Liaison Note to IHO

IALA Guideline on IP (Web Service) based S-100 data exchange

1   Introduction

With the introduction of Section 14 in the S-100 standard, an alternative mechanism for efficient, fine-grained S-100 data exchange is available. This draft IALA Guideline provides guidance on the application of reliable and efficient IP (Web Service) based communication for the exchange of S-100 data.

The S-100 online data exchange model allows frequent transmission of data, enabling continuous information exchange between e-Navigation applications and efficient usage of available (limited / expensive) bandwidth. This is an important building block for technical services for the implementation of maritime services in the context of e-Navigation.

It also facilitates the realization of service-oriented architectures (SOA) using S-100.

This draft IALA Guideline introduces the relevant technologies and explains the transmission of S-100 data with web services. In the Appendix, an example of the implementation of such a web service for the provision of Maritime Safety Information using S-124, is shown. This includes the specification of this web service according to IALA Guideline G1128 (Specification of E-Navigation Technical Services).

This draft IALA Guideline is intended for service providers, system architects and developers, who are designing S-100 based technical services implementing Maritime Services in context of e-Navigation.

2   Action requested

The IHO S-100 Working Group is requested to:

1. Note the attached draft IALA Guideline and provide feedback to IALA ENAV Committee (before ENAV25, which commences on the 16 March 2020).

2. Consider integrating the feature 'Streamable_Exchangeset' into the S-100 standard. This will support secure data exchange for online services.

3. Forward this Liaison Note to the S-124 CG for any action they may wish to take.

10, rue des Gaudines - 78100 Saint Germain en Laye, France
Tél. +33 (0)1 34 51 70 01- Fax +33 (0)1 34 51 82 05 - contact@iala-aism.org
www.iala-aism.org

International Association of Marine Aids to Navigation and Lighthouse Authorities
Association Internationale de Signalisation Maritime

1