



## **Orange response to the European Commission on the “Transforming the digital dividend opportunity into social benefits and economic growth in Europe” consultation**

Orange welcomes the opportunity to share its analysis on latest developments on the digital dividend in Europe. Recently Orange expressed its views, in the response to the RSPG consultation, by encouraging more Member States to release digital dividend spectrum for mobile broadband communications and ensure that this usage is widely harmonised across Europe.

Orange would like to use the opportunity of this new consultation on the digital dividend to reiterate some of those very important points for “Transforming the digital dividend opportunity into social benefits and economic growth in Europe”.

### **Broadcast analogue switch-off and availability of digital dividend spectrum for mobile communications**

Orange supports the European Commission in encouraging all Member States to switch-off their analogue television by the 1<sup>st</sup> January 2012. Although the analogue switch off is an important first step, Orange believes that clarification of the timing is required on the reorganisation of these prime frequencies to enable business certainty for both operators and manufacturers. This reshuffling of frequencies is essential to ensure a rapid release and efficient use of the 790 – 862MHz spectrum band by mobile broadband communications across Europe.

To ensure that the released spectrum for mobile communications is real as soon as the analogue switch-off is happening, borders frequency coordination are immediately required among Member States and with neighbouring countries outside of the EU.

Orange encourages the European Commission to confirm with Member States the commitment to 1<sup>st</sup> January 2012 for the analogue broadcast switch-off and rapid borders coordination to make sure that the availability of the 790-862 MHz band for mobile communications will be simultaneous to the broadcasting analogue switch-off. Consequently it is derived from this deadline that border coordination should be finalised before end of 2010.

### **Roadmap for harmonised use of the digital dividend**

Orange is supportive of the description of an EU roadmap for the digital dividend, as it will clarify the future technical usages of this spectrum band and will therefore facilitate the harmonisation across Europe.

Although, it is worth noting that in parallel of this process, many member states across Europe have already launched consultations on the allocation of this prime spectrum. Some of them have even announced that the allocation of the 790 – 862MHz band will take place at the beginning of 2010.



In order to allow a smooth, rapid and efficient deployment of mobile broadband communications, Orange would like to ensure that the EU roadmap will in no mean prevent these allocation to happen in due course, as originally planned by the national regulatory body.

The definition of the roadmap could be an enabler of a wider harmonisation of the digital dividend in Europe but it should not introduce delay in the release of the spectrum for mobile broadband communications at the national level.

## Elements for the roadmap

The low frequency bands, in particular 470-862 MHz, are prime spectrum bands for both broadcasting and telecommunication services across Europe.

Despite the evolution of TV standards and the increasing demand of high definition TV, the amount of spectrum below 1GHz is limited and would certainly be insufficient during the SD and HD television simulcast period while later HD+ and 3DTV will be naturally provided nationwide through cable, satellite, ADSL and fibre.

Subsequent to the evolutions of the technical standards (from DVB-T to DVB-T2 for example), there are new possibilities to use the spectrum more efficiently by for example planning broadcasting spectrum with almost nationwide single frequency networks (noting that there are cable, satellite and ADSL fibre networks already in operation which can rapidly offer more coverage than the terrestrial broadcasting networks).

Orange supports the evolution of services and technologies for broadcasting and mobile services that improve spectrum efficiency in general and in prime low frequency bands below 1 GHz in particular.

Indeed, it seems that a study of the most suitable spectrum and platform for HDTV and later 3D-TV should be conducted taken into account where necessary regional linguistic communities and several decision-makers as it is the case in Belgium for example. Similarly, it is necessary to consider the most appropriate spectrum for mobile broadband communications services.

At European and national levels, Orange supports studies on the new wireless services and demands as well as their associated means to provide them considering societal, technical and economical aspects.

In any case, more and more Member States and countries from outside European Union have already taken measures to make the band 790-862 MHz available for mobile broadband communications. The work in CEPT as shown a large preference for a 2\*30 +11 MHz FDD band plan in the digital dividend; this represents the most likely and pragmatic solution for a harmonisation of the digital dividend which would allow sufficient technical flexibility for operators to choose their preferred technologies and to benefit of the economies of scale at the European level.

Orange supports a rapid EU harmonisation of the technical conditions of the digital dividend following CEPT outcomes of the ECC in order to quickly allow economies of scale which are necessary for the development of mass-market mobile broadband communications services.



For a rapid implementation of the mobile communication services, Orange welcomes the EU initiatives to support bilateral and multilateral agreements in accordance with the GE-06 and WRC-07 Agreements to optimise a harmonised use of the 790-862 MHz band especially at the borders of the European Union. Very importantly, there is a need to describe, before any licensing process at the national level, the EU roadmap for availability of the digital dividend spectrum for mobile communications.

Some countries of the European Union did not ask for the inclusion of the 5.316A footnote during the WRC-07. The harmonisation of the technical and regulatory conditions for the use of the digital dividend across European Union should not be dependent of the inclusion of the countries in the list of countries of the 5.316A. Besides, the guidelines described in the CEPT for the release of the digital dividend do not make reference to the footnote.

Orange would favour the inclusion of new countries from European Union in the footnote 5.316A following the Agenda Item conclusions of the studies conducted under the 1.17 Agenda Item of the WRC-11 in order to describe more accurately the real use of the band in the ITU-R Radio communication Regulation and to help coordination with countries outside European Union.

Orange has participated to the debates on the use of the whites spaces in the UHF band for the PMSE applications in the spectrum band currently used by broadcasting applications. Even if the planning of broadcast is using multiple frequency and even if the PMSE have restricted usage areas, the conclusions indicated that the usages will be more and more difficult despite the use of cognitive radio systems. From Orange point of view, this might have represented a favourable scenario; unfortunately, the conclusions from the TG4 were quite definitive indicating that the cognitive radio technologies are not mature enough for the deployment of PMSE and moreover other sources indicate that the white spaces are not really suitable for wireless local networks. Orange then will carefully follow the activities on white spaces and cognitive radio systems in the SE43 or in the USA for example to understand whether white spaces could be considered as an option for the development of new services in the low frequency bands.

For the time being, it is clear that the white space and the cognitive radio do not provide sufficient certainties for deployment of nationwide networks to offer mobile broadband services and to guarantee a quality of service.

Finally, Orange believes as a strong principle that the secondary uses of the spectrum should not claim protection and cause harmful interference in accordance with the rules from the ITU-R Radiocommunication Regulation. Then, wireless microphone applications and PMSE in general should not ask for additional protection; they have to fulfil the technical conditions as those described in the Report 30 from CEPT, in particular the distance separation between them and the mobile terminals.

Orange believed that the priority should be given to primary licensed services and no additional conditions for the protection of wireless microphones in the 790-862 MHz band should be added to the mobile networks operators that have granted licences.