



# AMENDMENT

**ETS 300 113**

**A1**

**March 1997**

**Second Edition**

---

Source: ETSI TC-RES

Reference: RE/RES-02026

ICS: 33.020

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

**This amendment A1 modifies  
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**

European Telecommunications Standards Institute

**ETSI Secretariat**

**Postal address:** F-06921 Sophia Antipolis CEDEX - FRANCE

**Office address:** 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

**X.400:** c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 4 92 94 42 00 - Fax: +33 4 93 65 47 16

---

**Copyright Notification:** No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1997. All rights reserved.



## Foreword

This 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).

ETS 300 113, as amended by this 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 ERC Decision which references the technical specifications in this ETS for inclusion in national type approval regulations.

<b>Transposition dates</b>	
Date of adoption	21 February 1997
Date of latest announcement of this ETS (doa):	30 June 1997
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 December 1997
Date of withdrawal of any conflicting National Standard (dow):	31 December 1997

## 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).

*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.

### Page 100

*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  
of 1 November 1996  
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  
(ERC/DEC/(96)07)





## 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 regulations based on the European Telecommunications Standards (ETs) developed by the European Telecommunications Standards Institute (ETSI).

This Decision (ERC/DEC/(96)07) provides the necessary mechanism for CEPT Administrations to commit themselves to implement, within their national regimes, European Telecommunications Standard 300 113<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 300 113 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 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 purposes<sup>2</sup> which can be harmonised by adopting within approval regulations the limit values and measurement methods provided in ETS 300 113.

---

<sup>1</sup> 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" (Edition 2, 1996)*

<sup>2</sup> 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 ETS 300 113 will have the benefit of a Europe-wide market.



**ERC Decision  
of 1 November 1996**

**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**

**(ERC/DEC/(96)07)**

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) for combined speech/non speech, 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.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 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 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.

---

<sup>3</sup> Annex 2 is provided for information to show which options have been adopted by each administration in those cases where ETS 300 113 offers a choice

**Left blank**

## ANNEX 1

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

ETS 300 113	Section	Comments
<b>Transmitter parameters (Section 5.1):</b>		
Frequency error	5.1.1	Options for 12.5 and 20 and 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 and 25 kHz <sup>4</sup>
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	
<b>Receiver parameters (section 5.2):</b>		
Maximum usable sensitivity (data, conducted)	5.2.1	
Average usable sensitivity (data, field strength)	5.2.2	Split into frequency bands
Error behaviour at high input levels	5.2.3	
Co-channel rejection	5.2.4	Options for 12.5 and 20 and 25 kHz
Adjacent channel selectivity	5.2.5	Options for 12.5 and 20 and 25 kHz
Spurious response rejection	5.2.6	
Intermodulation response rejection	5.2.7	
Blocking or desensitisation	5.2.8	
Spurious radiation	5.2.9	
<b>Duplex operation - receiver limits (section 5.3)</b>		
Receiver desensitisation and maximum usable sensitivity (with simultaneous transmission and reception)	5.3.1	
Receiver spurious response rejection	5.3.2	

<sup>4</sup> 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	U1, U2, U3, V1, V2, V3
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	1 ; 3
Ukraine	
United Kingdom	
Vatican City	

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

**European Radiocommunications Committee Decision**

**CEPT/ERC/DEC(96)07**

**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**

As of 1 February 1997 the following CEPT Members have committed themselves to apply the terms of this Decision:

Austria  
Croatia  
Finland  
Iceland  
Ireland  
Italy  
Liechtenstein  
Lithuania  
Norway  
Slovak Republic  
Switzerland  
United Kingdom

## History

Document history	
June 1996	Second Edition
October 1996	Unified Approval Procedure UAP 56: 1996-10-21 to 1997-02-14
March 1997	Amendment 1 to Second Edition