EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of 20 March 1998
on the adoption of approval regulations
for short range devices
operating in the frequency range 25 to 1000 MHz
with power levels of up to 500 mW
based on the European Standard
(Telecommunications series) EN 300 220-1

(ERC/DEC/(98)05)

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(98)05) provides the necessary mechanism for CEPT administrations to commit themselves to implement, within their national regimes, European Standard (Telecommunications series) EN 300 220-1[1] 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 cooperation. The ERC, for its part, should, *inter alia*, adopt Decisions on the introduction of ETSI standards into approval regimes.

EN 300 220-1 has been prepared by the Electromagnetic compatibility and Radio spectrum Matters (ERM) Technical Committee of ETSI. The standard has undergone the ETSI standards approval procedure and is now published.

The EN is a general standard which may be superseded by specific standards covering specific applications.

The use of the frequency range (25-1000 MHz) covered by EN 300 220-1 is not harmonised within CEPT. Administrations have adopted different arrangements, to meet national requirements, for frequency bands and channel separations. 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 effective radiated power (e.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[2], which can be harmonised by adopting within approval regulations the limit values and measurement methods provided in EN 300 220-1.

[1] EN 300 220-1: "Technical characteristics and test methods for radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW; Part 1: Parameters intended for regulatory purposes" (V1.2.1(1997-11)).
[2] See Annex 1 of the Decision.

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 EN 300 220-1 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 EN 300 220-1 for short range devices operating in the frequency range 25 to 1000 MHz with power levels of up to 500 mW;

d) that, for the foreseeable future, there will continue to be widespread use of 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 ETSs and ENs 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.r.p.;

g) that suitable transitional arrangements are given in CEPT Recommendation T/R 01-05;

h) that information concerning frequency band, radiated power and field strength, type of antenna, permitted channel spacing, duty cycle, licensing requirements, type approval, and marking requirements can be found in CEPT/ERC Recommendation 70-03.

DECIDES

1. to adopt approval regulations for short range devices operating in the frequency range 25 to 1000 MHz with power levels of up to 500 mW, based on the limit values and measurement methods for spectrum management parameters contained in EN 300 220-1, with the exclusion by national choice of those parameters which are subject to national licensing requirements[3]. A list of the parameters to be included in approval regulations is given in Annex 1;

2. to withdraw any conflicting national regulation(s).

3. that this Decision shall enter into force on 1 April 1998;

4. 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 EN 300 220-1 offers a choice.

ANNEX 1

Parameters and methods of measurement from EN 300 220-1 to be included in approval requirements:

EN 300 220-1	Section	Comments
Method of measurement and limits for transmitter parameters[4] (Section 8):		
Frequency error	8.1	Not mandatory if the adjacent channel power under extreme conditions is measured
Carrier power (conducted)	8.2	Subject to national licensing conditions
Effective radiated power (radiated)	8.3	Subject to national licensing conditions
Response of the transmitter to modulation frequencies	8.4	Not applicable to wideband equipment
Frequency deviation	8.4.1	Measurement only applicable for analogue speech
Modulation depth	8.4.2	Measurement only applicable for analogue speech
Adjacent channel power	8.5	Not applicable to wideband equipment
Range of modulation bandwidth for wide band equipment (>25 kHz)	8.6	Only applicable to wideband equipment
Spurious emissions	8.7	
Frequency Stability under low voltage conditions	8.8	Only applicable to battery operated equipment
Duty cycle	8.9	Manufacturers declaration
Method of measurement and limits for receiver parameters[4] (Section 9):		
Spurious radiation	9.1	

[4] In some countries the spurious emissions and spurious radiations of transmitters and receivers are not considered as approval requirements but as essential requirements of the EMC Directive 89/336 EC for which alternative procedures apply.

ANNEX 2

Adoption of EN 300 220-1: National variations for equipment class[5] and channel spacing[6]

Administration	Adoption of equipment class options	Adoption of channel spacing options
Albania		
Austria	7a, 8, 9, 11, 12	1, 2, 4, 5
Belgium		
Bosnia and Herzegovina		
Bulgaria		
Croatia		
Cyprus		
Czech Republic	7a, 8, 9, 11, 12	1, 2, 3, 4, 5
Denmark		
Estonia	7a, 8, 9, 11, 12	1, 2, 3, 4, 5
Finland		
France		
Germany		
Greece		
Hungary		
Iceland		
Ireland		
Italy		
Latvia		
Liechtenstein		
Lithuania	7a, 8, 9, 11, 12	1, 2, 3, 4, 5
Luxembourg		
Malta		
Moldova		
Monaco		
Netherlands		
Norway		
Poland		
Portugal	8, 11, 12	1, 2, 5
Romania		
Russian Federation		
San Marino		
Slovak Republic	7a, 8, 9, 11, 12	1, 2, 4
Slovenia		
Spain		
Sweden		
Switzerland		
The Former Yugoslav Republic of Macedonia		
Turkey		
Ukraine		
United Kingdom		
Vatican City		

[5] EN 300 220-1 is divided into several classes based on maximum output power, (see table below).

Class	Power level (Conducted or radiated) (mW)
7a	5
8	10
9	25
11	100
12	500

[6] Channel spacing options:
1: 10 kHz; 2:12.5 kHz; 3: 20 kHz; 4: 25 kHz; 5: >25 kHz*
* No channel spacing - whole stated frequency band may be used.