



IALA STANDARD

S1020

MARINE AIDS TO NAVIGATION DESIGN AND DELIVERY

Edition 1.0

May 2018



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 1020 Marine Aids to Navigation Design and Delivery, 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
IALA Standard	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.
IALA Recommendation	An IALA Recommendation specifies what practices should 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

The IALA Strategic Vision for the period 2018-2026, approved by the General Assembly in 2018, 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.

- Visual signalling

- Range and performance
- Design, implementation, and maintenance
- Power systems
- Floating aids to navigation
- Environment, sustainability, and legacy

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
Visual Aids to Navigation	R0108(E-108)	The Surface Colours used as Visual Signals on Marine Aids to Navigation
	E-110	Rhythmic Characters of Lights on Aids to Navigation
	R0201(E200-1)	Marine Signal Lights - Colours
	R0106(E-106)	The Use of Retroreflecting Material on Marine Aids to Navigation Marks within the IALA Maritime Buoyage System
	O-104	Off Station Signals for Major Floating Aids
Range and Performance	R0202(E-200-2)	Marine Signal Lights - Calculation, Definition and Notation of Luminous Range
	E-200-3	Marine Signal Lights – Terms of Measurement
	R0204(E-200-4)	Marine Signal Lights – Determination and Calculation of Effective Intensity
Environment, Sustainability & Legacy		



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

Scope	Number	Title
Visual Aids to Navigation		
Range and Performance	E-109	The Calculation of the Range of a Sound Signal
	A-126	The use of the Automatic Identification System (AIS) in Marine Aids to Navigation Service
	E-107	Moorings for Floating Aids to Navigation
	R1005	Conserving the Built Heritage of Lighthouses and other Aids to Navigation
Design, Implementation & Maintenance		
Floating Aids to navigation		
Environment, Sustainability & Legacy	R1004	Environmental Management in the Provision of Marine Aids to Navigation

6. SUPPLEMENTARY ELEMENTS

There are no supplementary elements to this Standard.

7. APPROVAL AND AMENDMENT OF STANDARDS

IALA Standards may be adopted or amended at a General Assembly.

8. DOCUMENT HISTORY

Date	Details	Approval
2018-05-29	First issue	General Assembly Resolution, Incheon, Republic of Korea, May 2018.