

**EUROPEAN RADIOCOMMUNICATIONS COMMITTEE**

ERC Decision  
of 28 March 2000  
extending ERC/DEC/(97)07  
on the frequency bands for the introduction of terrestrial  
Universal Mobile Telecommunications System  
(UMTS)

(ERC/DEC/(00)01)



WITHDRAWN

## **EXPLANATORY MEMORANDUM**

### **1 INTRODUCTION**

The development of third generation mobile systems has been ongoing for many years now. At the world-wide level the ITU has been working on third generation mobile systems under the synonym IMT-2000. At the European level a vast amount of work has been done under the synonym UMTS, the Universal Mobile Telecommunications System. UMTS which is envisaged to be part of IMT-2000, the ITU third generation world wide-initiative.

The first ERC Decision on UMTS (ERC/DEC/(97)07) was adopted by the ERC in 1997. Since then a vast amount of activity has been ongoing within Europe involving manufacturers, operators and regulators. Within the radiocommunications sector the development of third generation systems is one of the main issues being discussed in a vast variety of groups such as the European Commission, ERC (TG 1), the UMTS Forum, ITU (WP 8F, former TG 8/1) and the 3<sup>rd</sup> Generation Partnership Project (3GPP). Activities on the national level have also commenced. The rapid progression of 3<sup>rd</sup> Generation mobile issues call for a further ERC Decision that satisfies the developments and market demands.

### **2 BACKGROUND**

The existing regulatory framework for UMTS builds on several decisions, which have been taken to date. They are the ERC Decision (ERC/DEC/(97)07) concerning frequency spectrum, the ETSI agreement concerning standards and the European Parliament and Council Decision on UMTS concerning the introduction (authorisation) of UMTS. These decisions aim at the introduction of UMTS by 1 January 2002. Furthermore, the ERC has developed a Decision pertaining to spectrum utilisation (ERC/DEC/(99)25). Finally, it should be mentioned that there are separate ERC Decisions covering the satellite component of UMTS and MSS at 2 GHz and related transitional arrangements.

Further to these decisions substantial work is currently ongoing in different groups in order to

- progress the detailed standardisation of the UMTS air interface in line with global IMT-2000 developments;
- use the allocated frequency spectrum in an optimal way; and
- search for additional frequency spectrum to satisfy the overall requirements.

Additional frequency spectrum for IMT-2000 is on the agenda for the next World Radiocommunications Conference of the ITU planned to take place in Istanbul on 8 May – 2 June 2000.

Different approaches to licensing 3<sup>rd</sup> generation systems are being taken since some administrations will auction spectrum whereas others will hold a public tender. 22 CEPT administrations will make spectrum available according to the ERC Decision on UMTS (ERC/DEC/(97)07) noting that 19 administrations have actually committed themselves to the implementation of this Decision. ERC/DEC/(97)07 designates the bands 1900 - 1980 MHz, 2010 - 2025 MHz and 2110 - 2170 MHz for terrestrial UMTS applications and states that within the identified spectrum administrations are required to make at least 2 x 40 MHz available by 1 January 2002.

### **3 REQUIREMENT FOR AN ERC DECISION**

The allocation or designation of a frequency band for its use by a service or system under specified conditions in CEPT member countries is laid down by law, regulation or administrative action. The ERC recognises that for UMTS to be introduced successfully throughout Europe, manufacturers and operators must be given the confidence to make the necessary investment in this new radiocommunications system and service. The availability of sufficient frequency spectrum should permit competition between UMTS/IMT-2000 operators in a fair, comparable and non-discriminatory manner. Therefore, ERC believes that it is necessary to designate an adequate amount of spectrum, creating the environment for multiple commercial operators to offer broadband services. This will enable a multiple operator, competitive environment. A commitment by CEPT member countries to implement this ERC Decision will provide a clear indication that the required frequency bands will be made available on time and on a European-wide basis.

**ERC Decision  
of 27 March 2000**

**extending ERC/DEC/(97)07  
on the frequency bands for the introduction of  
terrestrial Universal Mobile Telecommunications System (UMTS)**

**(ERC/DEC/(00)01)**

The European Conference of Postal and Telecommunications Administrations,

*considering*

- a) that there is a growing demand not only for mobile voice services, but also for mobile data services up to 2 Mbit/s providing multimedia applications;
- b) that UMTS/IMT-2000 is being developed to meet this demand;
- c) that UMTS will provide licensed and self-provided applications;
- d) that UMTS will provide third generation mobile services forming part of the International Mobile Telecommunications 2000 (IMT-2000) global family of standards;
- e) that there is a need to facilitate UMTS interoperability throughout Europe;
- f) that 3GPP is currently developing specifications for UMTS with the first release , "Release 99", finalised by the end of 1999;
- g) that WARC 92 adopted Resolution 212 and WRC 97 updated this Resolution;
- h) that the bands 1900-2025 MHz and 2110-2200 MHz are currently used for the fixed and/or mobile service in several CEPT member countries;
- i) that there will be differences in the demand for UMTS/IMT-2000 spectrum across Europe which could lead to an offset in timescales concerning the service introduction and the availability of frequencies;
- j) that the Decision ERC/DEC/(97)07 designates the bands 1900 - 1980 MHz, 2010 - 2025 MHz and 2110 - 2170 MHz for terrestrial UMTS applications and states that within the identified spectrum administrations are required to make at least 2 x 40 MHz available by 1 January 2002;
- k) that sharing between terrestrial UMTS and existing fixed service has to be based on geographical sharing and advice can be found in ERC Report 64;
- l) that the ITU-R has estimated the frequency requirements for terrestrial mobile spectrum in Region 1 to be 555 MHz in 2010. This can be covered in Europe through the frequency bands designated to second generation mobile services, in ERC/DEC/(97)07 and 160 MHz of additional spectrum to be identified globally at WRC-2000;

## RECOGNISING

- a) that spectrum should be utilised in the most efficient way;
- b) the mandate (LC/10/99 rev1) from the EC to the CEPT, which requests CEPT to make available all or nearly all 155 MHz of spectrum designated in ERC/DEC/(97)07;

## DECIDES

to extend spectrum availability beyond ERC/DEC/(97)07 as follows:

1. that the entirety of the 155 MHz in the bands 1900 - 1980 MHz, 2100 - 2250 MHz and 2110 - 2170 MHz shall be made available for terrestrial UMTS and other terrestrial systems included in the IMT-2000 family, in order to enable a competitive market for third generation mobile services. These frequency bands should be made available by 1 January 2002, subject to geographically spread market demand and national licensing schemes;
2. that this Decision shall enter into force on 27 March 2000;
3. that CEPT Member Administrations shall communicate the national measures implementing this Decision to the ERC Chairman and the ERO when the Decision is nationally implemented.

## Note:

Please check the ERO web site (<http://www.ero.dk>) under "Documentation / Implementation" for the up to date position on the implementation of this and other ERC Decisions.