



**Response to Consultation and Decision on the
Licensing of Spectrum in the 3.6 GHz Band
and
Notice of Proposed Modification to Existing
Licence held by BlueWave Communications Ltd**

9 June 2015

Contents

- Executive summary3
- 1. Introduction4
 - Request for spectrum in the 3.6 GHz band.....4
 - Legal and regulatory background.....4
- 2. Spectrum in the 3.4-3.8 GHz bands.....7
 - Summary of the March 2015 consultation proposals7
 - Summary of responses.....7
 - Correspondence with licensees in the band.....7
 - Commission’s analysis8
 - Commission’s decision.....8
- 3. 3.6 GHz spectrum award process9
 - Licence award process9
 - Licence condition obliging usage of the spectrum10
 - Licence fees11
 - Other issues raised in the consultation.....12
- 4. Commission Decisions13
- 5. Notice of Proposal to Modify Licence issued to BlueWave Communications Ltd under s.5 of the Telecommunications Act 1984.....14
- Annex 1: Text of proposed licence variation15

Executive summary

This response to consultation is concerned with the licensing of operators for the provision of communications services using the 3.6 GHz spectrum band on the Isle of Man, which the Communications Commission (the Commission), in conjunction with Ofcom, intends to carry out. The Commission published a consultation setting out its proposals on 26 March 2015 (the March 2015 consultation). The Commission received two responses to the consultation, from BlueWave and the Manx ICT Association. The Commission thanks the respondents for their comments.

Following consideration of the responses received, the Commission has made the following decisions:

1. The Commission will hold a spectrum award process offering access to three 40 MHz blocks of TDD-compatible spectrum in the 3.6 GHz band, with each operator's total spectrum holding in the band capped at 40 MHz.
2. The 3.6 GHz licence award process will comprise four stages, i.e. an Application Stage, Qualification Stage, Sealed Bid Stage and Award Stage. If three or fewer qualified applications are received, the Sealed Bid Stage will not be required and, in this instance, the process will proceed directly to the Awards Stage.
3. Operators licensed to provide services in the 3.6 GHz spectrum will be obliged to use this spectrum to provide a publicly available electronic communications service within a period of two years.
4. Operators licensed to provide services in the 3.6 GHz spectrum will be obliged to pay a £3,000 licence fee, payable on the award of the spectrum. In addition, licences granted by Ofcom under the Wireless Telegraphy Act 2006 for the use of radio spectrum are subject to the payment of WT Act fees payable to Ofcom. These are set out in the Statutory Instrument Wireless Telegraphy (Licence Charges) Regulations 2011.

1. Introduction

Request for spectrum in the 3.6 GHz band

- 1.1 This response to consultation is concerned with the licensing of operators for the provision of communications services using the 3.6 GHz spectrum band on the Isle of Man, which the Commission, in conjunction with Ofcom, intends to carry out. The Commission published a consultation setting out its proposals on 26 March 2015 (the March 2015 consultation).¹ The Commission received two responses to the consultation, from BlueWave and the Manx ICT Association. Non-confidential versions of these responses will be available on the Commission's website. BlueWave has requested that its response not be published until a later stage and that part of its response is kept confidential until that stage. The Commission thanks the respondents for their comments.
- 1.2 This response to consultation takes into account all comments made by respondents. Respondents' views are summarised under the heading of each of the Commission's proposals as set out in the March 2015 consultation, and this is followed by the Commission's reasoning and conclusion.

Legal and regulatory background

Legislative background

- 1.3 The Commission is responsible for issuing licences for telecommunications and broadcasting services on the Island. 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
- 1.4 Spectrum management is the responsibility of Ofcom. It licenses and regulates the use of radio spectrum in the Island, under the Wireless Telegraphy Act 2006 of Parliament (WTA), 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.
- 1.5 The legislative basis for the proposals to offer access to spectrum in the 3.6 GHz band in the Isle of Man is provided by the Telecommunications Act 1984. This consultation is undertaken as part of the process leading to such licensing.

¹ Consultation on the Licensing of Spectrum in the 3.6 GHz Band and Notice of Proposed Modification to Existing Licences, Isle of Man Communications Commission, 26th March 2015, available at: <http://iomcc.im/lib/docs/cc/consultations/36ghzconsultation.pdf>

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

³ See s.5(5) Telecommunications Act 1984.

UK legislation relevant to spectrum licensing in the Isle of Man

- 1.6 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 WTA and the Communications Act 2003.
- 1.7 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;*
 - (...)
- 1.8 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.*
- 1.9 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 Wireless Telegraphy Act 2006 to Isle of Man operators, specifying the spectrum bands and the allocations within these bands that should be included within such licences; and

- Ofcom may act on the recommendation and grant licences for spectrum use under the Wireless Telegraphy Act 2006 provided it is satisfied the Commission's recommendation is consistent with its own statutory duties.

Regulatory framework for the licensing of services in the Isle of Man

- 1.10 Operators in the Isle of Man who hold, or wish to hold, spectrum assignments in the 3.6 GHz band need both a WTA Licence issued by Ofcom which will, with the Commission's recommendation, allow the use of the 3.6 GHz band for the provision of telecommunications services on the Island, and a Telecommunications Act licence issued in the Isle of Man which allows the provision of telecommunications services in the Isle of Man.
- 1.11 For existing Telecommunication Act licensees, the Commission proposes to attach a new Part to the current Telecommunications Act licences for those operators who are assigned spectrum usage rights in the 3.6 GHz band. The new Part would contain licence conditions in relation to service provision in the band, and would formally link the Telecommunications Act licence to the WTA licence issued by Ofcom.
- 1.12 The Commission considers that this would, for current operators, require a modification in the current Telecommunications Act licences. The Commission's proposals for varying existing operators' licences were set out in Section 5 of the March 2015 consultation. The Commission attached to the March 2015 Consultation Document a proposed licence variation as Annex 1.
- 1.13 One current operator, BlueWave, has indicated that it intends to apply for a licence to provide services using the 3.6 GHz spectrum. If this application is successful, BlueWave's licence will therefore be modified as per the proposed licence variation set out in Annex 1 to this Decision and a formal notification to this effect is contained in Section 5 of this document. If any other current operators are also licensed to provide services using the 3.6 GHz spectrum, the Commission would modify their licences in the same way and formal notification of such modification would be made by the Commission in due course.
- 1.14 For a new market entrant, the Commission would issue an appropriate licence under the Telecommunications Act, which would licence the operator to provide telecommunications services on the Island. This may be a licence limited to providing internet and Internet related services or such other services as may be specified.

2. Spectrum in the 3.4-3.8 GHz bands

Proposal 1: the Commission will hold a spectrum award process offering access to three 40 MHz blocks of TDD-compatible spectrum in the 3.6 GHz band, with each operator's total spectrum holding in the band capped at 40 MHz.

Summary of the March 2015 consultation proposals

- 2.1 In the March 2015 consultation, the Commission examined spectrum availability in the 3.4-3.8 GHz bands, in light of international developments regarding future planned usage of the band and existing spectrum assignments within the bands.
- 2.2 The Commission noted that the bands have been identified within the EU for terrestrial electronic communications networks and that global harmonisation developments are likely to see the bands designated for IMT⁴ services. In light of these developments, the Commission felt it would be prudent for the Island to follow international trends in relation to the use of these bands on the Island, not least given the implications these trends are likely to have for the production of equipment (including terminal devices) used in the bands.
- 2.3 In the consultation, the Commission stated that the request for spectrum it had received could best be catered for within the 3.6 GHz band, where, with the re-assignment of usage rights currently held by Domicilium and Wi-Manx, up to three new operators could be licensed. On this basis, the Commission proposed that access be offered to three 40 MHz blocks of TDD-compatible spectrum in the 3.6 GHz band, with each operator's total spectrum holding in the band capped at 40 MHz.

Summary of responses

- 2.4 BlueWave welcomed the Commission's plans to issue new licenses in the 3.6 GHz band, stating that the allocation of spectrum in this band would help to improve access to broadband services on the Island. BlueWave argued that the proposed 40 MHz spectrum cap per operator should not apply unless demand exceeds supply for the spectrum.
- 2.5 Manx ICT Association agreed with the Commission's proposals to refarm current spectrum holdings in the 3.6 GHz band and to offer access to three blocks of spectrum in the band.

Correspondence with licensees in the band

- 2.6 Coinciding with the Consultation, the Commission met with and subsequently wrote to both Domicilium and WiManx, setting out its proposals for refarming existing spectrum holdings in the 3.6 GHz band and offering both licensees the opportunity to swap their existing 2 x 30 MHz FDD-compatible assignments for 40 MHz TDD-compatible allocations.

⁴ IMT (International Mobile Telecommunications) is a definition used by the International Telecommunication Union (ITU) to denote a family of global technical standards for mobile telephony.

- 2.7 Domicilium indicated to the Commission that it wishes to retain its existing FDD-compatible spectrum allocation in the band at this point in time. WiManx stated that it was happy to surrender its allocation and further stated that it did not wish to avail of the offer to obtain a 40 MHz TDD-compatible assignment.

Commission's analysis

- 2.8 In light of the above responses from the two existing licensees in the 3.6 GHz band, the Commission is able to proceed with its proposal to offer access to three 40 MHz blocks of TDD-compatible spectrum in the band. With Domicilium retaining its FDD-based allocation and WiManx relinquishing its current assignment, there is adequate space in the band for three such assignments (i.e. 3680-3720 MHz, 3720-3760 MHz and 3760-3800 MHz).
- 2.9 The Commission wishes to ensure that operators not currently licensed in the 3.6 GHz band have the opportunity to secure a spectrum allocation that would enable them to offer a publicly available communications service using the 3.6 GHz spectrum. Without a spectrum cap, there is a danger that one or more operators could apply for all of the three available spectrum blocks and in such a scenario it is possible that smaller operators would lose out, especially if the sealed bid part of the assignment process needed to be triggered. The Commission remains of the view that a 40 MHz spectrum cap is an appropriate condition to apply to this particular assignment process.
- 2.10 The Commission does not wish to speculate at this stage about whether or not supply will exceed demand for the spectrum on offer and so is not in a position to confirm what the position would be if an operator that is licensed in the 3.6 GHz band wishes to acquire additional spectrum holding. Operators holding spectrum usage rights are, however, free to apply for additional spectrum as and when they are in a position to show a demonstrable need for additional bandwidth. In addition, the Commission is planning to consult separately on putting in place a process whereby interested parties would be able to gain access to spectrum assignments in bands where no real scarcity exists, subject to the Commission's legal requirement to conduct an assignment process that is open, transparent and non-discriminatory.

Commission's decision

DECISION 1: the Commission will hold a spectrum award process offering access to three 40 MHz blocks of TDD-compatible spectrum in the 3.6 GHz band, with each operator's total spectrum holding in the band capped at 40 MHz.

3. 3.6 GHz spectrum award process

Licence award process

Proposal 2: the 3.6 GHz licence award process will comprise four stages, i.e. an Application Stage, Qualification Stage, Sealed Bid Stage and Award Stage. If three or fewer qualified applications are received, the Sealed Bid Stage will not be required and, in this instance, the process will proceed directly to the Awards Stage.

Summary of the March 2015 consultation proposals

3.1 In the March 2015 consultation, the Commission set out its proposed process for awarding 3.6 GHz licences. The Commission proposed that the process should comprise four stages, i.e.

- Application Stage;
- Qualification Stage;
- Sealed Bids Stage;
- Awards Stage.

The Commission stated that if three or fewer qualified applications are received, the Sealed Bid Stage would not be required, in which instance the process would then proceed directly to the Awards stage.

Summary of responses

3.2 BlueWave stated that if more than three applications were received, it would be preferable to reduce the amount of spectrum allocated to each operator rather than utilising the proposed Sealed Bids Stage.

3.3 Manx ICT Association did not provide any comments on the proposed award process.

Commission's analysis

3.4 The Commission is keen to ensure that interested parties are granted access to sufficiently large contiguous spectrum holdings to enable them to offer commercially attractive services, which is why it proposed in the consultation to offer access to blocks of 40 MHz TDD-compatible spectrum. The Commission's decision to refarm current spectrum holdings within the band and to impose a 40 MHz per-operator cap were designed to ensure that access could be offered to three blocks of spectrum, which should help to ensure that demand will not exceed supply. At the same time, the Commission needed to build into the process a means of allocating the spectrum on offer in a situation where there was excess demand and in this regard the Commission is satisfied that the use of sealed bid is the most efficient way of doing this.

Commission's decision

DECISION 2: the 3.6 GHz licence award process will comprise up to four stages, i.e. an Application Stage, Qualification Stage, Sealed Bid Stage and Award Stage. If three or fewer qualified applications are received, the Sealed Bid Stage will not be required and, in this instance, the process will proceed directly to the Awards Stage.

Licence condition obliging usage of the spectrum

Proposal 3: operators licensed to provide services in the 3.6 GHz spectrum will be obliged to use this spectrum to provide a publicly available electronic communications service within a period of two years.

Summary of the March 2015 consultation proposals

- 3.5 In the March 2015 consultation, the Commission stated that it wishes to ensure that operators granted licences to provide services in the 3.6 GHz band use their licences to provide a publicly available electronic communications service. To this end, the Commission proposed to insert a condition into the Telecommunications Act licences held by operators who are licensed to provide services in the 3.6 GHz spectrum to the effect that such a service should be made available within two years.

Summary of responses

- 3.6 BlueWave stated that it was important that the 3.6 GHz band is used to its full potential. In addition to the Commission's proposal to oblige operators who are licensed to provide services in the 3.6 GHz spectrum to make a service publicly available within two years, BlueWave argued that licensees should also be required to ensure that the service continued to be provided beyond this initial period and the service be made widely available to end-users.
- 3.7 Manx ICT Association stated its support for the Commission's proposal. The Association pointed out, however, that the Commission's process of offering licences to three spectrum blocks at the one time may encourage applicants to engage in spectrum hoarding. The Association felt that the Commission should also put in place an *ad hoc* process whereby individual spectrum blocks could be assigned on demand to operators.

Commission's analysis

- 3.8 The Commission shares the concerns expressed by respondents that the spectrum should be used to its potential by operators licensed to provide services within the 3.6 GHz band and that, as a scarce resource, blocks of spectrum should not be hoarded or left unused by licensed operators.

- 3.9 The Commission is, however, mindful of the requirement to secure the optimal use of the band. At present there appears to be limited interest in the band and so the Commission does not wish to impose overly onerous obligations in relation to usage on licensed operators. In the Commission's opinion, an obligation to use the spectrum to provide a publicly available service within two years is a proportionate measure to apply in licensing operators to provide services using the 3.6 GHz spectrum and it does not believe that more stringent measures are required in this area.
- 3.10 Respondents raised the issue of spectrum hoarding. The Commission does not believe that its proposed assignment process will encourage spectrum hoarding in the band. There is a cost to operators in both acquiring a licence from the Commission to provide services in the band and in paying WTA licence fees to Ofcom. As a result, the Commission does not envisage that spectrum in the band will be assigned to operators who do not intend to use it. It is also likely that access will be made available in the future to spectrum in the adjacent 3.4 GHz band so any incentive to foreclose access to spectrum in the 3.4-3.8 GHz band through a strategy of spectrum hoarding is very unlikely to work in practice.
- 3.11 The Commission notes the point made by the Manx ICT Association proposing that a process should be put in place whereby individual spectrum blocks could be assigned on demand to operators. This is something that the Commission plans to consult on separately in the not-too-distant future, as it wishes to enable interested parties to be able to gain access to spectrum assignments in bands where no real scarcity exists, while at the same time being mindful of the requirements on it to licence operators to provide services in particular spectrum bands using a process that is open, transparent and non-discriminatory.

Commission's decision

DECISION 3: operators licensed to provide services in the 3.6 GHz spectrum will be obliged to use this spectrum to provide a publicly available electronic communications service within a period of two years.

Licence fees

Summary of the March 2015 consultation proposals

- 3.12 In the consultation, the Commission proposed that a Telecommunications Act licence fee of £3,000 be levied on operators who apply for and are granted licences by the Commission to provide services using the 3.6 GHz spectrum and on the two existing operators licensed by the Commission in the band (Domicilium and Wi-Manx) should they agree to the re-assignment of their current spectrum allocations in the band.
- 3.13 The Commission proposed that this fee would be payable by each licensee on the award of the spectrum (for new licensees in the band) or on the re-assignment of current spectrum allocations in the band (for existing licensees in the band).

Summary of responses

- 3.14 BlueWave stated that the proposed licence fee was fair and proportionate.
- 3.15 Manx ICT Association agreed with the proposed licence fee.

Commission's analysis

- 3.16 The Commission is satisfied that its proposal to levy a £3,000 licence fee on operators granted licences by the Commission to provide services using the 3.6 GHz spectrum is a reasonable one. This is in addition to the Wireless Telegraphy Act licence fee payable to Ofcom. As neither of the two existing licensees in the band intends to avail of the offer to accept re-assigned spectrum allocations, the proposed licence fee will not apply to either of them.

Commission's decision

DECISION 4: operators licensed to provide services in the 3.6 GHz spectrum will be obliged to pay a £3,000 licence fee, payable on the award of the spectrum.

In addition, licences granted by Ofcom under the Wireless Telegraphy Act 2006 for the use of radio spectrum are subject to the payment of fees. These are set out in the Statutory Instrument Wireless Telegraphy (Licence Charges) Regulations 2011.

Other issues raised in the consultation

Preference of spectrum allocation

- 3.17 One of the respondents queried if it would be possible for applicants to specify a preference for a particular spectrum block when applying for a licence to provide services in the 3.6 GHz band.

Commission's analysis and conclusion

- 3.18 The Commission considers this request to be a reasonable one and will include it in the application form so that applicants are able to specify a preference for a particular spectrum block when applying for a licence to provide services in the 3.6 GHz band. It should be noted that it is Ofcom that has the responsibility for issuing the appropriate WTA licence to successful applicants, but the Commission is willing to recommend to Ofcom that applicants who have expressed a preference for a particular spectrum block be granted access to that block in their WTA licence if the block is available. If two or more applicants request the same block the Commission will discuss options with Ofcom and the applicants before making a recommendation to Ofcom.

4. Commission Decisions

DECISION 1: the Commission will hold a spectrum award process offering access to three 40 MHz blocks of TDD-compatible spectrum in the 3.6 GHz band, with each operator's total spectrum holding in the band capped at 40 MHz.

DECISION 2: the 3.6 GHz licence award process will comprise up to four stages, i.e. an Application Stage, Qualification Stage, Sealed Bid Stage and Award Stage. If three or fewer qualified applications are received, the Sealed Bid Stage will not be required and, in this instance, the process will proceed directly to the Awards Stage.

DECISION 3: operators licensed to provide services in the 3.6 GHz spectrum will be obliged to use this spectrum to provide a publicly available electronic communications service within a period of two years.

DECISION 4: operators licensed to provide services in the 3.6 GHz spectrum will be obliged to pay a £3,000 licence fee, payable on the award of the spectrum.

In addition, licences granted by Ofcom under the Wireless Telegraphy Act 2006 for the use of radio spectrum are subject to the payment of fees. These are set out in the Statutory Instrument Wireless Telegraphy (Licence Charges) Regulations 2011.

5. Notice of Proposal to Modify Licence issued to BlueWave Communications Ltd under s.5 of the Telecommunications Act 1984

- 5.1 Under the provisions of section 10(3) of the Telecommunications Act 1984, before making modifications to operators' licences, the Commission is required to give notice:
- a. *"(a) stating that it proposes to make the modifications and setting out their effect;*
 - b. *(b) stating the reasons why it proposes to make the modifications; and*
 - c. *(c) specifying the time (not being less than 28 days from the date of publication of the notice) within which representations or objections with respect to the proposed modifications may be made",*
- 5.2 One current operator, BlueWave, has indicated that it intends to apply for a licence to provide services using the 3.6 GHz spectrum. If this application is successful, BlueWave's licence will therefore be modified as per the proposed licence variation set out in Annex 1. This will be attached as Part 5 of Schedule 1 in the current Telecommunications Act licence held by BlueWave.
- 5.3 The purpose of the proposed modifications to BlueWave's licence is to ensure that services will be introduced and operated in the Isle of Man using the 3.6 GHz spectrum in a manner which will best achieve the objectives set out by the Commission. Representations on the proposed licence modifications must be made by 8 July 2015.

Annex 1: Text of proposed licence variation

Part 5: ADDITIONAL OBLIGATIONS IN RESPECT OF SERVICE PROVISION USING SPECTRUM IN THE 3.6 GHZ BAND

INTERPRETATION AND APPLICATION

1. The conditions in this Part are binding upon the Communications Provider insofar as the Communications Provider:
 - runs a telecommunications system making use of a frequency allocation in the 3.6 GHz band; and/or
 - provides telecommunications services making use of a frequency allocation in the 3.6 GHz band.
2. The conditions in this Part apply only to the Communications Provider's:
 - running of a telecommunications system making use of a frequency allocation in the 3.6 GHz band; and/or
 - provision of telecommunications services making use of a frequency allocation in the 3.6 GHz band.

PROVISION OF A PUBLICLY AVAILABLE COMMUNICATIONS SERVICE

3. The Communications Provider shall ensure that at all times after the Launch Date it is making use of a frequency allocation in the 3.6 GHz band to provide a publicly available telecommunications service to consumers in the Isle of Man.
4. For the purposes of this Condition:
 - the Launch Date is two years following the award of a licence to provide service using the 3.6 GHz spectrum.

PAYMENT OF FEES

5. A Communications Provider that is granted the use of a frequency allocation in the 3.6 GHz band shall pay, or cause to be paid, to the Treasury the following sum:
 - £3,000 within 14 days of the Commission's award of an appropriate Telecommunications Act 1984 licence, or in the case of an existing licensee, a modified Telecommunications Act licence incorporating this Part.
6. For the purposes of paragraph 1(b) of Schedule 2, amounts payable under this Condition shall be deemed to be amounts payable under Condition 12 of the Operator's Licence.
7. The Wireless Telegraphy licence fee (£5,000) shall be paid to Ofcom before the Wireless Telegraphy Act licence is granted.