

SLOVENSKI STANDARD
SIST EN 301 489-20:2001**01-september-2001**

Elektromagnetna združljivost (EMC) in zadeve v zvezi z radijskim spektrom (ERM) - Standard elektromagnetne združljivosti (EMC) za radijsko opremo in storitve - 20. del: Posebni pogoji za mobilne zemeljske postaje (MES) v okviru mobilnih satelitskih storitev (MSS)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 20: Specific conditions for Mobile Earth Stations (MES) used in the Mobile Satellite Services (MSS)

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Ta slovenski standard je istoveten z: EN 301 489-20 Version 1.1.1

ICS:

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

SIST EN 301 489-20:2001**en**

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ETSI EN 301 489-20 V1.1.1 (2000-12)

Candidate Harmonized European Standard (Telecommunications series)

**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
ElectroMagnetic Compatibility (EMC) standard
for radio equipment and services;
Part 20: Specific conditions for Mobile Earth Stations (MES)
used in the Mobile Satellite Services (MSS)**

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<https://standards.iteh.ai/catalog/standards/sist/76bebb91-110f-42a3-a3c0-6cfa30cd53d3/sist-en-301-489-20-2001>



Reference

DEN/ERM-EMC-219-20

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Sous-Préfecture de Grasse (06) N° 7803/88

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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	8
4.1 General	8
4.2 Arrangements for test signals.....	8
4.2.1 Arrangements for test signals at the input of transmitters.....	9
4.2.2 Arrangements for test signals at the output of transmitters.....	9
4.2.3 Arrangements for test signals at the input of receivers.....	10
4.2.4 Arrangements for test signals at the output of receivers.....	10
4.2.5 Arrangements for testing transmitter and receiver together (as a system).....	10
4.3 Exclusion bands	10
4.3.1 Transmitter exclusion band	10
4.3.2 Receiver exclusion bands.....	10
4.4 Narrow band responses of receivers.....	10
5 Performance assessment	11
5.1 General	11
5.2 MES connected to host equipment.....	11
5.2.1 Alternative A: combined equipment.....	11
5.2.2 Alternative B: use of a test jig.....	11
5.3 Ancillary equipment.....	11
5.4 Equipment classification.....	12
6 Performance criteria.....	12
6.1 General	12
6.2 Performance criteria for Continuous Phenomena (CP).....	12
6.3 Performance criteria for Transient Phenomena (TP).....	12
7 Applicability overview.....	13
7.1 Emission	13
7.1.1 General.....	13
7.1.2 Special conditions.....	13
7.2 Immunity	13
7.2.1 General.....	13
7.2.2 Special conditions.....	13
Annex A (normative): Definitions of MESs within the scope of the present document.....	14
A.1 MESs operating within 1,6 GHz/2,4 GHz band	14
A.2 MESs operating within the 1,5 GHz/1,6 GHz.....	14
A.3 MESs operating within 2,0 GHz band	14
A.4 MESs operating below 1 GHz.....	15
A.5 MESs operating in the 11/12/14 GHz frequency bands.....	15
Bibliography.....	16
History	17

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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 [5] (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 20 of a multi-part deliverable covering the ElectroMagnetic Compatibility (EMC) standard for radio equipment and services, as identified below:

- <https://standards.iteh.ai/catalog/standards/sist/76bebb91-110f-42a3-a3c0-6ca30ca53d3/sist-en-301-489-20-2001>
- 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:	17 November 2000
Date of latest announcement of this EN (doa):	28 February 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 August 2001
Date of withdrawal of any conflicting National Standard (dow):	31 August 2002

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1 Scope

The present document, together with EN 301 489-1 [1], covers the assessment of Mobile Earth Stations (MES) as defined in annex A used within Satellite radio services, and ancillary equipment in respect of ElectroMagnetic Compatibility (EMC).

Technical specifications related to the antenna port and emissions from the enclosure port of the 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 MESs and for the associated ancillary equipment.

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. The applicable environment(s) referred to in EN 301 489-1 [1] where the MES may be used, shall be declared by the manufacturer.

For a multimode radio station, the present document only applies to the radio station when operated in the Mobile Satellite Service mode.

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. <https://standards.iteh.ai/catalog/standards/sist/76bebb91-110f-42a3-a3c0-6cfa30cd53d3/sist-en-301-489-20-2001>
- 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 (V1.2.1) (2000): "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] ITU Radio Regulations (1998).
- [5] 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.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 301 489-1 [1], clause 3, and the following apply:

carrier-on state (allocated a channel): state of an MES when it is transmitting a signal in a continuous or a non-continuous mode

carrier-off state (idle mode): state of an MES when it is powered-on but not transmitting a signal, i.e. not in a carrier-on state

host equipment: any equipment which has complete user functionality when not connected to the MES, and to which connection is necessary for the MES to offer additional functionality

Installable Equipment (IE), Internally Mounted Equipment (IME) and Externally Mounted Equipment (EME): Installable Equipment (IE) is an equipment which is intended to be installed in a vehicle. An IE may consist of one or several modules. The IE is composed of modules intended to be externally mounted and declared by the manufacturer as Externally Mounted Equipment (EME). The remaining module(s) are defined as Internally Mounted Equipment (IME)

multimode MES: indicates equipment that accommodates radio stations of different radio systems.

occupied bandwidth: see ITU Radio Regulations [4], part A, chapter 1, Terminology RR 147.

Portable Equipment (PE): is generally intended to be self-contained, free standing and portable. A PE would normally consist of a single module, but may consist of several interconnected modules.

NOTE: More than one of the equipment classifications can apply to certain equipment, as described in subclause 5.4, dependent upon the manufacturer's declaration of normal intended use.

transmission disabled state: state of an MES when it is not authorized to transmit by the Network Control Facilities (NCF)

3.2 Abbreviations

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

BER	Bit Error Ratio
CMF	Control and Monitoring Functions
CP	performance criteria for Continuous Phenomena
EIRP	Equivalent Isotropically Radiated Power
EMC	ElectroMagnetic Compatibility
EME	Externally Mounted Equipment
EUT	Equipment Under Test
F-MES	Fixed MES
IE	Installable Equipment
IME	Internally Mounted Equipment
LBRDC	Low Bit Rate Data Communication
LEO	Low Earth Orbit
MES	Mobile Earth Station
MSS	Mobile Satellite Service
NCF	Network Control Facilities
P-MES	Portable MES
PE	Portable Equipment
PEP	Peak Envelope Power
QTMA	Quality of Transmission Measurement Apparatus
RF	Radio Frequency
STE	Special Test Equipment
S-PCN	Satellite Personal Communications Network