



## EUROPEAN COMMISSION

Directorate-General Information Society

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

Brussels, 26 May 2004  
DG INFSO/B4

**RSPG04-45 Rev.**

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

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

### **FOR AN OPINION**

### **ON A**

### **COORDINATED EU SPECTRUM POLICY APPROACH CONCERNING WIRELESS ACCESS PLATFORMS FOR ELECTRONIC COMMUNICATIONS SERVICES (WAPECS)**

#### **1. INTRODUCTION**

In accordance with Article 4 of the European 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 a coordinated EU spectrum policy approach concerning wireless access platforms for electronic communications services (WAPECS), to be addressed to the European Commission.

#### **2. OBJECTIVE**

The main objective for this request is to develop policy approaches ensuring that spectrum issues related to the growing and evolving variety of radio access platforms for public wireless communications comply with the overall policy goal to develop the EU internal market and European competitiveness, by ensuring an innovation-friendly regulatory environment which facilitates rapid access to spectrum for new technologies and leads to the provision of a wide variety of wireless services and applications.

The achievement of this overall objective will need to consider that there is a large variety of services and a large number of wireless access platforms potentially operating in various frequency bands. The objective will be fostered by the introduction of more flexibility in the conditions of use of spectrum resources for wireless electronic communications, while maintaining harmonisation where necessary within a coherent and spectrally efficient frequency management scheme. Wherever possible, constraints attached to the usage of specific radio spectrum bands should be removed and spectrum

management made more responsive to the rapid development of new markets and services.

### 3. CONTEXT FOR THE REQUEST FOR A RSPG OPINION

An increasing number of challenges to the management of radio spectrum are becoming apparent, mainly triggered by advances in technology as well as by service convergence trends. It is noticeable that:

- Current operators are already requesting the flexibility to modify the use of the spectrum assigned to them in the 900 MHz and 1800 MHz bands according to market demand. In general, current regulations do not allow this flexibility, while it is increasingly difficult to distinguish 2G from 3G through the services offered. Related to the above issue, relevant Community legislation<sup>1</sup> would need to be repealed or amended to allow for flexibility in the choice of technology as well as in the time scales for moving from 2G to 3G.
- Some administrations are considering allowing broadband wireless access technologies in the frequency bands used for 2G and 3G mobile services.
- First indications of new systems beyond IMT2000 show that they are expected to be a mix of mobile and portable or fixed broadband wireless services.
- The first GSM licences will expire in the near future and this transition will necessarily lead to a debate on how to use the related spectrum resources in the future. This debate picks up momentum at a moment when plans for making available additional spectrum for 3G are taking shape.
- PMR was initially aiming at providing services to a closed user group, however connection to the public network has been authorised. Moreover, new technologies for PAMR have been derived from cellular technologies (e.g. TETRA TAPS from EGDE and CDMA PAMR from CDMA1x) and allow for PMR as well as 3G applications in a band that was originally foreseen only for PMR-type applications. Maintaining PMR or separating it more clearly from 3G can be questioned.
- With the convergence of mobile communications (which intend to broadcast/multicast information) and broadcasting (some services of which will become interactive) innovative technologies such as datacasting will broadcast or multicast mobile multimedia services to the public. Consequently mobile networks may wish to use broadcasting spectrum from the digital dividend and broadcasters may wish to use telecommunication frequencies/services for their return channels/paths.
- New more flexible approaches to spectrum management have already been introduced by a number of administrations outside the EU, and are being actively considered, and in some cases even implemented, by some Member States.

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<sup>1</sup> Council Directive of 25 June 1987 has reserved exclusively the bands 905-914 MHz and 950-959 MHz for a public pan-European cellular digital mobile communications service. This service has been defined by Council Recommendation of 25 June 1987 as GSM.

The issue of how to adapt regulation to the long-term functional convergence of technologies and services is therefore essential. Despite a clear need and desire to work on this issue together, different approaches are being considered by national regulators in the EU. Coordination work has started within CEPT/ECC, which established various project teams covering these issues, namely PT1, RA12 and PT7. An overall policy and strategy steer at EU level is currently lacking. However, an overall long-term strategic approach at EU level would be beneficial, allowing a common analysis of the fundamental regulatory implications of changes in technology, whilst avoiding “ad-hoc” rules which might increase in complexity and hamper co-ordination across Europe as time went on. At the same time it must be recognised that the market is at different stages of development in different Member States, and that a long-term approach might be implemented with different speeds reflecting national circumstances.

Spectrum management should ensure that spectrum scarcity is not in fact increased by undue regulatory constraints and it should consider the benefits of new approaches, such as an increased flexibility in spectrum use, whilst maintaining the appropriate legal certainty as a condition to foster market development when heavy investments are needed.

A certain number of recent or forthcoming events and processes affecting the spectrum management of wireless communications suggest that it would be appropriate to hold a strategic discussion on this overall issue in Europe, as the table below illustrates.

| <b>Year</b>      | <b>Developments affecting the spectrum management of wireless electronic communications</b>   |
|------------------|---|
| <b>2003</b>      | <b>WRC 2003:</b> Worldwide spectrum for RLANs agreed; Studies concerning mobile beyond 3G commissioned in ITU;<br><b>Wideband-PAMR:</b> Licensing and spectrum identification issues within national administrations and in CEPT. New technologies are increasingly capable both of 3G-type and PAMR-type services. |
| <b>2004</b>      | <b>ITU Regional Radio Conference 1<sup>st</sup> phase</b> (Revision of the Stockholm '61 Agreement): Replanning of broadcasting frequencies needed to prepare for switchover, with the possible introduction of sufficient flexibility to foster the development of convergent services such as datacasting.        |
| <b>from 2004</b> | <b>National decisions to introduce Secondary Trading</b> within the EU: the spectrum bands allocated to electronic communications services are candidates for introduction of this new spectrum management model.   |
| <b>from 2004</b> | <b>Licence-free wireless technologies:</b> expected rapid mass uptake of innovative wireless technologies such as RLAN, WiMAX/Hiperman and UWB which may replicate and improve some functions of current mobile systems, and are proposed to be used without licensing requirements.                                |
| <b>2005</b>      | <b>First 2G licences in Europe to expire.</b> The duration of 2G licences varies widely throughout the EU, leading to concerns about uncoordinated actions at national level, impacting on the benefits of a common approach.   |
| <b>2007</b>      | <b>WRC 2007:</b> Discussion of new requirements and frequency bands for 3G and systems beyond.  |
| <b>2008</b>      | The 2.5-2.7 GHz band becomes available as <b>additional 3G spectrum</b> within Europe   |

Besides these specific events, the agenda will also be driven by the socio-economic context of mobile communications, for example by the rate of adoption of IMT-2000 services in Europe,

and by whether alternative non-terrestrial platforms based on satellite technology will become commercially attractive.

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

In order to reach the objectives mentioned under point 2 above and in line with 6 (2) of the RSPG provisional Rules of Procedure the Members of the group are hereby invited to adopt an opinion identifying strategic and policy issues related to the use of spectrum by WAPECS and giving their views on:

- A common understanding of the range of wireless access platforms for electronic communications services (WAPECS) and of their spectrum-related challenges to be addressed by the European regulators in the near- to medium-term.
- Common long-term objectives for the regulation of spectrum being used by such platforms, with the aim of promoting agreed EU policy goals including the promotion of competitiveness and innovation, increased single market cohesion and common solutions for the benefit of the European citizen as well as content regulation and audio-visual policy.
- Options for introducing, in a consistent manner, increased flexibility in spectrum use and technologically neutral regulation in order to set appropriate conditions for the development of converged wireless multimedia service offers, allowing industry to combine various technologies and access platforms as most appropriate.
- The need for the definition of a transitional period leading up to an implementation date for the new approach, thus giving room for individual adaptation measures to avoid disruptive effects.

#### **5. TIMING**

- RSPG# (February 2004): First discussion of a draft Request for Opinion; subsequently consolidation of the Request for Opinion.
- RSPG#4 (June 2004): Transmission of the Request for Opinion by the European Commission to RSPG. Start work on Request for Opinion
- RSPG#5 (November 2004): Progress report on Request for Opinion
- RSPG#7 (June 2005): Adoption of the 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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