

**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**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 61108-4:2006 sisaldab Euroopa standardi EN 61108-4:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.05.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 61108-4:2006 consists of the English text of the European standard EN 61108-4:2004.</p> <p>This document is endorsed on 19.05.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: Specifies the minimum operational and performance requirements, methods of testing and required test results conforming to performance standards not inferior to those adopted by the IMO in resolution MSC.114(73). Takes into account IMO resolution A.694(17) and is associated with IEC 60945.</p>	<p>Scope: Specifies the minimum operational and performance requirements, methods of testing and required test results conforming to performance standards not inferior to those adopted by the IMO in resolution MSC.114(73). Takes into account IMO resolution A.694(17) and is associated with IEC 60945.</p>
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ICS 47.020.70

Võtmesõnad:

**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 61108-4:2004)**

Matériels et systèmes de navigation
et de radiocommunication maritimes —
Système mondial de navigation
par satellite (GNSS)
Partie 4: Equipement pour récepteur de
balises radioélectriques DGLONASS et
DGPS embarqués —
Exigences d'exploitation et de
fonctionnement, méthodes d'essai et
résultats d'essai exigés
(CEI 61108-4:2004)

Navigations- und Funkkommunikations-
geräte und -systeme für die Seeschifffahrt —
Weltweite Navigations-Satellitensysteme
(GNSS)
Teil 4: DGPS- und DGLONASS-
Seefunkbaken-Empfangsanlagen —
Leistungsanforderungen, Prüfverfahren
und geforderte Prüfergebnisse
(IEC 61108-4:2004)

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 80/394/FDIS, future edition 1 of 61108-4, 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 61108-4 on 2004-10-01.

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) | 2005-07-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2007-10-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61108-4:2004 was approved by CENELEC as a European Standard without any modification.

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 Where 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 60945	- ¹⁾	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	EN 60945	2002 ²⁾
IEC 61162-1	- ¹⁾	Maritime navigation and radiocommunication equipment and systems - Digital interfaces Part 1: Single talker and multiple listeners	EN 61162-1	2000 ²⁾
IEC 61162-2	- ¹⁾	Part 2: Single talker and multiple listeners, high-speed transmission	EN 61162-2	1998 ²⁾
IMO Resolution MSC.114(73)	- ¹⁾	Performance standards for shipborne DGPS and DGLONASS maritime radio beacon receiver equipment	-	-
IMO Resolution A.694(17)	- ¹⁾	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	-	-
ITU-R M.823-2	- ¹⁾	Technical characteristics of differential transmissions for global navigation satellite systems (GNSS) from maritime radio beacons in the frequency band 285 kHz-325 kHz (283,5 kHz-315 kHz in Region 1)	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

INTERNATIONAL STANDARD

IEC
61108-4

First edition
2004-07

**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**



Reference number
IEC 61108-4:2004(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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INTERNATIONAL STANDARD

IEC
61108-4

First edition
2004-07

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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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International Standard IEC 61108-4 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

The text of this standard is based on the following documents:

FDIS	Report on voting
80/394/FDIS	80/398/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

IEC 61108 consists of the following parts, under the general title *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
- Part 2: Global navigation satellite system (GLONASS) – Receiver equipment – Performance standards, methods of testing and required test results
- Part 3: (To be used at a later date)

A bilingual version of this publication may be issued at a later date.

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

1 Scope

This part of IEC 61108 specifies the minimum operational and performance requirements, methods of testing and required test results conforming to performance standards not inferior to those adopted by the IMO in resolution MSC.114(73). In addition, it takes account of IMO resolution A.694(17) and is associated with IEC 60945. When a requirement of this standard is different from IEC 60945, the requirement in this standard shall take precedence.

This standard may be satisfied by equipment integral with GNSS equipment.

This standard is applicable to HSC.

All text of this standard, whose wording is identical to that in IMO resolution MSC.114(73) and ITU-R M.823 is printed in *italics* and the resolution (abbreviated to – 114 and M.823 respectively) and paragraph numbers are indicated in brackets i.e. (114/3.3 or M.823/3.3).

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

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

IEC 61162-2, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 2: Single talker and multiple listeners, high speed transmission*

IMO Resolution MSC.114(73), *Revised recommendation on performance standards for shipborne DGPS and DGLONASS maritime radio beacon receiver equipment*

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*

ITU-R M.823-2, *Technical characteristics of differential transmissions for Global Navigation Satellite Systems (GNSS) from maritime radio beacons in the frequency band 283,5 – 315 kHz in Region 1 and 285 – 325 kHz in Regions 2 and 3*