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Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

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Contents

Intellectual Property Rights 6
Foreword 6
Introduction 6
1 Scope 7
2 References 7
2.1 Normative references 7
2.2 Informative references 7
3 Definitions and abbreviations 8
3.1 Definitions 8
3.2 Abbreviations 8
4 Technical requirements specifications 8
4.1 Environmental profile 8
4.2 Conformance requirements 9
4.2.1 Transmitter frequency error 9
4.2.1.1 Definition 9
4.2.1.2 Limits 9
4.2.1.3 Conformance 9
4.2.2 Transmitter adjacent channel power 9
4.2.2.1 Definition 9
4.2.2.2 Limits 9
4.2.2.3 Conformance 9
4.2.3 Transmitter conducted spurious emissions conveyed to the antenna 9
4.2.3.1 Definition 9
4.2.3.2 Limit 9
4.2.3.3 Conformance 9
4.2.4 Transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna 9
4.2.4.1 Definitions 9
4.2.4.2 Limits 10
4.2.4.3 Conformance 10
4.2.5 Transient frequency behaviour of the transmitter 10
4.2.5.1 Definitions 10
4.2.5.2 Limits 10
4.2.5.3 Conformance 10
4.2.6 Transmitter carrier power 10
4.2.6.1 Definition 10
4.2.6.2 Limit 10
4.2.6.3 Conformance 10
4.2.7 Transmitter frequency deviation 10
4.2.7.1 Definition 10
4.2.7.2 Limit 10
4.2.7.3 Conformance 10
4.2.8 DSC frequency error (demodulated DSC signal) 10
4.2.8.1 Definition 10
4.2.8.2 Limit 11
4.2.8.3 Conformance 11
4.2.9 DSC modulation index 11
4.2.9.1 Definition 11
4.2.9.2 Limit 11
4.2.9.3 Conformance 11
4.2.10 DSC modulation rate 11
4.2.10.1 Definition 11
4.2.10.2 Limit 11

4.2.10.3 Conformance 11
4.2.11 Receiver maximum usable sensitivity 11
4.2.11.1 Definition 11
4.2.11.2 Limits 11
4.2.11.3 Conformance 11
4.2.12 Receiver co-channel rejection 11
4.2.12.1 Definition 11
4.2.12.2 Limit 12
4.2.12.3 Conformance 12
4.2.13 Receiver adjacent channel selectivity 12
4.2.13.1 Definition 12
4.2.13.2 Limits 12
4.2.13.3 Conformance 12
4.2.14 Receiver spurious response rejection 12
4.2.14.1 Definition 12
4.2.14.2 Limit 12
4.2.14.3 Conformance 12
4.2.15 Receiver intermodulation response 12
4.2.15.1 Definition 12
4.2.15.2 Limit 12
4.2.15.3 Conformance 12
4.2.16 Receiver blocking or desensitization 13
4.2.16.1 Definition 13
4.2.16.2 Limit 13
4.2.16.3 Conformance 13
4.2.17 Receiver spurious emissions at the antenna 13
4.2.17.1 Definition 13
4.2.17.2 Limit 13
4.2.17.3 Conformance 13
4.2.18 Receiver cabinet radiated spurious emissions 13
4.2.18.1 Definition 13
4.2.18.2 Limit 13
4.2.18.3 Conformance 13
4.2.19 DSC receiver maximum usable sensitivity 13
4.2.19.1 Definition 13
4.2.19.2 Limits 13
4.2.19.3 Conformance 14
4.2.20 DSC receiver co-channel rejection 14
4.2.20.1 Definition 14
4.2.20.2 Limits 14
4.2.20.3 Conformance 14
4.2.21 DSC receiver spurious response and blocking immunity 14
4.2.21.1 Definition 14
4.2.21.2 Limits 14
4.2.21.3 Conformance 14

5 Testing for compliance with technical requirements 14
5.1 Test conditions, power supply and ambient temperatures 14
5.2 Interpretation of the measurement results 14
5.3 Essential radio test suites 15
5.3.1 Transmitter frequency error 15
5.3.2 Transmitter adjacent channel power 15
5.3.3 Transmitter conducted spurious emissions conveyed to the antenna 15
5.3.4 Transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna 15
5.3.5 Transient behaviour of the transmitter 15
5.3.6 Transmitter carrier power 15
5.3.7 Transmitter frequency deviation 16
5.3.8 DSC frequency error (demodulated DSC signal) 16
5.3.9 DSC modulation index 16
5.3.10 DSC modulation rate 16
5.4 Other test suites 16

5.4.1 General....16
5.4.2 Receiver maximum usable sensitivity....16
5.4.3 Receiver co-channel rejection....16
5.4.4 Receiver adjacent channel selectivity....16
5.4.5 Receiver spurious response rejection....16
5.4.6 Receiver intermodulation response....16
5.4.7 Receiver blocking or desensitization....17
5.4.8 Receiver spurious emissions at the antenna....17
5.4.9 Receiver cabinet radiated spurious emissions....17
5.4.10 DSC receiver maximum usable sensitivity....17
5.4.11 DSC receiver co-channel rejection....17
5.4.12 DSC receiver spurious response and blocking immunity....17

Annex A (normative): HS Requirements and conformance Test specifications Table (HS-RTT)....18

History....20

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Foreword

This Harmonized European Standard (EN) 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 mandate M/284 from the European Commission issued under Directive 98/34/EC [i.2] as amended by Directive 98/48/EC [i.5].

The title and reference to the present document are intended to be included in the publication in the Official Journal of the European Union of titles and references of Harmonized Standard under the Directive 1999/5/EC [i.1].

See article 5.1 of Directive 1999/5/EC [i.1] for information on presumption of conformity and Harmonised Standards or parts thereof the references of which have been published in the Official Journal of the European Union.

The requirements relevant to Directive 1999/5/EC [i.1] are summarised in annex A.

The present document is part 2 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 covering the essential requirements of article 3.2 of the R&TTE Directive";

Part 3: "Harmonized EN covering the essential requirements of article 3.3(e) of the R&TTE Directive".

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Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the R&TTE Directive [i.1]. The modular structure is shown in EG 201 399 [i.4].

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 either 25 kHz or 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 [i.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 [i.1] may apply to equipment within the scope of the present document.

2 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 reference document (including any amendments) 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.

2.1 Normative references

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

[1] ETSI EN 301 025-1 (V1.5.2) (05-2013): "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 1: Technical characteristics and methods of measurement".

[2] ETSI TR 100 028 (all parts) (V1.4.1) (12-2001): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.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).

[i.2] 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.

[i.3] 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).

[i.4] ETSI EG 201 399: "Electromagnetic compatibility and Radio spectrum Matters (ERM); A guide to the production of Harmonized Standards for application under the R&TTE Directive".

[i.5] Directive 98/48/EC of the European Parliament and of the Council of 20 July 1998 amending Directive 98/34/EC 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 R&TTE Directive [i.1] and the following apply:

carrier frequency: frequency to which the transmitter or receiver is tuned

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

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

frequency deviation: difference between the instantaneous frequency of the modulated RF signal and the carrier frequency

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

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

3.2 Abbreviations

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

DSC	Digital Selective Calling
IMO	International Maritime Organization
R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
SINAD	SIgnal, Noise And Distortion
SOLAS	Safety Of Life And Sea
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 [i.3] (which shall also be within the boundary limits of the declared operational environmental profile).

4.2 Conformance requirements

4.2.1 Transmitter frequency error

4.2.1.1 Definition

The frequency error is defined in EN 301 025-1 [1], clause 8.1.1.

4.2.1.2 Limits

The transmitter frequency error limit shall be as stated in EN 301 025-1 [1], 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 adjacent channel power

4.2.2.1 Definition

The adjacent channel power is defined in EN 301 025-1 [1], clause 8.7.1.

4.2.2.2 Limits

The transmitter adjacent channel power limit shall be as stated in EN 301 025-1 [1], clause 8.7.3.

4.2.2.3 Conformance

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

4.2.3 Transmitter conducted spurious emissions conveyed to the antenna

4.2.3.1 Definition

Conducted spurious emissions conveyed to the antenna are defined in EN 301 025-1 [1], clause 8.8.1.

4.2.3.2 Limit

The transmitter conducted spurious emissions conveyed to the antenna limit shall be as stated in EN 301 025-1 [1], clause 8.8.3.

4.2.3.3 Conformance

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

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

4.2.4.1 Definitions

Cabinet radiation and conducted spurious emissions other than those conveyed to the antenna are defined in EN 301 025-1 [1], clause 8.9.1.

4.2.4.2 Limits

The transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna limit shall be as stated in EN 301 025-1 [1], clause 8.9.3.

4.2.4.3 Conformance

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

4.2.5 Transient frequency behaviour of the transmitter

4.2.5.1 Definitions

The transient frequency behaviour of the transmitter is defined in EN 301 025-1 [1], clause 8.10.1.

4.2.5.2 Limits

The transient frequency behaviour of the transmitter limit shall be as stated in EN 301 025-1 [1], clause 8.10.3.

4.2.5.3 Conformance

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

4.2.6 Transmitter carrier power

4.2.6.1 Definition

The transmitter carrier power is defined in EN 301 025-1 [1], clause 8.2.1.

4.2.6.2 Limit

The transmitter carrier power limit shall be as stated in EN 301 025-1 [1], clause 8.2.3.

4.2.6.3 Conformance

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

4.2.7 Transmitter frequency deviation

4.2.7.1 Definition

The transmitter frequency deviation is defined in EN 301 025-1 [1], clause 8.3.1.

4.2.7.2 Limit

The transmitter frequency deviation limit shall be as stated in EN 301 025-1 [1], clauses 8.3.2.2 and 8.3.3.2.

4.2.7.3 Conformance

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

4.2.8 DSC frequency error (demodulated DSC signal)

4.2.8.1 Definition

The DSC frequency error is defined in EN 301 025-1 [1], clause 8.12.1.

4.2.8.2 Limit

The DSC frequency error limit shall be as stated in EN 301 025-1 [1], 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 DSC modulation index

4.2.9.1 Definition

The DSC modulation index is defined in EN 301 025-1 [1], clause 8.13.1.

4.2.9.2 Limit

The DSC modulation index limit shall be as stated in EN 301 025-1 [1], clause 8.13.3.

4.2.9.3 Conformance

Conformance tests as defined in clause 5.3.9 shall be carried out.

4.2.10 DSC modulation rate

4.2.10.1 Definition

The DSC modulation rate is defined in EN 301 025-1 [1], clause 8.14.1.

4.2.10.2 Limit

The DSC modulation rate limit shall be as stated in EN 301 025-1 [1], clause 8.14.3.

4.2.10.3 Conformance

Conformance tests as defined in clause 5.3.10 shall be carried out.

4.2.11 Receiver maximum usable sensitivity

4.2.11.1 Definition

The receiver maximum usable sensitivity of the receiver is defined in EN 301 025-1 [1], clause 9.3.1.

4.2.11.2 Limits

The receiver maximum usable sensitivity limit shall be as stated in EN 301 025-1 [1], clause 9.3.3.

4.2.11.3 Conformance

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

4.2.12 Receiver co-channel rejection

4.2.12.1 Definition

The receiver co-channel rejection is defined in EN 301 025-1 [1], clause 9.4.1.

4.2.12.2 Limit

The receiver co-channel rejection limit shall be as stated in EN 301 025-1 [1], clause 9.4.3.

4.2.12.3 Conformance

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

4.2.13 Receiver adjacent channel selectivity

4.2.13.1 Definition

The adjacent channel selectivity is in EN 301 025-1 [1], clause 9.5.1 for the receiver and in EN 301 025-1 [1], clause 10.3.1 for the DSC receiver.

4.2.13.2 Limits

The adjacent channel selectivity limit shall be as stated in EN 301 025-1 [1], clause 9.5.3 for the receiver and in EN 301 025-1 [1], clause 10.3.3 for the DSC receiver.

4.2.13.3 Conformance

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

4.2.14 Receiver spurious response rejection

4.2.14.1 Definition

The spurious response rejection is defined in EN 301 025-1 [1], clause 9.6.1.

4.2.14.2 Limit

The receiver spurious response rejection limit shall be as stated in EN 301 025-1 [1], clause 9.6.3.

4.2.14.3 Conformance

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

4.2.15 Receiver intermodulation response

4.2.15.1 Definition

The intermodulation response is defined in EN 301 025-1 [1], clause 9.7.1 for the receiver and in EN 301 025-1 [1], clause 10.5.1 for the DSC receiver.

4.2.15.2 Limit

The intermodulation response limit shall be as stated in EN 301 025-1 [1], clause 9.7.3 for the receiver and in EN 301 025-1 [1], clause 10.5.3 for the DSC receiver.

4.2.15.3 Conformance

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

4.2.16 Receiver blocking or desensitization

4.2.16.1 Definition

Blocking is defined in EN 301 025-1 [1], clause 9.8.1.

4.2.16.2 Limit

The receiver blocking or desensitization limit shall be as stated in EN 301 025-1 [1], clause 9.8.3.

4.2.16.3 Conformance

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

4.2.17 Receiver spurious emissions at the antenna

4.2.17.1 Definition

Spurious emissions are defined in EN 301 025-1 [1], clause 9.9.1 for the receiver and in EN 301 025-1 [1], clause 10.7.1 for the DSC receiver.

4.2.17.2 Limit

The spurious emissions at the antenna limit shall be as stated in EN 301 025-1 [1], clause 9.9.3 for the receiver and in EN 301 025-1 [1], clause 10.7.3 for the DSC receiver.

4.2.17.3 Conformance

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

4.2.18 Receiver cabinet radiated spurious emissions

4.2.18.1 Definition

The cabinet radiated spurious emissions are defined in EN 301 025-1 [1], clause 9.10.1 for the receiver and in EN 301 025-1 [1], clause 10.8.1 for the DSC receiver.

4.2.18.2 Limit

The cabinet radiated spurious emissions limit shall be as stated in EN 301 025-1 [1], clause 9.10.3 for the receiver and in EN 301 025-1 [1], clause 10.8.3 for the DSC receiver.

4.2.18.3 Conformance

Conformance tests as defined in clause 5.4.9 may be carried out.

4.2.19 DSC receiver maximum usable sensitivity

4.2.19.1 Definition

The maximum usable sensitivity of the DSC receiver is defined in EN 301 025-1 [1], clause 10.1.1.

4.2.19.2 Limits

The DSC receiver maximum usable sensitivity limit shall be as stated in EN 301 025-1 [1], clause 10.1.3.

4.2.19.3 Conformance

Conformance tests as defined in clause 5.4.10 may be carried out.

4.2.20 DSC receiver co-channel rejection

4.2.20.1 Definition

The co-channel rejection of the DSC receiver is defined in EN 301 025-1 [1], clause 10.2.1.

4.2.20.2 Limits

The DSC receiver co-channel rejection limit shall be as stated in EN 301 025-1 [1], clause 10.2.3.

4.2.20.3 Conformance

Conformance tests as defined in clause 5.4.11 may be carried out.

4.2.21 DSC receiver spurious response and blocking immunity

4.2.21.1 Definition

The spurious response and blocking immunity of the DSC receiver is defined in EN 301 025-1 [1], clause 10.4.1.

4.2.21.2 Limits

The DSC receiver spurious response and blocking immunity limit shall be as stated in EN 301 025-1 [1], clause 10.4.3.

4.2.21.3 Conformance

Conformance tests as defined in clause 5.4.12 may be carried out.

5 Testing for compliance with technical requirements

5.1 Test conditions, power supply and ambient temperatures

These shall be as described in EN 301 025-1 [1], clauses 6.1 to 6.9 and 6.11 to 6.14.

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 [2] 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 values of absolute measurement uncertainties

Parameter	Maximum uncertainty
Radio Frequency (RF)	$\pm 1 \times 10^{-7}$
RF power/level	±0,75 dB
Maximum frequency deviation: - within 300 Hz to 6 kHz of modulation frequency - within 6 kHz to 25 kHz of modulation frequency	 ±5 % ±3 dB
Deviation limitation	±5 %
Adjacent channel power	±5 dB
Conducted spurious emission of transmitter	±4 dB
Sensitivity at 20 dB SINAD	±3 dB
Conducted emission of receiver	±3 dB
Two-signal measurement	±4 dB
Three-signal measurement	±3 dB
Transmitter transient time	±20 %
Transmitter transient frequency	±250 Hz

5.3 Essential radio test suites

5.3.1 Transmitter frequency error

The test method specified in EN 301 025-1 [1], clause 8.1.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.1.2 in order to prove compliance with the requirement.

5.3.2 Transmitter adjacent channel power

The test method specified in EN 301 025-1 [1], clause 8.7.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.2.2 in order to prove compliance with the requirement.

5.3.3 Transmitter conducted spurious emissions conveyed to the antenna

The test method specified in EN 301 025-1 [1], clause 8.8.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.3.2 in order to prove compliance with the requirement.

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

The test method specified in EN 301 025-1 [1], clause 8.9.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.4.2 in order to prove compliance with the requirement.

5.3.5 Transient behaviour of the transmitter

The test method specified in EN 301 025-1 [1], clause 8.10.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.5.2 in order to prove compliance with the requirement.

5.3.6 Transmitter carrier power

The test method specified in EN 301 025-1 [1], clause 8.2.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.6.2 in order to prove compliance with the requirement.

5.3.7 Transmitter frequency deviation

The test method specified in EN 301 025-1 [1], clauses 8.3.2.1 and 8.3.3.1 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.7.2 in order to prove compliance with the requirement.

5.3.8 DSC frequency error (demodulated DSC signal)

The test method specified in EN 301 025-1 [1], clause 8.12.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.8.2 in order to prove compliance with the requirement.

5.3.9 DSC modulation index

The test method specified in EN 301 025-1 [1], clause 8.13.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.9.2 in order to prove compliance with the requirement.

5.3.10 DSC modulation rate

The test method specified in EN 301 025-1 [1], clause 8.14.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.10.2 in order to prove compliance with the requirement.

5.4 Other test suites

5.4.1 General

The requirements in clauses 4.2.11 to 4.2.21 inclusive have been set on the assumption that the test specifications in clauses 5.4.2 to 5.4.12 will be used to verify the performance of the equipment.

5.4.2 Receiver maximum usable sensitivity

The test method specified in EN 301 025-1 [1], clause 9.3.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.11.2 in order to prove compliance with the requirement.

5.4.3 Receiver co-channel rejection

The test method specified in EN 301 025-1 [1], clause 9.4.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.12.2 in order to prove compliance with the requirement.

5.4.4 Receiver adjacent channel selectivity

The test methods specified in EN 301 025-1 [1], clauses 9.5.2 and 10.3.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.13.2 in order to prove compliance with the requirement.

5.4.5 Receiver spurious response rejection

The test method specified in EN 301 025-1 [1], clause 9.6.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.14.2 in order to prove compliance with the requirement.

5.4.6 Receiver intermodulation response

The test methods specified in EN 301 025-1 [1], clauses 9.7.2 and 10.5.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.15.2 in order to prove compliance with the requirement.

5.4.7 Receiver blocking or desensitization

The test method specified in EN 301 025-1 [1], clause 9.8.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.16.2 in order to prove compliance with the requirement.

5.4.8 Receiver spurious emissions at the antenna

The test methods specified in EN 301 025-1 [1], clauses 9.9.2 and 10.7.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.17.2 in order to prove compliance with the requirement.

5.4.9 Receiver cabinet radiated spurious emissions

The test methods specified in EN 301 025-1 [1], clauses 9.10.2 and 10.8.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.18.2 in order to prove compliance with the requirement.

5.4.10 DSC receiver maximum usable sensitivity

The test method specified in EN 301 025-1 [1], clause 10.1.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.19.2 in order to prove compliance with the requirement.

5.4.11 DSC receiver co-channel rejection

The test method specified in EN 301 025-1 [1], clause 10.2.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.20.2 in order to prove compliance with the requirement.

5.4.12 DSC receiver spurious response and blocking immunity

The test method specified in EN 301 025-1 [1], clause 10.4.2 shall be carried out. The results obtained shall be compared to the limits in clause 4.2.21.2 in order to prove compliance with the requirement.

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

The HS Requirements and conformance Test specifications Table (HS-RTT) in table A.1 serves a number of purposes, as follows:

- it provides a statement of all the requirements in words and by cross reference to (a) specific clause(s) in the present document or to (a) specific clause(s) in (a) specific referenced document(s);
- it provides a statement of all the test procedures corresponding to those requirements by cross reference to (a) specific clause(s) in the present document or to (a) specific clause(s) in (a) 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 manufacturer 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.

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

Harmonized Standard EN 301 025-2 The following requirements and test specifications are relevant to the presumption of conformity under article 3.2 of the R&TTE Directive [i.1]						
Requirement			**Requirement Conditionality**		**Test Specification**	
No	**Description**	**Reference: Clause No**	**U/C**	**Condition**	**E/O**	**Reference: Clause No**
1	Transmitter frequency error	4.2.1	U		E	5.3.1
2	Transmitter adjacent channel power	4.2.2	U		E	5.3.2
3	Transmitter conducted spurious emissions conveyed to the antenna	4.2.3	U		E	5.3.3
4	Transmitter cabinet radiation and conducted spurious emissions other than those conveyed to the antenna	4.2.4	U		E	5.3.4
5	Transient frequency behaviour of the transmitter	4.2.5	U		E	5.3.5
6	Transmitter carrier power	4.2.6	U		E	5.3.6
7	Transmitter frequency deviation	4.2.7	U		E	5.3.7
8	DSC frequency error (demodulated DSC signal)	4.2.8	U		E	5.3.8
9	DSC modulation index	4.2.9	U		E	5.3.9
10	DSC modulation rate	4.2.10	U		E	5.3.10

Harmonized Standard EN 301 025-2 The following requirements and test specifications are relevant to the presumption of conformity under article 3.2 of the R&TTE Directive [i.1]						
Requirement			**Requirement Conditionality**		**Test Specification**	
No	**Description**	**Reference: Clause No**	**U/C**	**Condition**	**E/O**	**Reference: Clause No**
11	Receiver maximum useable sensitivity	4.2.11	U		O	5.4.2
12	Receiver co-channel rejection	4.2.12	U		O	5.4.3
13	Receiver adjacent channel selectivity	4.2.13	U		O	5.4.4
14	Receiver spurious response rejection	4.2.14	U		O	5.4.5
15	Receiver inter-modulation response	4.2.15	U		O	5.4.6
16	Receiver blocking or desensitization	4.2.16	U		O	5.4.7
17	Receiver spurious emissions at the antenna	4.2.17	U		O	5.4.8
18	Receiver cabinet radiated spurious emissions	4.2.18	U		O	5.4.9
19	DSC receiver maximum useable sensitivity	4.2.19	U		O	5.4.10
20	DSC receiver co-channel rejection	4.2.20	U		O	5.4.11
21	DSC receiver spurious response and blocking immunity	4.2.21	U		O	5.4.12

Key to columns:

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.

Requirement Conditionality:

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

Condition Explains the conditions when the requirement shall or shall not be applicable for a technical 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. The completion of all tests classified "E" as specified with satisfactory outcomes is a necessary condition for a presumption of conformity. Compliance with requirements associated with tests classified "O" or "X" is 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.

History

Document history		
V1.1.1	August 1998	Publication as EN 301 025
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