



*Spectrum Management Policy, Part II:*

*Making the Most of the Digital Dividend*

**EABC Policy Paper**

**May 6, 2008**

POLICY SUMMARY: In its October 22, 2007 statement on spectrum management policy the EABC stated:

“To meet the growing demand for advanced wireless services and the capacity needs of new and evolving technologies, regulators and industry must work together to ensure the adoption of market-driven policies that get globally harmonized spectrum to the market as quickly as possible. Making key spectrum decisions now will have a massive positive socio-economic impact on business and consumers over the next two decades.

“...regulators should work to ensure the earliest possible availability of the 470-862 MHz band, including the WRC-07 proposed (790-862 MHz) band in Europe (as a first step implementing the Digital Dividend) and the 698-806 MHz (“700 MHz” band in the US) . Allocation of lower frequency bands can bridge the digital divide by enabling cost-effective coverage in rural areas and meet the increasing demand for capacity.”

The EABC continues to support market-driven spectrum policies and believe that policymakers should expeditiously make this spectrum available for advanced wireless services.

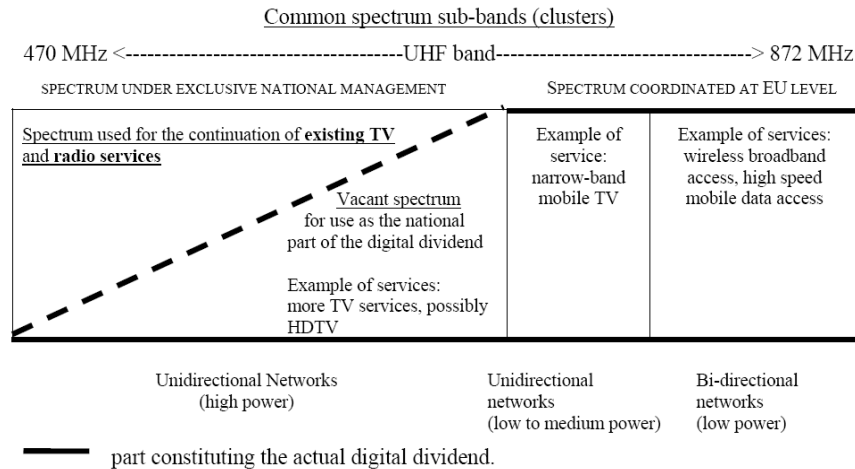
**The Situation in the EU:**

In the fall of 2007 the ITU World Radiocommunication Conference set the global regulatory framework for the band, permitting the use of the top part of the broadcast band for mobile services on a shared basis. Europe, together with many Asian and African countries, signed up to the agreement.

On 13 November 2007, the European Commission published its Communication on the Digital Dividend. The Commission proposes a Europe-wide approach and

outlines a possible band arrangement where three categories of transmission are envisaged:

- 1) Broadcast TV services, using high towers and high power
- 2) Multi media services such as Mobile TV
- 3) New mobile & fixed wireless broadband services



Further guidance from the European Commission is expected by the end of 2008. Furthermore the Telecom Package, including the Framework Directive covering spectrum policy, is currently being debated in the European Parliament and Council.

### The Situation in the US:

In the meantime, the U.S. DTV transition is proceeding apace with the final analog to digital switchover occurring February 17, 2009. This second EABC statement on spectrum management policy reviews these U.S. developments and addresses how policymakers can make the most of the Digital Dividend in Europe.

The 700 MHz experience in the U.S. provides useful data regarding the potential benefits of the Digital Dividend in Europe. The U.S. transition to digital television will clear 108 MHz of spectrum in this band — 24 MHz allocated to public safety and 84 MHz allocated to advanced wireless services.

The 24 MHz of spectrum to be allocated to public safety will allow “first responders” to improve their communications systems — dramatically enhancing

homeland security and disaster prevention. The propagation characteristics of the 84 MHz allocated to commercial services make it well suited to provide low-cost, broadband services for all consumers, including under-served rural communities.

The FCC recently completed its auction of the 700 MHz spectrum. The provisional winning bids total over 19 billion US dollars. However, 10 MHz of the public safety spectrum specifically devoted to a public safety-private partnership (the so-called “D Block”) need to be re-auctioned because of lack of interest of commercial bidders that were, among other things, concerned about the significant regulatory constraints associated with this spectrum.

A relatively small portion of these auction revenues—about 2 billion dollars—will fund equipment purchases for public safety and a voucher program that will defray the cost of converter boxes that will enable households to continue to use their analog TVs.

### **Speedy EU Switchover an Industry Priority:**

The overall success of the auction provides compelling evidence that advanced wireless services will generate valuable new services. By logical inference, the winning bidders expect that the net present value of the stream of profits they will earn from use of this spectrum will exceed their bids. But the gain to consumers from new services, lower prices, and more minutes of use can be expected to far surpass these auction proceeds. Indeed, one study based on U.S. cellular experience estimates that the consumer benefit (in excess of what they will pay for these new services) will be in the hundreds of billions of dollars.<sup>1</sup>

Europe should now follow the US example to implement mobile broadband in the 700 MHz band in order to ensure the competitiveness of European industry. Several studies have shown that the potential benefits of introducing mobile broadband in Europe could deliver huge economic benefits in terms of GDP and economic value. In a scenario where the mobile industry receives 60 % of the freed spectrum from digitalization, Europe’s GDP could be boosted by as much as 0.6% per year by 2020 according to the study by SCF Associates<sup>2</sup>. Another recent report by

---

Coleman Bazelon, Analysis Group, “Analysis of an Accelerated Digital Television Transition, May 31, 2005.

<sup>2</sup> SCF Associates :”*The Mobile Provide: Economic Impacts of Alternative Uses of the Digital Dividend*” (available at [www.digitaldividend.eu](http://www.digitaldividend.eu))

Spectrum Value Partners<sup>3</sup> has estimated that the European economy would receive a financial boost of at least €95 billion (NPV) over the next 20 years if one quarter of the UHF band were instead allocated for mobile broadband services. This study also confirms the demand for more than just 72 MHz, recently identified by WRC-07.

### **The Importance of a Coordinated EU-wide Approach:**

Irrespective of which interface technology or service is ultimately adopted by the market, the WRC '07 identification of the 790- 862 MHz band should facilitate a coordinated Europe-wide in order to create a globally competitive business system. However, the European Commission's attempts to have a coordinated approach have faced difficulties because of the lack of consensus amongst the Member States and the historical profile of the broadcasting community. Some Member States<sup>4</sup> have already embraced the idea of allocating spectrum for mobile services in the top part the band, whereas others maintain that there will be no new frequencies available for services other than broadcasting in the UHF band before 2015. We believe concerted action is needed EU-wide to create a coordinated European policy framework in order to optimize the use of the Digital Dividend. If economies of scale cannot be fully exploited, the potential benefits of the Dividend will be lost.

As a signal of Europe's intention to use spectrum in a more efficient manner, allowing advanced mobile technologies, such as UMTS, LTE or WiMax, to be rolled out in the 900/1800 MHz band would be an important step in the right direction. However, this too has been slowed by inter-institutional wrangling.

### **Conclusion:**

The Digital Dividend is one of the most important and far-reaching opportunities in for communications policy of the past several decades, and possibly for several decades to come. These frequencies can be utilized by a number of services due to their excellent technical and propagation characteristics and can bring considerable societal and economic benefits to the EU. EABC urges the decision makers to make this a reality by taking political action without undue delay.

---

<sup>3</sup> Spectrum Value Partners report "Getting the Most Out of the Digital Dividend", March 2008 (available at [www.spectrumstrategy.com](http://www.spectrumstrategy.com) )

<sup>4</sup> Notably Sweden & UK