Liaison Note to the IHO

Development of Recommendations and Guidelines

on e-Navigation Portrayal

# Introduction

IALA is developing *Recommendations and Guidelines on the Portrayal of e-Navigation Information*. A brief explanation is provided regarding the purpose and scope of these publications.

# Discussion

The IALA e-NAV Committee is working to develop Recommendations and Guidelines related to the ‘harmonized’ presentation/display of e-Navigation information. Rather than developing prescriptive rules, the focus is to develop ‘goal-based’ standards whereby over-arching objectives are defined, but freedom to innovate is left to developers and users. A guiding principle is that equipment, systems or services provide information content to all users in a uniform and consistent manner. How that information is displayed or presented will depend on the particular task, situation and needs of the user.

Some examples of the portrayal of e-Navigation related information include:

* navigation intentions related to collision or grounding avoidance;
* decision-support for passage planning (e.g., dynamic under-keel clearance);
* dynamic area notices;
* relevant environmental information (such as, tides, current flow, ice coverage, wind);
* new types of displays (e.g. heads-up and 3-D displays).

However, until it has been decided what will be the full scope of the proposed Common Maritime Data Structure (CMDS), it would be premature to develop specific ways in which these types of data should be portrayed as ‘information.’ This includes both existing as well as new types of e-Navigation related information (e.g., AIS Application Specific Messages, AIS AtoN, and virtual AtoN).

e-Navigation is defined as: ‘*the harmonized collection, integration, exchange,* ***presentation****, and analysis of maritime information aboard and ashore*…,’ While IALA has competence on shore-side aspects of e-Navigation, it is expected that other organizations will deal with other aspects of e-Navigation portrayal.

IMO has identified that ECDIS is a core component of e-Navigation. However, during the phased-in implementation of mandatory ECDIS carriage on board certain classes of vessels that will occur during 2012-2018, it is unlikely that most existing type-approved ECDIS equipment will be able to display new types of e-Navigation related information. While ECDIS standards were meant to be minimum Performance Standards, strict and prescriptive display and symbology standards currently inhibit the display of supplemental information. In the future, it may be necessary to reconsider the chart-related information content for the Standard and Base Display that is currently specified in the IMO ECDIS Performance Standards, as well as the IHO S-52 Colours and Symbols Specifications. Ideally, consideration may be given regarding the portrayal of e-Navigation-related information in the future IHO S-101 standard for ENCs.

IALA is considering the need for IALA Recommendations and Guidelines on the Portrayal of e-Navigation Information to be issued in 2013.