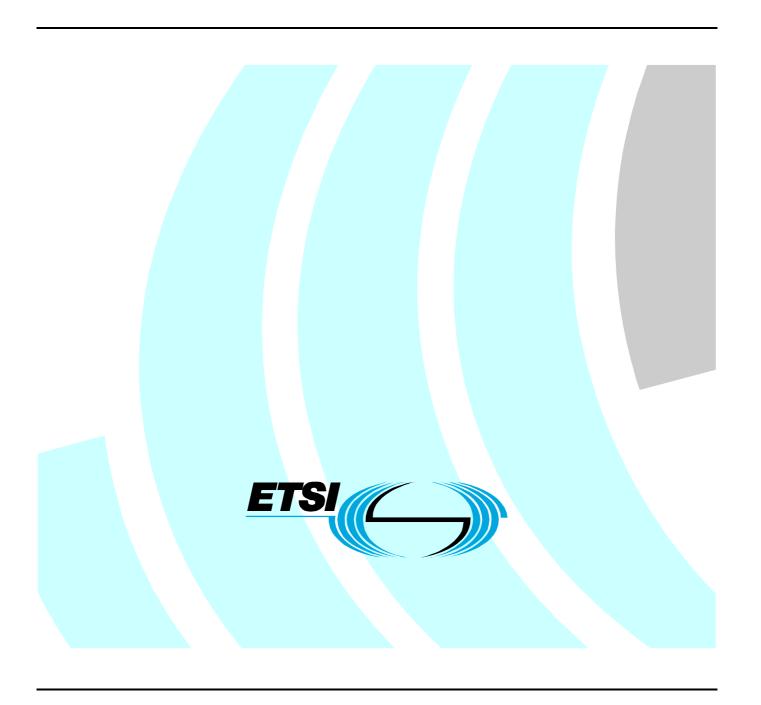
ETSI EN 300 065-2 V1.2.1 (2009-05)

Harmonized European Standard (Telecommunications series)

Electromagnetic compatibility and Radio spectrum Matters (ERM);
Narrow-band direct-printing telegraph equipment for receiving meteorological or navigational information (NAVTEX);

Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE directive



Reference

REN/ERM-TG26-060-2

Keywords maritime, NAVTEX, radio, regulation

ETSI

650 Route des Lucioles F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from: http://www.etsi.org

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at http://portal.etsi.org/tb/status/status.asp

If you find errors in the present document, please send your comment to one of the following services: http://portal.etsi.org/chaircor/ETSI_support.asp

Copyright Notification

No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

> © European Telecommunications Standards Institute 2009. All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM, **TIPHON**TM, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

3GPP[™] is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. LTE™ is a Trade Mark of ETSI currently being registered

for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Intellec	ctual Property Rights.		∠					
Forewo	ord		4					
1 5	Scope	·						
2 I	References							
2.1								
2.2								
	Abbreviations							
		echnical requirements specifications						
4.1	-	Environmental profile6						
4.2	Conformance requirements							
4.2.1	•	Call sensitivity						
4.2.1.1		Definition						
4.2.1.2								
4.2.1.3								
4.2.2	Interference rejection and blocking immunity							
4.2.2.1								
4.2.2.2								
4.2.2.3								
4.2.3		ion						
4.2.3.1	·							
4.2.3.2								
4.2.3.3								
4.2.4	Intermodulation							
4.2.4.1	Definition	Definition						
4.2.4.2	Limit		7					
4.2.4.3	Conformance							
4.2.5	Spurious emission	Spurious emissions						
4.2.5.1	Definition	Definition						
4.2.5.2	Limit		7					
4.2.5.3	Conformance		7					
5	Testing for compliance	e with technical requirements	7					
5.1		er supply and ambient temperatures						
5.1.1	<u> </u>	11.7						
5.1.2	Test power source	e	7					
5.1.3								
5.1.3.1		onditions						
5.1.3.1.	Normal ter	mperature and humidity	8					
5.1.3.1.2		st power supply						
5.1.3.2		conditions						
5.1.3.2.		Extreme test conditions Extreme temperatures						
5.1.3.2.2		est power supply values						
5.1.3.3		r tests at extreme temperatures						
5.2		S						
5.2.1		Call sensitivity						
5.2.2	-	tion and blocking immunity						
5.2.3	•	Co-channel rejection						
5.2.4		Intermodulation						
5.2.5		ns						
	A (normative):	HS Requirements and conformance Test specifications Table						
AHHICA	11 (mormative).	(HS-RTT)	9					
Annex	B (informative):	The EN title in the official languages	11					
	C (informative):	Bibliography						
nistory	/		13					

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://webapp.etsi.org/IPR/home.asp).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This 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 Council Directive 98/34/EC (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 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").

The present document is part 2 of a multi-part deliverable covering the Narrow-Band Direct-Printing telegraph equipment for receiving meteorological or navigational information (NAVTEX), 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 equirements of article 3.3(e) of the R&TTE directive".

National transposition dates					
Date of adoption of this EN:	14 May 2009				
Date of latest announcement of this EN (doa):	31 August 2009				
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	28 February 2010				
Date of withdrawal of any conflicting National Standard (dow):	28 February 2011				

1 Scope

The present document states the minimum requirements for a Narrow-Band Direct-Printing (NBDP) maritime receiver operating in the NAVTEX system.

The present document is intended to cover the provisions of Directive 1999/5/EC (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 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 a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
 - for informative references.

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 indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

[1] ETSI EN 300 065-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Narrow-band direct-printing telegraph equipment for receiving meteorological or navigational information (NAVTEX); Part 1: Technical characteristics and methods of measurement".

2.2 Informative references

The following referenced documents are not essential to the use of the ETSI deliverable but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Not applicable.

3 Abbreviations

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

NBDP

Narrow-Band Direct Printing

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 Call sensitivity

4.2.1.1 Definition

The call sensitivity of the receiver is defined in EN 300 065-1 [1], clause 6.1.1.

4.2.1.2 Limit

The character error limit for call sensitivity is specified in EN 300 065-1 [1], clause 6.1.3.

4.2.1.3 Conformance

Conformance tests as defined in 5.2.1 may be performed.

4.2.2 Interference rejection and blocking immunity

4.2.2.1 Definition

Interference rejection and blocking immunity is defined in EN 300 065-1 [1], clause 6.2.1.

4.2.2.2 Limit

The character error limit is specified in EN 300 065-1 [1], clause 6.2.3.

4.2.2.3 Conformance

Conformance tests as defined in 5.2.2 may be performed.

4.2.3 Co-channel rejection

4.2.3.1 Definition

The co-channel rejection is defined in EN 300 065-1 [1], clause 6.3.1.

4.2.3.2 Limit

The character error limit is specified in EN 300 065-1 [1], clause 6.3.3.

4.2.3.3 Conformance

Conformance tests as defined in 5.2.3 may be performed.

4.2.4 Intermodulation

4.2.4.1 Definition

Intermodulation is defined in EN 300 065-1 [1], clause 6.4.1.

4.2.4.2 Limit

The character error limit is specified in EN 300 065-1 [1], clause 6.4.3.

4.2.4.3 Conformance

Conformance tests as defined in 5.2.4 may be performed.

4.2.5 Spurious emissions

4.2.5.1 Definition

Spurious emissions are defined in EN 300 065-1 [1], clause 6.5.1.

4.2.5.2 Limit

Spurious emissions limits are defined in EN 300 065-1 [1], clause 6.5.3.

4.2.5.3 Conformance

Conformance tests as defined in 5.2.5 may be performed.

5 Testing for compliance with technical requirements

5.1 Test conditions, power supply and ambient temperatures

5.1.1 Test conditions

These shall be as defined in EN 300 065-1 [1], clause 5.1.

5.1.2 Test power source

This shall be as defined in EN 300 065-1 [1], clause 5.2.

5.1.3 Test conditions

5.1.3.1 Normal test conditions

5.1.3.1.1 Normal temperature and humidity

The normal temperature and humidity conditions for tests shall be as defined in EN 300 065-1 [1], clause 5.3.1.

5.1.3.1.2 Normal test power supply

The test power supply shall meet the requirements of EN 300 065-1 [1], clause 5.3.2.

5.1.3.2 Extreme test conditions

5.1.3.2.1 Extreme temperatures

The extreme temperature conditions for tests shall be as defined in EN 300 065-1 [1], clause 5.4.1.

5.1.3.2.2 Extreme test power supply values

The extreme test power supply values shall meet the requirements of EN 300 065-1 [1], clause 5.4.2.

5.1.3.3 Procedures for tests at extreme temperatures

The procedures for test at extreme temperatures shall be as defined in EN 300 065-1 [1], clause 5.5.

5.2 Other radio test suites

5.2.1 Call sensitivity

The test specified in EN 300 065-1 [1], clause 6.1.2 shall be carried out.

5.2.2 Interference rejection and blocking immunity

The test specified in EN 300 065-1 [1], clause 6.2.2 shall be carried out.

5.2.3 Co-channel rejection

The test specified in EN 300 065-1 [1], clause 6.3.2 shall be carried out.

5.2.4 Intermodulation

The test specified in EN 300 065-1 [1], clause 6.4.2 shall be carried out.

5.2.5 Spurious emissions

The test specified in EN 300 065-1 [1], clause 6.5.2 shall be carried out.

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 dependant 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 300 065-2 The following requirements and test specifications are relevant to the presumption of conformity under the article 3.2 of the R&TTE Directive								
Requirement			Requirement Conditionality		Test Specification			
No	Description	Reference: Clause No	U/C	Condition	E/O	Reference: Clause No		
1	Call sensitivity	4.2.1	U		0	5.2.1		
2	Interference rejection and blocking immunity	4.2.2	U		0	5.2.2		
3	Co-channel rejection	4.2.3	U		0	5.2.3		
4	Intermodulation	4.2.4	U		0	5.2.4		
5	Spurious emissions	4.2.5	U		0	5.2.5		

Key to columns:

Requirement:

No A unique identifier for one row of the table which may be used to identify a requirement or

its test specification.

Description A textual reference to the requirement.

Clause Number Identification of clause(s) defining the 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.

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

The enlargement of the European Union (EU) resulted in a requirement from the EU for a larger number of languages for the translation of the titles of Harmonized Standards and mandated ENs that are to be listed in the Official Journal to support the implementation of this legislation.

For this reason the title translation concerning the present document can be consulted via the <u>e-approval</u> application.

Annex C (informative): Bibliography

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.

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).

Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility (EMC Directive).

Council Directive 73/23/EEC of 19 February 1973 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits (LV Directive).

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

History

Document history							
V1.1.1	May 2001	Publication					
V1.2.1	January 2009	One-step Approval Procedure OAP 20090514: 2009-01-14 to 2009-05-14					
V1.2.1	May 2009	Publication					