



JRC Response to the Consultation on award of available spectrum 1452-1492 MHz

Key Points

- ❑ A number of existing users are continuing to use the band for microwave fixed links.
- ❑ There is no regulatory reason why existing fixed links users could not continue to use the band until their equipment reaches the end of its normal service life.
- ❑ This is no compelling reason to clear the band of existing users since we believe their use is mainly in geographic areas where it is unlikely to be put to alternative uses in the near future and would therefore remain unused.
- ❑ The original justification for closing the band to existing users was to make the band available for T-DAB, but that reason has been superseded by the commercial desire to make available virgin spectrum for auction.
- ❑ In other spectrum auctions, provisions have been made to allow existing users to continue with their current services in the spectrum concerned.

Answers to specific questions posed in the consultation

Q1. Do stakeholders agree with these proposals for the award of this band or have any other comments on the contents of this document?

1.1 The executive summary refers to 'less than 100 fixed links' still operating in the band. This is misleading. Paragraph 2.12 indicates that there are actually less than 100 fixed link **licences**'. Section 2.12 points out that these licences have around **500 fixed link assignments**. At an approximate replacement cost of £25,000 per installation, this amounts to roughly £12.5 million to replace existing infrastructure by existing operators to facilitate this auction. We cannot find anywhere in the document where this sum is reflected in the Regulatory Impact Assessment.

1.2 Although existing users were given notice to vacate the band several years ago, this was driven by the decision by the former Radiocommunications Agency to replan the band for Terrestrial Digital Audio Broadcasting (T-DAB). As is clear from the consultation document, this approach is no longer being adopted by the UK Administration and therefore the basis of the original decision to move existing users out of the band has disappeared.

1.3 Section 1.14 of the consultation document confirms that the new licences 'should be technology and application neutral'. This appears to undermine any case Ofcom may wish to make to force existing users to vacate the band and any new licensees could operate exactly the same service which Ofcom is now seeking to terminate in this band.

1.4 Section 2.18 of the consultation document confirms that there is little interest in using these frequencies for T-DAB, which was the original reason for mandating existing users to vacate the band.

1.5 Section 2.18 highlights one potential use of the band for the new licensees as 'point-to-point audio links'. In service terms, these are precisely the same 'microwave fixed links' which Ofcom is saying must vacate the band.

1.6 Section 2.18 highlights the use of the top of the band for S-DAB which will be protected. It would be helpful if the Regulatory Impact Assessment could compare the contribution to the UK economy by the S-DAB licensees in terms of Radio Spectrum Licence payments, VAT, Corporation Tax and net contribution to GDP through UK employment, etc, contrasted to the contribution to the UK economy of the existing users of the microwave links in the band who have been served notice to terminate their usage.

1.7 In paragraph 2.13, Ofcom has sought to assist existing users by considering a notice period for termination of their licences, but this is inappropriate for this type of service. The microwave fixed links in this band are frequently part of a complex 'mission critical' telecommunications network which makes it extremely difficult to replace parts piecemeal. Replacements of individual microwave links would have to be programmed into maintenance schedules to avoid disruption of vital services provided over these links.

1.8 The 1.5 GHz fixed links operating in this band are often part of major telecommunications infrastructures with service lifetimes of 15-25 years. Replacement of one part of the network – eg the 1.5 GHz links - ahead of the normal replacement cycle may result in stranded assets and a very short and uneconomic write-off time of replacement equipment.

1.9 It is understood that a significant number of the existing microwave links in the band are operating in support of the ambulance service. If these have to be replaced before the end of their service life, one would expect the Regulatory Impact Assessment to include a sum for the premature replacement of these assets which would accrue to the public exchequer and could potentially be a waste of scarce health service resources.

1.10 Section 5.8 of the consultation document confirms that the fixed service remains co-primary in the band and that fixed links which are registered in the ITU Master Frequency Register are entitled to continuing protection from interference. It would be helpful if Ofcom could indicate whether the existing 1.5 GHz microwave fixed links in this band have had their entries in the ITU Master Frequency Register maintained.

Alternative options

1.11 The concept of protection of existing users of a band is not new to Ofcom thinking. In this consultation, protection arrangements are written in for S-DAB services, even though they do not (as far as JRC is aware) pay any UK radio licence fees.

1.12 Within a companion document, Ofcom's consultation on the auction of UHF1 frequencies 412-414 MHz paired with 422-424 MHz, protection is offered to existing users, in this case the Ministry of Defence. It is therefore within Ofcom's gift to include similar provisions for existing users in this current consultation.

Conclusions

1.13 When the primary legislation implementing spectrum trading was passing through Parliament (Wireless Telegraphy Act 1998), government ministers were at pains to assure concerned radio users that spectrum efficiency was the primary reason for introducing spectrum pricing and trading, and revenue generation was not a consideration. In this consultation, the appearance is given that the only remaining justification for forcing existing users to vacate the bands is to increase its attraction – and therefore price – at auction. Changing the provisions to grant protection to existing users for as long as they continue to operate their existing equipment would be the single most important gesture Ofcom could make to dispel such accusations.

Background

A. JRC Ltd is a wholly owned joint venture between the UK electricity and gas industries specifically created to manage the radio spectrum allocations for these industries used to support emergency and safety critical operations. JRC also represents gas and electricity interests to government on radio issues.

B. JRC manages small blocks of VHF and UHF spectrum for PMR applications and for telemetry & telecontrol services. JRC created and manages a national cellular plan for co-ordinating frequency assignments for a number of large PMR networks in the UK.

C. The VHF and UHF frequency allocations managed by JRC support telecommunications networks to keep the electricity and gas industries in touch with their field engineers throughout the country. The networks provide comprehensive geographical coverage to support the installation, maintenance and repair of plant in all weather conditions on a 24 hour/365 days per year basis.

D. The Scanning Telemetry Service is used by radio based System Control And Data Acquisition (SCADA) networks which control and monitor safety critical gas and electricity industry plant and equipment throughout the country. These networks provide reliable communications at all times to unmanned sites and plant in remote locations to maintain the integrity of the UK's energy generation, transmission and distribution.

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