

**SLOVENSKI STANDARD**  
**SIST EN 301 489-19:2001****01-september-2001**

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**Elektromagnetna združljivost (EMC) in zadeve v zvezi z radijskim spektrom (ERM) - Standard elektromagnetne združljivosti (EMC) za radijsko opremo in storitve - 19. del: Posebni pogoji za sprejemne mobilne zemeljske postaje (ROMES), ki zagotavljajo podatkovne komunikacije in delujejo v pasu 1,5 GHz**

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications

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# ETSI EN 301 489-19 V1.1.1 (2000-12)

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*Candidate Harmonized European Standard (Telecommunications series)*

**Electromagnetic compatibility  
and Radio spectrum Matters (ERM);  
ElectroMagnetic Compatibility (EMC) standard  
for radio equipment and services;  
Part 19: Specific conditions for Receive Only Mobile  
Earth Stations (ROMES) operating in the 1,5 GHz band  
providing data communications**

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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 [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 19 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/934405c5-877c-4ec5-8505-34df9/sist-en-301-489-19-2001>
- 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".

<b>National transposition dates</b>	
Date of adoption of this EN:	17 November 2000
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# 1 Scope

The present document, together with EN 301 489-1 [1], covers the assessment of Receive Only Mobile Earth Stations (ROMES), as defined in annex A, and associated ancillary equipment in respect of ElectroMagnetic Compatibility (EMC).

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

ROMESs can have several configurations, including:

- portable equipment;
- fixed equipment;
- a number of modules including a display/control interface to the user.

The performance criteria used in the present document require that the satellite communications system of which the ROMES is a part provides reliable delivery of data or messages.

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 environments referred to in EN 301 489-1 [1] where ROMES may be used shall be declared by the manufacturer.

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SIST EN 301 489-19:2001

## 2 References

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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, the latest version applies.
- 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] 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] ITU R Radio Regulations (1998).

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## 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] and the following apply:

**stand-by mode of operation:** mode of operation in which the receiver is capable of receiving calls.

### 3.2 Abbreviations

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

CR	Continuous phenomena applied to ROMES
EMC	ElectroMagnetic Compatibility
EUT	Equipment Under Test
LISN	Line Impedance Stabilizing Network
LMSS	Land Mobile Satellite Service
RF	Radio Frequency
ROMES	Receive Only Mobile Earth Station
TR	Transient phenomena applied to ROMES

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## 4 Test conditions

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 ROMES are specified in the present document.

### 4.1 General

For emission and immunity tests the test modulation, test arrangements, etc., as specified in the present document, subclauses 4.1 to 4.5, shall apply.

In the following clauses, the Equipment Under Test (EUT) is the ROMES with the selected configuration of ancillary equipment.

### 4.2 Arrangements for test signals

The provisions of EN 301 489-1 [1], subclause 4.2 shall apply.

#### 4.2.1 Arrangements for test signals at the input of receivers (ROMES)

The provisions of EN 301 489-1 [1] subclause 4.2.3 shall apply with the following modifications.

The manufacturer may, at the time of submitting the ROMES for testing, supply, if necessary, a test fixture and a message generator to generate the wanted input signal.

The wanted RF input signal level for ROMES, modulated with the normal test modulation, shall be set to a value significantly above the threshold sensitivity but below the overload characteristics of the ROMES (the threshold sensitivity and overload characteristic shall be specified by the manufacturer).