

**8<sup>th</sup> MEETING OF THE HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE****IHB, Monaco (14-18 November 2016)****Paper for Consideration by HSSC****IALA Activities affecting HSSC**

<b>Submitted by:</b>	IALA ENAV Committee – WG1 (Harmonization) Chair
<b>Executive Summary:</b>	this paper reports on matters from the IALA ENAV committee that relate to the work HSSC. In particular, a request is made that S-100 is developed to support data services.
<b>Related Documents:</b>	HSSC6-5.4B List of Lights New Numbering System. S-100 IHO Universal Hydrographic Data Model. S-99 Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry.
<b>Related Projects:</b>	

**Introduction / Background**

IALA is the International Association of Marine Aids to Navigation and Lighthouse Authorities.

IALA is an international technical association with 77 National Members, 111 Industry Members and 49 Associate Members.

IALA encourages its members to work together in a common effort to harmonize aids to navigation worldwide and to ensure that the movements of vessels are safe, expeditious and cost effective while protecting the environment.

The IALA ENAV committee is responsible for a range of activities relating to the implementation of e-navigation. Of particular interest to IHO, the IALA ENAV committee is responsible for the management of the IALA domain of the IHO Geospatial Information (GI) Registry.

**Current ENAV activities relevant to HSSC**

The ENAV committee meets twice a year. Among its five working groups (WGs), WG1 (Harmonization) is of particular relevance to HSSC, as it is responsible for the harmonisation of e-navigation principles and the development of guidelines to support IALA membership in the development of product specifications (PS) within the IALA S-200 domain, see Terms of Reference of ENAV WG1 at Annex 1.

**ENAV19 Report**

Review/Agreement S-201

A drafting group was formed to progress work on S-201

The group reviewed comments received inter-sessionally on S-201 and agreed most of the proposed changes, which will be incorporated in version 0.0.4 to be posted on the IALA website after the meeting for further consideration. Some questions arose during the discussion, which can best be answered by members of the IALA ARM Committee. These questions will be formulated as a Liaison Note for consideration at ENAV 20.

Liaison Notes were drafted in response to the inputs from ARM on S-201 and Portrayal of Sector Lights.

Unique Identifiers for Maritime Resource/Procedure for MRN

The WG identified the input papers addressing specific aspects of managing identities are appropriate.

Nevertheless, broader understanding of maritime resource naming (MRN) is needed. The WG proposes a correspondence group (CG) under the lead of DMA (Thomas Christensen) to find harmonized approaches for MRN. Participants are welcomed.

Procedures for the Management of the IALA Domain under the IHO GI Registry

WG1 studied the comments from council and the report from the Lisbon Workshop on shore based maritime services from theory to practical use.

Amendments were made to documents to include the comments made by council. Some comments needed some further explanation:

- Regarding some comments about the focus of the guideline and broadening the scope of it: IALA is a domain owner and responsible for the registers in the registry within its domain. The guideline was intended to give guidance on domain manager responsibilities and explain the procedures for intended users of the registries within the IALA domain. These procedures were derived from IHO's S99.  
As a part of the domains management and procedure the domains manager will interact with IHO and other domain owners. Harmonisation on a broader scale than within the scope of the registry is within the realm of the IHO-IMO HGDM where IALA would take part in.
- Explanation of terminologies: It was the intention of the committee to keep the focus on the management procedure and keep the explanation of the IHO GI registry to a minimum. The different registers are extensively described in IHO S-100 standard. For the convenience of the IALA Members, Guideline 1106 was developed to give a more detailed description of the registers related to the foreseen development of PS.
- Regarding the comment related to the technical issues: The guideline 1106 was amended to reflect the intended audiences for the guidelines.

The updated IALA Guidelines are to be revised by IALA members to ENAV 20.

The Maritime Cloud

The submitters of the input paper introduced the concepts of the Maritime Cloud (MC) to the plenary. The input paper about the Maritime Cloud Conceptual Model is indicated as outdated but provided for reference. The WG1 appreciated the work done on the MC. The WG discusses which partitions of the MC has to be handled by IALA and discussed whether IALA should have coordinating role which implies addressing other bodies also. The WG proposed to set up a roadmap to identify which partitions of the MC are the appropriate to which international bodies such as IMO, IALA, IHO, ITU-T and W3C. The WG1 sees potential of the Service Registry (SR) to handle technical services in context of the MSPs. It suggests the sponsors of the provided documents to rework the document on the SR and to resubmit it as an input paper to ENAV20.

Request from IHO S100WG to explain IALA proposal about a new Appendix for Streaming within S-100

The IHO S100WG sought further clarification for the need and role of streamable data and has invited an IALA representative to attend the next IHO S100WG meeting to present and discuss the proposal. A WG1 representative (Andre Bolles) will attend the next S100WG meeting.

#### **Action Required of [HSSC] [Relevant HSSC WG]**

HSSC is invited to:

- a. note for information the S-200 work within IALA;
- b. note opportunity to attend the IALA workshop related to S-20X PS;
- c. note the need of IALA to develop S-100 to support data streaming;
- d. advise IALA on plans to make the recommended changes.

## **Annex 1 - Terms of Reference for the Harmonization Working Group (WG1)**

### **Introduction**

Harmonisation lies at the very core of the global development of e-Navigation. Without harmonized principles, concepts, data models, services and systems there will be no global implementation of e-Navigation. There will only be local solutions addressing local needs, and without any significant international interoperability.

### **Scope**

The development of:

- Internationally accepted and harmonized principles, concepts, and data models;
- Recommendations and guidelines for e-Navigation services and systems.

### **Topics and activities**

- Develop the technical content of e-Navigation services and MSPs;
- Support the IALA membership in the development of Product Specifications;
  - e.g. AtoN data information structure, exchange, presentation;
  - Data modelling;
  - Portrayal principles in relation to e-Navigation;
- Co-ordinate technical input to IMO, IHO, ISO, IEC and CIRM on e-Navigation;
- Management of IALA S200 domain ownership (IHO S-200, S-100 & S-99);
- Liaison with IHO on matters regarding S-100;
- Contribute to IMO/IHO Harmonisation Group on Data modelling (HGDM);
- Review and update IALA documents related to these topics.

### **Deliverables**

- Appropriate draft Standards, Recommendations, Guidelines and Product Specifications, etc., to fulfil the tasks assigned to the Working Group in the Committee Work Programme;
- Information and support to relevant subtasks requested from other Working Groups within the Committee for them to fulfil their tasks;
- Draft liaison notes etc. as appropriate.