Europe

Position Paper

On potential interference to cable TV receivers from Mobile Broadband use in the digital dividend spectrum

Brussels, 15th March 2010

The social and economic benefits[1] of an allocation of digital dividend spectrum for mobile services are well understood, including its potential contribution to the economic recovery. Taking this into account the European Commission is developing a Decision on the use of part of the digital dividend for mobile broadband[2].

Some concerns have recently been expressed by cable operators that their networks could experience interference from mobile devices operating in digital dividend spectrum. The Commission has tasked European standards bodies to jointly work on finding solutions to any interference that may arise. GSMA Europe welcomes this activity and is happy to contribute to the debate. With a real desire by all parties to find solutions, the full economic and social benefits of using the digital dividend spectrum for mobile services in Europe can be realised, while protecting the services to cable customers.

The GSMA believes that the process should be based on a proper assessment of the risks of interference, and that such interference is unlikely to occur, for the following reasons:

1. The cable industry's concerns are centred on the possibility that a mobile device (phone or mobile broadband dongle) might interfere with a customer's cable equipment. Interference will not occur unless a **combination of factors happen at the same time**:
   - The cable set-top box must be "tuned"[3] to a channel close to the transmit frequency of the mobile device (which can affect no more than 5% of the capacity of the cable network[4]);
   - The mobile device must be transmitting at close to its maximum power; and
   - The mobile device must be operating within a few metres of the cable set-top box.

   In the rare event of these factors occurring at once, the majority of cases can simply be remedied by moving the mobile device and the cable set-top box slightly further apart.
2. The USA is ahead of Europe in licensing its digital dividend spectrum for mobile services, and several networks are being rolled out. The US cable industry does not appear to have experienced interference nor to be concerned about the potential of this occurring[5].

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More facts and figures about the digital dividend at: www.gsmworld.com/digitaldividend

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[1] €150-200 billion over 15 years - Analysys Mason Report for the European Commission http://www.analysysmason.com/PageFiles/13825/Analysys%20Mason's%20final%20report%20'Exploiting%20the%20digital%20dividend%20-%20a%20European%20approach'%2020090814.pdf
[2] Draft Commission Implementing decision on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community
[3] Cable networks are not radio devices and only use frequencies within the cable, but the shielding is imperfect.
[4] Based on the expected use of FDD technology
[5] Reply Comments of the National Cable and Telecommunications Association on Petitions for Reconsideration (ET Docket Nos. 04-186 and 02-380); May 18, 2009 (page 4; final para. of section I. A.)

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