



## EUROPEAN COMMISSION

Directorate-General Information Society

Communications Services: Policy and Regulatory Framework  
**Radio Spectrum Policy**

Brussels, 22<sup>nd</sup> February 2006  
DG INFSO/B4

**RSPG06-120 Rev.**

### **REQUEST BY THE EUROPEAN COMMISSION**

### **TO THE RADIO SPECTRUM POLICY GROUP**

### **FOR AN OPINION**

### **ON**

### **“EU SPECTRUM POLICY IMPLICATIONS OF THE DIGITAL DIVIDEND”**

In accordance with Article 4 of the Commission Decision establishing the Radio Spectrum Policy Group (RSPG Decision) and with Article 6 of the provisional Rules of Procedure of the RSPG (document RSPG03-12), the European Commission hereby requests the RSPG to develop and adopt an Opinion on “EU spectrum policy implications of the digital dividend”.

#### **1. INTRODUCTION AND POSITIONING OF THIS ACTIVITY**

On 23rd November 2004, the RSPG adopted a first Opinion on “**Spectrum implications of the switchover to digital broadcasting**”<sup>1</sup> which highlighted, among other aspects, the importance of the prospect of a digital dividend.

On 24th May 2005, the Commission adopted a Communication on “**Accelerating the transition from analogue to digital broadcasting**”<sup>2</sup> which sets out the Community policy objectives for the transition. It identifies spectrum gains as one of the major advantage of the switchover, in particular the “additional spectrum capacity released by the switch-off of analogue terrestrial television” and the fact that “it will be important to not constrain unduly the re-use of these bands for new and innovative services”.

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<sup>1</sup> Full text of the RSPG Opinion can be found at the following web address:  
[http://rspg.groups.eu.int/documents/meeting\\_documents/index\\_en.htm](http://rspg.groups.eu.int/documents/meeting_documents/index_en.htm)

<sup>2</sup> COM (2005) 204 (24 may 2005).

On 29th September 2005, the Commission adopted another Communication to further describe its detailed priorities for **radio spectrum availability in the context of the digital switchover and the upcoming ITU Regional Radiocommunication Conference 2006 (RRC-06)**<sup>3</sup>. This latest Communication complements the Communication of May 2005 by concentrating on spectrum aspects of the switch-over. It identifies key issues and calls for action by Member States and by the Commission.

The current Request for an RSPG Opinion is therefore a **follow-up of the RSPG Opinion and the two recent Commission Communications** mentioned above in order to address the prospects of the digital dividend in more details and to identify any need for coordination at EU level.

**This new RSPG activity should be considered as a generic initiative to approach the issue of the digital dividend on a Community level**, and not as an attempt to impose any particular solution on individual Member States for the sake of uniformity. In particular, the scope of this activity should be **open to virtually all potential uses of the digital dividend**, be it for more TV programming, for new broadcasting services such as HDTV<sup>4</sup>, hybrid services combining broadcasting and mobile telephony functions such as mobile TV and mobile multimedia services delivered over mobile handsets, and “non broadcasting” services such as fixed wireless access, more spectrum for 3G, RFID systems, and even possibly more unlicensed access and/or flexible use via tradable spectrum bands.

This Request for Opinion is **complementary** to the Request for an **RSPG Opinion on “Spectrum for mobile multimedia services in the field of broadcasting”** (Mobile broadcasting). **Mobile broadcasting is one particular case of potential use of the digital dividend**, but it may also rely on frequency bands which is located outside the scope of the dividend. Mobile broadcasting is also addressed in its own right by the RSPG (separate Opinion) because industry demand is particularly pressing in this area, and there is possibly a risk of critical disincentive to investments regulatory if an appropriate spectrum allocation strategy is not found very shortly (in 2006 or early 2007). It is expected that there will be some cross-fertilization between the two Opinions, mobile broadcasting being a “bottom-up” approach to satisfy a particular service need and this generic Opinion being rather a “top-down” longer term approach to optimise the overall societal and economic value that can be extracted from the dividend.

## 2. MAIN OBJECTIVES

The main objectives for this Commission’s Request for an RSPG Opinion include:

- (1) To encourage **transparency** of Member States policies affecting the re-allocation of the digital dividend and to **support a convergence** of approaches;

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<sup>3</sup> COM (2005) 461 (29 September 2005).

<sup>4</sup> Terrestrial High Definition Television.

- (2) To ensure that the digital dividend resulting from the switchover will have a positive effect upon EU-wide **competition** and **innovation** in the provision and efficient<sup>5</sup> use of radio spectrum by wireless applications, i.e. contributing to the Lisbon's goals of economic growth and job creation;
- (3) To support the functioning of the **Internal Market** for electronic communications services and equipment which will operate in the released frequencies resulting from the switchover to digital broadcasting;
- (4) To reap the **full potential of the digital dividend**, in particular considering that some of the released spectrum could be used in priority for future innovative, high-value<sup>6</sup>, **pan-European services** while promoting multimedia diversity and content production.

### 3. CONTEXT FOR THIS REQUEST FOR AN RSPG OPINION

#### 3.1. The “digital dividend” is becoming a reality

There are many different views on the actual definition of a “digital dividend”. However, if one accepts the broad concept that, when current analogue TV broadcasting has completely switched over to fully digital transmission, substantially less radio spectrum would be needed to be able to deliver the exact equivalent of existing analogue programming (assuming a similar image resolution and size, and equivalent number of programming channels). Following this simplified logic, more than 300 MHz of the current amount allocated to terrestrial broadcasting could therefore become theoretically “redundant”<sup>7</sup>. In reality, this spectrum gain will be affected by several other factors such as market forces and public policy orientations but, in any case, it is expected that there will be a sizeable amount of “unused” spectrum available at the end of the switchover of current programs to the digital infrastructure. This is what the Commission broadly refers to as the “digital dividend”.

A large part – if not a majority - of the digital dividend may eventually be attributed to new broadcasting services (e.g. more traditional broadcasting under the form of additional standard programming, or new services such as mobile broadcasting, terrestrial HDTV or interactive TV). However, the new service allocation process should consider the merit of all possible alternatives in a transparent and non discriminatory way.

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<sup>5</sup> Spectrum efficiency in this context should be understood as an optimisation of the overall economic and societal value, not as a technical concept.

<sup>6</sup> “High-value” should not only be understood as high economic value, but should also include high societal/public benefits as well.

<sup>7</sup> In addition, there might be additional factors alleviating the need for free-to-air broadcasting spectrum use such as possible reductions in coverage obligations in some Member States, further improvement of compression standards, and in some instances the substitution of terrestrial transmission by other platforms (e.g. cable and satellite).

### **3.2. The digital dividend should emerge faster than initially anticipated**

In its two most recent Communications on the switchover as mentioned above, the Commission calls for an early switch-off of analogue broadcasting, by 2012. This objective was later endorsed by the European Council in its meeting in December 2005. It is also increasingly clear that many Member States will have switched off analogue broadcasting well before 2012: a critical amount of the dividend should be released by 2010, with some parts of the dividend already available starting in 2007. Since spectrum allocation and assignment have traditionally long life cycles, it is time to start the debate on the digital dividend at least three or four years before it becomes available on a large scale, i.e. already this year.

### **3.3. Importance of a European approach regarding the digital dividend**

A consistent European approach regarding the digital dividend should increase its potential economic and societal impact, and ensure that the switchover does not create distortions in markets which are underpinned by spectrum availability.

However, it does not seem trivial at this juncture to plan for the best use of the digital dividend while the relative weight of future demands on spectrum resources is unclear, given the fast evolution of broadcasting and mobile services and the increasing effect of the technical convergence on the diversity of possible services. The relatively short time left before the emergence of the digital dividend calls however for **quick investigations** at the level of **research and development**, of **market opportunities**, and of necessary **regulatory measures and planning** for the radio resources. In this context, one of the key questions addressed to the Radio Spectrum Policy Group is **how these investigations could be accelerated by conducting those in co-operation at European level**.

### **3.4. The advantage of an EU-wide harmonisation of parts of the dividend**

The spectrum dividend creates an opportunity to identify frequencies for new pan-European services. Many of these future services are expected to contribute to EU policy objectives set in the i2010 initiative<sup>8</sup>. Consequently, the Commission's view is that a part of the spectrum dividend should be considered for harmonisation on European level and made available for high value and innovative pan-European services. The Commission calls on Member States to start as soon as possible a common reflection across the EU on this opportunity in order to avoid fragmentation and the emergence of "legacy" situations which would prevent the later establishment of an EU harmonised dividend.

The issue of re-farming of frequencies in order to aggregate spectrum to constitute usable "slices" of harmonised dividend is outside the scope of this Opinion. The RSPG is however welcomed to suggest any action that could/should be undertaken by the Radio Spectrum Committee in anticipation of such EU-wide re-farming of frequencies.

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<sup>8</sup> More information available at [http://europa.eu.int/information\\_society/eeurope/i2010/index\\_en.htm](http://europa.eu.int/information_society/eeurope/i2010/index_en.htm)

#### 4. TASKS TO BE PERFORMED AND ISSUES TO BE ADDRESSED IN THE OPINION

In addition to the information to be addressed in the Opinion, as stipulated in Article 6 (2) of the provisional Rules of Procedure of the RSPG and in order to reach the objectives mentioned under point 2 above, the RSPG is requested to address more specifically the following questions in its Opinion:

- (1) **Identify EU coordination requirements** (if any) in order to **optimise the use of the dividend** both economically and from a societal/public interest viewpoint. Examine **risks & issues** that may arise **if the allocation of the digital dividend is not coordinated at EU level**.
- (2) **Make a recommendation on the best possible EU approach for the digital dividend**, including the advantage - and possible drawback - of using a part of the dividend in a **harmonised way** to be able to address future needs of innovative pan-European services.
- (3) **Identify regulatory issues** (national and/or Community level) which would hamper the appropriate planning and use of the digital dividend. In this context, the RSPG is invited to perform a quick comparative review of the existing and planned regulatory approaches in the various Member States regarding the allocation of the digital dividend.
- (4) Assess the need for Member States and the Commission to address timely **international regulatory aspects** such as new service definitions and/or new allocation - or co-allocation - of spectrum (i.e. via the ITU/WRC) in order to ensure access to the digital dividend spectrum for other services than broadcasting (as defined in the ITU).

#### 5. TIMING

- RSPG#9 (22 February 2006): presentation and first discussion of this request for an RSPG Opinion.
- RSPG#10 (11 May 2006): discussion on the scope and selection of key issues to be addressed in the Opinion.
- RSPG#11 (25 October 2006): discussion on the proposed recommendations and possibly on a preliminary draft Opinion.
- RSPG#12 (1<sup>st</sup> quarter 2007): adoption Opinion.

#### 6. ORGANISATION OF WORK

In accordance with Article 10 of the provisional Rules of Procedure of the RSPG, a working group may be established.

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