

# EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision  
of 10 March 1999

on the adoption of approval regulations for radio equipment  
to be used in the land mobile service for  
Terrestrial Trunked Radio System (TETRA)  
based on the TBR 035

(ERC/DEC/(99)04)





## EXPLANATORY MEMORANDUM

### 1 INTRODUCTION

The free movement of radiocommunications goods and the provision of Europe-wide services for radiocommunications are only achievable if there exist common regulations throughout Europe regarding availability of frequency bands, approval requirements and border crossing procedures. A basic requirement to fulfil these objectives is the Europe-wide implementation of national regulations based on either Technical Bases for a Regulation (TBRs) developed within TRAC or the European Telecommunications Standards (ETSS) developed by the European Telecommunications Standards Institute (ETSI)]. This Decision ERC/DEC/(99)04 provides the necessary mechanism for CEPT Administrations to commit themselves to implement, within their national regimes, TBR 035.

TETRA (Terrestrial Trunked Radio system), is a European standard for the mobile radio network system aimed at professional use. This system is based on digital technology and is intended to provide both voice and data services for private and public professional mobile radio applications with improved performance and spectrum efficiency over existing analogue technologies.

### 2 BACKGROUND

Both the ERC and ETSI are involved in the development of common regulations. The Memorandum of Understanding between ERC and ETSI explains the respective responsibilities of the two organisations and its annex describes the principles of co-operation. The ERC, for its part, should, *inter alia*, adopt Decisions on the introduction of ETSI standards into approval regimes.

This Decision supports ERC/DEC/(99)02 on exemption from individual licensing of TETRA mobile terminals and ERC/DEC/(98)03 on free circulation and use of TETRA civil mobile terminals.

TBR 035 has been prepared by the ETSI Project TETRA (EPT) Technical Committee. The recommendation specifies the minimum technical characteristics of both TETRA Voice plus Data (V+D) and Packet Data Optimised (PDO) Base Stations (BS) and Mobile Station (MS) equipment and the radio test methods used for type testing. The purpose of these specifications is to provide a sufficient quality of radio transmission and reception for equipment operating in a TETRA system and to minimise harmful interference to other equipment.

References to the ETSI Standards, ETS 300 394-1 use the old title namely Trans European Trunked Radio, whereas references to the system refer to the revised title, agreed by ETSI, namely Terrestrial Trunked Radio.

In the fullness of time, it is likely that ETSI will amend the title of the standards to reflect the change of name from Trans European Trunked Radio to Terrestrial Trunked Radio (TETRA) accordingly. Other Standards as well TBR 035 invoked by ERC Decisions on TETRA include ETS 300 394-1, ETS 300 392 and ETS 300 393.

### 3 REQUIREMENT FOR AN ERC DECISION

The allocation and assignment of radio frequencies and the complementary equipment approval regimes in CEPT member countries are laid down by law, regulation or administrative action. The ERC recognises that for harmonised fixed and mobile radio services to be introduced successfully throughout Europe, manufacturers and operators must be given the confidence to make the necessary investment in the development and procurement of new systems. Commitment by CEPT Administrations to implement this ERC Decision will provide a clear indication that equipment conforming to approval regulations based on TBR 035 will have the benefit of a Europe-wide market.

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“The European Conference of Postal and Telecommunications Administrations,

*considering:*

- a) that CEPT has a long term objective to harmonise the use of frequencies and the related regulatory regimes;
- b) that such harmonisation will benefit administrations, manufacturers, operators and users;
- c) that ETSI has published in 1998 the TBR 035;
- d) that, in accordance with the Memorandum of Understanding between ERC and ETSI, the ERC shall adopt ERC Decisions on the introduction of ETSI standards into approval regimes;
- e) that the use of trunked systems can improve spectrum efficiency and increase the quality of service provided to users of mobile radio;
- f) that the introduction of digital technology will allow the provision of a wide range of new services;
- g) that at present common harmonised frequency bands are not available throughout Europe;
- h) that compatibility between TETRA and systems in adjacent bands has to be taken into account on a national basis;
- i) that the bands 380-385 MHz and 390-395 MHz have been identified in ERC/DEC/(96)01, as the frequency bands to accommodate the needs of digital land mobile systems for emergency services within Europe;
- j) that the frequency requirements for TETRA civil systems have been identified in ERC/DEC/(96)04 and shall be met within one or more of the bands 410-430 MHz, 870-876/915-921 MHz, 450-470 MHz and 385-390/395-399.9 MHz;
- k) that, in a number of countries, the use of the band 380-400 MHz for new services is subject to sharing conditions;
- l) that in a number of countries the bands 385-390/395-399.9 MHz are not available for civil use at present;

*recognising*

that this Decision shall not impede EEA countries from fulfilling their obligations according to community law;

**DECIDES**

1. to adopt, by 31 May 1999, approval regulations for radio equipment to be used in the land mobile service for TETRA, based on the limit values and measurement methods for spectrum management contained in TBR 035;
2. that this Decision shall enter into force by 15 March 1999;
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 ( [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.