

## **Qualcomm response to Ofcom consultation on the Digital Dividend, 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?**

Wide area mobile access has been recognized as a key driver for economic national competitiveness and reduction of the digital divide between urban and rural areas. Nationwide deployment of mobile networks and services is economically sensible in the sub-1GHz frequency bands, due to their favourable propagation characteristics. Therefore, nationwide deployment of mobile broadband networks should be considered a priority not only for telecommunication stakeholders but also in the general public interest and for UK economic competitiveness.

WRC-07 identified the band 790-862 MHz for mobile services in parts of ITU region 1. CEPT, mandated by the European Commission, is currently developing a harmonised band plan and associated technical conditions for mobile services in the band 790-862 MHz in order to achieve economies of scale at European level. Harmonisation is indeed key to the success of wireless services as it allows timely availability of affordable equipment. Harmonisation implies the release of the whole 790-862 MHz band for mobile services in line with the CEPT harmonised band plan which covers the whole band. Qualcomm supports the harmonisation and release of the band 790-862 MHz (800 MHz) which will be a key element in ensuring the roll-out of nationwide mobile broadband networks in the UK and in Europe.

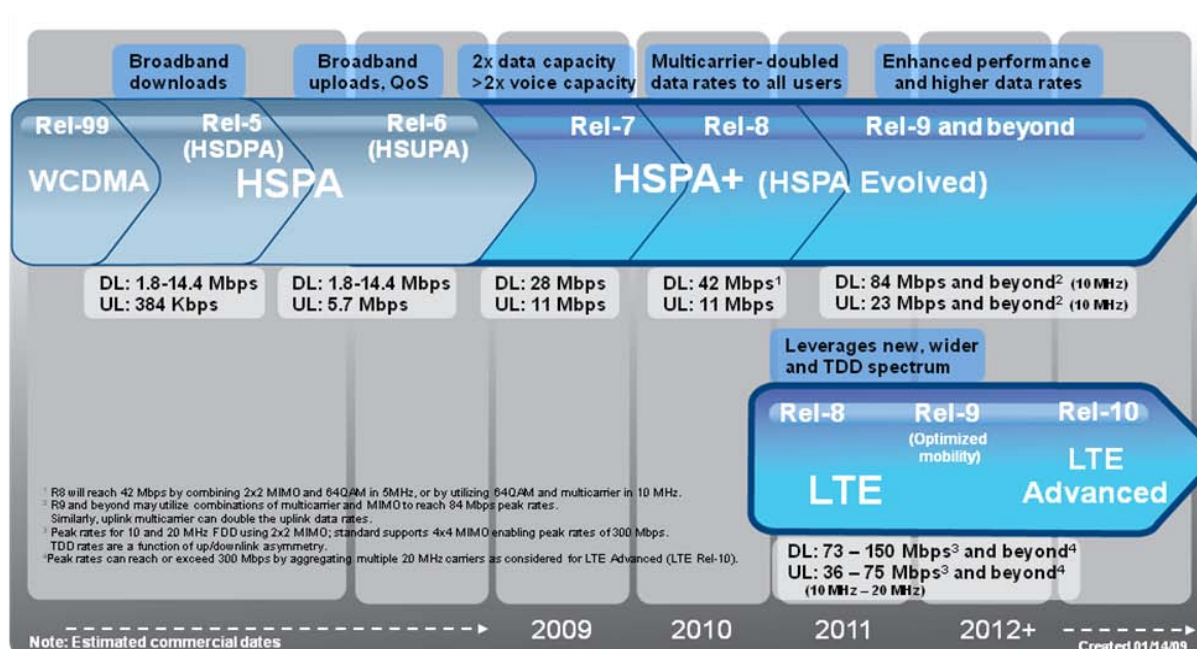
Qualcomm therefore highly welcomes and supports Ofcom proposal to align the upper part of the UK digital dividend on the harmonised European band and believes this alignment is of critical interest to citizens, consumers and UK economy.

**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?**

Qualcomm believes that implementation-timing options should take into account the technology development roadmap.

HSPA and LTE technologies roadmaps are illustrated in the figure below. The roadmap of products for the European 800 MHz band (790-862 MHz) specifically will depend on market demand, on the 800 MHz spectrum availability and its level of harmonisation across Europe, on the extent of adoption of the FDD band plan in the 800 MHz and its associated constraints, etc.

Qualcomm therefore urges Ofcom to clear and release the whole 790-862 MHz spectrum as early as possible after the Digital Switch Over.



## **Moving PMSE from channel 69**

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

With regards to Ofcom statements in 5.18 and 5.42 of the consultation document, Qualcomm believes that the harmonisation of the 800 MHz band plan is critical for the cost efficient deployment of mobile broadband networks and to achieve economies of scale. There is an overall opposition within the mobile industry against a flexible FDD / TDD band plan. Lately, there seems to be an alignment of the mobile industry for the support of a single full FDD band plan in the 800 MHz, with all technologies having an FDD profile. Therefore, Qualcomm argues that there is a general European move towards a harmonised FDD band plan. A satisfying level of certainty on the 800 MHz band plan can be reached by Ofcom by recognizing the importance of harmonisation and aligning on the upcoming European harmonised band plan.

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

Qualcomm agrees with Ofcom's proposal that channel 38 is the best alternative for channel 69 for PMSE usage. This would allow PMSE to take benefits of economies of scale of existing equipments able to operate over the interleaved UHF spectrum. In addition, this would enable an efficient usage of Channel 38 taking into account cross border coordination constraints imposed by Radio Astronomy 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?**

The 790-862MHz band will not be usable by mobile equipments in the UK until the whole band is released to mobile. This is due to the fact that cost efficient FDD equipments will be designed to be operated over the whole harmonised 800 MHz band. Therefore, PMSE usage of Channel 69 could be allowed until the DSO is completed, while ensuring a smooth transition of PMSEs from Channel 69 to Channel 38 over time.

While Qualcomm supports Ofcom assessment that it makes sense not to restrict PMSE use in that band until the DSO in the UK is completed, we urge Ofcom to ensure that the band 790-862 MHz is cleared and released as early as possible after the DSO.