

Question 1: This executive summary sets out our proposals for the Digital Dividend Cleared Award. Do you agree with these proposals?:

The WiMAX Forum supports the initiative taken by Ofcom to start addressing these important new spectrum opportunities.

The WiMAX Forum has reviewed the consultation document from Ofcom and would like to submit the following general comments:

- a) The WiMAX Forum is developing certification profiles for broadband wireless access equipment for operation in the UHF frequency ranges driven for the time being by the availability of spectrum in the US at 700 MHz and extending upwards to include the additional spectrum identified for IMT at the ITU WRC-07. Profiles for the range 698-862 MHz are being developed covering both TDD and FDD.
- b) The WiMAX Forum, being aware of the developments within Europe and the drive to formalise the spectrum arrangements for mobile services in the frequency range 790-862MHz, is therefore keen to see the greatest harmonisation possible in terms of the availability of spectrum across the European countries and fully supports the use of this upper sub-band for mobile broadband services.
- c) Regarding the lower UK sub-band, the WiMAX Forum is keen to understand more about the common availability of this frequency range across Europe in order to develop a stronger view on the opportunity this spectrum affords.
- d) The WiMAX Forum notes the aggressive timescale proposed by Ofcom for the awards but would emphasize the desirability to achieve maximum alignment with the wider regional developments and notes that some of the largest UK market areas may not be addressable until the end of 2012.
- e) The WiMAX Forum notes that many of the detailed characteristics of the mobile broadband technologies envisaged for these frequencies remain undefined leading to uncertainties in assessing the detailed proposals for spectrum usage rights highlighted in the consultation document. The exact technical restrictions on the use of the spectrum for mobile services whilst protecting TV reception are not yet clear from the Ofcom documentation, especially in the case of the channels 61 and 62.
- f) With the uncertainties in mind the WiMAX Forum encourages Ofcom to hold further detailed consultation.

Question 2: Do you agree with our proposal to include the interleaved spectrum in channels 61 and 62 in the cleared award?:

Full nationwide availability would be the preferred option.

Question 3: Do you agree with our proposal not to allow licence-exempt use of channels 61 and 62 by cognitive devices?:

Yes.

Question 4: Do you have any comments on our assessment of the most likely uses of the cleared spectrum and the amount of spectrum required for these services? Are there any other potential uses that we should consider?:

The WiMAX Forum agrees with the assessment generally but supports a focus on the development of mobile broadband services in the upper sub-band identified (in fact over the range 790-862 MHz).

Question 5: Do you agree that we should proceed with our current timetable, with a view to holding the cleared award in summer 2009?:

The WiMAX Forum supports any initiative to get spectrum to market in a timely manner. Due account has to also be taken of other influential activities. We believe the timescale should be suitable provided nothing arises that would require or enable changes to maximise the available spectrum alignment with the spectrum available for mobile elsewhere in Europe.

Question 6: Do you have any views on the appropriate notice period for temporary PMSE access to channels 63-68, and/or on whether or not extend temporary access to channels 31-40?:

No comment

Question 7: What are your views on deferring the start date for rights to use cleared spectrum in London to help meet the need for wireless microphones and other audio links for the London 2012 Olympic Games and Paralympic Games?:

No comment

Question 8: Do you agree with the use of SURs as the approach for defining consistent TLCs for this award?:

No comment

Question 9: Do you have any comments on the SUR parameters listed in Tables 5.1 to 5.5 and the assumptions used to derive them?:

No comment

Question 10: Do you agree with our proposals for managing interference between new services in the DDR cleared spectrum?:

Further study may be required as the characteristics of mobile broadband systems in these frequencies becomes more mature and stable. Also, Ofcom should consider whether the guard bands can be reduced further.

Question 11: Do you agree that the most efficient and effective means of preventing interference to the existing DTT services is by the addition of a protection clause to licences in the cleared spectrum? If not, what alternative approach would you suggest?:

No comment

Question 12: Do you agree that the best way to finalise the protection clause approach and to address the practical implementation issues is through direct engagement with interested stakeholders? With which stakeholders should we engage?:

Yes. Mobile Wireless industry, WiMAX Forum.

Question 13: What do you believe would be the implications of protecting indoor/set-top antennas? Should a distinction be drawn between set-top antennas and larger antennas designed for external reception of TV signals that are loft-mounted?:

No comment

Question 14: Do you agree with our proposals for managing interference between new and existing users?:

No comment

Question 15: Do you agree with the proposed propagation models and databases to be used for compliance assessment?:

No comment

Question 16: Do you have any comments on the transmit masks set out in paras 5.128 to 5.130?:

[We assume this refers to paras 5.130 to 5.132]

The WiMAX Forum believes that the characteristics of mobile broadband system remain under consideration and may not be mature enough to finalise these aspects at this time. The WiMAX Forum does not support an EIRP limit of +61dBm/5MHz. Such a constraint has not been justified.

Question 17: Do you agree that where the cleared spectrum is used for the operation of a DTT multiplex, we should replicate the ownership restrictions from the Broadcasting Act regime relating to (a) local authorities, (b) political bodies, (c) religious bodies and (d) bodies exerting undue influence but not replicate restrictions relating to (e) broadcasting bodies and (f) advertising agencies?:

No comment

Question 18: Do you agree that we should facilitate interoperability between existing DTT multiplex operators and new operators using cleared spectrum?:

No comment

Question 19: We welcome views on the relative merits of such an approach to information provision, in particular concerning the type of information that may be helpful and any impacts that publication of information might have both on licence holders and the wider spectrum market.:

No comment

Question 20: Do you agree that the cleared award should include both 8 MHz lots for DVB-T and MMS TLCs and 5 MHz lots for FDD and TDD TLCs across the band?:

The WiMAX Forum anticipates that mobile broadband services will deploy 5MHz or 10MHz wide channels.

Question 21: Do you agree that the cleared award requires a mixture of frequency-specific and frequency-generic lots to be offered in the auction?:

No comment

Question 22: Do you agree with the proposed outline definition of lots suitable for MMS, DVB-T, TDD and FDD applications?:

No comment

Question 23: Should the flexibility to bid for lots defined on both fixed and variable-frequency rasters be preserved in the auction? If not, which are preferred?:

No comment

Question 24: Do you agree with the proposed basis for awarding Channel 38 as a distinct lot in the auction?:

No comment

Question 25: Do you agree with the proposed structure of frequency rules for allocating different licence types in the auction? Are there any amendments that would improve the efficiency of spectrum allocation via an auction?:

No comment

Question 26: Do you agree with our proposal to proceed on the basis of UK-wide lots?:

Yes

Question 27: Do you favour including the available cleared spectrum in (a) Guernsey and (b) Jersey in the geographic coverage of the licences to be awarded? If not, what approach do you favour instead?:

No comment

Question 28: Do you agree that the combinatorial clock auction is the most suitable auction design for the cleared DDR award?:

No comment

Question 29: What potential simplifications, if any, could be made to the proposed lot structure for DVB-T, MMS, TDD and FDD lot categories which would still reflect the most important differences in value between lots?:

No comment

Question 30: Do you have any comments on our proposals for the Application and Qualification Stages of the combinatorial clock auction for the cleared DDR award, including our proposals for initial deposits?:

No comment

Question 31: Do you consider that it is important to distinguish relative weightings in advance between the eligibility points of the different 1 MHz blocks available in this award? If so should this be restricted to channels 36, 38, 61 and 62 and what do you consider these relative weightings should be?:

No comment

Question 32: Do you have any views on whether an ex ante eligibility points activity rule or a revealed preference activity rule should be used in this award?:

No comment

Question 33: Do you have any views on whether there should be restrictions on bidders' ability to bid on multiple technical licence types within single package bids or between different rounds of the auction

and whether bidder association rules should potentially be adjusted to cater for any such restrictions being imposed?:

No comment

Question 34: Do you have any further comments on any aspect of our proposals for the Principal Stage of the combinatorial clock auction for the cleared DDR award?:

No comment

Question 35: Do you have any comments on any aspect of our proposals for the Assignment Stage or the Grant Stage of the combinatorial clock auction for the cleared DDR award?:

No comment

Question 36: Do you agree with our approach to assessing whether the award of cleared spectrum fully promotes competition and efficiency? :

No comment

Question 37: Do you have particular concerns about possibilities for award outcomes to fail to fully promote competition in downstream markets or to result in inefficient use of spectrum? If so, please explain what these are and provide supporting evidence.:

No comment

Question 38: Do you agree with our view that we should introduce a general safeguard cap aimed at promoting diversity of spectrum holdings? Do you have views concerning the level of such a cap?:

No comment

Question 39: Do you agree with our proposals to include an information provision licence condition to help facilitate efficient secondary trading?:

No comment

Question 40: Do you agree with our view that we should not apply any other general remedies in the cleared award?:

No comment

Question 41: Do you agree with our identification of the three areas requiring further attention?:

No comment

Question 42: Do you agree with our assessment that the limitations on the amount of cleared spectrum available for mobile broadband applications, and the particular advantages of sub 1GHz spectrum, could result in an outcome where there are limits on the level of competition possible in the provision of these services?:

No comment

Question 43: Do you think that a soft spectrum cap on either (a) the cleared spectrum suitable for mobile broadband applications alone, or (b) the holding of any sub 1GHz spectrum suitable for mobile broadband applications, which would trigger action if a significant competition concern emerges in relation to the market structure in the future mobile broadband market, could be an appropriate approach to these concerns?:

No comment

Question 44: Do you agree with our assessment that issues in the pay TV market are not at this stage primarily an issue for the cleared award?:

No comment

Question 45: Do you agree with our initial assessment that we should not intervene further in the cleared award to remedy any potential impact on competition resulting from the holding of cleared spectrum by NGW/Arqiva?:

No comment

Comments: