

IALA COUNCIL 65th session



12-15 December 2017
IALA Headquarters

11 – TECHNICAL ACTIVITIES

11.5 – e-Navigation Underway

Note by the Secretariat

1. BACKGROUND

The first e-Navigation Underway Asia-Pacific (ENUW AP) conference was held from 18th to 20th June 2017 on Jeju Island, Republic of Korea and the fourth e-Navigation Underway North America (ENUW NA) conference was held from 16th to 18th October 2017 in St. Johns, Newfoundland.

ENUW AP had the theme implementing e-Navigation in the Asia-Pacific region and the ENUNW NA was a joint conference with the Marine Institute, St. Johns, on Enhancing Technology and Innovation for Polar Navigation.

2. E-NAVIGATION UNDERWAY ASIA-PACIFIC

Organized by the Republic of Korea's Ministry of Oceans and Fisheries and supported by IALA and the Danish Maritime Authority, the e-Navigation Underway Asia-Pacific Conference focused on the harmonized implementation of e-Navigation in the Asia-Pacific region. It highlighted, in particular, technologies to provide e-navigation services for non-SOLAS ships, the implementation of Maritime Service Portfolios (MSPs) and supporting infrastructure, regional coordination and collaboration, and cooperation with IALA to develop training programmes.

3. E-NAVIGATION UNDERWAY NORTH AMERICA

The Marine Institute hosted a joint conference which combined e-Navigation Underway (North America) 2017 with Ocean Innovation 2017.

Under the all-encompassing theme "Enhancing Technology and Innovation for Polar Navigation" the conference examined e-Navigation as it relates to:

- Infrastructure
- Ice Navigation and Passage Planning (User Needs and Local Knowledge)
- Incident Response (Including Antarctic)
- Sea Traffic Management (Arctic Corridors)
- Governmental Programs and Plans (Polar Code)

4. SUPPORTING DOCUMENTS

The presentations, conclusions and programmes from the conferences are provided on the IALA web site at <http://www.iala-aism.org/products-projects/e-navigation/e-nav-underway/>

5. HIGHLIGHTS

The ENUNW AP generated five highlights:

- 1 It is desirable to strengthen global e-navigation test-bed initiatives to facilitate implementing the IMO Strategy Implementation Plan (SIP). This work should be based on harmonized standards, a common communication framework and human centred design to ensure interoperability and usability.



- 2 Web based solutions such as ArcticWeb, BalticWeb and a future Asia-PacificWeb could be a means of accessing e-navigation services at an early stage.
- 3 MSPs should be scalable to include non-SOLAS ships. This might include developing connectivity between Non-SOLAS and SOLAS ships, customised e-navigation services and on-board e-navigation capable platforms for non-SOLAS ships.
- 4 It is important for all relevant stake-holders to contribute to the activities of the IMO-IHO Harmonization Group on Data Modelling (HGDM), which will work on the development of guidance on definition and harmonisation of the format and structure of e-navigation Maritime Service Portfolios (MSP).
- 5 It is essential to develop an e-navigation technical cooperation program for developing countries which includes training and capacity building.

The ENUW NA generated eight highlights:

- 1 Safety of shipping can be improved by using real-time ship traffic analysis.
- 2 Encourage International Collaboration to develop world-wide Standards.
- 3 Improve digital wireless communications infrastructure in polar regions
- 4 ASM to convey Maximum Wave Height.
- 5 ECDIS Systems software should meet minimum software standards (IEC 62288 Ed 2).
- 6 Require display ASM Information on radar.
- 7 Traditional navigation methods will need to be taught to mariners even in the age of highly automated bridge systems particularly in polar region.
- 8 GNSS systems used in polar regions should be able to use all available GPS Satellite systems.

6. INVITATIONS TO OTHER EVENTS

Invitation were issued to the eight 2018 e-Navigation Underway International Conference to be held in Copenhagen/Oslo 24th to 26th January 2018 and to the second e-Navigation Underway – Asia-Pacific 2018 conference to be held in Seoul, Republic of Korea, from 4th to 5th June 2017 back to back with the IALA Conference.

7. THE COUNCIL IS REQUESTED TO

Note the outcome of the conferences and to consider the highlights in relation to the work of IALA.