

Qualcomm Response to OFCOM Consultation

Digital Dividend: 600MHz and geographical interleaved spectrum

Introduction

Qualcomm welcomes the opportunity to respond to the public consultation on *Digital Dividend: 600MHz band and geographic interleaved spectrum*. The UHF band is the most valuable spectrum available as it offers an attractive combination of favourable propagation characteristics and significant capacity. Thus, Qualcomm applauds the extensive technical analysis and market research undertaken by Ofcom with regards to the Digital Dividend.

Qualcomm embraces the goal to increase the spectrum efficiency and spectrum utilisation. Internet is going mobile in Europe and globally with considerably higher data rates and increased diversity of connected devices (phones, laptops, e-readers, cameras, etc.).¹ In order to cope with this exponential uptake of convergent services, Qualcomm believes that it is important for the UK and for Europe to start the strategic review of the longer term use of the UHF band.

As a result, Qualcomm recommends to initiate the allocation of second harmonized digital dividend in Europe below 790MHz.

The opportunity to increase the digital dividend

Qualcomm believes that there is potential for an increased European harmonized digital dividend in Europe for mobile. Europe is lagging behind as other regions have identified far greater digital dividend, with spectrum allocated to mobile well below

¹ Mobile data traffic has already surpassed voice traffic on 3G networks and will continue to grow rapidly. By the end of 2011, mobile broadband subscribers are forecasted, globally, to surpass fixed broadband subscribers and will constitute, by the end of 2012, more than 70% of all broadband subscribers. By 2014, mobile data traffic is projected to grow by 4500% and to generate nearly 100 Billion Euros in operators' revenues. The provision of e-services (*Road Safety, Telematics and Value Added Location Based Services, e-Education, e-Learning, e-Health, e-Inclusion and e-Government*) over ubiquitous mobile broadband networks across the EU, will further bring considerable benefits to European businesses and consumers.

790MHz. In line with this global trend, Qualcomm recommends to carefully assess how the spectrum below 790MHz can be made available to mobile, in order to extend the current 790-862MHz regional allocation.

The opportunity for a DL extension below 790MHz

Qualcomm proposes to extend the digital dividend through identifying a harmonized downlink sub-band below 790MHz. Such a DL sub-band would allow extending 3G/4G capacity and/or the development of mobile multimedia broadcasting services.

This option was initially proposed by the European Commission in the EC Communication '*Reaping the full benefits of the digital dividend in Europe: A common approach to the use of the spectrum released by the digital switchover*'.

There are three major benefits linked with this approach:

- This downlink extension could further solve any potential interference issue at the border between broadcast and mobile bands, through the adoption of appropriate technical constraints.
- This approach would allow to allocate UHF spectrum in a transparent and competitive fashion.
- This sub-band would have considerable potential for future harmonization across Europe and therefore improve considerably the economic and social value of this spectrum.

Proposed way forward

Qualcomm encourages Ofcom to review its strategy regarding the allocation of the 600MHz with the aim to migrate the broadcasting use below 790MHz into the 600MHz. Such a relocation would make available a second digital dividend, in the form of a downlink band, which would be suitable for mobile and broadcasting below 790MHz.