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 transmitting signals to initiate
a specific response in the receiver based on
the Interim European Telecommunications Standard
(I-ETS) 300 219

(ERC/DEC/(96)10)





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)10) provides the necessary mechanism for CEPT Administrations to commit themselves to implement, within their national regimes, Interim European Telecommunications Standard (I-ETS) 300 219¹ 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.

I-ETS 300 219 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 I-ETS. The I-ETS is based on CEPT Recommendation T/R 24-01 Annex V.

The ERC will normally produce decisions on the introduction of ETSI standards into approval regimes, once the relevant standard becomes a European Telecommunications Standard (ETS). This Decision has been produced, as an exception: I-ETS 300 219 is mature, in use, and has not been upgraded because of issues which affect other standards in the same series. This Decision will be reviewed when the standard is up-graded to an ETS.

The use of the frequency range (30-1000 MHz) covered by I-ETS 300 219 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 I-ETS 300 219.

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 I-ETS 300 219 will have the benefit of a Europe-wide market.

¹ I-ETS 300 219: "Technical characteristics and test conditions for radio equipment transmitting signals to initiate a specific response in the receiver" (Edition 1, 1993)

² See Annex 1 of the Decision

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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 I-ETS 300 219 for equipment transmitting signals to initiate a specific response in the receiver, 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;
- d) that, for combined speech/non-speech equipment, this I-ETS is complementary to ETS 300 086, which covers radio equipment for use in the land mobile service intended primarily for analogue speech;
- 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 radio equipment to be used in the land mobile service for transmitting signals to initiate a specific response in the receiver, based on the limit values and measurement methods contained in I-ETS 300 219, with the exception of those parameters which are subject to national licensing requirements³. 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 ($\underline{www.ero.dk}$) 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 I-ETS 300 219 offers a choice.

ANNEX 1

Parameters from I-ETS 300 219 to be included in approval regulations:

I-ETS 300 219	Section	Comments
Transmitter parameters (section 6.1):		
Frequency error	6.1.1	Options for 12.5 and 20 and 25 kHz and frequency of operation
Carrier power variation (conducted)	6.1.2	
Effective radiated power	6.1.3	Subject to national licensing conditions
Adjacent channel power	6.1.4	Options for 12.5 and 20 and 25 kHz
Spurious emissions	6.1.5	
Intermodulation attenuation	6.1.6	Site engineering conditions in special cases
Transient frequency behaviour of a transmitter	6.1.7	
Receiver parameters (Section 6.2):		
Receiver sensitivity (response)	6.2.1	
Maximum usable sensitivity (response, conducted)	6.2.2	
Maximum usable sensitivity (response, field strength)	6.2.3	Split into frequency bands
Co-channel rejection	6.2.4	Options for 12.5 and 20 and 25 kHz
Adjacent channel selectivity	6.2.5	Options for 12.5 and 20 and 25 kHz
Spurious response rejection	6.2.6	
Intermodulation response rejection	6.2.7	
Blocking or desensitisation	6.2.8	
Spurious radiation	6.2.9	
Duplex operation - receiver limits (Section 6.3):		
Receiver desensitisation and maximum usable sensitivity	6.3.1	
Receiver spurious response rejection	6.3.2	

ANNEX 2 Adoption of I-ETS 300 219: National variations for channel spacing and temperature range⁴

Administration	Adoption of channel spacing options	Adoption of temperature range options
Albania		
Andorra		
Austria	U1, U2, U3, V1, V3	1
Belgium		
Bosnia and Herzegovina		
Bulgaria	U3, V3	
Croatia		
Cyprus		
Czech Republic	U1, U2, U3, V1, V2, V3	1, 2, 3
Denmark		
Estonia		
Finland		
France	U1, V1	1
Germany		
Greece		
Hungary	U1, U2, U3, V1, V2, V3	3
Iceland	U1, U3, V1, V3	
Ireland	U1, U3, V1	3
Italy		
Latvia		
Liechtenstein		
Lithuania	U1, U3, V1, V3	1
Luxembourg		
Malta		
Moldova		
Monaco		
Netherlands		
Norway		
Poland		
Portugal		
Romania		
Russian Federation		
San Marino		
Slovak Republic	U1, U2, U3, V1, V2, V3	
Slovenia	U1, U3, V3*	
Spain	,,	
Sweden		
Switzerland		
The Former Yugoslav Republic of	U1, U2, U3	1
Macedonia	01, 02, 03	1
Turkey	U1, U3, V1, V3	
Ukraine	01, 03, 11, 13	
United Kingdom		
Vatican City		
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Key: Channel spacing options: Temperature range options

 $1 = -25 \text{ to } +55^{\circ}\text{C}$ $2 = -15 \text{ to } +55^{\circ}\text{C}$ U = UHF $\bar{1} = 12.5 \text{ kHz}$ V = VHF2 = 20 kHz3 = 25 kHz $3 = -10 \text{ to } +55^{\circ}\text{C}$

⁴ Harmonisation of temperature range is underway in ETSI.

* For already existing network.
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