



AMENDMENT

ETS 300 113

pr **A1**

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Key words: Data, methodology, mobile, radio, speech, testing

**This draft amendment A1, if approved, will modify
the European Telecommunication Standard ETS 300 113 (1996)**

**Radio Equipment and Systems (RES);
Land mobile service;
Technical characteristics and test conditions
for radio equipment intended for
the transmission of data (and speech)
and having an antenna connector**

ETSI

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Foreword

This draft amendment to ETS 300 113 (1996) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Unified Approval Procedure phase of the ETSI standards approval procedure.

ETS 300 113, as amended by this draft amendment, together with ETS 300 279 is intended to become a Harmonized Standard, the reference of which is intended to be published in the Official Journal of the European Communities, referencing Council Directive 89/336/EEC (EMC Directive).

Annex H contains the draft ERC Decision which references the technical specifications in this ETS for inclusion in national type approval regulations. This draft ERC Decision is currently undergoing public consultation. The final ERC Decision will be included in this amendment when it has been adopted by the ERC.

Proposed transposition dates	
Date of latest announcement of this amendment (doa):	3 months after ETSI publication
Date of latest publication or endorsement of this amendment (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

Amendments

Page 9, Foreword

Replace the first paragraph with the following:

This European Telecommunications Standard (ETS) has been prepared by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS, together with ETS 300 279 is intended to become a Harmonized Standard, the reference of which is intended to be published in the Official Journal of the European Communities, referencing Council Directive 89/336/EEC (EMC Directive).

Conformity to a Harmonized EMC Standard will confer presumption of conformity with the essential requirements of the EMC Directive.

Insert the following after the last paragraph:

The technical specifications relevant to the EMC Directive are listed in annex G.

Annex H contains the ERC Decision which references the technical specifications in this ETS for inclusion in national type approval regulations.

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Insert before History:

Annex G (normative): ETS 300 113 Radio Equipment and Systems (RES); Land mobile service; Technical Characteristics and test conditions for radio equipment intended for the transmission of data (and speech) and having an antenna connector.

Table G.1: Clauses and/or subclauses of this ETS relevant for compliance with essential requirements of the EC Council Directives.

Clause/subclause number and title		Corresponding article of Council Directive 89/336/EEC	Qualifying remarks
5.1.5	Spurious emissions	4(a)	
5.2.9	Spurious radiations	4(a)	
5.2.6	Spurious response rejection	4(b)	
5.2.8	Blocking or desensitisation	4(b)	

Annex H (normative): ERC Decision on the adoption of approval regulations for radio equipment to be used in the land mobile service intended for the transmission of data (and speech) and having an antenna connector, based on the European Telecommunications Standard (ETS) 300 113

This annex contains the ERC Decision which references the technical specifications in ETS 300 113 for inclusion in national type approval regulations.

EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of1996

on the adoption of approval regulations for radio equipment to be used in the land mobile service intended for the transmission of data (and speech) and having an antenna connector, based on the European Telecommunications Standard (ETS) 300 113

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, type 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/***(96)XX) provides the necessary mechanism for CEPT administrations to commit themselves to implement, within their national regimes, European Telecommunications Standard 300 113¹ 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 300 113 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 300 113 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 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 purposes², which can be harmonised by adopting within approval regulations the limit values and measurement methods provided in ETS 300 113.

3. REQUIREMENT FOR AN ERC DECISION.

¹ ETS 300 113: *Radio Equipment and Systems (RES); Land Mobile service; "Technical characteristics and test conditions for radio equipment intended for the transmission of data (and speech) and having an antenna connector."*

² See Annex 1 of the Decision

The allocation and assignment of radio frequencies and the complementary equipment type 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 300 113 will have the benefit of a Europe-wide market.

Draft

on the adoption of approval regulations for radio equipment to be used in the land mobile service intended for transmission of data (and speech) and having an antenna connector based on the European Telecommunications Standard (ETS) 300 113

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 300 113 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 the transmission of data;
- d) that this ETS is complementary to ETS 300 086, which covers radio equipment in the land mobile service and 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.r.p.;
- h) that suitable transitional arrangements are given in CEPT Recommendation T/R 01-05.

DECIDES

1. to adopt, by 1 January 1997, approval regulations for radio equipment to be used in the land mobile service intended for transmission of data (and speech) and having an antenna connector, based on the limit values and measurement methods for spectrum management parameters contained in ETS 300 113, 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 Annex 2 is provided for information to show which options have been adopted by each Administration in those cases where ETS 300 113 offers a choice

3. that the equipment shall be marked ERC PMR Y, where Y is the country symbol of the national type approval authority which issued the type approval certificate;
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.

DRAFT

European Radiocommunications Committee Decision ERC/**(96)XX

on the adoption of approval regulations for radio equipment to be used in the land mobile service intended for the transmission of data (and speech) and having an antenna connector, based on the European Telecommunications Standard (ETS) 300 113

The following CEPT administrations have committed themselves to apply the terms of this Decision:

DRAFT

Annex 1

Parameters from ETS 300 113 to be included in approval requirements:

ETS 300 113	Section	Comments
Transmitter parameters:		
Frequency error	5.1.1	Options for 12.5 and 20/25 kHz and Frequency of operation
Carrier power variation (conducted)	5.1.2	
Effective radiated power	5.1.3	Subject to national licensing conditions
Adjacent channel power	5.1.4	Options for 12.5 and 20/25 kHz ⁴
Spurious emissions	5.1.5	
Intermodulation attenuation	5.1.6	Site engineering conditions in special cases
Transmitter attack time	5.1.7	
Transmitter release time	5.1.8	
Transient behaviour of the transmitter	5.1.9	
Receiver parameters:		
Maximum usable sensitivity (data, conducted)	5.2.1	
Maximum usable sensitivity (data, field strength)	5.2.2	Split into frequency bands
Bit error rate in normal operation	5.2.3	
Co-channel rejection	5.2.4	Options for 12.5 and 20/25 kHz
Adjacent channel selectivity	5.2.5	Options for 12.5 and 20/25 kHz
Spurious response rejection	5.2.6	
Intermodulation response	5.2.7	
Blocking or desensitisation	5.2.8	
Spurious radiation's	5.2.9	
Carrier sense delay	5.2.10	
Receiver opening delay	5.2.11	
Duplex operation - receiver limits		
Receiver desensitisation and maximum usable sensitivity (with simultaneous transmission and reception)	5.3.1	
receiver spurious response rejection	5.3.2	

⁴ See Annex 2 for details of the national implementation of channel spacing.

Annex 2

Adoption of ETS 300 113: National variations for channel spacing.

Administration	Adoption of channel spacing options
Albania	
Andorra	
Austria	
Belgium	
Bosnia and Herzegovina	
Bulgaria	
Croatia	
Cyprus	
Czech Republic	
Denmark	
Estonia	
Finland	
France	
Germany	
Greece	
Hungary	
Iceland	
Ireland	
Italy	
Latvia	
Liechtenstein	
Lithuania	
Luxembourg	
Malta	
Moldova	
Monaco	
Netherlands	
Norway	
Poland	
Portugal	
Romania	
Russian Federation	
San Marino	
Slovak Republic	
Slovenia	
Spain	
Sweden	
Switzerland	
The Former Yugoslav Republic of Macedonia	
Turkey	
Ukraine	
United Kingdom	
Vatican City	

Key: Channel spacing options:
 U= UHF 1 = 12.5 kHz
 V=VHF 2 = 20 kHz
 3 = 25 kHz

History

Document history	
June 1996	First Edition
October 1996	Unified Approval Procedure UAP 56: 1996-10-21 to 1997-02-14