

**Cover sheet for response to an Ofcom consultation**

**BASIC DETAILS**

**Consultation title:** Digital Dividend Review

**To (Ofcom contact):** Paula Guest

**Name of respondent:** Jane Cooper

**Representing (self or organisation/s):** Orange UK

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Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

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# Orange response to 'Ofcom consultation on the Digital Dividend Review'

20 March 2007

## Executive Summary

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Orange welcomes the opportunity to comment on Ofcom's proposals for the award of the digital dividend.

The proposed award of this spectrum represents the allocation of a significant amount of potentially very valuable spectrum to different operator communities, and as a result Ofcom is keen to press on with its award. Whilst Orange is generally supportive of Ofcom's desire to award spectrum as soon as possible, we do not believe that it should be at the expense of or risk to the operator community, and ultimately the UK consumer and citizen.

Orange's comments are based on the premise that ultimately the most efficient use of radio spectrum is by mobile applications. Mobile electronic communications services can **only** be delivered via radio spectrum, whilst there are an increasing number of more efficient delivery mechanisms for other services. Ofcom should therefore be careful to ensure that it does not enable (technically or economically) inefficient business models at the expense of mobile services by its decision in relation to the digital dividend.

As such, Orange believes that there are compelling reasons why part of the digital dividend could be made available for mobile services so as to extend cost-effective geographic coverage. However, we also recognise that the implementation of mobile communications in this band is a fundamental shift in the usage to date of this band and requires as such difficult decisions for Ofcom. In order to ensure that any potential bidder can correctly value the spectrum, it is imperative that Ofcom confirms its position with respect to refarming of the 2G spectrum allocations prior to the award of this spectrum.

From a European perspective, Orange urges Ofcom to work within the European framework to ensure that any possible solutions are harmonised as far as possible, bringing maximum benefits to the consumers of the European community.

To aid the resolution of a European solution, Orange is supportive of a harmonised sub band being allocated for mobile at WRC07 within the digital dividend. Due to the propagation of this spectrum, Ofcom must ensure that it negotiates effectively with its neighbouring Administrations to ensure that the full value of the spectrum is recognised. This is of particular importance as Ofcom intends implementing both technology and service neutrality within this band. Ofcom must not underestimate the detailed technical analysis and consultation that must take place to ensure that UK plc derives the greatest benefit from the award of the digital dividend.

Finally, we believe that Ofcom must give some consideration to a stand-alone award for Channel 36. There is some likelihood that the timetable for the award of the digital dividend could slip into 2009 or 2010. Orange is concerned that any delay to the award of the main digital dividend could render Channel 36 of little or no use for the deployment of a mobile TV network. If there is to be a DVB-H, or other, network deployed in time for the Olympics in 2012, Channel 36 must be awarded towards the end of 2008.

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

The Executive Summary considers most of the policy issues covered in the consultation, such as individual use, spectrum requirements and packaging, potential auction designs, usage rights and obligations. In general, Orange supports the proposal. This response covers the detailed considerations, such as the timing and the spectrum packaging.

We are pleased to note that mobile operators will be entitled to enter the award process on an equal footing to broadcasters.

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

Orange supports Ofcom's general approach to release this spectrum with as few constraints as possible. This is consistent with the need to comply with the UK's international obligations and the need to protect existing services within the UK that use adjacent frequencies.

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

Orange is supportive of the studies that Ofcom has commissioned to date and supports more the detailed analysis that clearly needs to be carried out, particularly with respect to mobile telephony.

Orange is in particular interested in the conclusions of the ERA study into how typical 3G and WiMAX uplink services may actually affect the reception of DTT services. This work showed that "uplink signals cause less interference to the reception of DTT services than initial modelling suggests".<sup>1</sup> Whilst the results of this study are therefore very encouraging in terms of the possibility of introducing 3G services into digital dividend spectrum, it is disappointing that due to the lateness of the ERA study that Ofcom is as yet unable to draw any firm conclusions on this issue. Given that Ofcom has indicated that the ERA results "do suggest that there may be fewer problems in using mobile uplink in the cleared spectrum than has been thought to date" it would appear critical that these results are verified as soon as possible by Ofcom and its consultants.

Orange would comment that it appears somewhat strange for Ofcom to be consulting on this issue whilst the ERA results have yet to be verified. Given their potential significance to the possible use of the digital dividend spectrum, it would appear to have been more appropriate to first verify these laboratory results so as to give greater regulatory comfort in terms of the possibility of mobile services being introduced in these bands.

In terms of the EU regulatory environment, Orange would encourage work with the European fora, in particular the RSC, to ensure that any solution can be harmonised across Europe.

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<sup>1</sup> A 10 .81

**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?*

Ofcom has identified a plethora of potential uses for the digital dividend, including mobile and digital television, wireless microphones, mobile communications and low power applications.

This spectrum band highlights many wireless opportunities that will be made possible when it is released. Ofcom considers the use of this spectrum for mobile multimedia (television and video). The mobile operators are currently trialling both DVB-H and MBMS equipment to understand the technical requirements and likely customer usage. However, it is clear that all mobile operators would want to have the opportunity to offer a national service. To this end, although Ofcom considers that the L Band spectrum may be suitable for broadcast mobile multimedia services,

For similar reasons, Orange also believes that the 2.6GHz band is not appropriate for a national service.

Orange is very supportive of the use of the digital dividend for mobile communications although we believe that further technical analysis is required to understand the exact requirements and packaging that could be enabled. Ultimately, only appropriate radio spectrum can enable mobile services, whilst other services can be delivered by an increasing number of more (economically and technically) efficient delivery mechanisms. Where technically possible Ofcom must be prepared to take the tough decisions needed to ensure spectral efficiency and to ensure that inefficient business models are not protected from alternative-platform competition.

We understand that there is a high commercial desire for the implementation of HDTV from the broadcasters; however, we support Ofcom's view that any broadcaster or operator wishing to introduce HDTV should be obliged to enter an award process.

**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?*

Whilst Orange is supportive of Ofcom's proposals for a market-led approach, we strongly believe that such an approach does not absolve Ofcom from its responsibilities with respect to spectrum management. Within its market, Ofcom is a monopoly provider of spectrum. To this end, it is entirely incumbent on Ofcom to decide when, and how to auction spectrum. The timing of this award, or any other, can have a significant impact on the market and the ability of operators to provide a particular service. It is also for Ofcom to ensure that the award process is a fair, transparent and open process for all potential players who want to take place.

However, if Ofcom intends implementing a technology neutral approach, we would encourage detailed technical considerations prior to the award of the spectrum to

ensure that the quality of the spectrum is not adversely affected and the most appropriate spectrum packaging is considered.

Ofcom considers whether the costs of taking part in an auction could prevent some valuable uses from getting access to the spectrum<sup>2</sup>, ie those with a high value to society. Orange would observe that this consideration applies to any use of spectrum, as opposed to just the digital dividend - If Ofcom were to determine that an auction was not appropriate in this regard, Orange would contend that it would not be appropriate in any other further award of spectrum. In an increasingly converged market, Ofcom must be fair and non-discriminatory in its spectrum awards process. It is very difficult to assess the externalities of any economic model, and to assist in the assessment of this model, Ofcom needs to consider all the various spectrum awards and the alternative means of delivery.

**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?*

No comment

**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?*

No comment

**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.*

Orange appreciates that there is a general requirement for low power uses. There is already a significant amount of licence exempt spectrum available at 5.8GHz which would be suitable for the uses proposed in the consultation document.

We do not believe that it is appropriate for this spectrum to be used for low power, typically licence exempt, applications. This is an extremely valuable spectrum resource which caters for national applications, such as mobile TV and mobile communications, which cannot be accommodated in any other spectrum band which is being made available. We do not believe that the L Band spectrum is an adequate substitute for this band.

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<sup>2</sup> Paragraph 6.27

**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*

Ofcom considers whether it would be appropriate to hold back some spectrum until possibly after DSO is completed in 2012. Orange is confused by Ofcom's proposal that such spectrum could be held as an 'innovation reserve' against the possibility of unexpected developments. Such an act seems to run contrary to Ofcom's current policy of getting all spectrum into the market as soon as possible. Ofcom seems to be sending a mixed message to the industry.

Orange does not support spectrum being held back from the main award in case of future innovation.

**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?*

Orange has no comment on the interleaved spectrum.

**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?*

Orange supports the use of the UHF spectrum for the provision of mobile broadband. The propagation characteristics of this low range UHF spectrum are ideally suited for rural mobile broadband coverage. The use of this spectrum for rural coverage would mean less environmental impact as we would be able to reduce the number of masts in rural locations. In addition, the lower cost base would enable in a competitive mobile market such as the UK, the cost savings to be passed on to UK citizens.

UMTS500 is currently being developed for use within this range, and would enable rural users to access services which otherwise may only be the preserve of urban-dwellers. This is such a huge opportunity for Ofcom to use the digital dividend to ensure there is no digital divide. However, we accept that further coordination studies will need to be carried out, and are encouraged by the initial ERA conclusions in this regard.

In an increasingly converged market place, Ofcom must ensure that there is a level playing field between the broadcasters and communication providers.

**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?*

Orange supports Ofcom's proposal not to intervene in this spectrum award to reserve capacity for high definition services on DTT and to package the spectrum in a way which is suitable for DTT use, unless Ofcom proposes reserving spectrum for the mobile operators.

We do not believe there is any reason why spectrum should be reserved for HD use. The mobile operators will be expected to purchase spectrum for the provision of mobile TV or mobile communications. Spectrum acquisition methods should be exactly the same between the two sectors.

The key point is that the allocative process for spectrum from the DDR must be open, transparent and for all to enter (bearing in mind that broadcasters possess gifted spectrum), acknowledging that as a result of digital switchover they will have a clear headstart. Any further assistance to broadcasters in relation to spectrum as a result of the DDR is likely to severely hamper the ability for innovative new services to emerge and therefore delivered to consumers – on a fair, market-driven and commercial basis.

We urge Ofcom to take this fully into account not just in relation to reserving spectrum for DTT but in relation to the entire DSO and DDR process.

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

Orange believes that Ofcom has considered most of the material risks in relation to market failure. However, we believe there should be a clear statement clarifying that there will be a level playing field between different market sectors. We also believe that there needs to be additional work completed on the inter-service operability between broadcast and mobile communications.

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

Orange supports Ofcom's proposal to auction licences for the use of the available UHF spectrum. However, we are not convinced that Ofcom has considered the details and aims of the award sufficiently.

Furthermore, we strongly believe that Channel 36 should be awarded both separately and early. It is the only spectrum that will be available in central London prior to the 2012 Olympics, hence the only channel that will be available for a mobile TV service.

In addition, consideration needs to be given to the auction rules concerning the bidder groups. ✂

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**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?*

Ofcom is proposing that any award of licences should be held as soon as possible (currently second half of 2008), that channel 36 should not be auctioned any sooner

than this and that any award for use of the interleaved spectrum should be held as soon as compatibly possible.

Orange is concerned that Ofcom is attempting to award the digital dividend spectrum before there is clarity over the use of the spectrum from both a UK and a European perspective. However, we do believe that consideration should be given to awarding Channel 36 both on a stand alone basis and early, or at least prior to the award of the digital dividend.

There is some likelihood that the timetable for the award of the digital dividend could slip into 2009 or 2010. Ofcom raises concerns<sup>3</sup> that if Channel 36 were awarded on a standalone basis, that such an auction would risk being inefficient as bidders will not have any certainty they would win complementary channels in the subsequent main digital dividend auction. Whilst Orange appreciates these issues, we are more concerned that any delay to the award of the main digital dividend could render Channel 36 of little or no use for the deployment of a mobile TV network. If there is to be a DVB-H, or other, network deployed in time for the Olympics, Channel 36 must be awarded towards the end of 2008 at the latest.

In addition, further consideration needs to be given to the applicability of the auction rules if one party is bidding as part of a consortium for a joint channel and also as a single bidder for access to a unique channel.

Furthermore, Orange is concerned that Ofcom's current proposals to award future rights in the digital dividend, ie award the spectrum prior to the spectrum being cleared leaves the successful bidders carrying all the risks if the incumbent user does not clear in the agreed timeframe. Clear sanctions should be agreed which take into account the potential reduction in the licence term for the bidders.

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

Orange believes that prior to resolving the auction design, Ofcom should first address the uncertainties surrounding the possible uses of the digital dividend. We also believe that Ofcom should work within the European Framework that is currently being discussed to ensure that the solution is harmonised across Europe.

We look forward to further discussion and consultation on this issue.

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

Orange has no comment on the interleaved spectrum.

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

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<sup>3</sup> Paragraph 8.20

Orange does not understand how Ofcom can move forward with a proposed auction design whilst there are still so many uncertainties regarding the spectrum packaging, as Ofcom itself acknowledges<sup>4</sup>.

However, as a matter of principle, Orange would favour an open and transparent award, taking into account the likelihood that bidders may act as part of a consortium and individually. Ofcom must also take into account that spectrum packages are never generic and each have a separate and distinct value. To this end, bidders should be able to bid on the spectrum package they desire during the auction, not reduced to chance in a sealed bid round at the end of the main award. Such bidding during the main auction should be completed with the full knowledge of potential neighbours and the technology and service that will be deployed.

**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?*

Orange supports Ofcom's proposal regarding an indefinite licence term and that all licences will be tradable. We are also supportive of the proposal that licences will not contain roll out obligations or 'use it or lose it' obligations (apart from some relating to the possible future supply of interleaved spectrum for PMSE use), although there must be a level playing field and no asymmetry of licensing conditions.

However, we are not clear how Ofcom can construe that non-technical restrictions ie technology neutrality are part of the non-technical terms<sup>5</sup>. We believe that the technical restrictions are fundamental to the successful award of this spectrum. Ofcom must not underestimate the detailed technical analysis and consultation that must take place to ensure that UK plc derives the greatest benefit from the award of the digital dividend.

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

It is clear that Ofcom has carried out an extensive Impact Assessment, and, in the main, we would support the proposals. However, we believe, as is often the case, that the devil is in the detail and for the award of this spectrum to be successful in the UK, Ofcom must continue to consult in an open, transparent and timely manner.

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<sup>4</sup> paragraph 10.3

<sup>5</sup> paragraph 11.32