

IALA RECOMMENDATION (INFORMATIVE)

R1019 ON PROVISION OF MARITIME SERVICES IN THE CONTEXT OF E-NAVIGATION IN THE DOMAIN OF IALA

Edition 2.0

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DOCUMENT REVISION

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

Date	Details	Approval
December 2019	First Edition	Council 70
September 2020	Editorial corrections	
June 2024	Edition 2.0 Update to reflect the work undertaken in the relevant IALA committees under this recommendation.	Council 80

THE COUNCIL

RECALLING:

- 1 The function of IALA with respect to the safety of navigation, efficiency of maritime transport and protection of the environment.
- 2 Article 8 of the IALA Constitution regarding the authority, duties and functions of the Council.
- 3 That IALA has been recognised as a domain coordinating body with respect to certain Maritime Services, as identified in *IMO Resolution MSC.467(101) on Guidance on the definition and harmonisation of the format and structure of Maritime Services in the context of e-navigation*.
- 4 That IALA and other domain coordinating bodies (e.g. IHO, IMPA, WMO) are developing Maritime Services in the context of e-navigation.

RECOGNIZING:

- 1 Digitalization in the maritime domain is advancing rapidly. The shipping industry is experiencing increasing levels of digitization and automation on board and ashore, the growing electronic exchange of digital information and the advent of digital maritime services.
- 2 These trends will lead to:
 - a The need for increased and improved connectivity.
 - b Increased safety and efficiency of shipping and enhanced environmental protection.
- 3 Whilst improved connectivity offers many benefits and cost savings, existing systems present some challenges. These challenges include:
 - a Lack of harmonization and interoperability.
 - b Lack of capacity to accommodate growing and complex data needs.
 - c Limited capability to use Internet Protocol (IP) based data exchange.
 - d Lack of security in data exchange.

NOTING:

That there is now a compelling need to ensure:

- 1 The harmonization of services and data models, in order to enable interoperability between systems.
- 2 A modern, fit-for-purpose communication infrastructure for the exchange of digital information.
- 3 Resilience and security, identity and authentication by design of systems, networks and services.
- 4 Cybersecurity (e.g. availability, integrity and confidentiality) of systems, networks and services.

CONSIDERING the proposals of the IALA Digital Technologies Committee,

ADOPTS this revised IALA Recommendation,

RECOMMENDS the following:

- 1 Contribute to the development, specification, testing and demonstration of Maritime Services in the context of e-navigation, to define international standards.
- 2 Provide Maritime Services in digital formats, using international standards.
- 3 Ensure that a communications infrastructure to provide such digital maritime services is available in their area of responsibility.
- 4 Ensure worldwide harmonization and interoperability, by taking into account international standards and guidance for:
 - a Digital maritime services.
 - b The communications infrastructure.
 - c System design and cybersecurity (e.g., availability, integrity and confidentiality).
 - d Harmonized Product Specifications and interoperable Technical Services delivering these.
 - e Platforms for providing users with interoperable service discovery, identity authentication and messaging services.
- 5 Ensure that their services are harmonized with other technical services that are the responsibility of other domain coordinating bodies.

REQUESTS the Digital Technologies Committee, or other Committees as the Council may direct, to keep this Recommendation under review and to propose amendments, as necessary.