PROPOSAL FOR A SEMINAR

MARITIME DIGITAL INFRASTRUCTURE AND TESTBEDS

VISION	The e-Navigation Strategy Implementation Plan (SIP) approved at IMO MSC 94 defines nine e-Navigation solutions, of which five prioritised solutions have been identified: S1: improved, harmonised and user friendly bridge design; S2: means for standardised and automated reporting; S3: improved reliability, resilience and integrity of bridge equipment and navigation information; S4: integration and presentation of available information in graphical displays received via communications equipment; and S9: improved communication of VTS Service Portfolio. Of the above five prioritised solutions, all but S1 will imply, directly or indirectly, the increased and, at many times, automated exchange of information between ship-ship, ship-shore, shore-ship, and shore-shore. For this, the SIP stresses the need for a defined data exchange framework and thus implyies the need to establish a maritime digital infrastructure. One of the solutions presented with regard to this is the Maritime Cloud facilitating system-wide information management as has been described at the IALA Conference 2014, in IMO NSCR 1/INF.21, and at IALA ENAV15 and ENAV16. IALA remains a key contributor to the shore side development of e-Navigation and has an ambitious 2014-2018 work programme in this regard. The ENAV Committee has been re-organised to address a coordinated development of a shore-based maritime digital infrastructure and related testbeds. It is proposed to discuss and debate issues such as maritime infrastructure frameworks (e.g., Maritime Cloud), facilitating system wide information management concepts, and related testbeds.
PROPOSAL	To conduct a seminar bringing together IALA Members and experts in digital infrastructures and testbeds in related domains. The seminar will involve the following distinct topics: ***Digital Infrastructures for e-Navigation*** • *Concept and definition of digital infrastructure for e-Navigation;* • *Full scope of the interaction between ship and shore side under e-Navigation, based on user requirements;* • *Key elements of the infrastructures;* • *Harmonisation and integration of the new infrastructures with existing infrastructures;* • *Related testbeds.* ***Identities & Security*** • *Current developments in maritime and voyage identifiers;* • *Internationally accepted unique identifiers;* • *Security models for data and information;* • *Security models of digital infrastructures in relation to identity mechanisms.* ***Description, Registration and Management of Services*** • *Developments of service description and registration mechanisms;* • *Techniques and mechanisms for management of services including evaluation and qualification.*

	Governance • *Roles and models for digital infrastructure in the maritime domain;* • *Other industry examples of service interaction and information sharing.*
PURPOSE(S)	The purpose of the seminar is to: • Exchange views on developments on digital infrastructure and data and information sharing; • Facilitate discussion amongst a wide range of professionals within the maritime domain as well as from other sectors; • Provide IALA with proposals, concepts and examples for further discussion to formulate guidance on the development and deployment of a maritime digital infrastructure.
GOAL(S)	To discuss the development and deployment of maritime digital infrastructures and related testbeds, with the aim of forming a basis for a future introduction of e-Navigation services and solutions. An associated goal is to identify steps to establish a framework for a maritime digital infrastructure and the sharing of data and information.
WHO	The seminar will provide a forum for discussion between stakeholder groups. It is envisaged that invitations will be sent to: • IALA National and Associate Members • IALA Industrial Members • IMO • IHO • ITU • IALA sister organizations • CIRM and its members
SIZE OF GROUP	It is expected that the seminar will attract 50-60 persons.
WHERE	Swedish Maritime Administration (SMA) and Viktoria Swedish ICT, Gothenburg, Sweden. Participants will benefit from demonstration facilities at Chalmers University of Technology and SMA
DURATION	3.5-4 days
WHEN	To be agreed with IALA Secretariat. Suggested dates: Monday 30th November – Thursday 3rd December, 2015
COST TO PARTICIPANTS	To be determined
PROCESS	Day 1 – Introduction, Key note speech, presentations on Maritime Digital Infrastructures. Day 2-3 – Presentations on Technologies / Discussion / break-out groups. Day 4 – Results of break-out groups presented / Presentation of Conclusions and Recommendations.

STEERING COMMITTEE	Proposed Steering Committee for the Seminar: Omar Frits Eriksson, Chair of ENAV Committee Mikael Lind, Swedish Maritime Administration and Viktoria, Swedish ICT Jin H. Park, Korea Research Institute of Ships and Ocean Engineering Jens Christian Jensen, Danish Maritime Administration Michael Bergmann, CIRM Anders Brodje, Swedish Maritime Administration Edward Hosken (as the chair IALA ENAV Committee WG1) IALA ENAV Committee Secretary (Secretary)