



**Consultation Title:** Application of spectrum liberalisation and trading to the mobile sector

**To:** Justin Moore  
Floor 3  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA  
[justin.moore@ofcom.org.uk](mailto:justin.moore@ofcom.org.uk)

**Name of respondent:** Isabella De Michelis Di Slong  
Senior Director, Government Affairs Europe  
[idemiche@qualcomm.com](mailto:idemiche@qualcomm.com)

**Representing:** Qualcomm

**Address:** Waterfront (4th Floor)  
Hammersmith Embankment  
Chancellors Road  
LONDON W6 9RU

**Date:** 29 November 2007

## CONFIDENTIALITY

What do you want Ofcom to keep confidential? Nothing

## DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response. It can be published in full on Ofcom's website, unless otherwise specified on this cover sheet, and I authorise Ofcom to make use of the information in this response to meet its legal requirements. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments. Ofcom seeks to publish responses on receipt.



Qualcomm welcomes the opportunity to respond to Ofcom consultation on the application of liberalisation and trading to the mobile sector. Qualcomm is a leading technology provider as well as a key provider of leading-edge chipset and software solutions, provides support for 3G technologies including UMTS (WCDMA/HSPA) in a variety of frequency bands. In January 2006, Qualcomm achieved with its partners, the industry's first UMTS (WCDMA/HSDPA) calls at 900 MHz. Qualcomm recently sampled the RTR 6285 chipset which is a highly integrated, single-chip, quad-band WCDMA solution that allows the support of WCDMA/HSPA in the 900 MHz band at no additional chipset cost. Since 2006, Qualcomm has also been involved in a number of UMTS900 field trials which allowed to test coverage and capacity comparison, adjacent channel interference, co-channel Isolation distance, building penetration and indoor performance as well as site solution tests (antenna sharing, TMA configuration) and mobility. Qualcomm has been very active along with many other players within the industry to develop a suitable regulatory, standardisation and market environment for UMTS900.

Taking into account the various competition issues raised by Ofcom in its consultation paper, Qualcomm would like to limit its response to the following:

- The UK is a laggard within Europe when it comes to UMTS900. UMTS900 provides the opportunity to expand 3G mobile broadband into the smaller towns, villages and rural areas, in an economically efficient manner. UMTS900 also improves indoor coverage in all areas, including cities. Providing broadband access to rural areas is essential for the UK's digital inclusiveness. Having 3G mobile broadband wireless operators with nationwide and improved indoor coverage, as a competitive alternative to wired providers, further enhances competitiveness and broadband development.
- As the mobile industry in Europe expands from GSM/GPRS/EDGE (voice with a limited data user experience) towards WCDMA/HSPA (greater capacity, faster data rates, shorter download times and lower costs) the refarming of the 900 MHz is becoming increasingly important. 3G High Speed Downlink and Uplink Packet access technologies and their evolution (HSDPA and HSUPA, HSPA+ will offer as soon as 2009 a significant evolution in data rates (downlink up to 42 Mbits/s and uplink up to 11 Mbits/s) comparable and superior to those offered over ADSL. This will enable seamless user experience across fixed and mobile networks and the generalization of mobile internet services. Qualcomm therefore strongly supports the liberalization of the 900 MHz spectrum as it will enable consumers to benefit from mobile broadband services in a cost efficient manner.
- Qualcomm believes that Ofcom should allow the liberalization of the 900 MHz band as soon as possible and not to delay this liberalization until 2010. Indeed, this will allow existing 900 MHz mobile operators to efficiently transit from the current interleaved spectrum assignments in the band towards the more efficient targeted band plan that includes contiguous blocks of spectrum which will then enable contiguous 5MHz UMTS900 services to be deployed. Based on our practical experience in other countries of deploying UMTS900 we believe that, for the UK, 2x15 MHz per operator would ease the introduction of UMTS900 in major conurbations in an efficient manner during the transition phase from the existing spectrum assignments towards the target band plan envisaged by Ofcom.
- Qualcomm supports the open these bands for IMT technologies but we would caution that sharing studies within the CEPT are required for new technologies to ensure that a pan European harmonised approach is taken and that interference is minimised.

We would be pleased to provide further information at a follow up meeting.

-----