Consultation on the allocation of spectrum in the 3.4 GHz band

19 November 2015
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1. **Introduction**

1.1 **Request for spectrum in the 3.4 GHz band**

The Isle of Man Communications Commission (‘the Commission’) has received a request from Domicilium (IOM) Limited (‘Domicilium’) for access to additional spectrum in the 3.4 GHz band.

Domicilium already holds an allocation of 2 x 20 MHz of FDD-compatible spectrum in the 3.4 GHz band and it has requested a further allocation of 2 x 30 MHz in the band in exchange for relinquishing the 2 x 30 MHz allocation it currently holds in the adjacent 3.6 GHz band\(^1\).

Domicilium has never used its 3.6 GHz allocation to provide services to end-users. The Commission recently completed an assignment process licensing the provision of TDD-compatible services in the 3.6 GHz band and while supply exceeded demand for the spectrum on offer, interest has since been expressed in the 3.9 GHz band for another service.

This being so and with Domicilium expressing a preference for acquiring additional paired spectrum in the 3.4 GHz band, it is the Commission’s view that Domicilium’s 3.6 GHz allocation should be handed back and, in return, a recommendation would be made to Ofcom that Domicilium is granted access to an equivalent 2 x 30 MHz allocation in the 3.4 GHz band.

The Commission is, as a result, minded to recommend to Ofcom that the Wireless Telegraphy licence (‘WT licence’) held by Domicilium in relation to its spectrum assignment in the 3.6 GHz band should be revoked and that its WT licence in relation to its spectrum assignment in the 3.4 GHz band be varied granting it access to a further spectrum assignment of 2 x 30 MHz in the 3.4 GHz band. It is the Commission’s view that this approach is consistent with its spectrum policy, and is in the best interests of end-users and of the broader Isle of Man economy. The reasoning for this is explained further in Section 3 below.

Before making such a recommendation to Ofcom, the Commission must ensure that it has considered any other demand for spectrum in the 3.4 GHz band. The extent and nature of any such demand will inform the Commission’s decision on how it deals with the request for spectrum made by Domicilium.

The Commission invites comments on its proposal to recommend an additional spectrum allocation to Domicilium in the 3.4 GHz band, as set out in Section 4. Following an assessment of responses to this consultation, the Commission will decide whether or not to proceed with a recommendation to Ofcom.

\(^1\) Domicilium currently has access to the 3630 – 3660 MHz block (in the 3.6 GHz band) paired with the 3950 – 3980 MHz block (in the 3.9 GHz band) for FDD-compatible services.
1.2 Consultation structure

This Consultation Document is structured in the following way:

- **Section 2** contains a legal and regulatory background on the award of licences and associated spectrum usage rights on the Isle of Man;
- **Section 3** outlines the policy background for the Commission’s spectrum licensing decisions;
- **Section 4** provides details of the request for spectrum in the 3.4 GHz band made by Domicilium and how the Commission proposes to deal with it;
- **Section 5** sets out the Commission’s proposed next steps in relation to this issue.
2. Legal and regulatory background

2.1 Legislative background

The Commission is responsible for issuing licences for telecommunications and broadcasting services on the Island. Under the Telecommunications Act 1984 (of Tynwald) its powers include:

- specifying the nature of the telecommunications systems and services which operators are permitted to operate and provide under the licence\(^2\); and
- setting conditions on such operation and provision.\(^3\)

Spectrum management is the responsibility of the UK Office of Communications (‘Ofcom’). Ofcom licenses and regulates the use of radio spectrum in the Island, under the Wireless Telegraphy Act 2006 of Parliament, which is extended to the Isle of Man, with Tynwald’s consent, by Order in Council. The Commission works closely with Ofcom to ensure that Isle of Man Government policies are taken into account in licensing decisions.

2.2 UK legislation relevant to spectrum licensing in the Isle of Man

The use of spectrum in the Isle of Man is governed by UK legislation that has been extended to the Isle of Man, as well as by 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 Isle of Man, is carried out by Ofcom, by virtue of the powers given to it by the Wireless Telegraphy Act 2006 and the Communications Act 2003.

Ofcom’s principal and secondary duties are in Section 3 of the Communications Act 2003 (‘General duties of Ofcom’), which provides that:

\(\text{(1)}\) 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.

\(\text{(2)}\) 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;
(…)

\(^2\) See s.5(1) and 5(4)(b) Telecommunications Act 1984.

\(^3\) See s.5(5) Telecommunications Act 1984.
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 the Commission and Ofcom in coordinating the award of spectrum licences in the Isle of Man are as follows:

- the Commission ascertains the level and nature of demand for the spectrum in the specified bands. It identifies whether a selection process is needed. Eventually, when the assessment and selection process is completed, it makes a recommendation to Ofcom in relation to the issuing of licences under the WTA to Isle of Man operators, specifying the spectrum bands and the allocations within these bands that should be included within such licences; and

- Ofcom issues licences for spectrum use under the WTA where it is satisfied the Commission’s recommendation is consistent with its own statutory duties.
3. **Spectrum licensing policy**

Building on the legal and regulatory background within which the Commission operates, spectrum licensing decisions that the Commission makes is also grounded in a clear policy framework.

In the first instance, the Commission is mindful of the legislative requirement placed on it in the Telecommunications Act 1984 “to promote the interest of consumers, purchasers and other users of telecommunications services ... in respect of the prices charged for, and the quality and variety of services provided”.\(^4\) Given this requirement, the Commission needs to be satisfied that granting a request for access to additional spectrum will promote end-users’ interests.

The Commission also needs to be cognisant of its own Spectrum Strategy\(^5\), in which it decided that the best approach to adopt in relation to the licensing of spectrum was one geared towards maximising investment in telecommunications services on the Island.

Recent licensing processes undertaken by the Commission also need to be factored in. In this respect, the recent 3.6 GHz licensing process\(^6\) forms an important backdrop to the Commission’s consideration of the request made by Domicilium for additional spectrum in the adjacent 3.4 GHz band.

The 3.6 GHz licensing process resulted in one valid application being submitted for the three possible licences providing access to 40 MHz of TDD-compatible spectrum that were offered. One licence to provide services in the 3.6 GHz band was issued, to BlueWave Communications Ltd.

In light of the fact that supply far exceeded demand for spectrum in the 3.6 GHz band, the Commission is of the view it is very likely that the situation will be similar with regard to demand for spectrum in the adjacent 3.4 GHz band. As a result, it is the Commission’s provisional view that a competitive selection process is not required in this instance and that it should proceed with a recommendation to Ofcom that that Domicilium be issued with a WT licence granting it access to a further spectrum assignment of 2 x 30 MHz in the 3.4 GHz band.

If any other operators in addition to Domicilium are interested in acquiring spectrum in the 3.4 GHz band at this time, the Commission would be more than willing to consider such requests. In the Commission’s view, there would be sufficient

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\(^4\) See s.1(2) Telecommunications Act 1984.


available spectrum between 3.4 and 3.8 GHz to consider further applications for licensing in the future.
4. **Request for spectrum in the 3.4 GHz band**

4.1 **Request submitted by Domicilium**

Domicilium has made a formal request to the Commission for a spectrum assignment in the 3.4 GHz band, to augment the 2 x 20 MHz spectrum holding it already has in this band, which is used for the provision of fixed wireless access (FWA) communications services. The request is equivalent to its current assignment in the 3.6 GHz band, i.e. 2 x 30 MHz of FDD-compatible spectrum.

4.2 **Current and prospective assignments in the 3.4 GHz band**

Domicilium is currently the only operator licensed to use spectrum in the 3.4 GHz on the Island. Its currently holding of 2 x 20 MHz comprises the 3480 – 3500 MHz block, paired with the 3580 – 3600 MHz block.

Were Domicilium to be granted the additional assignment sought, the Commission would propose to do so by recommending to Ofcom that Domicilium be provided with access to blocks that are adjacent to its current holding, i.e. that it be granted access to the 3450 – 3480 MHz block, paired with the 3550 – 3580 MHz block. The result of such assignment would be that Domicilium would be given access to a contiguous 2 x 50 MHz spectrum assignment within the band (i.e. 3450 – 3500 MHz paired with 3550 – 3600 MHz).
5. **Next steps**

Your views are sought on this Consultation paper. Please respond in writing by 17.00 on 18 December 2015 to:

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Electronic copies of this document are also available at [www.iomcc.im](http://www.iomcc.im)

When submitting your views please indicate if you are responding on behalf of an organisation. To ensure that the process is open and honest and in line with the Government’s Code of Practice on Consultation, responses can only be accepted if you provide your name with your response. Unless specifically requested otherwise, any responses received may be published either in part or in their entirety, within three months of the closing date for this consultation, and will be available on the Commission’s website.

It is the Commission’s view that it is important that consultations are carried out in a transparent manner, that the views of respondents are published, and that the reasoning behind the Commission’s consideration of these views can be made clear. Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. Please indicate clearly if any part of your response should be considered to be commercially sensitive, and so required to be confidential. Confidential responses will be included in any statistical summary and numbers of comments received.

The purpose of consultation is not to be a ‘referendum’ but an information, views and evidence gathering exercise from which to make an informed decision. In any consultation exercise the responses received do not guarantee changes will be made to what has been proposed.