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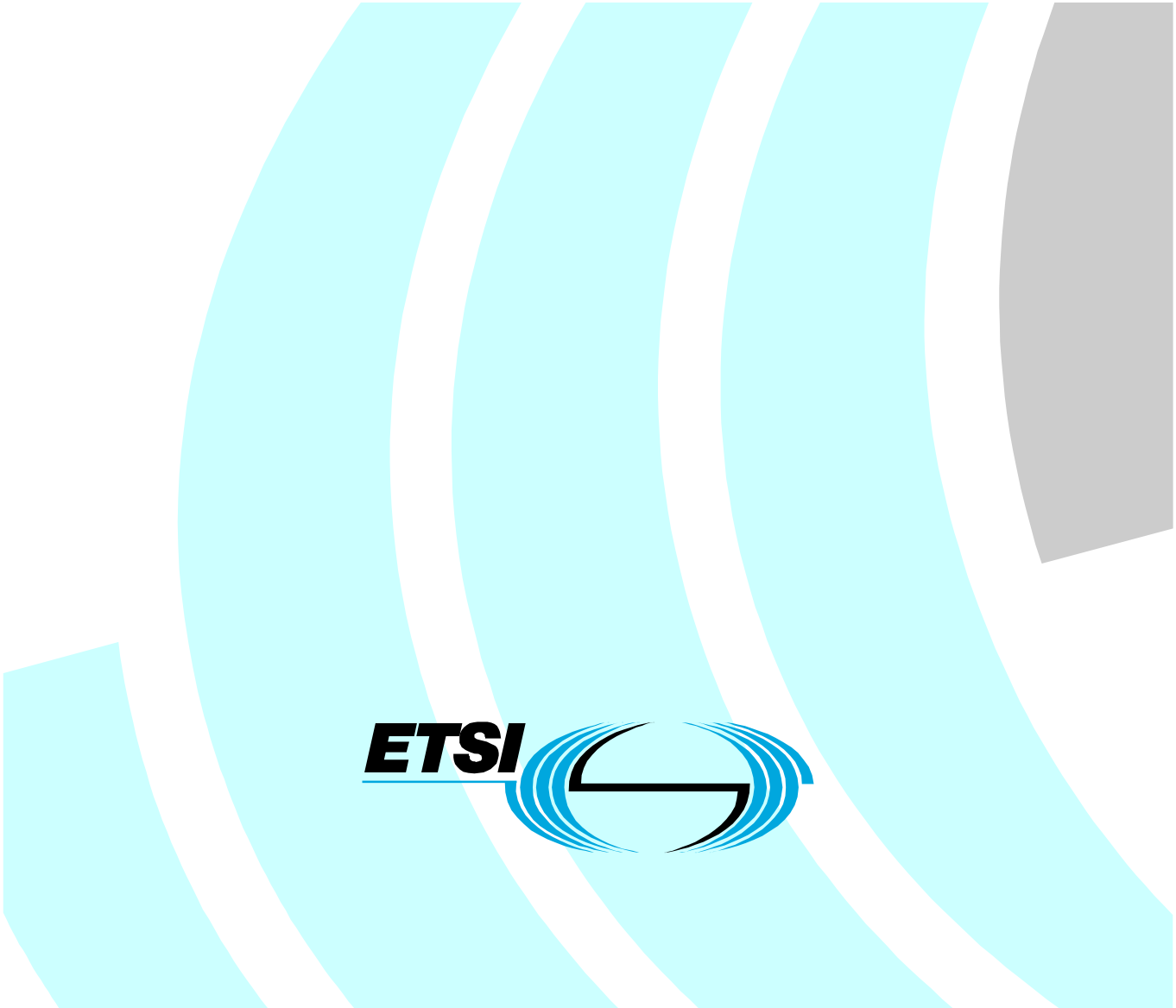
Harmonized European Standard (Telecommunications series)

Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 3: Harmonized EN under article 3.3 (e) 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), and is now submitted for the ETSI standards One-step Approval Procedure.

The present document is part 3 of a multi-part deliverable covering the VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC), as identified below:

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

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

Part 3: "Harmonized EN under article 3.3 (e) 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 laying down a procedure for the provision of information in the field of technical standards and regulations and following the Commission Decision 2000/638/EC of 22 September 2000.

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").

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	18 months after doa

1 Scope

The present document covers the minimum requirements for general communication for shipborne fixed installations using a VHF radiotelephone operating in certain frequency bands allocated to the maritime mobile service using both 25 kHz and 12,5 kHz channels with associated equipment for DSC - class D.

The present document is intended to cover the provisions of Directive 1999/5/EC [1] (R&TTE Directive) article 3.3 (e), which states that radio equipment within the scope of the present document shall be so constructed that: "it supports certain features ensuring access to emergency services".

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] will 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 either specific (identified by date of publication and/or edition number or version number) or non-specific.
- 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.

[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] ITU-R Recommendation M.493-11 (2004): "Digital selective-calling system for use in the maritime mobile service".

[3] ETSI EN 301 025-1 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC) with the use of 12,5 kHz channels; Part 1: Technical characteristics and methods of measurement".

[4] EC decision 2004/71/EC of 4 September 2003 on essential requirements relating to marine radio communication equipment which is intended to be used on non-SOLAS vessels and to participate in the Global Maritime Distress and Safety System (GMDSS).

[5] ETSI TR 100 028-1 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1".

3 Definitions 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:

class D: class D equipment is intended to provide minimum facilities for VHF DSC distress, urgency and safety as well as routine calling and reception, not necessarily in full accordance with IMO GMDSS carriage requirements for VHF installations

NOTE: See ITU-R Recommendation M.493-11 [2].

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

G2B: phase-modulation with digital information, with a sub-carrier for DSC operation

G3E: phase-modulation (Frequency modulation with a pre-emphasis of 6 dB/octave) for speech

modulation index: ratio between the frequency deviation and the frequency of the modulation signal

3.2 Abbreviations

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

DSC	Digital Selective Calling
IMO	International Maritime Organization
MMSI	Maritime Mobile Service Identity
R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
SINAD	SIgnal, Noise And Distortion
VHF	Very High Frequency

4 Technical requirements specifications

4.1 Environmental profile

Tests defined in the present document shall be carried out at representative points within the boundary limits of the declared operational environmental profile which, as a minimum, shall be that specified in the test conditions contained in the present document.

As technical performance varies subject to environmental conditions, tests shall be carried out under a sufficient variety of environmental conditions as specified in the present document to give confidence of compliance for the affected technical requirements. These environmental conditions represent those required by Article 2 of EC decision 2004/71/EC [4] (which shall also be within the boundary limits of the declared operational environmental profile).

4.2 General, operational and technical requirements

4.2.1 General and operational requirements

4.2.1.1 Requirements

The general and operational requirements are defined in EN 301 025-1 [3], clause 4.

4.2.1.2 Conformance

The manufacturer shall declare that compliance to these requirements is achieved and shall provide relevant documentation.

4.2.2 Technical requirements

4.2.2.1 Requirements

The technical requirements are defined in EN 301 025-1 [3], clause 5.

4.2.2.2 Conformance

The manufacturer shall declare that compliance to these requirements is achieved and shall provide relevant documentation.

4.3 Environmental requirements

4.3.1 Vibration test

4.3.1.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.4.1.

4.3.1.2 Requirement

The equipment shall meet the requirements of the performance check defined in EN 301 025-1 [3], clause 7.3.

There shall be no harmful deterioration of the equipment visible.

4.3.1.3 Conformance

Relevant environment tests as defined in clause 5.3.1.4 shall be carried out.

4.3.2 Temperature tests

4.3.2.1 Definition

This series of tests is defined in EN 301 025-1 [3], clause 7.5.1.

4.3.2.2 Dry heat

4.3.2.2.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.5.2.1.

4.3.2.2.2 Requirement

The equipment shall meet the requirements of the performance check defined in EN 301 025-1 [3], clause 7.3.

4.3.2.2.3 Conformance

Relevant environment tests as defined in clause 5.3.1.5.1 shall be carried out.

4.3.2.3 Damp heat

4.3.2.3.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.5.3.1.

4.3.2.3.2 Requirement

The equipment shall meet the requirements of the performance check defined in EN 301 025-1 [3], clause 7.3.

4.3.2.3.3 Conformance

Relevant environment tests as defined in clause 5.3.1.5.2 shall be carried out.

4.3.2.4 Low temperature

4.3.2.4.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.5.4.1.

4.3.2.4.2 Requirement

The equipment shall meet the requirements of the performance check defined in EN 301 025-1 [3], clause 7.3.

4.3.2.4.3 Conformance

Relevant environment tests as defined in clause 5.3.1.3 shall be carried out.

4.4 Conformance requirements

4.4.1 Sensitivity of the modulator, including microphone

4.4.1.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.4.1.

4.4.1.2 Limit

The frequency deviation shall be as stated in EN 301 025-1 [3], clause 8.4.3.

4.4.1.3 Conformance

Conformance tests as defined in clause 5.3.2.1 shall be carried out.

4.4.2 Audio frequency response

4.4.2.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.5.1.

4.4.2.2 Limit

The audio frequency response shall lie within the limits shown in EN 301 025-1 [3], clause 8.5.3, figure 2.

4.4.2.3 Conformance

Conformance tests as defined in clause 5.3.2.2 shall be carried out.

4.4.3 Audio frequency harmonic distortion of the emission

4.4.3.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.6.1.

4.4.3.2 Limit

The harmonic distortion limit shall be as stated in EN 301 025-1 [3], clause 8.6.3.

4.4.3.3 Conformance

Conformance tests as defined in clause 5.3.2.3 shall be carried out.

4.4.4 Residual modulation of the transmitter

4.4.4.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.11.1.

4.4.4.2 Limit

The residual modulation shall not exceed the limit stated in EN 301 025-1 [3], clause8.11.3.

4.4.4.3 Conformance

Conformance tests as defined in clause 5.3.2.4 shall be carried out.

4.4.5 Frequency error (demodulated DSC signal)

4.4.5.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.12.1.

4.4.5.2 Limit

The frequency error shall not exceed the limit stated in EN 301 025-1 [3], clause 8.12.3.

4.4.5.3 Conformance

Conformance tests as defined in clause 5.3.2.5 shall be carried out.

4.4.6 Modulation index for DSC

4.4.6.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.13.1.

4.4.6.2 Limit

The modulation index shall not exceed the limit stated in EN 301 025-1 [3], clause 8.13.3.

4.4.6.3 Conformance

Conformance tests as defined in clause 5.3.2.6 shall be carried out.

4.4.7 Modulation rate for DSC

4.4.7.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.14.1.

4.4.7.2 Limit

The frequency shall not exceed the limit stated in EN 301 025-1 [3], clause 8.13.3.

4.4.7.3 Conformance

Conformance tests as defined in clause 5.3.2.7 shall be carried out.

4.4.8 Testing of generated call sequences

4.4.8.1 Definition

This test is defined in EN 301 025-1 [3], clause 8.15.1.

4.4.8.2 Limit

The requirements stated in EN 301 025-1 [3], clause 8.15.3 shall be met.

4.4.8.3 Conformance

Conformance tests as defined in clause 5.3.2.8 shall be carried out.

4.4.9 Harmonic distortion and rated audio-frequency output power

4.4.9.1 Definition

This test is defined in EN 301 025-1 [3], clause 9.1.1.

4.4.9.2 Limit

The rated audio-frequency output power shall comply with the limits stated in EN 301 025-1 [3], clause 9.1.3.

4.4.9.3 Conformance

Conformance tests as defined in clause 5.4.2 may be carried out.

4.4.10 Receiver audio frequency response

4.4.10.1 Definition

This test is defined in EN 301 025-1 [3], clause 9.2.1.

4.4.10.2 Limit

The audio frequency response shall lie within the limits shown in EN 301 025-1 [3] , clause 9.2.3, figure 5.

4.4.10.3 Conformance

Conformance tests as defined in clause 5.4.3 may be carried out.

4.4.11 Receiver residual noise level

4.4.11.1 Definition

This test is defined in EN 301 025-1 [3], clause 9.11.1.

4.4.11.2 Limit

The receiver residual noise level shall not exceed the limit stated in EN 301 025-1 [3], clause 9.11.3.

4.4.11.3 Conformance

Conformance tests as defined in clause 5.4.4 may be carried out.

4.4.12 Squelch operation

4.4.12.1 Definition

This test is defined in EN 301 025-1 [3], clause 9.12.1.

4.4.12.2 Limit

The squelch operation shall comply with the limits stated in EN 301 025-1 [3], clause 9.12.3.

4.4.12.3 Conformance

Conformance tests as defined in clause 5.4.5 may be carried out.

4.4.13 Squelch hysteresis

4.4.13.1 Definition

This test is defined in EN 301 025-1 [3], clause 9.13.1.

4.4.13.2 Limit

The squelch hysteresis shall comply with the limits stated in EN 301 025-1 [3], clause 9.13.3.

4.4.13.3 Conformance

Conformance tests as defined in clause 5.4.6 may be carried out.

4.4.14 Dynamic range

4.4.14.1 Definition

This test is defined in EN 301 025-1 [3], clause 10.6.1.

4.4.14.2 Limit

The bit error ratio shall not exceed the limit stated in EN 301 025-1 [3], clause 10.6.3.

4.4.14.3 Conformance

Conformance tests as defined in clause 5.4.7 may be carried out.

4.4.15 Verification of correct decoding of various types of DSC calls

4.4.15.1 Definition

This test is defined in EN 301 025-1 [3], clause 10.8.1.

4.4.15.2 Limit

The requirements stated in EN 301 025-1 [3], clause 10.8.3 shall be met.

4.4.15.3 Conformance

Conformance tests as defined in clause 5.4.8 may be carried out.

5 Testing for compliance with technical requirements

5.1 Test conditions, power supply and ambient temperatures

The general conditions for measurement as stated in EN 301 025-1 [3], clause 6 shall apply.

5.2 Interpretation of the measurement results

The interpretation of the results recorded in a test report for the measurements described in the present document shall be as follows:

- the measured value related to the corresponding limit will be used to decide whether an equipment meets the requirements of the present document;
- the value of the measurement uncertainty for the measurement of each parameter shall be included in the test report;
- the recorded value of the measurement uncertainty shall be, for each measurement, equal to or lower than the figures in table 1.

For the test methods, according to the present document, the measurement uncertainty figures shall be calculated in accordance with TR 100 028-1 [5] and shall correspond to an expansion factor (coverage factor) k = 1,96 or k = 2 (which provide confidence levels of respectively 95 % and 95,45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).

Table 1 is based on such expansion factors.

Table 1: Maximum measurement uncertainty

Parameter	Maximum uncertainty
Radio Frequency (RF)	±1 x 10^{-7}
RF power/level	±0,75 dB
Audio output power	±0,5 dB
Amplitude characteristics of receiver limiter	±1,5 dB
Sensitivity at 20 dB SINAD	±3 dB
Two-signal measurement	±4 dB
Three-signal measurement	±3 dB

5.3 Essential radio test suites

5.3.1 Environmental tests

5.3.1.1 Introduction

Environmental tests shall be carried out before tests are performed on the same equipment with respect to the other requirements of the present document.

5.3.1.2 Procedure

This test procedure is defined in EN 301 025-1 [3], clause 7.2.

5.3.1.3 Performance check

The "performance check" series of tests are defined in EN 301 025-1 [3], clause 7.3.

5.3.1.4 Vibration test

5.3.1.4.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.4.1.

5.3.1.4.2 Limit

The equipment shall comply with the limits of the performance check defined in EN 301 025-1 [3], clause 7.3.

There shall be no harmful deterioration of the equipment visible.

5.3.1.4.3 Conformance

Relevant environment tests as defined in clause 5.3.1 shall be carried out.

5.3.1.5 Temperature tests

5.3.1.5.1 Dry heat

5.3.1.5.1.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.5.2.1.

5.3.1.5.1.2 Limit

The equipment shall comply with the limits of the performance check defined in EN 301 025-1 [3], clause 7.3.

5.3.1.5.1.3 Conformance

Relevant environment tests as defined in clause 5.3.1 shall be carried out.

5.3.1.5.2 Damp heat

5.3.1.5.2.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.5.3.1.

5.3.1.5.2.2 Limit

The equipment shall comply with the limits of the performance check defined in EN 301 025-1 [3], clause 7.3.

5.3.1.5.2.3 Conformance

Relevant environment tests as defined in clause 5.3.1 shall be carried out.

5.3.1.5.3 Low temperature

5.3.1.5.3.1 Definition

This test is defined in EN 301 025-1 [3], clause 7.5.4.1.

5.3.1.5.3.2 Limit

The equipment shall comply with the limits of the performance check defined in EN 301 025-1 [3], clause 7.3.

5.3.1.5.3.3 Conformance

Relevant environment tests as defined in clause 5.3.1 shall be carried out.

5.3.2 Conformance tests

5.3.2.1 Sensitivity of the modulator, including microphone

The test specified in EN 301 025-1 [3], clause 8.4.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.1.2 in order to prove compliance with the requirement.

5.3.2.2 Audio frequency response

The test specified in EN 301 025-1 [3], clause 8.5.2 shall be carried out .

The results obtained shall be compared to the limits in clause 4.4.2.2 in order to prove compliance with the requirement.

5.3.2.3 Audio frequency harmonic distortion of the emission

The test specified in EN 301 025-1 [3], clause 8.6.2 shall be carried out The results obtained under each of the stated test conditions shall be compared to the limits in clause 4.4.3.2 in order to prove compliance with the requirement.

5.3.2.4 Residual modulation of the transmitter

The test specified in EN 301 025-1 [3], clause 8.11.2 shall be carried out The results obtained shall be compared to the limits in clause 4.4.4.2 in order to prove compliance with the requirement.

5.3.2.5 Frequency error (demodulated DSC signal)

The test specified in EN 301 025-1 [3], clause 8.12.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.5.2 in order to prove compliance with the requirement.

5.3.2.6 Modulation index for DSC

The test specified in EN 301 025-1 [3], clause 8.13.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.6.2 in order to prove compliance with the requirement.

5.3.2.7 Modulation rate for DSC

The test specified in EN 301 025-1 [3], clause 8.14.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.7.2 in order to prove compliance with the requirement.

5.3.2.8 Testing of generated call sequences

The test specified in EN 301 025-1 [3], clause 8.15.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.8.2 in order to prove compliance with the requirement.

5.4 Other test suites

5.4.1 General

The requirements in clauses 4.4.9 to 4.4.15 inclusive have been set on the assumption that the test specifications in clauses 5.4.2 to 5.4.8 will be used to verify the performance of the equipment.

5.4.2 Harmonic distortion and rated audio-frequency output power

The test specified in EN 301 025-1 [3], clause 9.1.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.9.2 in order to prove compliance with the requirement.

5.4.3 Receiver audio frequency response

The test specified in EN 301 025-1 [3], clause 9.2.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.10.2 in order to prove compliance with the requirement.

5.4.4 Receiver residual noise level

The test specified in EN 301 025-1 [3], clause 9.11.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.11.2 in order to prove compliance with the requirement.

5.4.5 Squelch operation

The test specified in EN 301 025-1 [3], clause 9.12.2 shall be carried out. The results obtained in each of the tests shall be compared to the appropriate limits in clause 4.4.12.2 in order to prove compliance with the requirement.

5.4.6 Squelch hysteresis

The test specified in EN 301 025-1 [3], clause 9.13.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.13.2 in order to prove compliance with the requirement.

5.4.7 Dynamic range

The test specified in EN 301 025-1 [3], clause 10.6.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.14.2 in order to prove compliance with the requirement.

5.4.8 Verification of correct decoding of various types of DSC calls

The test specified in EN 301 025-1 [3], clause 10.8.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.4.15.2 in order to prove compliance with the requirement.

Annex A (normative): HS Requirement and conformance Test specifications Table (HS-RTT)

The HS Requirements and conformance Test specifications Table (HS-RTT) in table A1 below serves a number of purposes, as follows:

- it provides a statement of all the essential requirements in words and by cross reference to a specific clause in the present document or to a specific clause in a specific referenced document;
- it provides a statement of all the test procedure corresponding to those essential requirements by cross reference to specific clause(s) in the present document or to a specific clause(s) in specific referenced document(s);
- it qualifies each requirement to be either:
  - Unconditional: meaning that the requirement applies in all circumstances; or
  - Conditional: meaning that the requirement is dependent on the supplier having chosen to support optional functionality defined within the schedule;
- in the case of Conditional requirements, it associates the requirement with the particular optional service or functionality;
- it qualifies each test procedure to be either:
  - Essential: meaning that it is included with the Essential Radio Test Suite and therefore the requirement shall be demonstrated to be met in accordance with the referenced procedures;
  - Other: meaning that the test procedure is illustrative but other means of demonstrating compliance with the requirement are permitted;
- when the schedule is completed in respect of a particular equipment, including the testing outcomes, and including a completed version of Table A1 it provides a means to assert the "presumption of conformity" with the HS.

Table A.1: HS Requirements and conformance Test specifications Table (HS-RTT)

Harmonized Standard EN 301 025-3 The following technical requirements and test specifications are relevant to the presumption of conformity under Article 3.3 (e) of the R&TTE Directive						
Technical Requirement reference			**Technical Requirement Conditionality**		**Test Specification**	
No	**Description**	**Reference: Clause No**	**U/C**	**Condition**	**E/O**	**Reference: Clause No**
1	General and operational requirements	4.2.1	U		X	
2	Construction	4.2.1.2	U		X	
3	Controls and indicators	4.2.1.3	U		X	
4	Facilities for coding and decoding of DSC	4.2.1.4	U		X	
5	DSC display	4.2.1.5	U		X	
6	Handset and loudspeaker	4.2.1.6	U		X	
7	Safety precautions	4.2.1.7	U		X	
8	Labelling	4.2.1.8	U		X	
9	Warm up	4.2.1.9	U		X	
10	Technical requirements	4.2.2	U		X	
11	Class of emission and modulation characteristics	4.2.2.2	U		X	
12	Facilities for DSC transmission and reception	4.2.2.3	U		X	
13	Ships identity – MMSI and Group MMSI	4.2.2.4	U		X	
14	Entry of position information	4.2.2.5	U		X	
15	Alarm circuits	4.2.2.6	U		X	
16	Facilities for automatic indentification	4.2.2.7	U		X	
17	Multiple watch facilities	4.2.2.8	U		X	
18	Sensitivity of the modulator, including microphone	4.4.1	U		E	5.3.2.1
19	Audio frequency response	4.4.2	U		E	5.3.2.2

Harmonized Standard EN 301 025-3 (continued) The following technical requirements and test specifications are relevant to the presumption of conformity under Article 3.3 (e) of the R&TTE Directive						
Technical Requirement reference			**Technical Requirement Conditionality**		**Test Specification**	
20	Audio frequency harmonic distortion of the emission	4.4.3	U		E	5.3.2.3
21	Residual modulation of the transmitter	4.4.4	U		E	5.3.2.4
22	Frequency error (demodulated DSC signal)	4.4.5	U		E	5.3.2.5
23	Modulation index for DSC	4.4.6	U		E	5.3.2.6
24	Modulation rate for DSC	4.4.7	U		E	5.3.2.7
25	Testing of call generated sequences	4.4.8	U		E	5.3.2.8
26	Harmonic distortion and rated audio-frequency output power	4.4.9	U		O	5.4.2
27	Receiver audio frequency response	4.4.10	U		O	5.4.3
28	Receiver residual noise level	4.4.11	U		O	5.4.4
29	Squech operation	4.4.12	U		O	5.4.5
30	Squelch hysteresis	4.4.13	U		O	5.4.6
31	Dynamic range	4.4.14	U		O	5.4.7
32	Verification of correct decoding of various types of DSC calls	4.4.15	U		O	5.4.8

Key to columns:

Essential Requirement:

No A unique identifier for one row of the table which may be used to identify an essential requirement or its test specification.

Description A textual reference to the requirement.

Clause Number Identification of clause(s) defining the essential requirement in the present document unless another document is referenced explicitly.

Conditionality:

U/C Indicates whether the requirement is to be *unconditionally* applicable (U) or is *conditional* upon the suppliers claimed functionality of the equipment (C).

Condition Explains the conditions when the requirement shall or shall not be applicable for a requirement which is classified "conditional".

Test Specification:

E/O Indicates whether the test specification forms part of the Essential Radio Test Suite (E) or whether it is one of the Other Test Suite (O).

NOTE: All tests whether "E" or "O" are relevant to the requirements. Rows designated "E" collectively make up the Essential Radio Test Suite; those designated "O" make up the Other Test Suite; for those designated "X" there is no test specified corresponding to the requirement. All tests classified "E" shall be performed as specified with satisfactory outcomes is a necessary condition for a presumption of conformity. Requirements associated with tests classified "O" or "X" must be complied with as a necessary condition for presumption of conformity, although conformance with the requirement may be claimed by an equivalent test or by manufacturer"s assertion supported by appropriate entries in the technical construction file.

Clause Number Identification of clause(s) defining the test specification in the present, document unless another document is referenced explicitly. Where no test is specified (that is, where the previous field is "X") this field remains blank.

Annex B (informative): The EN title in the official languages

Language	EN title
Czech	
Danish	Elektromagnetisk kompatibilitet og Radiospektrum Anliggender (ERM); VHF radiotelefoni udstyr til generel kommunikation og tilknyttet udstyr til "Klasse D" Digitale, selektive opkald (DSC); Del 3: Harmoniseret EN, som dækker de væsentlige krav i R&TTE direktivets artikel 3.3e
Dutch	Elektromagnetische compatibiliteit en radiospectrum zaken (ERM); VHF radiotelefonie apparatuur tbv algemene communicatie en bijbehorende apparatuur voor klasse "D" Digital Selective Calling (DSC); Deel 3: Geharmoniseerde EN welke invulling geeft aan de wezenlijke vereisten, neergelegd in artikel 3.3e va de R&TTE Directive
English	Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 3: Harmonized EN under article 3.3e of the R&TTE Directive
Estonian	
Finnish	Sähkömagneettinen yhteensopivuus ja radiospektriasiat (ERM); Yleisen liikenteen meri-VHF -radiopuhelimet ja D-luokan digitaalisen selektiivikutsun (DSC) lisälaitteet; Osa 3: Harmonisoitu EN R&TTE - direktiivin artiklan 3.3e olennaisten vaatimusten mukaisesti
French	CEM et spectre radioélectrique (ERM) - Appareils de radiotéléphone en VHF pour la téléphonie générale et appareils associés pour Appel numérique sélectif (DSC) de classe "D" - Partie 3: EN harmonisée de l"article 3.3e de la Directive R&TTE
German	Elektromagnetische Verträglichkeit und Funkspektrumangelegenheiten (ERM); UKW-Sprechfunkanlagen des mobilen Seefunkdienstes für "allgemeine Kommunikation" mit Zusatzeinrichtung für den digitalen Selektivruf (DSC) Klasse D; Teil 3: Harmonisierte Europäische Norm (EN) mit wesentlichen Anforderungen nach R&TTE-Richtlinie Artikel 3.3e
Greek	Ηλεκτρομαγνητική συμβατότητα και θέματα Ραδιοφάσματσς (ERM) - Συσκευή ραδιοτηλε-φώνου VHF γενικώ επικοινωνιών και συσχε-τισμένο εξοπλισμό για Ψηφιακή Επιλεκτική Κλήση (DSC) κατηγοριας "D" - Μέρος 3: Εναρμονισμένο EN για την κάλυψη των ουσιω-δών απαιτήσεων του άρθρου 3.2 της οδηγίας R&TTE
Hungarian	
Icelandic	
Italian	Compatibilità elettromagnetica e Questioni relative allo spettro delle radiofrequenze (ERM); apparecchiature radiotelefoniche VHF per comunicazioni generiche ed apparecchiature associate per Chiamate Digitali Selettive (DSC) di Classe "D"; Part 3: Norma Europea armonizzata per l'articolo 3.3e della direttiva R&TTE
Latvian	
Lithuanian	
Maltese	
Norwegian	
Polish	Kompatybilność Elektromagnetyczna i Zagadnienia Widma Radiowego (ERM) - Urządzenia radiotelefoniczne VHF dla łączności ogólnej i związane wyposażenie do wywoływania selektywnego cyfrowego (DSC) "klasy D" - Część 3: Zharmonizowana EN zgodna z artykułem 3.3(e) dyrektywy R&TTE
Portuguese	Assuntos de Espectro Radioeléctrico e Compatibilidade Electromagnética (ERM); Equipamento radiotelefónico VHF destinado a comunicações genéricas e equipamento associado para Chamada Selectiva Digital (DSC) de Classe "D"; Parte 3: EN harmonizada cobrindo os requisitos essenciais no âmbito do Artigo 3.3e da Directiva R&TTE
Slovak	Elektromagnetická kompatibilita a záležitosti rádiového spektra (ERM). Rádiotelefónne zariadenia VHF na všeobecné komunikácie a pridružené zariadenia triedy D digitálneho selektívneho volania (DSC). Časť 3: Harmonizovaná EN podľa článku 3.3 (e) smernice R&TTE
Slovenian	
Spanish	Compatibilidad electromagnética y cuestiones de espectro de radiofrecuencia (ERM); Equipos radioteléfono VHF para comunicaciones generales y equipos asociados para clase "D" Llamada selectiva digital (DSC); Parte 3: EN armonizada cubriendo los requisitos esenciales según el artículo 3.3e de la directiva de R&TTE
Swedish	Elektromagnetisk kompatibilitet och radio-spektrumfrågor (ERM); Radiotelefonutrustning på VHF avsedd för allmänna kommunikationer och associerad utrustning för Klass "D" digitalt selektivt anrop (DSC); Del 3: Harmoniserad EN enligt artikel 3.3e i R&TTE-direktivet

Annex C (informative): Bibliography

- Council Directive 98/34/EC of the European Parliament and of the Council laying down a procedure for the provision of information in the field of Technical Standards and Regulations and of rules on Information Society Services.
- Commission Decision of 22 September 2000 on the application of Article3(3)(e) of Directive 1999/5/EC to marine radiocommunication equipment intended to be fitted to seagoing non-SOLAS vessel sand which is intended toparticipate in the global maritime distress and safety system (GMDSS) and not covered by Council Directive 96/98/EC on marine equipment.

History

Document history		
V1.1.1	August 1998	Publication as EN 301 025
V1.1.1	May 2001	Publication
V1.2.1	September 2004	Publication
V1.3.1	September 2006	One-step Approval Procedure OAP 20070119: 2006-09-20 to 2007-01-19