
Standard elektromagnetne združljivosti (EMC) za pomorsko radijsko opremo in storitve - 1. del: Splošne tehnične zahteve

ElectroMagnetic Compatibility (EMC) standard for marine radio equipment and services - Part 1: Common technical requirements

Sample Document

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EUROPEAN STANDARD

**ElectroMagnetic Compatibility (EMC) standard
for marine radio equipment and services;
Part 1: Common technical requirements**

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Contents

Intellectual Property Rights	5
Foreword.....	5
Modal verbs terminology.....	6
Introduction	6
1 Scope	7
2 References	7
2.1 Normative references	7
2.2 Informative references.....	8
3 Definition of terms, symbols and abbreviations.....	9
3.1 Terms.....	9
3.2 Symbols.....	10
3.3 Abbreviations	10
4 General and operational requirements.....	11
4.1 Environmental profile.....	11
4.2 Arrangements for test signals	11
4.2.0 General.....	11
4.2.1 Arrangements for test signals at the input of transmitters.....	11
4.2.2 Arrangements for test signals at the output of transmitters.....	12
4.2.3 Arrangements for test signals at the input of receivers	12
4.2.4 Arrangements for test signals at the output of receivers	12
4.2.5 Arrangements for testing transmitter and receiver together (as a system).....	12
4.3 RF exclusion band of radio communications equipment.....	12
4.4 Intermediate frequency responses of receivers or receivers which are part of transceivers	13
4.5 Void.....	14
5 Performance assessment.....	14
5.1 General	14
5.2 Equipment which can provide a continuous communication link	14
5.3 Equipment which does not provide a continuous communication link	14
5.4 Ancillary equipment	15
5.5 Equipment classification	15
6 Performance criteria	15
6.0 General requirements	15
6.1 Performance criteria A for continuous phenomena applied to transmitters and receivers.....	16
6.2 Performance criteria B for transient phenomena applied to transmitters and receivers	16
6.3 Performance criteria C applied to power supply failure	16
6.4 Void.....	16
6.5 Performance criteria for equipment which does not provide a continuous communication link.....	16
6.6 Performance criteria for ancillary equipment tested on a stand alone basis	17
7 Applicability.....	17
8 Testing for compliance with technical requirements.....	17
8.1 Test configuration.....	17
8.2 Enclosure emissions	18
8.2.0 Applicability	18
8.2.1 Test description.....	18
8.2.2 Test method	18
8.2.3 Limits.....	19
8.3 DC power input/output ports	20
8.3.0 Applicability	20
8.3.1 Test description.....	20
8.3.2 Test method	20
8.3.3 Limits.....	21

8.4	AC mains power input/output ports	21
8.4.0	Applicability	21
8.4.1	Test description.....	21
8.4.2	Test method	21
8.4.3	Limits.....	22
9	Test methods and levels for immunity tests	23
9.0	General	23
9.1	Test configuration.....	23
9.2	Radio frequency electromagnetic field (80 MHz to 6 GHz)	23
9.2.0	Applicability	23
9.2.1	Test description.....	23
9.2.2	Test method	23
9.2.3	Performance criteria.....	24
9.3	Electrostatic discharge.....	24
9.3.0	Applicability	24
9.3.1	Test description.....	24
9.3.2	Test method	24
9.3.3	Performance criteria.....	24
9.4	Fast transients, differential and common mode.....	25
9.4.0	Applicability	25
9.4.1	Test description.....	25
9.4.2	Test method	25
9.4.3	Performance criteria.....	25
9.5	Radio frequency, common mode.....	25
9.5.0	Applicability	25
9.5.1	Test description.....	26
9.5.2	Test method	26
9.5.3	Performance criteria.....	26
9.6	Power supply variations	26
9.6.0	Applicability	26
9.6.1	Power supply short term variations.....	27
9.6.1.1	Test description	27
9.6.1.2	Test method.....	27
9.6.1.3	Performance criteria	27
9.6.2	Power supply failure	27
9.6.2.1	Test description	27
9.6.2.2	Test method.....	27
9.6.2.3	Performance criteria	27
9.7	Surges	28
9.7.0	Applicability	28
9.7.1	Test description.....	28
9.7.2	Test method	28
9.7.3	Performance criteria.....	28
Annex A (informative):	Guidance on setting the dwell time for radiated immunity testing	29
A.1	Overview	29
A.2	Example of EUT containing a GNSS receiver.....	29
Annex B (informative):	Bibliography.....	30
Annex C (informative):	Change history	31
History		32

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Foreword

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

The present document is part 1 of a multi-part deliverable covering the ElectroMagnetic Compatibility (EMC) standard for marine radio equipment and services, as identified below:

Part 1: "Common technical requirements";

Part 2: "Specific conditions for VHF radiotelephone transmitters and receivers operating in the frequency range 156 MHz to 174 MHz";

Part 3: "Specific conditions for non-SOLAS maritime radars and river radars";

Part 4: "Specific conditions for Narrow-Band Direct-Printing (NBDP) NAVTEX receivers";

Part 5: "Specific conditions for MF/HF radiotelephone transmitters and receivers";

Part 6: "Specific conditions for Earth Stations on board Vessels operating in frequency bands above 3 GHz";

Part 7: "Specific conditions for Maritime Broadband Radiolink equipment";

Part 8: "Specific conditions for radio beacons and locating devices".

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Introduction

The present document contains a full list of EMC requirements together with the standard test set-ups and compliance limits, that should be used by the product specific parts within the ETSI EN 301 843 series. Deviations, where applicable, from this are set out in the specific product related part.

Product dependent arrangements necessary to perform the EMC tests on dedicated types of radio equipment, and the assessment of test results, are detailed in the appropriate relevant radio technology parts of ETSI EN 301 843 series details of which can be found in the foreword of the present document.

The present document also acts as the basis for product specific parts of the ETSI EN 301 843 series. It is these product specific parts that are intended to be cited in the OJEU under article 3.1(b) of Directive 2014/53/EU [i.8].

1 Scope

The present document contains the common requirements for marine radio communications and radio determination equipment and associated ancillary equipment operating from any combination of internal batteries, DC and single phase AC, in respect of ElectroMagnetic Compatibility (EMC).

The provisions of the present document apply to marine radio equipment **not covered** in the scope of the Council Directive on marine equipment (the "Marine Equipment Directive" 2014/90/EU [i.4]).

Product dependent arrangements necessary to perform the EMC tests on dedicated types of marine radio communications and radio determination equipment, and the assessment of test results, are detailed in the appropriate product related parts of the present document.

The present document, together with the product related part, specifies the applicable EMC tests, the methods of measurement, the limits and the performance criteria for marine radio equipment and associated ancillary equipment.

In case of differences (for instance concerning special conditions, definitions, abbreviation) between the present document and the relevant product related part of the present document, the product related part takes precedence.

For the further content of the present document, the expression "radio equipment" is taken to mean marine radio communications or radio determination equipment, in each individual case.

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

The environment classification used in the present document is maritime, as defined in EN IEC 60945 [i.3].

Marine radio communications equipment meeting the EMC requirements set out in EN IEC 61000-6-3 [i.1] and EN 61000-6-1 [i.2] is deemed to meet also the EMC requirements for the maritime environment described in EN IEC 60945 [i.3].

The EMC requirements have been selected to ensure an adequate level of compatibility for apparatus intended to be used in the maritime environment. The levels, however, do not cover extreme cases which may occur in any location but with low probability of occurrence.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

- [1] [EN IEC 55016-1-4:2019](#): "Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-4: Radio disturbance and immunity measuring apparatus – Antennas and test sites for radiated disturbance measurements", (produced by CENELEC).
- [2] [EN IEC 55016-1-1:2019](#): "Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus", (produced by CENELEC).