



SLOVENSKI STANDARD

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Electromagnetic compatibility and Radio spectrum Matters (ERM) - Ultra-High Frequency (UHF) on-board vessels communications systems and equipment - Part 2: Harmonized EN under article 3.2 of the R&TTE Directive

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Harmonized European Standard (Telecommunications series)

**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
Ultra-High Frequency (UHF) on-board vessels
communications systems and equipment;
Part 2: Harmonized EN under article 3.2
of the R&TTE Directive**

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Foreword

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

The present document is part 2 of a multi-part deliverable covering Electromagnetic compatibility and Radio spectrum Matters (ERM); Ultra-High Frequency (UHF) on-board vessels communications systems and equipment, as identified below:

Part 1: "Technical characteristics and methods of measurement";

Part 2: "Harmonized EN under article 3.2 of the R&TTE Directive".

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

The present document is intended to become a Harmonized Standard, the reference of which will be published in the Official Journal of the European Communities referencing the Directive 1999/5/EC [1] of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity ("the R&TTE Directive") [1].

Technical specifications relevant to Directive 1999/5/EC are given in annex A.

National transposition dates

Date of adoption of this EN:	12 October 2007
Date of latest announcement of this EN (doa):	31 January 2008
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 July 2008
Date of withdrawal of any conflicting National Standard (dow):	31 July 2009

1 Scope

The present document specifies the minimum technical characteristics required for UHF on board vessels radio equipment and systems operating on frequencies allocated to the maritime mobile services by the ITU Radio Regulations [5].

The present document is intended to cover the provisions of Directive 1999/5/EC [1] (R&TTE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communications and orbital resources so as to avoid harmful interference".

In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the R&TTE Directive [1] may apply to equipment within the scope of the present document.

NOTE: A list of such ENs is included on the web site <http://www.newapproach.org>.

2 References

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

- References are specific (identified by date of publication, edition number, version number, etc.).
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

- [1] Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (R&TTE Directive).
- [2] ETSI EN 300 720-1 (V1.3.1): "Electromagnetic compatibility and Radio Spectrum Matters (ERM); Ultra-High Frequency (UHF) on-board vessels communications systems and equipment; Part 1: Technical characteristics and methods of measurement".
- [3] ETSI TR 100 028: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [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 Recommendation M.1174-2 (05/2004): "Technical characteristics of equipment used for on-board vessel communications in the bands between 450 and 470 MHz".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in the R&TTE Directive [1] and the following apply:

environmental profile: range of environmental conditions under which equipment within the scope of the present document is required to comply with the provisions of the present document

supplier: entity referred to in the R&TTE Directive [1] responsible for the placing on the market of an equipment within the scope of the Directive

3.2 Symbols

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

emf electromotive force

3.3 Abbreviations

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

R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
UHF	Ultra High Frequency

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4 Technical requirements specifications

4.1 Environmental profile

The technical requirements of the present document apply under the environmental profile for operation of the equipment, which shall be determined by the environmental class of the equipment. The equipment shall comply with all the technical requirements of the present document at all times when operating within the boundary limits of the required operational environmental profile.

4.2 Conformance requirements

4.2.1 Transmitter frequency error

4.2.1.1 Definition

The transmitter frequency error shall be as defined in EN 300 720-1 [2], clause 8.1.1.

4.2.1.2 Limit

The transmitter frequency error limit shall be as stated in EN 300 720-1 [2], clause 8.1.3.

4.2.1.3 Conformance

Conformance tests as defined in clause 5.3.1 shall be carried out.

4.2.2 Transmitter maximum effective radiated power

4.2.2.1 Definition

The transmitter maximum effective radiated power shall be as defined in EN 300 720-1 [2], clause 8.2.1.

4.2.2.2 Limit

The transmitter maximum effective radiated power limit shall be as stated in EN 300 720-1 [2], clause 8.2.3.

4.2.2.3 Conformance

Conformance tests as defined in clause 5.3.2 shall be carried out.

4.2.3 Transmitter frequency deviation

4.2.3.1 Definition

The transmitter frequency deviation shall be as defined in EN 300 720-1 [2], clause 8.3.1.

4.2.3.2 Limit

The transmitter frequency deviation limit shall be as stated in EN 300 720-1 [2], clause 8.3.2.2.

4.2.3.3 Conformance

Conformance tests as defined in clause 5.3.3 shall be carried out.

4.2.4 Frequency deviation at modulation frequencies above 3 kHz

4.2.4.1 Definition

The transmitter frequency deviation shall be as defined in EN 300 720-1 [2], clause 8.3.1.

4.2.4.2 Limit

The transmitter frequency deviation limit shall be as stated in EN 300 720-1 [2], clause 8.3.3.2, figure 1.

4.2.4.3 Conformance

Conformance tests as defined in clause 5.3.4 shall be carried out.

4.2.5 Transmitter adjacent channel power

4.2.5.1 Definition

The transmitter adjacent channel power shall be as defined in EN 300 720-1 [2], clause 8.8.1.

4.2.5.2 Limit

The transmitter adjacent channel power limit shall be as stated in EN 300 720-1 [2], clause 8.8.3.

4.2.5.3 Conformance

Conformance tests as defined in clause 5.3.5 shall be carried out.

4.2.6 Transient frequency behaviour of the transmitter

4.2.6.1 Definition

The transient frequency behaviour of the transmitter shall be as defined in EN 300 720-1 [2], clause 8.10.1.

4.2.6.2 Limit

The transient frequency behaviour of the transmitter limit shall be as stated in EN 300 720-1 [2], clause 8.10.3.

4.2.6.3 Conformance

Conformance tests as defined in clause 5.3.6 shall be carried out.

4.2.7 Transmitter conducted spurious emissions conveyed to the antenna

4.2.7.1 Definition

The transmitter conducted spurious emissions conveyed to the antenna shall be as defined in EN 300 720-1 [2], clause 8.11.1.

4.2.7.2 Limit

The transmitter conducted spurious emissions conveyed to the antenna limit shall be as stated in EN 300 720-1 [2], clause 8.11.3.

4.2.7.3 Conformance

Conformance tests as defined in clause 5.3.7 shall be carried out.

4.2.8 Transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna

4.2.8.1 Definition

The transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna shall be as defined in EN 300 720-1 [2], clause 8.12.1.

4.2.8.2 Limit

The transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna limit shall be as stated in EN 300 720-1 [2], clause 8.12.3.

4.2.8.3 Conformance

Conformance tests as defined in clause 5.3.8 shall be carried out.

4.2.9 Receiver maximum usable sensitivity

4.2.9.1 Definition

The receiver maximum usable sensitivity shall be as defined in EN 300 720-1 [2], clause 9.3.1.

4.2.9.2 Limit

The receiver maximum usable sensitivity limit shall be as stated in EN 300 720-1 [2], clause 9.3.3.