



## **Comments by Cisco Systems in response to the RSPG Consultation on the draft RSPG opinion on “EU Spectrum Policy Implications of the Digital Dividend”**

Cisco is pleased to provide this response to the Radio Spectrum Policy Group (RSPG) and its draft opinion on the EU spectrum policy implications of the digital dividend. Cisco is the worldwide leader in networking for Internet Protocol (IP) - based communications. Cisco’s IP-based networking solutions are the foundation of broadband networks, including service provider broadband networks. Cisco technology is actively supporting our European service provider customers as they make the transition to broadband delivery systems. For this reason, Cisco strongly encourages all relevant European regulatory authorities to move quickly to speed the digital switchover, which will result in re-farming for broadband uses spectrum formerly assigned to analog television broadcasting.

As defined by the draft opinion, the “digital dividend” is defined as the spectrum that will become available over and above that which will be used by television broadcasters to transmit signals in digital form. Pursuant to the Geneva 2006 Agreement, digital broadcasting use is available in frequency bands 174-230 MHz and 470-862 MHz, although the broadcast service is not expected to occupy the entirety of these frequencies. For this reason, other uses, such as wireless broadband, may be deployed there in the future.

In response to the RSPG’s draft opinion, Cisco offers the following comments:

### **Spectrum is needed to support broadband**

The European Union as a whole must improve citizen access and use of broadband Internet access as a fundamental building block of Europe’s knowledge based economy for the 21<sup>st</sup> century. Recent OECD figures show approximately 16 broadband subscribers for every 100 inhabitants, with major European nations like Germany, Spain, Italy and Portugal falling below the average. Furthermore, most broadband in Europe is provided by DSL technology, at relatively low speeds and with little or no competitive supply. This lack of platform competition has turned out to be a handicap for broadband penetration and for evolution towards next generation broadband.

Opening spectrum in support of broadband technologies is critical to expanding supply and promoting inter-platform competition and the digital dividend offers a unique opportunity to create nation-wide broadband wireless competitive infrastructures. Competitive markets bring innovation, choice and price competition. Using the digital dividend for services other than broadband access wastes an important opportunity for

furthering achievement of the Lisbon goals. In this respect, Cisco respectfully disagrees with the draft opinion's view that supports "all" potential uses of the digital dividend, and that Member States be permitted to designate any assigned use for the digital dividend.

Cisco would also be disappointed if the RSPG's opinion serves to promote only "mobile multimedia" technologies such as DVB-H and MediaFlo, in this band. In Cisco's view, these broadband technologies serve an important purpose – to bring to mobile broadband subscribers bandwidth-heavy video applications that would otherwise clog the existing networks of mobility providers. But these useful technologies do not represent the entirety of the broadband uses to which the digital dividend may be put. For example, OFDM technologies like WiMax will be able to support full broadband capacity and therefore diverse and large bandwidth applications. Cisco strongly urges the RSPG not to fixate on one or two technologies at the expense of other broadband technologies.

### **Rules for the digital dividend should be service and technology neutral**

Other than Cisco's strong preference for broadband access services in this band, rules for use of the digital dividend should be both service neutral and technology neutral. For example, a broadband use could be fixed, nomadic, or mobile – or all of the above. The applications that utilize the broadband channel could deliver data, voice, or video communications – and more likely, all of the above. Cisco suggests therefore that the service rules be minimal for this band, such as limiting its use to bidirectional communications technologies that support broadband applications.

In addition, Cisco favors minimal technology constraints on broadband spectrum allocations. Minimal constraints are necessary only to prevent interference to users who utilize adjacent frequencies or who are geographically adjacent. For example, Ofcom, in its current consultation on 2 GHz wireless broadband auctions, is taking comment on a spectral mask approach and a "spectrum user rights" approach to guarding against interference. Cisco also notes, in this regard, its support of the RSPG's WAPECS policy favoring only minimal technical rules intended to minimize risk of harmful interference.

### **RSPG needs to make a strong statement in favor of a coordinated switchover**

In its prior opinions, the RSPG has noted that the switchover would best be supported by bilateral, multilateral, or EU coordination. In fact, two years have now passed since the RSPG noted that this issue was of "high importance."<sup>1</sup> Since that time, the preparations for a 2012 cutover have been advancing, but slowly. Now is the time for the RSPG to call on the European Commission to take a leadership role in moving the switchover forward.

The digital switchover is a rare transformational opportunity for Europe's ICT industry and for spectrum policy. Since the development of wireless broadband technologies, there has not been such a unique opportunity to pair the power of broadband with the special spectral characteristics of the below 1GHz "TV" bands. It is important that Europe orchestrate this switchover to maximize its economic benefit for the European Union as a whole. Future licensees who will put private capital at risk to build the new networks in this band need a pan-European business model. The RSPG should do

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<sup>1</sup> RSPG Opinion on Spectrum Implications of Switchover to Digital Broadcasting, RSPG04-55, November 19, 2004.

everything in its power to ensure that the cutover happens as quickly as practicable, and in a way that maximizes opportunities to use the dividend for pan-European services. It could and should start here, by recommending a stronger role for the European Commission.

Should you require any clarification or further information on the positions set out in this response, please contact:



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