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Utrustning för satellitbaserad positionsbestämning – Del 3: Galileo-mottagare – Tekniska fordringar, provningsmetoder och erforderliga provningsresultat

*Maritime navigation and radiocommunication equipment and systems –
Global navigation satellite systems (GNSS) –
Part 3: Galileo receiver equipment –
Performance requirements, methods of testing and required test results*

Som svensk standard gäller europastandarden EN 61108-3:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61108-3:2010.

Nationellt förord

Europastandarden EN 61108-3:2010

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61108-3, First edition, 2010 - Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 3: Galileo receiver equipment - Performance requirements, methods of testing and required test results**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 47.020.70

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**Maritime navigation and radiocommunication equipment and systems -
Global navigation satellite systems (GNSS) -
Part 3: Galileo receiver equipment -
Performance requirements, methods of testing and required test results
(IEC 61108-3:2010)**

Matériels et systèmes de navigation
et de radiocommunication maritimes -
Système mondial de navigation
par satellite (GNSS) -
Partie 3 : Equipement pour récepteur
Galileo -
Exigences d'exploitation
et de fonctionnement, méthodes d'essai
et résultats d'essai exigés
(CEI 61108-3:2010)

Navigations-
und Funkkommunikationsgeräte
und -systeme für die Seeschifffahrt –
Weltweite Navigations-Satellitensysteme
(GNSS) -
Teil 3: Galileo – Empfangsanlagen –
Leistungsanforderungen, Prüfverfahren
und geforderte Prüfergebnisse
(IEC 61108-3:2010)

This European Standard was approved by CENELEC on 2010-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 80/590/FDIS, future edition 1 of IEC 61108-3, prepared by IEC TC 80, Maritime navigation and radiocommunication equipment and systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61108-3 on 2010-06-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61108-3:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- | | | |
|------------------|------|---|
| IEC 61108 series | NOTE | Harmonized in EN 61108 series (not modified). |
| IEC 61162-2 | NOTE | Harmonized as EN 61162-2. |

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60721-3-6	1987	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Ship environment	EN 60721-3-6 ¹⁾	1993
IEC 60945	-	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	EN 60945	-
IEC 61108-1	2003	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 1: Global positioning system (GPS) - Receiver equipment - Performance standards, methods of testing and required test results	EN 61108-1	2003
IEC 61108-4	-	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 4: Shipborne DGPS and DGLONASS maritime radio beacon receiver equipment - Performance requirements, methods of testing and required test results	EN 61108-4	-
IEC 61162	Series	Maritime navigation and radiocommunication equipment and systems - Digital interfaces	EN 61162	Series
IEC 61162-1	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	EN 61162-1	-
IEC 62288	-	Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results	EN 62288	-
IMO Resolution A.694(17)	-	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	-	-

¹⁾ EN 60721-3-6 includes A1 to IEC 60721-3-6.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IMO Resolution A.915(22)	-	Revised maritime policy and requirements for a future Global Navigation Satellite System (GNSS)	-	-
IMO Resolution A.953(23)	-	World-wide radionavigation system	-	-
IMO Resolution MSC.233(82)	-	Adoption of the Performance Standards for Shipborne GALILEO Receiver Equipment	-	-
ITU-R Recommendation M.823-3	-	Technical characteristics of differential transmissions for global navigation satellite systems from maritime radio beacons in the frequency band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3	-	-
RTCM 10402 version 2.4	-	RTCM Recommended Standards for Differential GNSS (Global Navigation Satellite Systems) Service	-	-

CONTENTS

1	Scope	7
2	Normative references	7
3	Terms, definitions and abbreviations	8
3.1	Terms and definitions	8
3.2	Abbreviations	8
4	Minimum performances standards	9
4.1	Object	9
4.2	Galileo receiver equipment	10
4.2.1	Minimum facilities	10
4.2.2	Configuration	10
4.2.3	Quality assurance	10
4.3	Performance standards for Galileo receiver equipment	10
4.3.1	General	10
4.3.2	Equipment output	11
4.3.3	Accuracy	12
4.3.4	Acquisition	12
4.3.5	Antenna and input/output connections	13
4.3.6	Antenna design	13
4.3.7	Dynamic range	13
4.3.8	Protection from specific interfering signals	13
4.3.9	Position update	14
4.3.10	Differential Galileo input	14
4.3.11	Navigational warnings and status indications	14
4.3.12	Output of COG, SOG and UTC	18
4.3.13	Typical interference conditions	19
5	Methods of testing and required test results	19
5.1	Test sites	19
5.2	Test sequence	20
5.3	Test signals	20
5.4	Determination of accuracy	21
5.5	General requirements and presentation requirements	21
5.5.1	Normal conditions	21
5.5.2	General requirements	21
5.5.3	Presentation requirements	21
5.6	Receiver tests	21
5.6.1	Galileo receiver equipment	21
5.6.2	Position output	22
5.6.3	Equipment output	22
5.6.4	Accuracy	22
5.6.5	Acquisition	23
5.6.6	Antenna and input/output connections	24
5.6.7	Antenna design	24
5.6.8	Sensitivity and dynamic range	24
5.6.9	Protection from other shipborne transmitters	25
5.6.10	Position update	25

5.6.11	Differential Galileo input	26
5.6.12	Navigational warnings and status indications	26
5.6.13	Accuracy of COG and SOG	29
5.6.14	Validity of COG and SOG information	29
5.6.15	Output of UTC	30
5.7	Tests for typical RF interference conditions	30
5.7.1	Simulator conditions	30
5.7.2	Navigation solution accuracy test	30
5.7.3	Re-acquisition test	31
Annex A (informative)	Galileo navigation signals characteristics	33
Annex B (informative)	The Galileo integrity concept	35
Annex C (informative)	Receiver autonomous integrity monitoring (RAIM)	41
Annex D (normative)	Galileo standard received signals and interference environment	51
Annex E (informative)	Galileo RAIM testing	56
	Bibliography	58
Figure B.1	– Graphical illustration of SISA and SISMA [GIC05]	37
Figure C.1	– Navigation alerts and FDE events	42
Figure C.2	– RNP parameters	43
Figure C.3	– Receiver autonomous integrity monitoring (RAIM)	44
Figure C.4	– Position errors	45
Figure C.5	– Decision threshold and minimum detectable bias for the (W)SSE statistic	46
Figure C.6	– Maximum residual test statistic	47
Figure C.7	– Geometry screening	48
Figure D.1	– E5 in-band and near-band maximum CW RFI levels	52
Figure D.2	– E1 in-band and near-band maximum CW RFI levels	53
Figure D.3	– E5 Maximum in-band CW/NBI RFI levels	54
Figure D.4	– E1 Maximum in-band CW/NBI RFI levels	54
Table 1	– Acquisition time limits	13
Table 2	– RAIM integrity states	17
Table 3	– Integrity states corresponding to the Galileo integrity message	18
Table 4	– Accuracy of COG	19
Table 5	– RF interference values	31
Table A.1	– General characteristics of the Galileo navigation signals	33
Table A.2	– General characteristics of Galileo observables	34
Table B.1	– Integrity flag values	38
Table C.1	– Galileo satellite failure [GIC05]	49
Table C.2	– RAIM-FDE parameters	50
Table D.1	– Minimum and maximum receiver power levels on ground	51
Table D.2	– Minimum and maximum levels at antenna port and receiver input	51
Table D.3	– Table of main characteristics of Figure D.1 above	52
Table D.4	– Table of main characteristics of Figure D.2	53
Table D.5	– E5 maximum in-band RFI levels versus bandwidth	54

Table D.6 – E5 maximum in-band RFI levels versus bandwidth.....	55
Table E.1 – Scenario overview.....	57

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) –

Part 3: Galileo receiver equipment – Performance requirements, methods of testing and required test results

1 Scope

This part of IEC 61108 specifies the minimum performance standards, methods of testing and required test results for Galileo shipborne receiver equipment, based on IMO resolution MSC.233(82), which uses the signals from the Galileo Global Navigation Satellite System in order to determine position. It takes account of the general requirements given in IMO resolution A.694(17) and is associated with IEC 60945. When a requirement in this standard is different from IEC 60945, the requirement in this standard takes precedence. It also takes account, as appropriate, of requirements for the presentation of navigation-related information on shipborne navigational displays given in IMO resolution MSC.191(79) and is associated with IEC 62288.

A description of the Galileo Open Service and Safety of Life Service is given in the Galileo interface control documents (see Bibliography). This receiver standard applies to navigation in ocean waters for the open service and harbour entrances, harbour approaches and coastal waters for the Safety of Life service, as defined in IMO resolution A.953(23).

All text of this standard, whose meaning is identical to that in IMO resolution MSC.233(82), is printed in *italics* and the resolution and paragraph numbers are indicated in brackets i.e. (M.233/A1.2).

The requirements in Clause 4 are cross-referenced to the tests in Clause 5 and vice versa.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60721-3-6:1987, *Classification of environmental conditions – Part 3-6: Classification of groups of environmental parameters and their severities – Ship environment*

IEC 60945, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61108-1:2003, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 1: Global positioning system (GPS) – Receiver equipment – Performance standards, methods of testing and required test results*

IEC 61108-4, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 4: Shipborne DGPS and DGLONASS maritime radio beacon receiver equipment – Performance requirements, methods of testing and required test results*

IEC 61162 (all parts), *Maritime navigation and radiocommunication equipment and systems – Digital interfaces*

IEC 61162-1, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

IEC 62288, *Maritime navigation and radiocommunication equipment and systems – Presentation of navigation-related information on shipborne navigational displays – General requirements – Methods of testing and required test results*

IMO resolution A.694(17), *General requirements for shipborne radio equipment forming part of the Global maritime distress and safety system (GMDSS) and for electronic navigational aids*

IMO resolution A.915(22), *Revised maritime policy and requirements for a future Global Navigation Satellite System (GNSS)*

IMO resolution A.953(23), *World-wide radionavigation system*

IMO resolution MSC.233(82), *Adoption of the Performance Standards for Shipborne GALILEO Receiver Equipment*

ITU-R Recommendation M.823-3, *Technical characteristics of differential transmissions for Global Navigation Satellite Systems from maritime radio beacons in the frequency band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3*

RTCM 10402 RTCM Recommended Standards for Differential GNSS (Global Navigation Satellite Systems) Service, Version 2.4

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