

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

We welcome the acknowledgment that interference and a UK-centric approach will negatively affect the attractiveness of spectrum packages. If in the UK, there is only a little spectrum available in line with the CEPT plan, this would impact equipment availability and cost of both equipment and services severely. We recommend that all possible effort is made to clear channels 61, 62 and 69 in order to maximize the amount of spectrum in line with the rest of the Europe.

We also emphasise that UK variant phones (e.g. operating on UK channels or with variable duplex spacing) may not be competitive.

Regarding the award process, it does seem that attempts to perfect the award efficiency have concentrated too much on maximising bids. An auction only approximates the long term value maximisation. For example auction bids depend on different discount rates applicable to different bidders which will also be higher than rates applicable to benefits to society (the treasury now uses 3.5%.)

This could be addressed in part by deferring payments, in part.

In addition even if an auction outcome were optimum at the time of the award, interest rates etc change over the licence period.

The resulting award process is also in itself complex enough to dissuade some bidders from participating, as well as making the process less transparent (it seems it will be almost impossible for most bidders to check the results.)

Lastly, having in mind Ofcom's obligation to 'secure optimum spectrum use' some assessment should be made of the carbon impact of different outcomes.

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

Yes but the best outcome would be to harmonize the usage of the full 790-862MHz with the rest of Europe in order to secure optimum spectrum use and equipment availability. This could involve moving the DTT in these channels and PMSE in Ch 69 to other frequencies. There is a strong case for delaying the auction of the 'upper band' until an EU harmonised solution is agreed.

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

Yes, but as Ofcom explained in the Condoc on Interleaved spectrum interference could be an even greater issue in bands where mobile TV is envisaged.

**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?:**

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

We recommend all possible effort is made to clear channels 61, 62 and 69 to make 790-862MHz available in line with the rest of the Europe before any decisions is made in UK. If, however, the award is delayed for any reason we would urge Ofcom to transfer Ch 36 to an earlier award of interleaved spectrum, or to a separate award. This would enhance competition, having in mind L band has already been awarded. Until the award of Ch 36 detailed work on the network cannot commence.

**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?:**

**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?:**

The benefits of deferring the start date are not clear, whereas the costs of a 6 month delay could run to many millions, even allowing for some interruption during the games (taking Ofcom estimates of total benefits nationwide of £5-10bn). Furthermore many of the new services can expect especially high demand during the games.

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

We are concerned that the use of SURs in the UK alone will lead to UK specific solutions, and also that specific products may be required by the negotiation enabled by SURs. Both could increase costs. We also believe that even if SURs are used ?back-stop? power limits will be required that are stringent enough to avoid EMC interference to non-radio equipment close-by. Otherwise there is a risk that a transmitter could be deemed to contravene the EMC Directive in the event of interference.

The SURs in UK should be in line with the CEPT wide agreed minimum restricted parameters that are currently under preparation in SE42.

**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?:**

We would like to consider the figures further if a decision is confirmed to use SURs.

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

Yes

**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?:**

Yes

**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?:**

**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?:**

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

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

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

Would like to consider the figures further.

**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?:**

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

Yes

**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.:

**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?:**

Yes

**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?:**

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

**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?:**

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

**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?:**

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

**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?:**

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

**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?:**

The distinction between upper and lower band channels is important. However there is flexibility as to at what point in the award process the assignment can be made.

**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?:**

**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?:**

**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?:**

**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?:**

**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?:**

It is not clear why eligibility points are the criteria used to decide the award in the event of a tie. In order to increase competition it may be possible to give priority to new entrants or to the outcome that would result in the largest number of licencees.

**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?:**

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

**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.:**

**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?:**

Yes, although it would appear logical that it should also apply post award also, so far as possible.

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

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

Yes from a competition perspective. However, other things being equal spectrum that is bought for use will generate greater benefits to society than spectrum which is not. It might therefore be possible to increase award efficiency by making a bid allowance for use (coupled with subsequent penalty if not fulfilled.)

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

**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?:**

Yes this concern is valid, and should be addressed by Ofcom as competition regulator, taking account of other lower frequency spectrum.

**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?:**

Yes

**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?:**

**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?:**

**Comments:**