

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN IEC 61162-2:2024 sisaldab Euroopa standardi EN IEC 61162-2:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.05.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN IEC 61162-2:2024 consists of the English text of the European standard EN IEC 61162-2:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 17.05.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 2: Single talker and multiple listeners, high-speed transmission  
(IEC 61162-2:2024)

Matériels et systèmes de navigation et de radiocommunication maritimes - Interfaces numériques - Partie 2: Emetteur unique et récepteurs multiples, transfert rapide de données  
(IEC 61162-2:2024)

Navigations- und Funkkommunikationsgeräte und -systeme für die Seeschifffahrt - Digitale Schnittstellen - Teil 2: Ein Datensender und mehrere Datenempfänger, Hochgeschwindigkeitsübertragung  
(IEC 61162-2:2024)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

The text of document 80/1065/CDV, future edition 2 of IEC 61162-2, prepared by IEC/TC 80 "Maritime navigation and radiocommunication equipment and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61162-2:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2025-02-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-05-09

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Maritime navigation and radiocommunication equipment and systems – Digital interfaces –**

**Part 2: Single talker and multiple listeners, high-speed transmission**

**Matériels et systèmes de navigation et de radiocommunication maritimes – Interfaces numériques –**

**Partie 2: Emetteur unique et récepteurs multiples, transfert rapide de données**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION  
EQUIPMENT AND SYSTEMS – DIGITAL INTERFACES –****Part 2: Single talker and multiple listeners,  
high-speed transmission**

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IEC 61162-2 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems. It is an International Standard.

This second edition cancels and replaces the first edition published in 1998. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) alternative hardware is given in 5.1 which may now be as specified in this document or as specified in IEC 61162-1;
- b) the data transmission rate given in Clause 6 is now configurable. The default remains as 38 400 (bits/s) but higher rates may be provided;

- c) the description of the data format protocol has been removed as this information is given in IEC 61162-1;
- d) former Annex A and Annex B have been deleted as now of historic interest.

The text of this International Standard is based on the following documents:

Draft	Report on voting
80/1065/CDV	80/1083/RVC

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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# MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – DIGITAL INTERFACES –

## Part 2: Single talker and multiple listeners, high-speed transmission

### 1 Scope

This part of IEC 61162 contains the requirements for data communication between maritime electronic instruments, navigation and radiocommunication equipment when interconnected via an appropriate interface.

This document is intended to support one-way serial data transmission from a single talker to one or more listeners. This data is in printable ASCII form and can include any information as specified by approved sentences or information coded according to the rules for proprietary sentences. Typical messages can be from 11 to a maximum of 79 characters in length and generally require repetition rates up to once per 20 ms.

The electrical definitions in this document are intended to accommodate higher data rates than are specified in IEC 61162-1. Since there is no provision for guaranteed delivery of messages and only limited error-checking capability, it is important this document is used with caution in all safety applications.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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*

ITU-T Recommendation X.27/V.11, *Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbits/s*

### 3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms and definitions apply.

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