



SLOVENSKI STANDARD

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Elektromagnetna združljivost (EMC) in zadeve v zvezi z radijskim spektrom (ERM) - Standard elektromagnetne združljivosti (EMC) za radijsko opremo in storitve - 2. del: Posebni pogoji za opremo radijskega osebne klica

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 2: Specific conditions for radio paging equipment

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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 2: Specific conditions for radio paging equipment**

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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 the 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 [2] 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" 1999/05/EC [3]).

The present document is part 2 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 requirements 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 requirements for Wideband data and HIPERLAN";
- Part 18: "Specific requirements for Terrestrial Trunked Radio (TETRA)";
- 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 requirements for VHF aeronautical mobile and fixed radios".

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1 Scope

The present document, together with the EN 301 489-1 [1], covers the assessment of paging equipment (receivers, transmitters and combined equipment) and associated ancillary equipment, in respect of ElectroMagnetic Compatibility (EMC).

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

Examples of paging equipment are given in annex A.

In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and the 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 the 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] 89/336/EEC: "Council Directive on the approximation of the laws of the Member States relating to electromagnetic compatibility".
- [3] 1999/05/EC: "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".
- [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.

3 Definitions and abbreviations

3.1 Definitions

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

alignment range: frequency range over which the receiver or transmitter can be programmed and/or re-aligned to operate without any physical change of components other than programmable and frequency controlling devices.

calling function: transmission of a message via the base transmitter to the paging receiver in order to alert and/or inform the carrier of the paging receiver.

base receiver: receiver at a fixed location.

pocket receiver: stand alone pocket paging receiver or a receiver being part of a pocket paging transceiver typically for portable use (portable equipment).

base transmitter: transmitter at a fixed location.

pocket transmitter: stand alone pocket paging transmitter using the return channel, or a transmitter being part of a pocket paging transceiver typically for portable use (portable equipment).

standby mode (receiver): mode of operation in which the receiver is capable of receiving calls.

standby mode (base transmitter): mode of operation in which the transmitter is ready to transmit, waiting for a start control signal to actual start transmitting.

standby mode (pocket transmitter): mode of operation in which the transmitter is ready to transmit, waiting for a control signal to start the transmitting sequence.

talk-back function: transmitting of a message from the pocket transmitter (normally combined in a transceiver) which is sent to a central receiver (base receiver) and further processed by the central processing unit.

3.2 Abbreviations

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

CR	Continuous phenomena applied to Receivers
CT	Continuous phenomena applied to Transmitters
EMC	ElectroMagnetic Compatibility
ERMES	Enhanced Radio MESSage System
EUT	Equipment Under Test
RF	Radio Frequency
TR	Transient phenomena applied to Receivers
TT	Transient phenomena applied to Transmitters

4 Test conditions

For the purposes of the present document, the test conditions of the EN 301 489-1 [1], clause 4, shall apply as appropriate. Further product related test conditions for paging equipment 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 4.1.1 to 4.5, shall apply.

4.1.1 Receivers

Whenever a receiver is provided with a detachable antenna, the EUT shall be tested with the antenna fitted in a manner typical of normal intended use.

The individual immunity tests shall be performed with the receiver in the standby mode.

Mobile or pocket receivers: