



**IALA RECOMMENDATION**

**(INFORMATIVE)**

RXXXX

Digitalization of Marine Aids to Navigation and Services for Vessels of Varying Levels of Autonomy

**Edition 1.0**

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**DOCUMENT HISTORY**

Revisions to this document are to be noted in the table prior to the issue of a revised document.

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| **Date** | **Details** | **Approval** |
| XXXX | 1st issue | Council XX |
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**THE COUNCIL**

# RECALLING

1. The function of IALA with respect to Safety of Navigation, the efficiency of maritime transport and the protection of the environment.
2. Article 8 of the Convention on the International Organization for Marine Aids to Navigation regarding the authority, duties and functions of the Council.

# RECOGNIZING

1. Recommendation *RXXXX Digitalization of Marine AtoN and Services for Vessels of Varying Levels of Autonomy* will support development of eNavigation services to include Human Interface, Machine to Machine interface, etc. and provide enhanced navigation services to conventional vessels as well as vessels with varying levels of automation.
2. IALA *Guideline(s)* *GXXXX Developments and Implications of Maritime Autonomous Surface Ships for coastal authorities and GXXXX VTS Interaction with a Mix of Conventional, Automated, and Autonomous Ships (under development)* are associated with this Recommendation.

**NOTING**

1. SOLAS regulations V/12 and V/13 recognize the establishment of vessel traffic services (VTS) and aids to navigation (AtoN), respectively.
2. The evolving technological developments associated with Digitalization of Marine AtoN including the expected adoption of:

* The non-mandatory IMO Code for MASS,
* The mandatory IMO Code for MASS,
* Implementation of IHO eNavigation Services (Phase 1), and
* Implementation of IHO eNavigation Services (Phase 2).

1. IALA document *The Future of Maritime Autonomous Surface Ships (MASS) - Future Scenarios Regarding the Development and Evolution of MASS, IALA, 2024*.
2. R1019 The Provision of Maritime Services in the Context of eNavigation in the Domain of IALA.

**ADOPTS** Recommendation *RXXXX on Digitalization of Marine AtoN and Services for Vessels of Varying Levels of Autonomy.*

**RECOMMENDS** that member States, competent authorities for AtoN authorities VTS, and VTS providers:

* Proactively review the requirements of digitization as it relates to digital navigation (e.g. S-100/200) and include different levels of automation.
* Review their AtoN and VTS service provisions to ensure that identified existing and future digital services can operate safely and efficiently, as the volume and nature of traffic justifies and the degree of risk requires.
* In addition to the digitalization of marine AtoN and services for vessels of varying levels of autonomy, IALA members are encouraged to actively collaborate with neighboring authorities and IALA to ensure regional and worldwide consistency of services as outlined in R1019.

**REQUESTS** the IALA Committees keep this Recommendation under review and to propose amendments, as necessary.