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| IALA Recommendation  (informative) |

R1019

PROVISION OF MARITIME SERVICES IN THE

CONTEXT OF E-NAVIGATION IN THE DOMAIN

OF IALA

Edition 1.2

Date (of approval by Council)

urn:mrn:iala:pub:r1019:ed1.2

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 |
| December 2019 | First Edition | Council 70 |
| September 2020 | Editorial corrections |  |
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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. Digitalisation in the maritime domain is advancing rapidly. The shipping industry is experiencing increasing levels of digitisation 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:
   1. The need for increased and improved connectivity.
   2. 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:
   1. Lack of harmonisation and interoperability.
   2. Lack of capacity to accommodate growing and complex data needs.
   3. Limited capability to use Internet Protocol (IP) based data exchange.
   4. Lack of security in data exchange.

**NOTING** that

There is now a compelling need to ensure:

1. The harmonisation 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,

**RECOMMENDS** that IALA members:

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 harmonisation and interoperability, by taking into account international standards and guidance for:
   1. Digital maritime services.
   2. The communications infrastructure.
   3. System design and cybersecurity (e.g., availability, integrity and confidentiality).
   4. Harmonised data product specifications and interoperable technical services delivering these.
   5. Platforms for providing users with interoperable service discovery, identity authentication, and messaging services.
5. Ensure that their services are harmonised 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.