



# IALA STANDARD

S1060

DIGITAL COMMUNICATION TECHNOLOGIES

**Edition 2.0**

**May 2023**

# THE GENERAL ASSEMBLY

**BEARING IN MIND** the provisions of the United Nations Convention on the Law of the Sea (UNCLOS) and the Convention on 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 harmonisation of 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 for the period 2018-2026,

**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 Standards, Recommendations, and Guidelines, defined as follows.

| Document                   | Definition   |
|----------------------------|--|
| <b>IALA Standard</b>       | An IALA Standard is a part of a framework, the implementation of which by all coastal states will harmonise Marine Aids to Navigation worldwide. IALA standards cover technology and services and are non-mandatory. |
| <b>IALA Recommendation</b> | 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.                                    |
| <b>IALA Guideline</b>      | An IALA Guideline describes how to implement practices normally specified in a Recommendation.   |

## 2. PURPOSE

The IALA Strategic Vision for the period 2018-2026, approved by the General Assembly in 2023, includes the Goal to ensure that

“Marine Aids to Navigation are developed and harmonised through international cooperation and the provision of standards.”

IALA Standards are suitable for direct citation by States in the interest of an efficient and harmonised global network of Marine Aids to Navigation and services.

## 3. APPLICATION

This Standard is suitable for implementation by all 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.

- Technical scope

TS 6.1 Wide and medium bandwidth systems

TS 6.2 Narrow bandwidth systems

TS 6.3 Harmonised 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   |
|---|--------|---|
| <b>TS 6.1 Wide and medium bandwidth systems</b> | R1007  | VDES for Shore Infrastructure   |
|   | R0123  | The Provision of the Shore Based Automatic Identification System (AIS)                                |
|   | R0124  | Automatic Identification System (AIS) Shore Station and Networking Aspect relating to the AIS Service |

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

| Scope  | Number | Title  |
|--|--------|--|
| <b>TS 6.3 Harmonised maritime connectivity framework</b> | 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

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| Date       | Details                                     | Approval   |
|------------|---|--|
| 2018-05-29 | First issue                                 | General Assembly Resolution, Incheon, Republic of Korea, May 2018. |
| 2023-05-xx | Review on the scope and reference documents | General Assembly Resolution, Rio de Janeiro, Brazil, May 2023      |