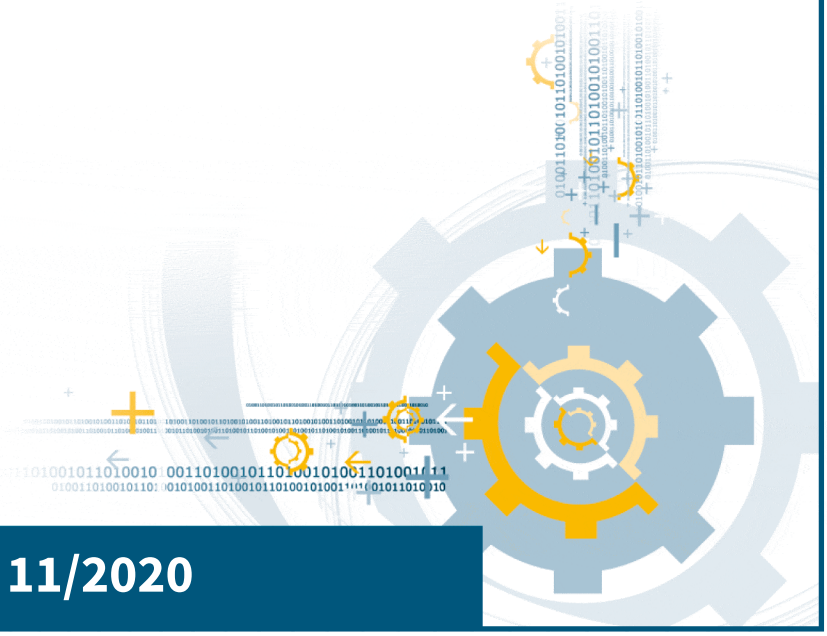
ILNAS

Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 303 135 V2.2.1 (2020-11)

Coastal Surveillance, Vessel Traffic Services and Harbour Radars (CS/VTS/ HR); Harmonised Standard for access to radio spectrum



11/2020

National Foreword

This European Standard EN 303 135 V2.2.1 (2020-11) was adopted as Luxembourgish Standard ILNAS-EN 303 135 V2.2.1 (2020-11).

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

ETSI EN 303 135 V2.2.1 (2020-11)

Coastal Surveillance, Vessel Traffic Services and Harbour Radars (CS/VTS/HR);
Harmonised Standard for access to radio spectrum

Reference
REN/ERM-TGMAR-535

Keywords
harmonised standard, maritime, radar, 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

The present document can be downloaded from:
http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

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
https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

If you find errors in the present document, please send your comment to one of the following services:
https://portal.etsi.org/People/CommiteeSupportStaff.aspx

Copyright Notification

Contents

Intellectual Property Rights 5
Foreword 5
Modal verbs terminology 5
1 Scope 6
2 References 6
2.1 Normative references 6
2.2 Informative references 6
3 Definition of terms, symbols and abbreviations 7
3.1 Terms 7
3.2 Symbols 8
3.3 Abbreviations 8
4 Technical requirements specifications 9
4.1 Environmental profile 9
4.2 Conformance requirements 9
4.2.1 Transmitter requirements 9
4.2.1.1 Frequency Accuracy 9
4.2.1.1.1 Definition 9
4.2.1.1.2 Limits 9
4.2.1.1.3 Conformance 9
4.2.1.2 Transmitter power 10
4.2.1.2.1 Definition 10
4.2.1.2.2 Limits 10
4.2.1.2.3 Conformance 10
4.2.1.3 Measured Bandwidth 10
4.2.1.3.1 Definition 10
4.2.1.3.2 Limits 10
4.2.1.3.3 Conformance 10
4.2.1.4 Out-of-band emissions 10
4.2.1.4.1 Definition 10
4.2.1.4.2 Limits 11
4.2.1.4.3 Conformance 12
4.2.1.5 Spurious emissions 12
4.2.1.5.1 Definition 12
4.2.1.5.2 Limits 13
4.2.1.5.3 Conformance 13
4.2.1.6 Stand-by Mode Emissions 13
4.2.1.6.1 Definition 13
4.2.1.6.2 Limits 14
4.2.1.6.3 Conformance 14
4.2.2 Receiver requirements 14
4.2.2.1 System Noise Figure 14
4.2.2.1.1 Definition 14
4.2.2.1.2 Limits 14
4.2.2.1.3 Conformance 14
4.2.2.2 Receiver Selectivity 14
4.2.2.2.1 Definition 14
4.2.2.2.2 Limit 14
4.2.2.2.3 Conformance 15
4.2.2.3 Receiver Compression Level 15
4.2.2.3.1 Definition 15
4.2.2.3.2 Limit 15
4.2.2.3.3 Conformance 15
5 Testing for compliance with technical requirements 16
5.0 General requirements 16

5.1 Environmental conditions for testing 16
5.1.1 Test Conditions 16
5.1.2 Normal temperature and humidity 16
5.1.3 Normal test power supply 16
5.2 Radio test suites 16
5.2.1 Transmitter test specification 16
5.2.1.1 Frequency Accuracy 16
5.2.1.2 Transmitter power 16
5.2.1.3 Measured Bandwidth 17
5.2.1.4 Out-of-Band-emissions 17
5.2.1.5 Spurious emissions 19
5.2.1.6 Stand-by Mode Emissions 20
5.2.2 Receiver test specification 20
5.2.2.1 System Noise Figure 20
5.2.2.1.0 General 20
5.2.2.2 Receiver Selectivity 20
5.2.2.2.0 General 20
5.2.2.2.1 Receiver Out-of-Band selectivity 21
5.2.2.3 Receiver Compression Level 22

Annex A (informative): Relationship between the present document and the essential requirements of Directive 2014/53/EU 23

Annex B (normative): Transmission power, Frequency Accuracy and Unwanted Emissions of radar systems with indirect methods 24

Annex C (normative): Calculation of the -40 dB Bandwidth 25

Annex D (informative): Maximum Measurement Uncertainty 27

Annex E (informative): WR90/WG16/R100 waveguide characteristics 28

Annex F (normative): Noise figure measurement set-up 30

Annex G (normative): Compression level and selectivity measurement set-up 31

Annex H (informative): Checklist 32

Annex I (informative): Bibliography 35

Annex J (informative): Change history 36

History 37