



DPC: 25/30483056 DC

BSI Group Headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

Date: 01 August 2025

Origin: International

Latest date for receipt of comments: 23 September 2025

Project No. 2023/02709

Responsible committee: EPL/80 Maritime navigation and radiocommunication equipment and systems

Interested committees:

Title: BS ISO 22090-2 Draft Ships and marine technology. Transmitting heading devices (THDs). Part 2: Geomagnetic principles.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 22090-2

Ships and marine technology — Transmitting heading devices (THDs) —

Part 2: Geomagnetic principles

*Navires et technologie maritime — Dispositifs de transmission de
données de pilotage —*

Partie 2: Principes géomagnétiques

ICS: 47.020.70

ISO/TC 8/SC 6

Secretariat: JISC

Voting begins on:
2025-07-31

Voting terminates on:
2025-10-23

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Reference number
ISO/DIS 22090-2:2025(en)

Full document details: 25/30483056 DC

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 6, *Navigation and ship operations*.

This third edition cancels and replaces the second edition (ISO 22090-2:2014), which has been technically revised.

The main changes are as follows:

- [Clause 1](#): In line with the latest gyro-related standards, etc., it has been kept to a minimum and other applicable conditions have been moved to Application ([5.1](#)).
- [Clause 3](#): Along with renewal of the overall structure of the document, the terms and definitions have been updated.
- [Clause 4](#): (abbreviated terms) has been added.
- IMO performance requirements were summarized in [Clause 5](#).
- in [5.6](#), requirements related to bridge alert management have been added.
- in [5.7.6](#), requirements related to electromagnetic compatibility have been added.
- in [6.11](#), test method for requirements related to bridge alert management has been added.
- in [6.14](#), electromagnetic compatibility test has been added.
- in [Annex A](#), the equivalent requirements in ISO 22090-2 and IMO Resolution have been deleted and the alerts with a standard alert identifier have been defined.
- in [Annex B](#), IEC 61162 interfaces overview has been added.
- the normative references and bibliography have been updated.

A list of all parts in the ISO 22090 series can be found on the ISO website.

ISO/DIS 22090-2:2025(en)

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 22090 consists of the following parts, under the general title *Ships and marine technology — Transmitting heading devices (THDs)*:

- *Part 1: Gyro-compasses*
- *Part 2: Geomagnetic principles*
- *Part 3: GNSS principles*

Introduction

This document is aligned with IMO Resolution MSC.116(73) on performance standards for marine transmitting heading devices (THDs).

Any text in this document which is a citation from the IMO Resolution MSC.116(73), appears in italics. Within these citations, any changes to the original wording of the IMO Resolution MSC.116(73) are written in upright font.

In this document, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.