



**Response to Consultation and Decision  
on the licensing of spectrum  
in the 800 MHz and 900 MHz bands**

**8 December 2015**

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# 1. Introduction

## 1.1 Requests for spectrum in the 800MHz and 900MHz bands

This response to consultation is concerned with the requests submitted by Manx Telecom Limited ("MT") and Sure (Isle of Man) Limited ("Sure") for access to additional spectrum in the 800 MHz and 900 MHz bands in order to improve the quality of the mobile communications services provided by both operators to end-users.

The Commission published a consultation setting out its proposals further to these requests on 22 October 2015 (the October 2015 consultation).<sup>1</sup> The Commission received one response to the consultation, from Sure. In addition, MT indicated by email that it agreed with the Commission's proposals. A non-confidential version of Sure's consultation response will be available on the Commission's website in due course. The Commission thanks the respondent for its comments, which have been taken into account in this consultation response.

## 1.2 Legal and regulatory background

### *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<sup>2</sup>; and
- setting conditions on such operation and provision.<sup>3</sup>

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.

### *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

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<sup>1</sup> Consultation on the Licensing of Spectrum in the 800 MHz and 900 MHz bands, Isle of Man Communications Commission, 22<sup>nd</sup> October 2015, available at: <https://www.gov.im/lib/docs/cc/consultations/800900mhzconsultation22oct2015.pdf>

<sup>2</sup> See s.5(1) and 5(4)(b) Telecommunications Act 1984.

<sup>3</sup> See s.5(5) Telecommunications Act 1984.

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:

- (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;*
  - (...)

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.

## **2. Requests for additional spectrum in the 800 MHz and 900 MHz bands**

### **2.1 Summary of the November 2015 consultation proposals**

In the November 2015 consultation the Commission considered the requests made by MT and Sure for additional spectrum in the 800 MHz and 900 MHz bands in the context of the legislative requirements placed on it in relation to the assignment of spectrum usage rights and its own policy in this area, as well as recent experience in relation to the award of spectrum for 4G services, including in the 800 MHz band.

The Commission noted that both MT and Sure had provided adequate justification for requesting the additional spectrum in the 800 MHz and 900 MHz bands. Both operators stated that the additional spectrum was needed in order to improve the quality of the mobile communications services provided to end-users.

In the consultation, the Commission reached the provisional conclusion that both requests were justified and well-founded. As a result, the Commission took the provisional view that it should recommend to Ofcom that the Wireless Telegraphy licences held by MT and Sure in relation to their spectrum assignments in the 800 MHz and 900 MHz bands should be varied so that they would be granted access to the additional spectrum blocks each had requested. The Commission was also of the view that this approach would be consistent with its spectrum policy and that it would be in the best interests of end-users and of the broader Isle of Man economy.

### **2.2 Summary of responses**

Sure agreed with the principles underlying the Commission's proposals to grant both operators access to the additional spectrum requested in the 800 MHz and 900 MHz bands. Sure went on to state, however, that there were technical constraints which could potentially result in a significant degradation of service should it be granted access to the revised 2 x 15 MHz allocation in the band that was identified by the Commission in the consultation (i.e. the 925 MHz – 940 MHz base transmit block).

Sure stated that this was because the proposed revised spectrum assignment it would hold in the 900 MHz band would sit largely outside the primary (P-GSM-900) band and so only 5 MHz of this allocation could be used by it for the provision of GSM-based 2G services.<sup>4</sup>

Sure proposed that the Commission's 900 MHz proposals should be varied so that it retained its existing 2 x 10 MHz allocation within the band and that the additional 2 x 5 MHz should instead be provided in the 930 MHz – 935 MHz base transmit frequencies. A consequential impact of Sure's proposal would be that the unassigned 2 x 5 MHz block in the band would sit at the bottom of the band, i.e. in the 925 MHz

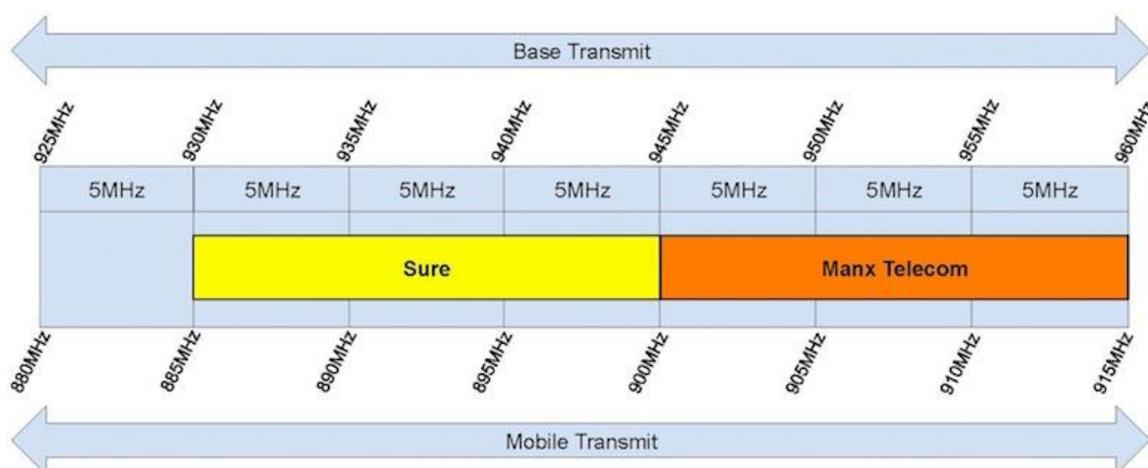
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<sup>4</sup> The P-GSM-900 band comprises the 935 MHz – 960 MHz frequencies (base transmit), paired with the 890 MHz – 915 MHz frequencies (mobile transmit), within which GSM services in Europe and some other areas were first deployed.

– 930 MHz base transmit frequencies, instead of, as was originally envisaged, in the middle of the band.

Sure's proposed revised spectrum assignments in the 900 MHz band are illustrated in Figure 1 below.

**Figure 1: Revised possible spectrum assignments in the 900 MHz band**



### 2.3 Commission's analysis

The Commission notes that there are no objections to its proposal to grant MT and Sure access to additional assignments of 2 x 5 MHz each in the 800 MHz band.

The Commission understands the rationale for Sure's argument against its 900 MHz assignment being moved down the band, as per the Commission's consultation proposal. While the Commission is of the opinion that issues relating to the way in which hardware operates in the band are only valid for as long as GSM-based 2G services continue to be provided in the band, it recognises that such issues are material at this point in time and accepts that there is a danger that customers of Sure might experience a degradation of service should its 900 MHz spectrum allocation be varied so that only 5 MHz of this allocation could be used by it for GSM-based services.

The Commission further notes that altering Sure's revised 2 x 15 MHz allocation in the 900 MHz band to that set out in Figure 1 above would have no material impact on the other operator in the band, MT. While the revised spectrum assignments would mean that Sure and MT have adjacent 2 x 15 MHz allocations, such a situation is not unusual and Ofcom have stated that it raises no issues from a wireless telegraphy licensing perspective. In any event, the issue of adjacent allocations will only arise when MT avails of the additional 2 x 1.2 MHz within the band which, as per the consultation proposals, is being reserved for it for future use as and when MT decides it wishes to obtain access to it.

Moving the unassigned 2 x 5 MHz block to the bottom of the band might be seen as an alteration that advantages Sure vis-à-vis MT but, as it was always the

Commission's intention to leave this block unassigned for now, where in the band this unassigned block sits is largely immaterial. Sure would have no greater claims on the block at the bottom of the band compared to the original consultation proposal (where it would sit in the middle of the band, between the two 2 x 15 MHz assignments) and it is always open to the Commission to recommend to Ofcom that it reassigns spectrum holdings within the band at a future date.

In addition, if either Sure or MT require additional spectrum, then the 2 x 5 MHz unassigned block in the 900 MHz band is not the only choice facing them. Additional spectrum is also available for assignment in other bands (e.g. at 1800 MHz, 2100 MHz and 2.6 GHz) and it is expected that further sub-1 GHz spectrum will in time be made available in the 700 MHz band. As a result, operators in the Isle of Man are likely to have more than adequate choices as regards obtaining additional spectrum, both in bands below 1 GHz and above it, over the longer-term. Because of this, the location within the 900 MHz band of the 2 x 5 MHz which the Commission proposes to leave unassigned for now will, at best, be only a minor consideration for operators as they weigh up spectrum assignment choices in the future.

## 2.4 Commission's decisions

**DECISION 1:** MT and Sure should each be granted access to an additional 2 x 5 MHz block in the 800 MHz band. The Commission will recommend to Ofcom that MT's Wireless Telegraphy licence granting it access to spectrum in the 800 MHz band be varied so that it is granted access to the 806 MHz – 821 MHz base transmit block and that Sure's Wireless Telegraphy licence granting it access to spectrum in the 800 MHz band be varied so that it is granted access to the 791 MHz – 806 MHz base transmit block.

**DECISION 2:** MT and Sure should be granted access to additional spectrum in the 900 MHz band so that each of the two operators should have a 2 x 15 MHz allocation in the band. In the case of Sure, the Commission will recommend to Ofcom that Sure's Wireless Telegraphy licence granting it access to spectrum in the 900 MHz band be varied so that it is granted access to the 930 MHz – 945 MHz base transmit block. In the case of MT, the Commission will, upon receiving a request from MT to do so, recommend to Ofcom that MT's Wireless Telegraphy licence granting it access to spectrum in the 900 MHz band be varied so that it is granted access to the 945 MHz – 960 MHz base transmit block.