



Office of Utility Regulation

Broadband Fixed Wireless Access in Guernsey

Licensing of 2.6 GHz Spectrum

Information Note

and

Call for Expressions of Interest

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Office of Utility Regulation

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1. Introduction

In fulfilling his duty to promote the objectives set out in Part II of The Regulation of Utilities (Bailiwick of Guernsey) Law 2001, the Director General issues this Information Note to invite expressions of interest in the 2.6 GHz band.

Spectrum in this band has the potential to play an important role in the development of advanced wireless data services and promote competition in the telecommunications market. Given interest in this spectrum in the UK, the DG is seeking to establish what interest there is in accessing spectrum at the 2.6 GHz band at this time in Guernsey. Interested parties are therefore invited to express their interest in applying for use of the spectrum.

This document provides information on the licensing process and the next steps should such interest be expressed. Where there are expressions of interest, respondents are invited to set out their spectrum needs and justification for those requirements to allow the DG to ascertain the extent of any interest in access to the 2.6 GHz bands.

2. Structure of the Paper

2.1. Structure

The rest of this paper is structured as follows:

- Section 3:** sets out the background to this information paper;
- Section 4:** explains the licensing process in Guernsey;
- Section 5:** provides the conditions the DG is likely to attach for the award of any spectrum;
- Section 6:** sets out the next steps for this consultation process;

2.2. Comments

Parties are invited to submit expressions of interest in writing on the matters set out in this paper to the following address:

Office of Utility Regulation
Suites B1& B2
Hirzel Court
St Peter Port
Guernsey
GY1 2NH

Email: info@regutil.gg

All comments should be clearly marked "Licensing of 2.6 GHz – Calls for Expression of Interest" and should arrive before 5pm on 9th January 2009. Upon receipt of any expressions of interest the DG will consider further any award process.

In line with the policy set out in Document OUR 05/28 – "Regulation in Guernsey; Revised Consultation Procedures", the DG intends to make any further comments received available on the OUR website. Any material that is confidential should be put in a separate Annex and clearly marked so that it can be kept confidential.

This document does not constitute legal, technical or commercial advice; the Director General is not bound by this document and may amend it from time to time. This document is without prejudice to the legal position or the rights and duties of the Director General to regulate the market generally

3. Background

Developments in the UK and the EU have a strong bearing on the issues around spectrum regulation and licensing in the Bailiwick of Guernsey. This is due to the fact that Ofcom, the UK telecoms regulator, manages the radio spectrum resource on behalf of the Bailiwick and the standardisation of the uses for various spectrum bands is driven by developments in these wider markets. In particular, harmonisation of spectrum usage is necessary to address issues around harmful interference as well as acquiring the related benefit from common standards among equipment manufacturers.

The Radio Spectrum Committee of the European Commission agreed the text of a decision on harmonised use of the 2.6 GHz band. This decision requires Member States to designate the 2.6 GHz band within 6 months of the decision entering into force and subsequently make it available on a non-exclusive basis for terrestrial systems capable of providing electronic communication services subject to a number of technical parameters relating to harmful interference.

As a result of its availability for wireless services in the EU and a number of countries worldwide, the 2.6 GHz band provides an important opportunity for the introduction of next generation wireless technologies as well as for the provision of additional capacity for networks using the current generation of technologies. In Guernsey, utilisation of the spectrum has the potential to promote competition in the provision of wireless services through likely new entry and the deployment of new technologies to the benefit of consumers.

There are likely to be, as identified by Ofcom which manages the radio spectrum resource for the Bailiwick, two main drivers of demand for spectrum in the 2.6 GHz band¹. These are:

- WiMAX, developed with a strong input from the internet and IT sectors, which is optimised for data services (with voice over IP being one of the potential data applications) and for which equipment is ready and available now for operation in unpaired (TDD) mode; and
- 3G mobile technologies which are in use now in the UK and, significantly, their likely successor technologies based on the LTE standard which is also optimised for data and is primarily based on paired (FDD) operation. LTE equipment is likely to be available in the relatively near term, probably around 2010 or possibly before, as standardisation groups and manufacturers accelerate LTE development at least in part in response to the competitive threat from WiMAX.

Use of the 2.6 GHz band offers significant scope for innovation, with the potential for new technologies, services, applications and devices. It also offers scope for greater competition as most parties who have expressed an interest in using the band as soon as possible for mobile WiMAX would be providers of wireless services. Ofcom believes that allowing use of this spectrum is likely to generate significant consumer benefits in the UK, through increased competition and innovation and help secure a

¹ <http://www.ofcom.org.uk/consult/condocs/2ghzrules/statementim/statement/statement.pdf>

wide range of electronic communications services in the UK. It is likely that similar benefits can be gained for consumers in Guernsey, particular should its use lead to the roll-out of higher speed, competitive broadband services to compete with existing fixed line broadband providers.

In the UK, Ofcom has concluded that in its opinion, no other spectrum is currently available (or as suitable) for the provision of mobile WiMAX-based services. The opportunity for new service providers to develop and establish mobile broadband services is likely to depend in part on their ability to offer differentiated services in a market environment which already contains a number of existing providers of data services and in which other next generation mobile technologies (such as LTE) are not yet available.

In the DG's view, in light of such developments and approaches from interested parties, it is important to assess interest in this spectrum locally at this time. He is therefore calling for expressions of interest in 2.6GHz spectrum so that he can consider further how this spectrum might best be released to benefit the Bailiwick.

4. The Licensing Process in Guernsey

As stated above, Ofcom is responsible for the management of the radio spectrum in the UK and because of historical links it has also managed the radio spectrum for a number of Crown Dependencies, including the Bailiwick of Guernsey. Consequently the award of radio spectrum in the Crown Dependencies has tended to follow the approach of the UK mainland. However with the liberalisation of Guernsey's telecommunications market there have been adjustments to take account of local matters.

The Ofcom decision to award 2.6 GHz spectrum was published on 4th April 2008, in which it anticipated that the 2.6 GHz licences in the UK would be awarded through an auction process. This is increasingly becoming the preferred approach for the allocation of such spectrum in the UK particularly where it is possible that demand for the spectrum may outstrip supply. Ofcom's proposed award however has been delayed due to legal action in the UK and consequently the award process has not yet commenced.

The DG wants to ensure that the opportunities that exist with available spectrum are maximised for the Bailiwick. With this in mind the OUR is mindful that the certain fundamental principles should be borne in mind in deciding on the allocation of such spectrum including;

- the efficient utilisation of the spectrum available;
- that the opportunities that spectrum presents for increased and effective competition for the provision of telecommunication services are realised; and
- that the award process for the available licences reflects the special characteristics of the market in Guernsey.

The OUR is therefore inviting expressions of interest in licences for 2.6GHz spectrum. Interested parties are advised to consult further the comprehensive information that is available on the Ofcom website relating to the 2.6 GHz spectrum and the conditions that Ofcom attaches to the award of this spectrum.

Should the number of expressions of interest match or be less than the number of licences available, those companies or individuals will then be invited to apply for the licences on a first come first served basis. In the event that the number of expressions of interest exceed the number of available licences, the criteria outlined above will be used to further consider how best to award the available licences. The DG would intend to consult further on the precise detail of any award process should this be necessary. Should any licence(s) remain after the award of licences arising from this process, they will be available for award on a "first come, first served" basis.

Interested parties should also note that a Telecommunications Licence is likely to be required to cover the provision of any telecommunications services to the public within the Bailiwick of Guernsey using this spectrum. The DG is minded, subject to the outcome of this invitation, to include for this (and future FWA spectrum awards) "use it or lose it" conditions in any such licence.

5. Conditions for awarding 2.6 GHz Spectrum

The DG intends to award licences for use of the 2.6 GHz band on a technology and service neutral basis. It is his view that this will assist in securing the best use of the spectrum by only including restrictions where absolutely necessary, and that market circumstances dictate licensee decisions around chosen technology and services.

Consultation with Ofcom has confirmed that there is potentially 190 Mhz available in the 2.6 GHz band. The DG does not propose to stipulate at this time how the packages of available spectrum should be divided given uncertainties around the potential for different technologies to exploit the spectrum and the lack of knowledge on the potential demand at this time for the spectrum. He instead invites respondents to set out their own requirements, with supporting evidence that would assist initial evaluation of the arguments forwarded for the spectrum sought and allow the DG to gauge the level of demand. To the extent that expressions of interest exceed the amount of spectrum available in the 2.6 GHz band, this will be taken account of when finalising any process for awarding any allocation and licensing following this Information Notice.

It is likely that priority would be given to those parties who can provide assurance of an intention to commit to utilising the spectrum and where the utilisation promotes greater competition in the telecoms market. The DG wishes to avoid the possibility of awarding spectrum that is not utilised for the benefit of Guernsey consumers in the near future and therefore indications of a clear rollout timescale would inform his considerations in this area.

The DG also proposes that licences for 2.6 GHz would be tradeable to ensure optimum utilisation of the spectrum should market circumstances and business plans change.

It is also suggested that respondents familiarise themselves with any technical conditions for the use of this spectrum prior to responding. Technical conditions for use of this band has been subject to extensive consultation and analysis both through Ofcom's own processes and through European regulatory discussions in the CEPT project team SE42 which was charged, under the WAPECS mandate from the EC, with developing the least restrictive technical conditions for use of these bands across Europe.

These technical restrictions take the form of Block Edge Masks which are the same as those set out in CEPT Report 19². They are also consistent with the RSC Decision agreed on 2nd April 2008 in relation to the 2.6 GHz band and published in the Official Journal on 24th June 2008³. These restrictions are designed to be as least restrictive as possible while managing the risk of harmful interference between spectrum users. Respondents should note that compliance with these technical conditions will be a requirement for any licensee seeking spectrum in this band.

² <http://www.ero.dk/AF8F727A-BCD1-45A9-B454-59BD80A17BD1?frames=no&>

³ <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2008:163:SOM:EN:HTML>

6. Next Steps

As the DG indicated earlier in this document there exists demand for access to spectrum in the 2.6 GHz range in Guernsey. At present the OUR is of the view that it is in the best interest of the market that an Information Note is published to invite expressions of interest and, based on the response, to then consider the various options available in making this spectrum band available.

Respondents are invited to provide as much information as possible in their response on their proposed use of this spectrum and how its availability would contribute to the DG's overall duties as provided for in the Regulation Law.

ENDS