

Question 1: This executive summary sets out Ofcom's proposals for the release of the digital dividend. Do you agree with these proposals?::

We welcome the opportunity to respond to the review of spectrum related to digital switchover. Timely intervention will enable the benefits from the 'digital dividend' to be maximised. We have focussed our response on mobile TV, where the UK is currently behind many European countries because of uncertainties over spectrum. Many countries (including Germany, France, Italy, Finland and Spain) have already earmarked spectrum for mobile TV, or started services. The economic risk of unnecessary delay is considerable.

We believe the arguments leading to a predominantly market led approach is not always supported by the evidence provided. The value of the public service element, which applies to television broadcasting including mobile TV, has been understated. There is also additional market research available with results at variance with that presented by Ofcom. In particular the feedback from mobile television trials in Oxford was much more positive than the Ofcom research results, for which we assume no demonstration of DVB-H was available. If participants had any experience at all of mobile television it would most likely have been of streaming on existing 3G phones. DVB-H terminals will often have larger screens and better picture quality. Market research on mobile phones in 1982, or colour television in 1964 would no doubt have also provoked a luke warm response.

Feedback from DVB-H trials in other countries has also been very positive. In Finland 58% of the participants were certain or fairly certain that Mobile TV will be popular. In Seville over 80% said they would recommend the service.

Further information from Nokia on mobile TV can be found at <http://www.mobiletv.nokia.com/>
[http://www.nokia.com/NOKIA_COM_1/Microsites/3GSM/pdf/Mobile_TV_Press_Backgrounder.pdf](http://www.nokia.com/NOKIA_COM_1/Microsites/3GSM/pdf/Mobile_TV_Press_Background.pdf)

Question 2: Do you have any comments on our analysis of the essential constraints that will apply to the available UHF spectrum?::

None other than it would appear to be to the benefit of the UK (in terms of spectrum value) if the one remaining Channel 36 radar can be replaced as soon as possible. It is also unclear whether it might be possible to use the channel in other parts of the UK in the mean time.

Question 3: Do you agree with the more detailed analysis and proposals regarding these technical constraints as set out in Annex 10?::

Question 4: Do you have any comments on Ofcom's assessment of the potential uses of this spectrum? Are there any potential uses which should be considered that are not mentioned in this document?::

We think the significant technologies have been covered, but they will have uses beyond those mentioned. For example the Olympic games in 2012 will be an unparalleled opportunity for all kinds of broadcasting, most notably mobile television for the millions of visitors from both UK and abroad. The benefits will include entertainment and improved public safety information.

Question 5: Do you have any comments on our analysis of the choice between a market-led and an interventionist approach to the release of this spectrum? Do you agree with the analysis of different mechanisms for intervening to remedy potential market failures?..:

We continue to believe that market failure is more likely than Ofcom predicts. This arises largely because spectrum is a national resource that can be used for public services. There are particular reasons for market failure in the broadcast context, as we have raised in previous consultations. They have been analysed in the report by Analysys but we do not find the conclusion that the effect is not significant wholly convincing, for the reasons outlined below.

1. Ofcom's firm policy on not using spectrum as an instrument of public policy depends on government being willing and able to fund public services adequately. If public services must compete on commercial terms for spectrum the subjective decisions (evaluating services) are not so much avoided, but transferred from Ofcom to government. Therefore in order for Ofcom to 'secure optimum use' of spectrum it cannot operate independent of government.

We also note that the market research report indicated 'universal agreement' for some sort of government intervention. (paragraph 8.12)

2. Advertising revenue does not reflect the full value of the programme content ('viewers' surplus?') (A5.32, A8.4, A8.322, A8.393, Annex E note 39&42) It is incorrect to assume that mobile TV will always be pay-per-view rather than reliant in part on advertising. The business model will vary and depend on many factors, including the content.

3. Part of the service value (the 'willingness to pay') is the cost of the network, mobile terminal, or TV receiver, regardless of whether it is supplied from the service provider or from a third party. The consultation document regards this value as insignificant (or already accounted for) but does not in our view provide an adequate justification (although in the case of third party provision reference is made to a paper on innovation by Mansfield, but it is not clear how relevant this is in this case.) If the relative equipment values for the different services were similar this omission may not change the outcome. In the case of DSO however the value could be very different between e.g. a set top box for DTT and a mobile TV. Therefore the value of mobile TV is underestimated by the auction. Even where the equipment market is competitive all the parts costs (and labour etc) constitute a significant contribution to spectrum value (which is what Ofcom is ultimately aiming to maximise.)

Ofcom have argued that it is only incremental changes that are significant here, and that it makes no difference to the contribution to the economy if mobile TV receivers are made for UHF or for L band. We could agree with this in theory but it assumes

that if UHF spectrum was not available L band receivers would be made, and in similar numbers.

4. Some recognition is given in the consultation document to the benefits of harmonisation, but the conclusion is open ended. We contend they are substantial.

5. One externality that was estimated by DCMS/DTI in their cost benefit analysis of DSO (dated 20 December 2005) is that of carbon emissions (at least for the network, if not for receivers.) This may be outside the remit of Ofcom, but it is unclear how that important work will now inform spectrum decisions.

6. Finally the Olympic games provide a compelling case for intervention, since surpluses elsewhere in the economy would in no way compensate for the games failing to deliver. We understand Ofcom recognises this, but we believe Mobile TV will have a substantial part to play.

Question 6: Do you agree with our proposals to continue making available channel 69 for use by low power PMSE devices? Do you agree with our proposal to make some or all of the spectrum available for use on a licence-exempt basis?:

Yes

Question 7: Do you agree that there should be transitional protection for professional PMSE users to ensure that they can continue to access interleaved capacity until at least the end of 2012? Do you have any views on the mechanism for providing future access to this spectrum?:

Yes

Question 8: Do you consider that additional spectrum from the digital dividend should be reserved for low power applications? If so, please provide as much evidence as possible about the nature of the application and its potential value to society.:

Where there are standards in development for use in other parts of the world that are likely in time to be adopted in Europe (IEEE802.22 being a possible candidate), Ofcom should recognise that early, and decide on suitable spectrum that can be made available on a licence-exempt basis, even if it is not nationwide. A 'wait and see' policy would put UK suppliers at a disadvantage. These applications would be suited to interleaved spectrum channels. However care will be needed to avoid interference to mobile TV.

Question 9: Do you consider that it would be desirable to hold back some spectrum from award with a view to its potential use for future innovation? If so, please provide comments on how much spectrum should be held back, and for how long.:

This should not be necessary provided some licence-exempt spectrum is available, and provided other spectrum licences can be revoked if needed, after the minimum term.

Question 10: Do you agree with our proposal that we should package the interleaved spectrum in a way that would be suitable for use by local television services, but not reserve spectrum solely for this use?::

We agree that the use of the interleaved channels should be flexible and include mobile TV, which could be a local service. However consumer benefits, in this case for local TV, might be lost if bidders do not have the necessary resources to compete in an open auction. If Ofcom takes this path they should work with government and local authorities to ensure such opportunities are not missed (noting however that local TV can also be provided via the internet or other means.)

Question 11: Do you agree with our proposal to package the spectrum in a way which does not preclude mobile broadband use, but to take no further action in relation to this use?::

Yes, this will depend on moves in the ITU to identify mobile spectrum in the band.

Question 12: Do you agree with our proposal that we should not intervene in the award of this spectrum to reserve spectrum for DTT? Do you agree that we should package the spectrum in a way which is suitable for DTT use?::

In the light of the aspects of market failure described above intervention may be desirable in respect of DTT and also of mobile TV.

Question 13: Do you consider that we have included in our analysis the most material risks in relation to market failure?::

The Analysis report appears to have subtracted rather than added the costs (i.e. value of terminal and network).

Page 47 (electronic page 69) bullet 1 of section 4.1 says 'less the cost of..'

Page 50 Ex 4.2 suggest private value is only user + service provider surpluses

Page 50 bullet 2, says 'less cost'

Page 51 Section 4.2.3 bullet also subtracts costs.

See our response to Question 5.

There are also significant investment effects in the programme content (the 'creative economy?') with long term benefits to the UK.

Question 14: Do you agree with our proposal to auction licences for the use of the available UHF spectrum?::

Yes, subject to some spectrum being reserved for mobile television. We would prefer that more than one channel be made available to mobile TV. If a single channel is available, competition can be maintained at the service level, using a shared network.

Question 15: Do you agree with Ofcom's proposals as to the timing of any auction? If not, what alternative proposal would you make and why, and what evidence and analysis can you provide in support of your alternative proposal?..:

We think it would be a mistake to assume that Channel 36 will be auctioned at the same time as the other channels, which could be delayed for a variety of reasons. We consider it would be better to release Channel 36 as soon as there is certainty about a date when it would be available. Therefore the auction could be held next year, giving time for a network to be built, even if the spectrum is only available 2009.

Question 16: Do you have any views on which of the packaging options identified for the cleared spectrum would be most suitable?..:

Question 17: Do you have any views on which of the packaging options identified for the interleaved spectrum would be most suitable?..:

Question 18: Do you have any views on which of the auction design options would be most suitable?..:

Question 19: Do you agree with Ofcom's proposals for the non-technical terms of the licences to be awarded for use of the UHF spectrum?..:

Question 20: Do you agree with the analysis of the options as set out in this Impact Assessment?..:

Additional comments: