EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of 1 November 1996
on the adoption of approval regulations for
radio equipment to be used in the land mobile service
for the transmission of data (and speech) and using
an integral antenna
based on the European Telecommunications Standard
(ETS) 300 390

(ERC/DEC/(96)14)





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 the European Telecommunications Standards (ETSs) developed by the European Telecommunications Standards Institute (ETSI).

This Decision (ERC/DEC/(96)14) provides the necessary mechanism for CEPT Administrations to commit themselves to implement, within their national regimes, European Telecommunications Standard 300 390¹ and withdraw any conflicting national standard.

2. BACKGROUND

Both the ERC and ETSI are involved in the development of common regulations, as described in (1) above. 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.

ETS 300 390 has been prepared by the Radio Equipment and Systems (RES) Technical Committee of ETSI. The standard has undergone the ETSI standards approval procedure and is now published as an ETS.

The ETS is a general standard which may be superseded by specific standards covering specific applications.

The use of the frequency range (30-1000 MHz) covered by ETS 300 390 is not harmonised within CEPT. Although CEPT Recommendation T/R 25-08 provides preferred arrangements for some frequency bands designated for mobile radio systems, administrations have adopted different arrangements, to meet national requirements, for frequency bands, duplex separations and channel separations (12.5, 20 and 25 kHz). Further, the equipment used in this frequency range is subject to national licensing and frequency planning which requires specification of, *inter alia*, frequency of operation and equivalent isotropically radiated power (e.i.r.p.) and, in some cases, additional requirements to improve spectrum utilisation, for example timers to limit maximum duration of transmissions. Such parameters or requirements are considered as outside the scope of this Decision.

Nevertheless, there are a number of parameters, in particular those considered by the ERC as essential for spectrum management purposes², which can be harmonised by adopting within approval regulations the limit values and measurement methods provided in ETS 300 390.

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 ETS 300 390 will have the benefit of a Europe-wide market.

¹ ETS 300 390: "Land Mobile service; Technical characteristics and test conditions for radio equipment intended for the transmission of data (and speech) and using an integral antenna" corrigendum to Edition 1, 1996

² See Annex 1 of the Decision

ERC Decision of 1 November 1996

on the adoption of approval regulations for radio equipment to be used in the land mobile service for the transmission of data (and speech) and using an integral antenna based on the European Telecommunications Standard (ETS) 300 390

(ERC/DEC/(96)14)

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 ETS 300 390 for equipment to be used in the land mobile service operating on radio frequencies between 30 MHz and 1000 MHz with channel separations of 12.5 kHz, 20 kHz and 25 kHz and intended for the transmission of data (and speech);
- d) that for combined analogue speech/data equipment, this ETS is complementary to ETS 300 113 which covers radio equipment intended for the transmission of data (and speech) and having an antenna connector;
- e) that, for the foreseeable future, many official, public and private networks will continue to use land mobile equipment having the technical characteristics described in (c) above;
- f) 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;
- g) that the use of radio equipment is subject to national licensing and frequency planning requirements, in particular for frequency of operation, limit of maximum duration of transmission (e.g. use of time-out/timers) and e.i.r.p.;
- h) that suitable transitional arrangements are given in CEPT Recommendation T/R 01-05.

DECIDES

- 1. to adopt, by 1 March 1997, approval regulations for equipment to be used in the land mobile service for the transmission of data (and speech) using an integral antenna, based on the limit values and measurement methods for spectrum management parameters contained in ETS 300 390, with the exception of those parameters which are subject to national licensing requirements³. A list of spectrum management parameters to be included in approval regulations is given in Annex 1;
- 2. to withdraw any conflicting national approval regulation(s);
- 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) under "Documentation / Implementation" for the up to date position on the implementation of this and other ERC Decisions.

³ Annex 2 is provided for information to show which options have been adopted by each administration in those cases where ETS 300 390 offers a choice

ETS 300 390	Section	Comments
Transmitter parameters (Section 5.1):		1
Frequency error	5.1.1	Options for 12.5 and 20/25 kHz ⁴ and frequency of operation
Effective radiated power	5.1.2	Subject to national licensing conditions
Adjacent channel power	5.1.3	Options for 12.5 and 20 and 25 kHz ⁴
Radiated spurious emissions	5.1.4	
Transmitter attack time	5.1.5	
Transmitter release time	5.1.6	
Transient behaviour of the transmitter	5.1.7	
Receiver parameters (Section 5.2):		
Average usable sensitivity (field strength, data or messages)	5.2.1	Split into frequency bands
Error behaviour at high input levels	5.2.2	
Co-channel rejection	5.2.3	Options for 12.5 and 20 and 25 kHz ⁴
Adjacent channel selectivity	5.2.4	Options for 12.5 and 20 and 25 kHz ⁴
Spurious response rejection	5.2.5	
Intermodulation response rejection	5.2.6	
Blocking or desensitisation	5.2.7	
Spurious radiation	5.2.8	

 $^{^{\}scriptscriptstyle 4}\,$ See Annex 2 for details of the national implementation of channel spacing

ANNEX 2 Adoption of ETS 300 390: National variations for channel spacing

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Key:

Channel spacing options:

U = UHF1 = 12.5 kHzV = VHF2 = 20 kHz3 = 25 kHz

^{*} In future limited availability of U1 # For already existing networks Edition 12.3.01