



IALA STANDARD

S1060

DIGITAL COMMUNICATION TECHNOLOGIES

Edition 2.0

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International Association of Marine Aids to Navigation and Lighthouse Authorities
Association Internationale de Signalisation Maritime

THE GENERAL ASSEMBLY

BEARING IN MIND the provisions of the United Nations Convention on the Law of the Sea (UNCLOS) and the International Convention for the Safety of Life at Sea (SOLAS),

RECOGNIZING that the aim of IALA is to foster the safe, economic and efficient movement of vessels, through improvement and harmonization of Marine Aids to Navigation world-wide,

RECALLING article 7 of the IALA Constitution regarding the authority, duties and functions of the General Assembly,

RECALLING ALSO that a goal of the work of IALA is that Marine Aids to Navigation are developed and harmonized through international cooperation and the provision of standards as described in the Strategic Vision,

HAVING CONSIDERED the advice of the Council provided to General Assembly at its 13th Session,

APPROVES the IALA Standard 1060 Digital Communication Technologies, and

INVITES members and Marine Aids to Navigation authorities world-wide to undertake to implement the provisions of the Standard.



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1. INTRODUCTION

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) is a specialized organization for world-wide improvement and harmonization of Marine Aids to Navigation.

The term “Marine Aid to Navigation” referred to in the Constitution of IALA, should be understood to be device, system or service, external to vessels, designed and operated to enhance safe and efficient navigation of individual vessels and/or vessel traffic. For the purposes of IALA this definition includes vessel traffic services.

IALA publishes non-mandatory standards, recommendations, and guidelines, defined as follows.

Document	Definition
IALA standard	An IALA standard is a part of a framework, the implementation of which by all coastal States will harmonize Marine Aids to Navigation world-wide. IALA standards cover technology and services and are non-mandatory.
IALA recommendation	An IALA recommendation specifies what practices shall be carried out in order to comply with that recommendation, and may be referenced, in full or in part, in an IALA standard.
IALA guideline	An IALA guideline describes how to implement practices normally specified in a recommendation.

2. PURPOSE

In accordance with articles 2 and 3 of its Constitution, and its Strategic Vision, IALA formulates and publishes standards to achieve the safe, economic and efficient movement of vessels, through improvement and harmonization of Marine Aids to Navigation world-wide.

3. APPLICATION

This Standard is suitable for implementation by Marine Aids to Navigation authorities.

4. SCOPE

IALA standards may contain normative and informative provisions.

Normative provisions are those with which it is necessary to conform in order to claim compliance to the Standard.

Informative provisions are those which specify additional desirable practices but with which it is not necessary to conform in order to claim compliance to the Standard.

This Standard references normative and informative provisions, detailed in the listed IALA recommendations, covering the following scope:

S1060.1 Wide and medium bandwidth systems



- S1060.2 Narrow bandwidth systems
- S1060.3 Harmonized maritime connectivity

5. REFERENCED DOCUMENTS

In this Standard, any reference to a recommendation is to the most recent version approved by the IALA Council.

In this Standard the word ‘shall’ is used to indicate that a provision is normative and is to be followed in order to comply with the Standard. The word ‘should’ introduces informative provisions.

The following recommendations are normative provisions, and shall be observed if compliance with this Standard is claimed.

Scope	Number	Title
S1060.1 Wide and medium bandwidth systems	R1007	The VHF Data Exchange System (VDES) for Shore Infrastructure
	R0123	The Provision of Shore Based Automatic Identification System (AIS)
	R0124	The AIS Service

The following recommendations are informative provisions and should be observed if compliance with this Standard is claimed.

Scope	Number	Title
S1060.3 Harmonized maritime connectivity	R0140	The Architecture for Shore-based Infrastructure 'fit for e-Navigation'
	R0148	The Need to Implement Regional e-Navigation Solutions Based on International Standards

6. SUPPLEMENTARY ELEMENTS

There are no supplementary elements to this Standard.

7. APPROVAL AND AMENDMENT OF STANDARDS

IALA standards may be approved or amended at a General Assembly.

8. DOCUMENT HISTORY



Date	Details	Approval
29 May 2018	First issue.	General Assembly Resolution, Incheon, Republic of Korea, May 2018.
3 June 2023	Review of the scope and reference documents.	General Assembly Resolution, Rio de Janeiro, Brazil, June 2023.