# **Creating an overview guideline or recommandation on floating AtoN**

# Buoy related information is available in many IALA guidelines and other IALA documents.

# Create a guideline or recommandation “floating marine aids to navigation” with an overview of related guidelines and further documents relating to floating AtoN and evaluate if they are adaptable to buoys.

# **Definition of floating marine aids to navigation (Light vessels, Light floats, Buoys)**

* **Light vessels:** A vessel anchored at a designated geographical location as an aid to navigation, to mark a hazard or to serve as a landfall mark. It is equipped with a light of high luminous intensity and may carry a fog signal emitter, a racon, a radiobeacon or other aids to navigation as required by the particular station. It may or may not be self-propelled.

A light vessel serves also as a conspicuous navigation mark by day. For this reason the hull and the lantern support tower are usually coloured red. The name of the station is exhibited on either side of the vessel.

*Please note that this is the term as it stands in the original IALA Dictionary edition (1970-1989)*

* **Light floats:** A boat-like structure used instead of a light buoy in waters where strong streams or currents are experienced, or when a greater elevation than that of a light buoy is necessary.  
  Source: IHO Dictionary – S-32, provided by the IALA ARM Committee in paper ARM7-12.1.7 in 2017.  
  *This supercedes definition number 8-2-020 in the original IALA Dictionary edition (1970-1989).*
* **Buoys:** A floating, and moored, artificial navigation mark. It can be recognized by means of its shape, colour, pattern, topmark or light character, or a combination of these. It may carry various additional aids to navigation.  
  Note 1 :

The terms light buoy and lighted buoy refer to a buoy that is fitted with a signal light.  
Note 2 :

The term high focal plane (HFP) buoy may be used for a light buoy on which the signal light is fitted particularly high above the waterline.  
Note 3 :

The terms unlighted buoy and blind buoy refer to a buoy that is not fitted with a signal light.  
*Please note that this is the term as it stands in the original IALA Dictionary edition (1970-1989)*

# **Look for the existing IALA Guidelines and further documents**

**Buoy body**

* IALA NavGuide 2018
* E-107 Moorings for Floating Aids to Navigation
* R0106 (E-106) Retroreflecting Materials on Aids to Navigation Marks within the IALA MBS (Jun 2017)
* R0108 (E-108) Surface Colours Used as Visual Signals on Marine Aids to Navigation Ed.4 (Dec 2017)
* R1001 The IALA Maritime Buoyage System Ed.1 (Jun 2017)
* IALA Recommendation O-118 For The Recording Of Aids To Navigation Positions
* 1006 On Plastic Buoys
* 1066 Ed 1.1 The Design of Floating Aids to Navigation Moorings (Jun 2010)
* 1077 Ed. 1 Maintenance of Aids to Navigation (Dec 2009)
* 1091 Ed. 1 Bird Deterrents (Dec 2016)
* 1109 Ed. 1 Theft and Vandalism Deterrents (Dec 2013)
* G1140 Ed. 1 Commissioning of AtoN Equipment and Systems (Dec 2017)
* IALA Guideline No. 1099 on the Hydrostatic design of buoys
* 1015 Painting aids to navigation buoys 1015
* IALA GUIDELINE 1108 THE CHALLENGES OF PROVIDING AtoN SERVICES IN POLAR REGIONS
* GUIDELINE G1136 PROVIDING AtoN SERVICES IN EXTREMELY HOT AND HUMID CLIMATES
* GUIDELINE G1127 SYSTEMS AND SERVICES FOR HIGH ACCURACY POSITIONING AND RANGING
* WWA L2.6.1-2 AtoN Service Craft and Buoy Tenders
* WWA L2.1.8 Buoy Cleaning
* WWA L2.1.5-6 Buoy Handling and Safe Working Practices
* WWA L2.1.7 Buoy Moorings
* WWA L2.1.3-1.4 Introduction to AtoN Buoyage
* WWA L2.1.9 Introduction to Buoy Positions
* WWA L2.1.10 Maintenance of Plastic Buoys
* WWA L2.1.11 Maintenance of Steel Buoys
* WWA L2.1.12 Power Sources on Buoys 01 June 2016

**Buoy equipment**

* 1098 Application of AIS AtoN on Buoys
* IALA GUIDELINE 1010 RACON RANGE PERFORMANCE
* IALA GUIDELINE 1090 THE USE OF AUDIBLE SIGNALS GUIDELINE
* G1039 DESIGNING SOLAR POWER SYSTEMS FOR MARINE AIDS TO NAVIGATION (SOLAR SIZING TOOL)
* 1067-0 Selection of Power Systems for Aids to Navigation and Associated Equipment
* 1067-1 Total Electrical Loads of Aids to Navigation
* 1067-2 Power Sources
* 1067-3 Electrical Energy Storage for Aids to Navigation
* IALA GUIDELINE 1008 REMOTE CONTROL AND MONITORING OF AIDS TO NAVIGATION

# **Light**

* E-110 Rhythmic Characters of Lights on Aids to Navigation
* E-200-0 Marine Signal Lights Part 0 – Overview 200
* E-200-3 Marine Signal Lights Part 3 – Measurement 200
* E-200-5 Marine Signal Lights Part 5 – Estimation of the Performance of Optical Apparatus 200
* R0201 E200-1 Marine Signal Lights - Colours Ed.2 (Dec 2017)
* R0202 E200-2 Marine Signal Lights – Calculation Definition and Notation of Luminous Range Ed.2 (Dec 2017)
* R0204 E200-4 Marine Signal Lights – Determination and Calculation of Effective Intensity Ed.2 (Dec 2017)
* 1048 Ed. 1 LED Technologies and their use in Signal Lights (Dec 2005)
* G1065 Ed. 3 AtoN Signal Light Beam Vertical Divergence (Dec 2017)
* G1073 Ed. 2 Conspicuity of AtoN Lights at Night (Dec 2017)
* G1134 Ed. 1 Surface Colours Used as Visual Signals on AtoN (Dec 2017)
* G1135 Ed. 1 Determination and Calculation of Effective Intensity (Dec 2017)
* IALA GUIDELINE 1064 INTEGRATED POWER SYSTEM LANTERNS (SOLAR LED LANTERNS)

**Availability**

* R0130 (O-130) Categorization and Availability Objectives for Short Range Aids to Navigation Ed.2 (Jun 2017)
* Availability and Reliability of Aids to Navigation 1035

**Software**

* IALA CALMAR Mooring Line Calculation Software
* AtoN light flash simulator

**Other**

* R1002 The Management for Marine Aids to Navigation Ed.1 (Jun 2017)