



**GSM Association response to ComReg’s consultation
“Digital Dividend: A new approach to spectrum use in the UHF band”
May 2009**

OVERVIEW

The GSMA welcomes the opportunity to respond to ComReg’s consultation on the Digital Dividend. The GSMA agrees with ComReg that the Digital Dividend has the facility to enable new and innovative communications products and services for the benefit of Irish citizens, in particular enhanced mobile broadband services and Internet connectivity throughout the country.

We believe strongly in the merits of a coordinated approach to the Digital Dividend between EU Member States; access to UHF spectrum in bands harmonised across Europe is extremely important to ensure broadband availability in rural areas. The benefits of having a band available for mobile that is compatible with the rest of Europe far outweigh the anticipated costs of migrating services out of the 790-862MHz band.

Harmonised Digital Dividend spectrum will also allow mobile broadband to reach its full potential as a viable alternative to fixed broadband for many consumers. This is of particular importance in countries such as Ireland, where fixed broadband penetration is below the EU average¹. An increase in competition for broadband services will benefit all broadband users. The growth of mobile broadband will also help to foster long-term economic growth. This is of clear importance in the current economic climate.

The net outcome of harmonisation with Europe will be cheaper and better handsets for all Irish consumers, due to economies of scale in handset production. This will allow mobile broadband to better serve consumer needs in rural areas and developing markets.

We strongly recommend that Ireland should align with the World Radiocommunications Conference (WRC) 2007 identifications and allocate the frequency band 790-862 MHz to mobile broadband. In doing so, Ireland will join a growing number of major markets that will use this band for mobile broadband in Europe.

Q1 What would you consider to be the levels of value and benefits, including any social value which may be produced for Irish consumers/citizens and Ireland’s digital economy arising from non-broadcasting uses of the digital dividend?

The GSMA has long believed that there are substantial benefits – economic, social and technical - to be had from harmonised spectrum assignments for mass market mobile services.

¹ See http://ec.europa.eu/information_society/policy/ecomms/doc/implementation_enforcement/annualreports/14threport/ie.pdf

The economic benefits of broadband are clear² and have been demonstrated by numerous economic studies. Allocating some of the Digital Dividend spectrum to mobile operators would have a significant positive economic impact, driving innovation, job creation, productivity and competitiveness. Across Europe, allocating up to 100MHz of UHF spectrum to mobile would generate between €63bn and €165bn in extra economic value³.

In terms of social benefits, policy makers globally have identified widespread internet access as a critical tool in social development; it has an essential role to play in improving health, wealth, education and social mobility and bridging the digital divide between rural and urban areas. Currently mobile broadband penetration in Ireland is 20.5%, considerably higher than the EU-27 average of 13%⁴. More widespread roll-out of mobile broadband will continue to bridge the digital divide between rural and urban areas and allow more Irish citizens to fully engage with services such as e-government, as well as enhancing inclusion, quality of life, community ethos, cultural understanding, education of citizens and informed democracy. Environmental benefits will also ensue from deploying mobile broadband in the UHF band as significantly fewer base stations will be required.

The technical benefits are two-fold: better designed mobile devices with superior radio performance⁵, and improved interference control between countries.

Q3 Please outline your views regarding (i) the types of applications and services which you consider the digital dividend should be used for; (ii) possible spectrum requirements of these applications; (iii) timeframes for making available rights of use for digital dividend spectrum

(i) The GSMA believes that digital dividend spectrum is ideal for the deployment of mobile broadband services, in particular HSPA, HSPA+ and the newest version of 3G technology, LTE (Long Term Evolution). In the GSMA's response to the European Commission workshop on the Digital Dividend in Europe⁶ in March 2009, we made clear our view that if sufficient favourable regulatory signals are given by national administrations in Europe by the end of this year, LTE services could start to be deployed as early as 2011, with large-scale deployment by 2012. Mobile Internet access via these technologies will enable a multitude of new and innovative services, including government, health, education and entertainment services, to be delivered widely cost-effectively in rural areas of Ireland as well as urban.

(ii) Ideally, a minimum of 100MHz of harmonised digital dividend spectrum would be allocated to deliver mobile broadband services in the UHF band. This would be sufficient to license larger frequency channels, which would deliver higher data rates and support several operators in the Irish market, ensuring vigorous competition. Each operator needs a minimum of 2 x 10 MHz to provide an efficient LTE service.

100MHz represents only approximately 25% of the spectrum currently used for terrestrial broadcasting.

² See <http://www.analysismason.com/PageFiles/11730/GSMA.pdf>

³ Source: Spectrum Value Partners, Getting the most out of the Digital Dividend, 2008

⁴ See

http://ec.europa.eu/information_society/policy/ecom/doc/implementation_enforcement/annualreports/14threport/ie.pdf

⁵ See http://www.gsmworld.com/our-work/public-policy/spectrum/digital-dividend/frequency_harmonisation.htm for more detail.

⁶ <http://www.analysismason.com/PageFiles/11730/GSMA.pdf> (conclusion to question 4)

(iii)The GSMA believes that the harmonised band of 790-862MHz should be made available as soon as possible to ensure that citizens of Ireland can derive the maximum benefit from mobile broadband, and that the country can maintain international competitiveness. Although analogue switchover in Ireland is not scheduled for completion until 2012, the sooner mobile operators have certainty on the issue, the sooner they can confirm their network investment plans. This will ensure that Irish consumers can benefit from new services as quickly as possible.

Q6 In light of your views on non-broadcasting services, do you consider that a mixed approach to spectrum allocation in the UHF spectrum band should be adopted?

The GSMA agrees with ComReg's view that a mixed approach will be central to Ireland's ability to achieve greatest benefit from its digital dividend. The characteristics of UHF spectrum mean that it can comfortably be shared by mobile, TV and potentially other service providers (eg public safety).

We believe at least 100MHz of UHF spectrum can easily be freed for mobile services without impacting broadcast TV services, as digital TV is between five and ten times more spectrally efficient than analogue. From a mobile network perspective, the excellent propagation characteristics of UHF spectrum mean that fewer base stations are required, making it much cheaper to provide mobile broadband coverage than over 2100MHz⁷. Networks can therefore be rolled out and services delivered to consumers more quickly and cost-effectively.

In our view, a mixed approach to UHF spectrum allocation will provide consumers in Ireland with the 'best of both worlds' – more television channels of higher quality, and faster and cheaper access to mobile broadband.

Q7 Do you agree with ComReg's assessment regarding the initial mix between broadcasting and non-broadcasting services?

With regard to ComReg's view that 80 to 120MHz of UHF spectrum should exclude the ability to provide DTT services, it is our opinion that ideally this tranche should be a minimum of 100MHz. A smaller allocation would limit the number of providers able to operate in the market, reducing competition.

Q9 Do you consider that the 800MHz sub-band should be reserved for services other than broadcasting?

The GSMA believes that the sub-band 790-862MHz should be reserved for mobile broadband. This band was identified for mobile broadband in Region 1 at WRC 07, and is currently being planned by the CEPT. By aligning with the WRC frequency band, Ireland would join a growing number of major markets that will use this band for mobile broadband in Europe. The decision will increase momentum and encourage other countries to follow suit in a "domino effect". The benefits of having a band available for mobile that is compatible with the rest of Europe far outweigh any costs of migrating services out of the 790-862MHz band.

⁷ See http://www.digitaldividend.eu/files/digital_dividend_summary_report.pdf

Conclusion

Clear and timely decisions on the allocation of digital dividend spectrum will enable stakeholders such as mobile operators to invest early and with confidence in the future of mobile broadband and the services it will deliver. This kind of future-proofing is essential if the mobile industry is to continue to deliver social and economic benefits in Ireland and other European countries.

For questions regarding this response please contact:

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About the GSMA

Founded in 1987, the GSMA is the global trade association of the mobile industry, representing more than 750 GSM and 3G mobile phone operators across 218 countries and territories 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 that 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 represent more than 3.7 billion GSM and 3G connections – nearly 90% of the world's mobile phone connections.

The GSMA plays a pivotal role in the development of the GSM platform and the global wireless industry. Much of the GSMA's work is focused on two areas: Emerging Services and Developing Markets. The GSMA helps its members develop and launch new services, ranging from mobile instant messaging to video sharing to mobile Internet access, which will work across networks and across national boundaries. At the same time, the GSMA is heavily engaged in the industry's push to extend basic voice, text and broadband access services to more people and assisting Administrations in developing communications infrastructure in their countries.

More information about the Digital Dividend is available on our website at:
www.gsmworld.com/digitaldividend