# **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 using an integral antenna intended primarily for analogue speech based on the European Telecommunications Standard (ETS) 300 296

(ERC/DEC/(96)11)



# 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)11) provides the necessary mechanism for CEPT Administrations to commit themselves to implement, within their national regimes, European Telecommunications Standard 300 296<sup>1</sup> 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 300 296 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The ETS, which is based on CEPT Recommendation T/R 24-01, is a general standard which may be superseded by specific standards covering specific applications.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 300 296 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 isotropic 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 purposes<sup>2</sup>, which can be harmonised by adopting within approval regulations the limit values and measurement methods provided in ETS 300 296.

# 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 300 296 will have the benefit of a Europe-wide market.

<sup>1</sup> ETS 300 296:

<sup>296: &</sup>quot;Technical characteristics and test conditions for radio equipment using integral antennas intended primarily for analogue speech" (Edition, December 1994)

## ERC Decision of 1 November 1996

## on the adoption of approval regulations for radio equipment to be used in the land mobile service using an integral antenna intended primarily for analogue speech based on the European Telecommunications Standard (ETS) 300 296

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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 ETS 300 296 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 primarily for analogue speech;
- d) 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;
- e) 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;
- f) 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.;
- g) 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 using an integral antenna intended primarily for analogue speech, based on the limit values and measurement methods for spectrum management parameters contained in ETS 300 296, with the exception of those parameters which are subject to national licensing requirements<sup>3</sup>. A list of the 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 (<u>www.ero.dk</u>) under "Documentation / Implementation" for the up to date position on the implementation of this and other ERC Decisions.

<sup>&</sup>lt;sup>3</sup> Annex 2 is provided for information to show which options have been adopted by each administration in those cases where ETS 300 296 offers a choice.

# ANNEX 1

ETS 300 296	Section	Comments
Transmitter parameter limits (Section 5.1) :		
Frequency error	5.1.1	Options for 12.5 and 20 and 25 kHz and frequency of
		operation
Effective radiated power	5.1.2	Subject to national licensing conditions
Frequency deviation	5.1.3	Options for 12.5, 20 and 25 kHz channel separation
Adjacent channel power	5.1.4	Options for 12.5, 20 and 25 kHz channel separation
Spurious emissions	5.1.5	
Transient frequency behaviour of the transmitter	5.1.6	
<b>Receiver parameter limits (Section 5.2) :</b>		
Average usable sensitivity (field strength, speech)	5.2.1	
Amplitude characteristic	5.2.2	
Co-channel rejection	5.2.3	Options for 12.5, 20 and 25 kHz channel separation
Adjacent channel selectivity	5.2.4	Options for 12.5, 20 and 25 kHz channel separation
Spurious response rejection	5.2.5	
Intermodulation response	5.2.6	
Blocking or desensitisation	5.2.7	
Spurious radiation	5.2.8	

Parameters from ETS 300 296 to be included in approval regulations:

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# ANNEX 2

	Administration	Adoption of channel spacing options	
	Albania		
	Andorra		1
	Austria	U1, U2, U3, V1, V3	1
	Belgium		l
	Bosnia and Herzegovina		1
	Bulgaria	U3, V3	
	Croatia		
	Cyprus		
	Czech Republic	U1, U2, U3, V1, V2, V3	1
	Denmark		
	Estonia	U1, U3, V1, V3	
	Finland	U3, V3, *	
	France	U1, V1	
	Germany		
	Greece		$\square$
	Hungary	U1, U2, U3, V1, V2, V3	
	Iceland	U1, U3, V1, V3	1
	Ireland	U1, U3, V1	1
	Italy		1
	Latvia		1
	Liechtenstein		1
	Lithuania	U1, U3, V1, V3	1
	Luxembourg		1
	Malta		1
	Moldova		1
	Monaco	· · ·	1
	Netherlands		1
	Norway		l
	Poland	r	l
	Portugal		1
	Romania		l
	Russian Federation		l
4	San Marino		1
	Slovak Republic	U1, U2, U3, V1,V3	l
	Slovenia	$U1, V1 \text{ and } U3, V3^{\#}$	l
	Spain	01, V1 and 03, V3	1
			l
	Sweden Switzerland		1
			l
	The Former Yugoslav Republic of	U1, U3, V1, V3	1
	Macedonia		
	Turkey	U1, U3, V1, V3	1
	Ukraine		1
	United Kingdom		1
	Vatican City		l
	annel spacing options:		

Adoption of ETS 300 296: National variations for channel spacing

Key:

Channel spacing options:	
$\mathbf{U} = \mathbf{U}\mathbf{H}\mathbf{F}$	1
$\mathbf{V} = \mathbf{V}\mathbf{H}\mathbf{F}$	2

<sup>\*</sup> In future limited availability of U1 # for already existing networks Edition 12.3.01