

## **Vodafone comments on Ofcom Consultation on clearing the 800 MHz band (February 2009)**

### **INTRODUCTION**

The digital dividend in the UHF band is the most important spectrum to become available in the UK in at least the last decade, and probably for the next decade to come. It falls in the “sweet spot” in the radio spectrum that is suitable for both capacity and coverage, and is therefore attractive for a wide range of applications. The DDR cleared spectrum award is the most significant that Ofcom has yet undertaken.

The economic modelling undertaken by Ofcom shows the high value of UHF spectrum for mobile communications. This is supported by many other studies – for example Spectrum Value Partners has showed that the European economy would receive a financial boost of at least €95 billion over the next 20 years if around 25% of the UHF broadcasting spectrum were allocated for mobile broadband services.

However, this value can only be realised if there is a pan-European market for mobile terminals. This requires a common spectrum allocation across Europe. WRC-07 allocated the 790-862MHz band for mobile services in Europe, and identified this spectrum for IMT. In the last year, France, Germany, Sweden, Finland and Switzerland have made decisions or policy announcements to release this spectrum for mobile services. The UK was the first country to recognise the potential importance of digital dividend spectrum for mobile services, and it built this option into the digital switchover plans from the outset. However, these plans were developed well before WRC-07, and unfortunately the proposed digital dividend spectrum did not include the whole 790-862MHz band.

In June 2008, Ofcom consulted on its proposals for the award of cleared spectrum in the digital dividend. Vodafone was one of many respondents which recommended that Ofcom should amend its proposals in order to release the whole 790-862MHz band as cleared spectrum, and we suggested how this might be achieved. Ofcom is to be congratulated for seriously considering these recommendations. We recognise the considerable work that Ofcom has undertaken in order to bring forward the proposals in this consultation.

***Vodafone welcomes the proposal by Ofcom to release the whole 790-862MHz band for mobile services.***

## **RESPONSES TO THE CONSULTATION QUESTIONS**

### **The costs and benefits of clearing the 800 MHz band**

**Question 1.** Do you agree that clearing DTT from channels 61 and 62 and PMSE from channel 69 to align the upper band of cleared spectrum in the UK with the emerging digital dividend in other European countries is likely to further the interests of citizens and consumers to the greatest extent?

Yes.

Vodafone believes that citizens and consumers will benefit greatly from mobile broadband services provided in the UHF band. This can only be realised if there is a pan-European market for equipment, which requires that the spectrum released for mobile services in UK is aligned with other European countries. This can only be achieved if DTT is relocated from channels 61 and 62, and PMSE is relocated from channel 69.

### **Moving DTT from channels 61 and 62 (questions 2-7)**

**Question 2.** Do you agree that the proposed DTT migration criteria are proportionate and appropriate? If not, please explain why and clearly identify any other criteria you believe should be adopted and why.

Yes.

We agree that these criteria are proportionate and appropriate.

**Question 3.** Do you have views on the options identified and our assessment of them? Do you believe there are other, superior options, and, if so, why? Do you agree that the hybrid option is most consistent with the DTT migration criteria?

We agree that the hybrid option is the most consistent with the DTT migration criteria.

**Question 4.** Do you have views on the implementation-timing options identified and our assessment of them? Do you agree that DSO-integrated implementation is most consistent with the DTT migration criteria? If not, why not?

We agree that DSO-integrated implementation is most consistent with the DTT migration criteria. There may be some possibility to bring forward the completion date. The UK DSO programme seems rather conservative compared to other European countries (especially in respect of maintaining transmission redundancy during engineering work and the length of programmes of viewer education).

**Question 5.** Do you agree that a programme-control and -governance arrangement such as that outlined above is appropriate?

No comment.

**Question 6. Do you agree that the four cost categories adequately capture the costs associated with clearing DTT from channels 61 and 62? Are there any costs that do not appear to have been accounted for in any of these categories?**

We agree that the analysis appears to include all the main costs, and the total cost appears to be of the right magnitude.

**Question 7. Do you agree that our cost profile is a reasonable basis for planning the capital expenditure for clearing DTT from channels 61 and 62?**

No comment.

### **Moving PMSE from channel 69 (questions 8-15)**

**Question 8. Do you agree that these are the most appropriate criteria to assess which spectrum is the best alternative to channel 69 for PMSE?**

Yes.

We believe that these criteria are appropriate.

**Question 9. Do you agree with our technical and coverage analysis of the possible alternatives to channel 69 for PMSE?**

Yes.

Recent proposals for harmonised use of the 872-876/917-921MHz band in Europe make it less suitable for PMSE than when Vodafone proposed it in a previous consultation.

**Question 10. Do you agree with our economic assessment of the realistic alternatives to channel 69 for PMSE?**

No comment.

**Question 11. Do you agree that channel 38 is the best alternative to channel 69 for PMSE?**

It is not for Vodafone to judge what is best for PMSE stakeholders, but we believe that Ofcom's analysis is sound.

**Question 12. Do you agree that we should award channel 38 to the band manager on the same terms as would have applied to channel 69?**

Given the proposed relocation of PMSE to channel 38, it might be appropriate for Ofcom to provide a greater confidence in the long-term security of tenure of this spectrum for PMSE use.

**Question 13. Do you agree with our proposal to maintain PMSE access to channel 36 on 12 months' notice to cease and to the rest of the cleared spectrum (channels 31-35, 37 and 61-69) until DSO is completed in the UK in late 2012?**

We believe that maintaining PMSE access to channels 61-69 until DSO is completed (and until after the Olympics and Paralympics) will not be a major constraint on the new licence holders.

**Question 14. Do you agree with our approach to determining eligibility for, and our assessment of the level of, funding to move PMSE from channel 69?**

No comment.

**Question 15. Do you agree that three years is long enough for PMSE to move from channel 69?**

We would offer two suggestions on how to facilitate this migration:

- The start is determined by availability of equipment. It is therefore important to give certainty to manufacturers as soon as possible. To achieve this, Ofcom need to make a statement on the future band for PMSE as soon as possible after the close of the consultation,
- Ofcom needs to make the use of channel 38 as straightforward as possible in the period before it is fully vacated by radio astronomy. There is no need for all PMSE channels to be coordinated during the transition to avoid interference – professional PMSE users can be relied upon to respect an exclusion zone. The size of the exclusion zone would be substantially reduced if the radio astronomy sites are not protected for elevations of a few degrees above the horizon. Ofcom might consider seeking the agreement of radio astronomy users to this minor constraint on their operations during the transition period.

### **Impact assessment**

**Question 16. Do you agree that with our analysis of the key impacts of our policy options? Are there any other key impacts we should assess? Are there any situations not covered by the modelling approaches suggested here?**

Yes.

We agree with Ofcom's analysis, and we share its view that the estimate of the potential benefits is likely to be conservative.