

PUBLICLY AVAILABLE SPECIFICATION

PRE-STANDARD

**Maritime navigation and radiocommunication equipment and systems – Digital interfaces –
Part 103: Single talker and multiple listeners – New and amended sentences and
Talker IDs**



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2021 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search - webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee, ...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

IEC online collection - oc.iec.ch

Discover our powerful search engine and read freely all the publications previews. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 000 terminological entries in English and French, with equivalent terms in 18 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

Preview generated by EVS



**PUBLICLY AVAILABLE
SPECIFICATION
PRE-STANDARD**

**Maritime navigation and radiocommunication equipment and systems – Digital interfaces –
Part 103: Single talker and multiple listeners – New and amended sentences and Talker IDs**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.060

ISBN 978-2-8322-9598-4

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 New content to IEC 61162-1	6
2.1 Field definitions	6
2.2 Approved sentences	6
2.2.1 DDC – Display dimming control	6
2.2.2 EPM – Command or report long equipment property value.....	9
2.2.3 NLS – Navigation light status.....	11
2.2.4 SEL – Selection report.....	12
2.2.5 SLM – Steering location/mode	12
2.2.6 VBC – Water-referenced and ground-referenced docking log speed data.....	14
Bibliography.....	15
Table 1 – Talker identifier mnemonics.....	6

This document is a preview generated by EVS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS – DIGITAL INTERFACES –**
**Part 103: Single talker and multiple listeners –
New and amended sentences and Talker IDs**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

A PAS is a technical specification not fulfilling the requirements for a standard, but made available to the public.

IEC PAS 61162-103 has been processed by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

Draft PAS	Report on voting
80/985/DPAS	80/992/RVDPAS

Following publication of this PAS, which is a pre-standard publication, the technical committee or subcommittee concerned may transform it into an International Standard.

This PAS shall remain valid for an initial maximum period of 2 years starting from the publication date. The validity may be extended for a single period up to a maximum of 2 years, at the end of which it shall be published as another type of normative document, or shall be withdrawn.

This document is a preview generated by EVS

INTRODUCTION

This document is circulated as an IEC Publicly Available Specification (IEC/PAS). This agreed process allows the new information needed to implement new sentences in a shorter time-scale than revising the appropriate international standards. This document provides information on sentences to support more functionality than available in the published 5th edition of IEC 61162-1.

This PAS has been developed in conjunction with the IEC TC 80 WG6 and the NMEA.

This PAS will be replaced at a future date by, or be included within, a revision of IEC 61162-1.

This document is a preview generated by EVS

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – DIGITAL INTERFACES –

Part 103: Single talker and multiple listeners – New and amended sentences and Talker IDs

1 Scope

IEC 61162-1:2016 supports the transfer of data between various equipment. This document specifies more equipment Talker IDs, amends existing sentences and introduces new sentences to facilitate more functionality between equipment.

2 New content to IEC 61162-1

2.1 Field definitions

Additional field definitions are indicated in Table 1.

Table 1 – Talker identifier mnemonics

Talker device	Identifier
Automation – Alarm and monitoring system	JA
Automation – Reefer monitoring system	JB
Automation – Power management system	JC
Automation – Propulsion control system	JD
Automation – Engine control console	JE
Automation – Propulsion boiler	JF
Automation – Auxiliary boiler	JG
Automation – Electronic governor system	JH
Night vision	NV
Electronic record book	RB
Rudder angle indicator	RI
Steering control system/device	SC
System management	SM
Track control system	TC

2.2 Approved sentences

2.2.1 DDC – Display dimming control

The DDC sentence provides controls for equipment display dimming presets, display brightness percentage and selection of colour palette.

Transmitting and receiving equipment may support unidirectional or bidirectional communications as determined by the manufacturer.