

SLOVENSKI STANDARD
SIST EN 301 489-17:2001
01-september-2001

Elektromagnetna združljivost (EMC) in zadeve v zvezi z radijskim spektrom (ERM) - Standard elektromagnetne združljivosti (EMC) za radijsko opremo in storitve - 17. del: Posebni pogoji za širokopasovne podatke in opremo HIPERLAN

ElectroMagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Wideband data and HIPERLAN equipment

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 301 489-17:2001](https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33ff49d02/sist-en-301-489-17-2001)

<https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33ff49d02/sist-en-301-489-17-2001>

Ta slovenski standard je istoveten z: EN 301 489-17 Version 1.1.1

ICS:

33.060.01	Radijske komunikacije na splošno	Radiocommunications in general
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

SIST EN 301 489-17:2001

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 301 489-17:2001](#)

<https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33ffd49d02/sist-en-301-489-17-2001>

ETSI EN 301 489-17 V1.1.1 (2000-09)

Candidate Harmonized European Standard (Telecommunications series)

**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
ElectroMagnetic Compatibility (EMC) standard
for radio equipment and services;
Part 17: Specific conditions for Wideband data
and HIPERLAN equipment**

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

[SIST EN 301 489-17:2001](https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33fd49d02/sist-en-301-489-17-2001)

<https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33fd49d02/sist-en-301-489-17-2001>



Reference

DEN/ERM-EMC-219-17

Keywords

EMC, HIPERLAN, LAN, radio, regulation

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

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

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 301 489-17:2001

<https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33fd49d02/sist-en-301-489-17-2001>

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at <http://www.etsi.org/tb/status/>

If you find errors in the present document, send your comment to:
editor@etsi.fr

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 2000.
All rights reserved.

Contents

Intellectual Property Rights	4
Foreword.....	4
1 Scope	6
2 References	6
3 Definitions and abbreviations.....	7
3.1 Definitions	7
3.2 Abbreviations	7
4 Test conditions	7
4.1 General	7
4.2 Arrangements for test signals	8
4.2.1 Arrangements for test signals at the input of transmitters.....	8
4.2.2 Arrangements for test signals at the output of transmitters.....	8
4.2.3 Arrangements for test signals at the input of receivers	8
4.2.4 Arrangements for test signals at the output of receivers	8
4.2.5 Arrangements for testing transmitter and receiver together (as a system).....	8
4.3 Exclusion bands.....	9
4.4 Narrow band responses on receivers or receivers which are part of transceivers.....	9
4.5 Normal test modulation	9
5 Performance assessment.....	9
5.1 General	9
5.2 Arrangements for the assessment of host dependant equipment and plug-in cards.....	9
5.2.1 Alternative A: composite equipment	9
5.2.2 Alternative B: use of a test jig or host.....	10
5.3 Assessment procedures.....	10
5.4 Ancillary equipment.....	10
5.5 Equipment classification	10
6 Performance criteria	10
6.1 General performance criteria.....	10
6.2 Performance table.....	11
6.3 Performance criteria for Continuous phenomena applied to Transmitters (CT)	11
6.4 Performance criteria for Transient phenomena applied to Transmitters (TT).....	11
6.5 Performance criteria for Continuous phenomena applied to Receivers (CR).....	12
6.6 Performance criteria for Transient phenomena applied to Receivers (TR).....	12
7 Applicability overview	12
7.1 Emission.....	12
7.1.1 General.....	12
7.1.2 Special conditions.....	12
7.2 Immunity	12
7.2.1 General.....	12
7.2.2 Special conditions.....	12
Annex A (informative): Examples of radio equipment in the scope of the present document	13
A.1 Wideband transmission systems operating in the 2,4 GHz ISM band using spread spectrum techniques	13
A.2 High Performance Radio Local Area Networks (HIPERLAN) type 1 operating in the 5 GHz frequency band.....	13
Bibliography	14
History	15

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Candidate Harmonized European Standard (Telecommunications series) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document has been produced by ETSI in response to a mandate from the European Commission issued under the Council Directive 98/34/EC [4] (as amended) laying down a procedure for the provision of information in the field of technical standards and regulation.

The present document together, with EN 301 489-1 [1], is intended to become a Harmonized EMC Standard, the reference of which will be published in the Official Journal of the European Communities referencing the Council Directive on the approximation of the laws of the Member States relating to electromagnetic compatibility (the "EMC Directive" 89/336/EEC [3] as amended), and the Council Directive on the approximation of the laws of the Member States relating to radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (the "R&TTE Directive" 1999/5/EC [2]).

The present document is part 17 of a multi-part EN covering the ElectroMagnetic Compatibility (EMC) standard for radio equipment and services, as identified below:

- Part 1: "Common technical requirements";
- Part 2: "Specific conditions for radio paging equipment";
- Part 3: "Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz";
- Part 4: "Specific conditions for fixed radio links and ancillary equipment and services";
- Part 5: "Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech)";
- Part 6: "Specific conditions for Digital Enhanced Cordless Telecommunications (DECT) equipment";
- Part 7: "Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS)";
- Part 8: "Specific conditions for GSM base stations";
- Part 9: "Specific conditions for wireless microphones and similar Radio Frequency (RF) audio link equipment";
- Part 10: "Specific conditions for First (CT1 and CT1+) and Second Generation Cordless Telephone (CT2) equipment";
- Part 11: "Specific conditions for FM broadcasting transmitters";
- Part 12: "Specific conditions for Earth Stations operated in the frequency ranges between 4 GHz and 30 GHz in the Fixed Satellite Service (FSS)";
- Part 13: "Specific conditions for Citizens' Band (CB) radio and ancillary equipment (speech and non-speech)";

- Part 15: "Specific conditions for commercially available amateur radio equipment";
- Part 16: "Specific conditions for analogue cellular radio communications equipment, mobile and portable";
- Part 17: "Specific conditions for Wideband data and HIPERLAN equipment";**
- Part 18: "Specific conditions for Terrestrial Trunked Radio (TETRA) equipment";
- Part 19: "Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications";
- Part 20: "Specific conditions for Mobile Earth Stations (MES) used in the Mobile Satellite Services (MSS)";
- Part 22: "Specific conditions for ground based VHF aeronautical mobile and fixed radio equipment".

National transposition dates	
Date of adoption of this EN:	22 September 2000
Date of latest announcement of this EN (doa):	31 December 2000
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 June 2001
Date of withdrawal of any conflicting National Standard (dow):	31 December 2003

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 301 489-17:2001](https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33fd49d02/sist-en-301-489-17-2001)

<https://standards.iteh.ai/catalog/standards/sist/46a57564-5bec-4255-9af8-3a33fd49d02/sist-en-301-489-17-2001>

1 Scope

The present document, together with EN 301 489-1 [1], covers the assessment of the 2,4 GHz wideband transmission systems and High Performance Radio Local Area Network (HIPERLAN) type 1 equipment, in respect of ElectroMagnetic Compatibility (EMC).

Technical specifications related to the antenna port and emissions from the enclosure port of the radio equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum.

The present document specifies the applicable test conditions, performance assessment and performance criteria for wideband data communication systems.

Examples of types of wide band data communications systems covered by the present document are given in annex A.

In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and EN 301 489-1 [1], the provisions of the present document take precedence.

The environmental classification and the emission and immunity requirements used in the present document are as stated in EN 301 489-1 [1], except for any special conditions included in the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, subsequent revisions do apply.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ETSI EN 301 489-1: "Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements".
- [2] Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications equipment and the mutual recognition of their conformity.
- [3] Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility.
- [4] Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.
- [5] ETSI ETS 300 328 (1996): "Radio Equipment and Systems (RES); Wideband transmission systems; Technical characteristics and test conditions for data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques".
- [6] ETSI ETS 300 328 /A1(1997): "Radio Equipment and Systems (RES); Wideband transmission systems; Technical characteristics and test conditions for data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques".
- [7] ETSI EN 300 652: "Broadband Radio Access Networks (BRAN); High Performance Radio Local Area Network (HIPERLAN) Type 1; Functional specification".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, definitions of EN 301 489-1 [1], clause 3 apply as appropriate.

Additionally the following product related definitions apply:

Equipment Under Test (EUT): equipment under test and subject to the performance requirements of this document.

fixed station: equipment intended for use in a fixed location and fitted with one or more antennas. The equipment may be fitted with either antenna socket(s) or integral antenna(s) or both.

hand-portable station: equipment normally used on a stand-alone basis and to be carried by a person. The equipment may be fitted with one or more antennas. The equipment may be fitted with either antenna socket(s) or integral antenna(s) or both.

host: any equipment which has complete user functionality when not connected to the radio equipment part and to which the radio equipment part provides additional functionality and to which connection is necessary for the radio equipment part to offer functionality.

plug-in radio device: equipment, including slide-in radio cards, intended to be used with or within a variety of host systems, using their control functions and power supply.

stand-alone radio equipment: equipment that is intended primarily as communications equipment and that is normally used on a stand-alone basis.

iTeh STANDARD PREVIEW

3.2 Abbreviations (standards.iteh.ai)

For the purpose of the present document, the following abbreviations apply:

AC	Alternating Current
ACK	ACKnowledgement
ARQ	Automatic Retransmission reQuest
DC	Direct Current
EMC	ElectroMagnetic Compatibility
EUT	Equipment Under Test
HIPERLAN	HIgh PERformance Radio Local Area Network
MUS	Maximum Usable Sensitivity
NACK	Not ACKnowledgement
RF	Radio Frequency
TR	Transient phenomena applied to Receivers
TT	Transient phenomena applied to Transmitters

4 Test conditions

4.1 General

For the purposes of the present document, the test conditions of EN 301 489-1 [1], clause 4, shall apply as appropriate. Further product related test conditions for wideband data communications systems are specified in clauses 4.2 to 4.5.

The radio equipment may take forms which may require special software and/or test fixtures. Equipment which requires connection to a host equipment to function shall use the test configuration as defined by the manufacturer. In all cases the EUT shall be exercised in a manner representative of normal intended use.