



GSMA Response to the Norwegian consultation on the use of Digital Dividend radio frequencies

Summary

The GSMA welcomes the chance to respond to this important consultation on use of UHF spectrum and the decision to make the bands 790 – 862 MHz available on a technology and service neutral basis, making deployment of digital mobile broadband services to all areas possible at this frequency. The use of this band coincides with the bands identified for mobile broadband services (IMT) by the ITU World Radiocommunication Conference last year. This is also consistent with the bands being studied by the CEPT under the mandate from the European Commission. This will help ensure that terminals for use by Norwegian citizens can take advantage of the significant economies of scale that international frequency harmonisation can bring, and help to better manage cross border radio interference.

GSMA does, however, believe that more than 72MHz of spectrum will be necessary to roll out mobile broadband services to all users.

Discussion

GSMA understands that the 470-790 MHz band is assigned to digital terrestrial broadcast until the expiry of the current licences in 2021. We understand that the license issued is linked to DVB based technologies and broadcasting services and that transfer of part or whole of the license requires approval from the Norwegian Ministry of Transport and Communication.

The proposal that 790-862 MHz should be made available on a technology and service neutral approach, making deployment of digital mobile broadband services in this spectrum, is in line with the bands under study by the CEPT and identified by the ITU.

However the GSMA believes that more than the 72 MHz identified for such services is necessary in this band for the long term development of mobile broadband. An allocation of around 100 MHz would still leave sufficient spectrum for terrestrial broadcasting services. Norway should consider lifting the technology and service regulations on use of parts of the 470-790 MHz spectrum and the Norwegian Ministry of Transport and Communication should allow trading of part of the spectrum so that Norwegian citizens can enjoy expanded UHF spectrum for mobile broadband services should this trend develop internationally.

Studies have been done which show the economic benefits¹ of assigning some of the spectrum currently used for terrestrial television for new and innovative services such as mobile broadband. Such studies have also shown that the economic benefits are maximised if a greater amount of spectrum is made available than 72 MHz. Doing so will allow competition and benefit consumers through higher data rates at more competitive prices.

Indeed the European Parliament has published a report² that states that: *"Recognises that the increased spectrum efficiency of digital terrestrial television should allow for around 100 MHz of digital dividend to be re-allocated to mobile broadband and other services (e.g. public safety services, RFID, road safety applications etc.) whilst ensuring that broadcasting services can continue to flourish; "*

This recognises that broadband access is no longer a luxury, but important for consumers to participate in the knowledge based economy. Many consumers will access this via their fixed telephone lines (copper or cable). However a significant number will live in areas where they cannot get cable or are too far from an exchange to access broadband service data rates. For such users (mostly in rural areas) mobile broadband may be the only economic option.

We have seen the huge investment by the mobile industry in recent years in technologies such as GPRS, UMTS, and HSPA, allowing mobile operators to offer the data rates that consumers demanded.

However for the longer term the industry believes the data rates and capabilities offered by Long Term Evolution (LTE) mobile services are necessary. Such mobile technologies are ideal to offer the broadband that consumers demand. In the 2007 auction the Norwegian spectrum manager assigned LTE capable 2.6 GHz spectrum suited for commercially offering capacity in densely populated areas of Norway. The Norwegian government should follow up by assigning the 790-862 MHz band making it economically possible to offer LTE services to rural areas of Norway. The regulator and / or government should contribute to making it possible to expand use of UHF spectrum for mobile broadband coverage below the 790-862 MHz band. The higher data rates demanded by subscribers (as well as lower delay and jitter), require larger bandwidths and channels. This is because the new LTE air-interface uses new technology (OFDMA) – specifically to offer higher data rates efficiently and economically.

DTT is no longer the only means of receiving TV content. The advent of satellite and cable, followed by the deployment and take-up of internet TV services, have diminished our reliance on traditional networks. This has led to a realisation that the public good benefits of broadcasting depend on the wide scale availability of diverse content for citizens, not on the availability of any single technology platform.

Digital television is much more spectrally efficient than its analogue counterpart. Digital television's spectrum efficiency will increase over time with the introduction of new modulation schemes and compression techniques. This increase of spectrum efficiency should enable terrestrial television to operate even more content in less spectrum.

¹ <http://www.digitaldividend.eu/> and <http://www.spectrumstrategy.com/Pages/GB/perspectives/Spectrum-Getting-the-most-out-of-the-digital-dividend-2008.pdf>

² http://www.europarl.europa.eu/news/expert/infopress_page/058-32511-177-06-26-909-20080623IPR32510-25-06-2008-2008-false/default_en.htm

The GSMA therefore believes that ideally 750 – 862 MHz should be available for use by new and innovative services such as mobile.

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About the GSM Association

Founded in 1987, The GSM Association (GSMA) is a global trade association representing more than 750 GSM mobile phone operators across 218 territories and countries of the world. In addition, more than 180 manufacturers and suppliers support the Association's initiatives as associate members.

The primary goals of the GSMA are to ensure mobile phones and wireless services work globally and are easily accessible, enhancing their value to individual customers and national economies, while creating new business opportunities for operators and their suppliers. The Association's members serve more than 3 billion customers.

The GSMA believe that the promotion of open, competitive market conditions is fundamental to extending the benefits of mobile communications to all, from the most developed Western European and North American markets to remote areas in Developing Countries. Mobile has a critical role to play in improving health, wealth, education and social mobility. To this end the GSMA launched its Emerging Market Handset Programme to produce sub \$30 (US) GSM handsets.

The GSMA also hopes to replicate this GSM handset program success for 3GSM enabled handsets. This initiative is called "3G for All". Under this initiative, which builds on the success of the GSMA's Emerging Market Handset programme, mobile phone suppliers will compete to design a 3G handset that meets the operators' common requirements. Twelve operators will evaluate and score the proposals submitted by handset vendors against the following criteria - functionality, usability, logistics, market acceptance, target price, service and support, strategic commitment and form factor. The GSMA hopes to announce the winner of this selection process at the 3GSM World Congress at Barcelona, in February 2007³.

³ For more details see: http://www.gsmworld.com/news/press_2006/press06_47.shtml