

## **ELECTRONIC COMMUNICATIONS COMMITTEE**

ECC Decision  
of 1 December 2006

on transitional arrangements for the Fixed Service and tactical  
radio relay systems in the bands 1980-2010 MHz and  
2170-2200 MHz in order to facilitate the harmonised  
introduction and development of systems in the Mobile  
Satellite Service including those supplemented by a  
Complementary Ground Component

(ECC/DEC/(06)10)  
(2007/98/EC)



## **EXPLANATORY MEMORANDUM**

### **1 INTRODUCTION**

In March 2004, the ECC decided to review the regulatory framework for the Mobile Satellite Service in the bands 1980-2010 MHz and 2170-2200 MHz. This review has been undertaken to accommodate a new generation of mobile satellite systems planning to operate in the bands 1980-2010 MHz / 2170-2200 MHz, some of which are intending to provide commercial services by 2009. However, the frequency bands where these services are to be introduced are still partly or totally used by terrestrial fixed services and tactical radio relay systems in some CEPT countries, which are incompatible with mobile satellite systems.

### **2 BACKGROUND**

In the Table of Frequency Allocations contained in Article 5 of the Radio Regulations of the International Telecommunication Union the Mobile-Satellite Service and the Fixed Service are allocated on a co-primary basis. Additionally, some CEPT administrations use tactical radio relay systems in the 1980-2010 MHz / 2170-2200 MHz bands.

By its nature the operation of mobile satellite systems cannot be limited on a national basis and it also requires common frequency blocks to be made available in adjacent geographical areas. Therefore, in order to facilitate the harmonised introduction and development of mobile satellite systems, transitional arrangements are required for the transfer of fixed services and of tactical radio relay systems from the affected frequency bands.

New Mobile-Satellite Systems may employ a Complementary Ground Component (CGC) which is a ground-based infrastructure used to enhance satellite coverage in highly shadowed areas.

### **3 REQUIREMENT FOR AN ECC DECISION**

In 1997, ERC/DEC/(97)04 “on transitional arrangements for the Fixed Service and the Mobile-Satellite Service in the bands 1980-2010 MHz and 2170-2200 MHz in order to facilitate the harmonised introduction and development of Satellite Personal Communications Services” was adopted. While it has been widely implemented, fixed service and tactical radio relay systems are still operated in part or all the bands 1980-2010 MHz / 2170-2200 MHz in some CEPT countries.

Additionally, a new ECC Decision, replacing the ERC Decision (97)04, is necessary due to the delay in the use of these bands by mobile satellite systems with respect to the expected date in the late 1990s and the fact that new mobile-satellite systems require the whole 2x30 MHz.

Moreover, for the successful introduction of mobile satellite systems throughout the world, manufacturers and operators must be given the confidence to make the necessary investment in this new radiocommunications service. A commitment by CEPT member countries to implement an ECC Decision will provide a clear indication that the required frequency bands will be made available on time at least on a European-wide basis.

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**(ECC/DEC/(06)10)**

**(2007/98/EC)**

Comparable technical specifications to those given in this ECC Decision are given in Commission Decision 2007/98/EC of 14 February 2007. EU/EFTA Member States and, if so approved by the EEA Joint Committee, Iceland, Liechtenstein and Norway are obliged to implement the EC Decision.

“The European Conference of Postal and Telecommunications Administrations,

*considering*

- a) that WRC-95 allocated the band 1980-2010 MHz to the Mobile-Satellite Service in the Earth-to-space direction and allocated the band 2170-2200 MHz to the Mobile-Satellite Service in the space-to-Earth direction with a date of entry into force of the allocations of 1 January 2000 in Regions 1 and 3;
- b) that the bands 1980-2010 MHz and 2170-2200 MHz are also allocated to the Fixed Service and the mobile service, and that the provisions of Resolution 716 (Rev.WRC-2000) apply;
- c) that some satellite operators intend to provide operational service by 2009 in the bands 1980-2010 MHz / 2170-2200 MHz;
- d) that the use of the above bands by the Mobile-Satellite Service is subject to coordination under the relevant provisions of Article 9 of the ITU Radio Regulations;
- e) that sharing between the Mobile-Satellite Service and the Fixed Service or tactical radio relay systems in these bands is not feasible;
- f) that following WARC-92 many European Administrations established a moratorium on new Fixed Service networks in the 2 GHz bands allocated to the Mobile-Satellite Service. The moratorium was associated with plans to vacate these bands of existing Fixed Service networks by around the year 2005;
- g) that CEPT/ERC Recommendation T/R 13-01 and ITU-R Recommendation F.1098 specify channel arrangements for the Fixed Service which should be used for new 2 GHz Fixed Service networks in order to avoid overlap with the 2 GHz Mobile-Satellite Service allocations;
- h) that the bands 1980-2010 MHz / 2170-2200 MHz are still used by some CEPT administrations for Fixed Service or tactical radio relay systems and as a consequence are not totally available for use by mobile satellite systems;
- i) that it is anticipated that mobile satellite systems will utilise the entire 2x30 MHz;
- j) that the viable operation of mobile satellite systems requires common frequency blocks to be made available in adjacent geographical areas and that common harmonised frequency solutions are required in Europe;
- k) that the ECC Decision ECC/DEC(06)09 “on the Designation of the bands 1980-2010 MHz and 2170-2200 MHz for use by systems in the Mobile Satellite Service including those supplemented by a Complementary Ground Component” has been adopted in order to facilitate the harmonised introduction of mobile satellite systems in Europe;

- l) that as the purpose of this ECC Decision is to withdraw the F S and tactical radio relay systems from the bands 1980-2010 MHz / 2170-2200 MHz, frequency coordination of mobile-satellite systems with these terrestrial systems in the interim period is not deemed necessary;

**DECIDES**

1. that administrations shall finalise the transitions of existing Fixed Service systems (including troposcatter systems) and tactical radio relay systems operating in or overlapping the 1980-2010 MHz / 2170-2200 MHz bands, no later than one year after the first mobile-satellite system has fulfilled milestones 1 to 5 inclusive of Annex 2 of ECC Recommendation ECC/REC/(06)05;
2. that new Fixed Service networks and tactical radio relay systems which are incompatible with Mobile-Satellite Service operations within the territory of CEPT administrations shall not be implemented in the bands 1980-2010 / 2170-2200 MHz;
3. that in the interim period before the Fixed Service and tactical radio relay systems are withdrawn from the bands 1980-2010 MHz / 2170-2200 MHz, Administrations shall not require coordination of the mobile-satellite systems with respect to their fixed service and tactical radio-relay systems;
4. that the ERC/DEC/(97)04 is abrogated;
5. that this Decision shall enter into force on 1 December 2006;
6. that the preferred date for implementation for this Decision shall be 1 June 2007;
7. that CEPT Member administrations shall communicate the national measures implementing this Decision to the ECC Chairman and the Office when the Decision is nationally implemented.“

**Note:**

Please check the Office 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 ECC Decisions.