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Information Society and Media Directorate-General  
Electronic Communications  
**Radio Spectrum Policy**

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DG INFSO/B4

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## **RADIO SPECTRUM COMMITTEE**

### **Working Document**

**Subject:** **Final draft of Commission Decision on *the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community* - Approved by RSC through a favourable Regulatory Opinion on 22 May 2007**

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels,  
.../2007/EC

Draft

**COMMISSION DECISION**

**of [...]**

**on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community**

**Draft**

**COMMISSION DECISION**

**of [...]**

**on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community**

**(Text with EEA relevance)**

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision)<sup>1</sup>, and in particular Article 4(3) thereof,

Whereas:

- (1) The 890-915 and 935-960 MHz frequency bands were reserved and were to be occupied for the public pan-European cellular digital mobile communications service, provided in each of the Member States to a common specification, identified by Council Directive 87/372/EEC of 25 June 1987 on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community<sup>2</sup>, complemented by Council recommendation of 25 June 1987 on the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community<sup>3</sup> and by Council Resolution of 14 December 1990 on the final stage of the coordinated introduction of pan-European land-based public digital mobile cellular communications in the Community (GSM)<sup>4</sup>.
- (2) There is a growing demand for interoperable mobile voice as well as data services and multimedia services with ever-increasing broadband capacity in the Community.
- (3) Considering in particular the propagation characteristics in the 900 MHz band which allow coverage of larger distances than at higher frequency bands, this band should be available to terrestrial systems capable of providing pan-European electronic

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<sup>1</sup> OJ L 108, 24.4.2002, p. 1

<sup>2</sup> OJ L 196, 17.7.1987, p.85.

<sup>3</sup> OJ L 196, 17.7.1987, p.81.

<sup>4</sup> OJ C 329, 31.12.1990, p.25.

communications services, using various specifications such as GSM and UMTS, to allow an appropriate coverage of less densely populated and rural areas.

- (4) Pursuant to Article 4(2) of the Radio Spectrum Decision, the Commission issued a mandate dated 5 July 2006 to the European Conference of Postal and Telecommunications Administrations (hereinafter referred as “CEPT”) to develop least restrictive technical conditions for frequency bands addressed in the context of WAPECS (Wireless Access Policy for Electronic Communications Services) and which includes the 900 MHz and 1800 MHz bands.
- (5) It is important for the internal market that the conditions of use of the 900 MHz and 1800 MHz bands are harmonised so as to facilitate the introduction of pan-European services and to allow consumers as much freedom in the choice of services and spectrum users in the choice of technologies as possible. Availability of radio spectrum has an important role to play in ensuring the achievement of the Lisbon agenda and the i2010 initiative– *A European Information Society for growth and employment*<sup>5</sup> to harness the potential of the digital economy to deliver growth, jobs and widespread availability of modern services.
- (6) The current use of GSM in the 900 MHz and 1800 MHz bands should remain protected in the whole Community as long as there is a reasonable demand for the service.
- (7) Technological neutrality and service neutrality are policy goals that have been stated and described by the Member States in the Radio Spectrum Policy Group (RSPG) Opinion on WAPECS of 23 November 2005 to achieve a more flexible use of spectrum. The RSPG Opinion on WAPECS considers that these policy goals should not be introduced abruptly, but in a gradual manner to avoid disruption of the market. The Commission has stated its views on a more flexible use of spectrum in its Communication on “Rapid access to spectrum for wireless electronic communications services through more flexibility”<sup>6</sup>, which *inter alia* stresses the need for a consistent and proportionate solution regarding the 2<sup>nd</sup> and 3<sup>rd</sup> generation mobile bands in the context of introducing flexible spectrum use for electronic communications services.
- (8) The designation of the 900 MHz and 1800 MHz bands for GSM should therefore be modified in the Community in order to allow for other terrestrial systems capable of providing pan-European electronic communications services which can coexist with GSM systems given that Member States should take all necessary measures to protect continued operation of GSM systems from harmful interference.
- (9) Any other system deployed in the 900 MHz and 1800 MHz bands needs to ensure technical compatibility to adjacent networks operated by other right holders in these bands as well as to the usage of frequency bands adjacent to the 900 and 1800 MHz bands.
- (10) For harmonisation measures pursuant to the Radio Spectrum Decision technical compatibility is demonstrated by compatibility studies performed by CEPT via a

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<sup>5</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM(2005) 229 final.

<sup>6</sup> COM(2007)50.

Mandate from the Commission. These studies should lead to the definition of technical conditions to ensure the coexistence of a growing number of terrestrial systems capable of providing pan-European electronic communications services. A list of such systems demonstrating technical compatibility should be established, and should be modified whenever appropriate by the Commission assisted by the Radio Spectrum Committee pursuant to the WAPECS principles, so that the list of systems which would have harmonised access to the 900 and 1800 MHz bands may continue to increase over time.

- (11) Based on technical investigations, in particular Electronic Communications Committee's (ECC) Reports 82 and 96, and in response to the Mandate of 5 July 2006, the CEPT has produced a report for the case of introducing UMTS in the 900 and 1800 MHz bands alongside GSM. This report concludes that UMTS/900/1800 networks can be deployed in urban, sub-urban and rural areas in co-existence with GSM900/1800 networks by using appropriate values for carrier separation.
- (12) The results of the mandate to the CEPT should be made applicable in the Community and implemented by the Member States without delay given the market demand for the introduction of UMTS in these bands. In addition, Member States should ensure that UMTS gives appropriate protection to existing systems in adjacent bands as well as eventually take into account prospective aeronautical communications systems operating above 960 MHz which are in support of European transport policy.
- (13) In order to increase flexibility while preserving the necessary pan-European coverage by electronic communications services in harmonised bands, Member States furthermore should have the power to introduce in the 900 and 1800 MHz bands other systems alongside the GSM and other identified terrestrial systems capable of providing pan-European electronic communications services, provided that they ensure the coexistence of such terrestrial systems.
- (14) In order to be considered as a pan-European service, the same or equivalent service in terms of functionality should be accessible to all consumers throughout the Community.
- (15) Radio spectrum technical management includes the harmonisation and allocation of radio spectrum. Such harmonisation should reflect the requirements of general policy principles identified at Community level. However, radio spectrum technical management does not cover assignment and licensing procedures (including their timing), nor the decision whether to use competitive selection procedures for the assignment of radio frequencies.
- (16) Differences in the national legacy situations could result in competitive distortions. The existing regulatory framework gives Member States the tools to deal with these problems in a proportionate, non-discriminatory and objective manner, subject to Community law including the Authorisation Directive and the Framework Directive.
- (17) The use of spectrum is subject to the requirements of Community law for public health protection in particular Directive 2004/40/EC of the European Parliament and of the Council of 29 April 2004 on the minimum health and safety requirements regarding

the exposure of workers to the risks arising from physical agents (electromagnetic fields)<sup>7</sup> and Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)<sup>8</sup>. Health protection for radio equipment is ensured by conformity of such equipment to the essential requirements pursuant to Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (the R&TTE Directive)<sup>9</sup>.

- (18) In order to ensure effective use of the 900 MHz and 1800 MHz bands also in the longer term, administrations should continue with studies that may increase efficiency and innovative use. With the aim of reviewing this decision to cover additional technologies, such studies, as well as studies undertaken by the CEPT on the basis of further mandates, could demonstrate that systems other than GSM and UMTS are capable of providing terrestrial pan-European electronic communications services and can ensure technical compatibility with GSM and UMTS by appropriate measures and should accordingly benefit from a pan-European coverage in the future.
- (19) The measures provided for in this Decision are in accordance with the opinion of the Radio Spectrum Committee,

HAS ADOPTED THIS DECISION:

#### *Article 1*

This Decision aims at harmonising the conditions for the availability and efficient use of the 900 MHz and 1800 MHz bands for terrestrial systems capable of providing pan-European electronic communications services.

#### *Article 2*

For the purposes of this Decision, the following definitions shall apply:

- (a) "GSM system" means an electronic communications network, which complies with the GSM Standards, as published by ETSI, in particular EN 301 502 and EN 301 511;
- (b) "pan-European electronic communications services" means electronic communications services, including services provided over a GSM system, where users of such services in one Member State can also gain access to the same or equivalent services in any other Member State;
- (c) the "900 MHz band" means the 880-915 MHz and 925-960 MHz bands;
- (d) the "1800 MHz band" means the 1710-1785 MHz and 1805-1880 MHz bands.

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<sup>7</sup> OJ L 159, 30.4.2004, p. 1, as amended by OJ L 184, 24.5.2004, p. 1.

<sup>8</sup> OJ L 199, 30.7.1999, p. 59.

<sup>9</sup> OJ L 91, 7.4.1999, p. 10. Directive amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).

### *Article 3*

- (1) The 900 MHz and 1800 MHz bands shall be designated and made available for GSM systems, by [*insert actual date of entry into force of the Directive repealing the GSM Directive*].
- (2) The 900 MHz and 1800 MHz bands shall be designated from [*insert actual date of entry into force of the Directive repealing the GSM Directive*] and subsequently made available for other terrestrial systems capable of providing pan-European electronic communications services, as listed in the Annex and subject to the conditions laid down therein.
- (3) Member States may designate and make available the 900 MHz and 1800 MHz bands for other terrestrial systems not listed in the Annex, provided that they ensure that such systems can co-exist with GSM systems and systems listed in the Annex on their own territory as well as in neighbouring Member States.
- (4) Member States shall ensure that other systems referred to in paragraphs (2) and (3) give appropriate protection to systems in adjacent bands.

### *Article 4*

Member States shall keep the use of the 900 and 1800 MHz bands under review to ensure the efficient use thereof and in particular report to the Commission any need for a revision of the Annex.

### *Article 5*

This Decision is addressed to the Member States.

Done at Brussels, [...]

*For the Commission*  
*Member of the Commission*



## ANNEX

### List of Systems referred to in Article 3 (2)

The following technical parameters shall be applied as an essential component of conditions necessary to ensure co-existence in the absence of bilateral or multilateral agreements between neighbouring networks, without precluding less stringent technical parameters if agreed among the operators of such networks.

<b>Systems</b>	<b>Technical Parameters</b>	<b>Date</b>
UMTS complying with UMTS Standards, as published by ETSI, in particular EN 301 908-1, EN 301 908-2, EN 301 908-3 and EN 301 908-11	1) A carrier separation of 5 MHz or more between two neighbouring UMTS networks;  2) A carrier separation of 2.8 MHz or more between a neighbouring UMTS network and a GSM network.	the date of entry into force of the Directive repealing the GSM Directive