shows that it is less than successful⁶. As already noted, the holders of the largest quantity of spectrum in the islands are the former incumbents that have licenses in perpetuity on the bands that have the most utility for LTE services. In addition the size of the local market is such that the asset value of this resource is unlikely to outweigh the commercial advantage of excluding competition. Therefore, CMJ concludes that it is highly unlikely that the legal right to trade spectrum would stimulate the market.

⁵ <http://stakeholders.ofcom.org.uk/binaries/consultations/award-800mhz/statement/IM.pdf>

⁶ Spectrum Trading, Tommaso M. Valletti
http://rru.worldbank.org/Documents/PapersLinks/spectrum_trading.pdf

CMJ is doubtful that the cost of introducing changes to the relevant laws would be worth the associated cost. For this reason CMJ firmly supports the policy of spectrum caps to ensure a level playing field.

Q14.

After the previous consultation on the 2600 MHz spectrum, Ofcom identified a potential interference problem with certain radar systems and instigated an investigation⁷ into the issue. CMJ is aware that the radar system at Jersey airport has recently been replaced with a more modern system and as the potential problem has been known since 2009 mitigating technology should have been installed. The potential for interference arises because of the re-farming of the 2600 MHz spectrum from military to commercial use. Telecommunications operators deploying LTE services in this band are more likely to cause interference than the previous intermittent military use. However, French operators have already begun deploying services in Normandy and it is likely that some interference could result from this.

CMJ would take the view that as this is a matter of public safety, then it is up to the airport authorities to ensure that their systems are safe from potential harmful interference.

Q15.

Should the authorities determine that telecommunications operators in Jersey should underwrite the cost of interference mitigation on radar systems, then CMJ would propose that the cost should only be shared among operators utilising 2600 MHz band allocations.

Q16.

Ofcom published a second consultation on the potential interference with DTT on 12 January 2012⁸ which closed on 19 April. The UK government and Ofcom set up a company following the 4G auction to mitigate the effects of LTE on DTT called MitCo which was to provide a working base to resolve problems associated with the rollout of networks. The winning operators formed a company called at800 to take on the role of resolving interference issues. This is a joint venture company funded by LTE operators that will continue until LTE networks have been fully rolled out or 2017 whichever is the sooner, thereafter the UK government would continue to resolve and fund any arising problems.

Ofcom carried out an assessment⁹ of the potential effects of DTT interference in 2011. This concluded that there was a potential problem particularly with viewers close (within 1km) to LTE base stations. The present resolution to the problem is to provide filters to users that experience

⁷ http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-awards/awards-in-preparation/757738/589_Radiated_Out-of-Band_Wa1.pdf

⁸ See: <http://stakeholders.ofcom.org.uk/binaries/consultations/949731/summary/condoc.pdf>

⁹ <http://stakeholders.ofcom.org.uk/binaries/consultations/dtt/annexes/Ite-800-mhz.pdf>

problems. The users contact at800 either through its website or telephone. One filter is provided free of charge, however, if users need more than one, then they must purchase the balance.

The number of viewers that are likely to be affected is likely to be high given the geography and topology of the Channel Islands. However, the number of DTT viewers in the islands may be less than the number of households since there is a high penetration of satellite television, particularly in Jersey. Therefore the number of viewers affected may not be as great as may seem the case on first view.

Already at800 has reported that the number of affected viewers may be lower than expected¹⁰. Given this data, it would seem wasteful to carry out a full audit of the islands to assess any problems. It would seem likely that a more cost effective solution to the problem would be to deal with issues as they arise. Further, given the stance of the UK and other EU countries with regard to funding, it is not unreasonable to expect that local operators utilizing 800 MHz spectrum should fund the provision of filters.

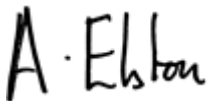
Q17.

The responsibility for international coordination of these spectrum bands lies with Ofcom and CMJ understands that the necessary MOUs with the French regulatory authorities are already in place, therefore the distribution and use of this asset can be expedited.

As an auction process is unlikely for the reasons set out earlier in the islands, an internationally acceptable competitive approach to the distribution should be adopted. In some jurisdictions, a 'beauty contest' is used as an alternative process¹¹. This has the advantage of a shorter timescale and lower costs to both the authority and the operators compared to an auction. CMJ notes that a similar process was adopted by the JCRA in 2009 when it received a recommended package of 2600 MHz.

CMJ would advocate a beauty contest approach to this distribution since it will give the authority an insight into the individual operators' proposals, timescales and business cases.

For the avoidance of doubt, this document may be published in its entirety.



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http://www.mobiletoday.co.uk/News/24867/4G_barely_interfering_with_television_signals_says_operator_JV.aspx

¹¹ http://www.bmg.eur.nl/fileadmin/ASSETS/bmg/ECRI/Maasland/Auctions_and_Beauty_Contests.pdf