SVENSK STANDARD SS-EN IEC 63173-1

Fastställd	Utgåva	Sida	Ansvarig kommitté
2021-10-20	1	1 (1+249)	SEK TK 80

Marin navigerings- och kommunikationsutrustning – Datagränssnitt – Del 1: S-421 ruttplan baserad på S-100

Maritime navigation and radiocommunication equipment and systems – Data interface – Part 1: S-421 route plan based on S-100

Som svensk standard gäller europastandarden EN IEC 63173-1:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 63173-1:2021.

Nationellt förord

Europastandarden EN IEC 63173-1:2021

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 63173-1, First edition, 2021 - Maritime navigation and radiocommunication equipment and systems - Data interface - Part 1: S-421 route plan based on S-100**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 47.020.70

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 63173-1

August 2021

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English Version

Maritime navigation and radiocommunication equipment and systems - Data interface - Part 1: S-421 route plan based on S-100
(IEC 63173-1:2021)

Matériels et systèmes de navigation et de radiocommunication maritimes - Interface de données - Partie 1: Plan de route S-421 basé sur la S-100
(IEC 63173-1:2021)

Navigations- und Funkkommunikationsgeräte und -Systeme für die Seeschifffahrt - Digitale Schnittstellen - Teil 1: S-421 Routenplan auf Grundlage von S-100
(IEC 63173-1:2021)

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

Ref. No. EN IEC 63173-1:2021 E

European foreword

The text of document 80/997/FDIS, future edition 1 of IEC 63173-1, 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 63173-1:2021.

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) 2022-04-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-07-21

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

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 63173-1:2021 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 61174	NOTE	Harmonized as EN 61174
IEC 62288	NOTE	Harmonized as EN 62288
ISO 19115 (series)	NOTE	Harmonized as EN ISO 19115 (series)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
S-100	2018	IHO Universal Hydrographic Data Model (edition 4.0.0)	-	-

IEC 63173-1

Edition 1.0 2021-06

INTERNATIONAL STANDARD

colour inside

Maritime navigation and radiocommunication equipment and systems – Data interfaces – Part 1: S-421 route plan based on S-100

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – DATA INTERFACES –

Part 1: S-421 route plan based on S-100

FOREWORD

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IEC 63173-1 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems. It is an International Standard.

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

FDIS	Report on voting
80/997/FDIS	80/1000/RVD

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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 63173 series, published under the general title *Maritime navigation and radiocommunication equipment and systems – Data interfaces*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The voyage plan is a key element of a vessel's voyage and can be used to optimize safety and processes, as well as for the interaction of participants and stakeholders.

The core element of the voyage plan is the route.

The exchange of routes (whether it be between ship-to-ship, ship-to-shore or shore-to-shore) may improve

– situational awareness,
– reduction in the number of accidents and incidents (by proactively de-conflicting routes),
– resource utilization by knowing the intentions of other actors,
– secured passages by knowing the intentions of other actors,
– predictability of arrivals and departures by early information sharing,
– planning for involved actors leading to reduced idle time for resources, and
– just-in-time operations by enabling stakeholders and service providers to be efficiently organized for handling vessel movements, port resources, and hinterland connections.

This document has been registered with the IHO S-100 registry as product specification S-421. A S-100 product specification is a description of the features, attributes and relationships of an application and their mapping to a dataset. It is a complete description of all the elements required to define a particular geographic data product.

IHO S-97 describes readiness levels of product specifications to show a progression from an idea to regular use. S-421 is currently at the initial level 1 pending demonstration in a real-world environment.

S-100 uses camelCase for naming. CamelCase names are made up of words joined together without spaces and capitalised within the compound using a limited set of English letters. Feature and information types begin with uppercase A-Z and attributes and values begin with lowercase a-z.

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – DATA INTERFACES –

Part 1: S-421 route plan based on S-100

1 Scope

This part of IEC 63173 specifies an S-100 compliant product specification for route plan intended for exchange of information. It specifies the content, structure, and metadata needed for creating fully S-100 compliant route plan information and its portrayal within an S-100-based application. The IHO manages all numbers for S-100 compliant product specifications and has assigned S-421 for this route plan IEC standard.

This document specifies only a data format for the route plan exchange. This document does not specify a data format of vessel monitoring and logging information. This information can be provided by other mechanisms or be specified in other standards.

The format of the route plan exchange includes some limited vessel static information. When more static information is required, it can be obtained by other methods such as AIS.

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.

S-100:2018, *IHO Universal Hydrographic Data Model* (edition 4.0.0)