

**EUROPEAN RADIOCOMMUNICATIONS COMMITTEE**

ERC Decision  
of 21 March 1997  
on the extended frequency bands  
to be used for the  
GSM Digital Pan-European Communications System

(ERC/DEC/(97)02)





## **EXPLANATORY MEMORANDUM**

### **1. INTRODUCTION**

Global System for Mobile communications (GSM) is a pan-European cellular, digital, land-based mobile communications system.

For an international mobile communications system to operate successfully, it is important to ensure that there are recognised frequency bands within which it can operate. Within Europe, it is the responsibility of the European Radiocommunications Committee (ERC) to designate frequency bands.

### **2. BACKGROUND**

The ERC Decision of 24 October 1994 (ERC/DEC/(94)01) designated the frequency bands 890-915 MHz and 935-960 MHz for the introduction of the GSM system. According to this Decision at least 2 x 9 MHz shall be reserved for the introduction of GSM within the designated frequency bands.

It should be noted that the frequency bands 890-914 MHz / 935-959 MHz and 914-915 MHz / 959-960 MHz are also designated for public analogue cellular systems and analogue cordless telephones (CEPT CT1) respectively. In several CEPT countries these systems will continue to be operated in the next years. At the same time, the number of subscribers in these networks, as with the number of CT1 telephone sets, is increasing.

The number of subscribers in the GSM networks has been growing significantly more than previously estimated. At the end of July 1996 there were more than 14 million subscribers in Western Europe and this number is growing at a rate of approximately 1 million subscribers per month.

Furthermore, dual/multi-band operation of terminals is expected to take place in the near future providing terminal roaming between different GSM versions such as GSM 900 and DCS 1800.

All of the above mentioned developments show that usage of the existing GSM bands will increase all the time, creating more and more pressure on those bands.

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

The ERC recognises that there is a need for additional spectrum to be identified by the CEPT Member countries for GSM. Terminal equipment capable of operating in the extended frequency bands is not yet available, although GSM standards already cover these extended bands. The ERC recognises that in order to enable further growth of GSM, manufacturers and operators must be given full confidence to make further investments in the development of GSM terminals capable of operating in these extended bands.

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The European Conference of Postal and Telecommunications Administrations,

*considering:*

- a) that the European Telecommunications Standards Institute (ETSI) has developed European Telecommunications Standards for GSM and these standards already cover the use of the extended frequency bands (880-890 MHz / 925-935 MHz);
- b) Council Directive 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 European Community, 87/372/EEC, and ERC Decision of 24 October 1994 (ERC/DEC/(94)01) on GSM;
- c) CEPT Recommendation T/R 20-08 on frequency planning and frequency coordination for the GSM system.

**DECIDES**

1. that for the purpose of this Decision the "Global System for Mobile communications (GSM)" shall mean equipment complying with European Telecommunications Standards for GSM operating in the 900 MHz band;
2. that when an Administration requires additional spectrum for GSM beyond the frequency bands mentioned in the ERC Decision on GSM (ERC/DEC/(94)01) all or parts of the frequency bands 880-890 MHz paired with 925-935 MHz shall be used;
3. that this Decision shall enter into force by 1 April 1997;
4. 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 ( [www.ero.dk](http://www.ero.dk) ) under "Documentation / Implementation" for the up to date position on the implementation of this and other ERC Decisions.