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## **e-Navigation Underway Conference, NA**

### **1. BACKGROUND**

The e-Navigation Underway initiative complements the e-Navigation work carried out by the International Maritime Organization (IMO), supported by a wide range of concerned stakeholders and with the IMO acting as the leading coordinator to ensure a global approach to e-Navigation developments.

The e-Navigation Conference series is coordinated by IALA, in close cooperation with the Danish Maritime Authority, The Ministry of Oceans and Fisheries and international organizations, in particular, the IHO, CIRM, BIMCO and the NI.

These conferences are concerned with gathering stakeholder opinions and facilitating the exchange of views and experiences, with a particular focus on user needs and on supporting the human element, which is also a central concern of the IMO. Each conference produces a set of highlights for the guidance of stakeholders and to further progress e-Navigation in IALA and elsewhere.

### **2. 2. E-NAVIGATION UNDERWAY NORTH AMERICA**

Since the North America e-Navigation Underway Conference was first established in 2014 it has developed into an important annual event in the e-Navigation Underway Conference series.

This year's Conference was hosted by the Radio Technical Commission for Maritime Services (RTCM) 12-13 November in Tampa, Florida. The theme of the Conference was: Enabling e-Navigation today and tomorrow, Building the Infrastructure and Reaping the Benefits.

The Secretary-General participated on behalf of IALA and gave a presentation on the importance of implementing harmonized, global e-Navigation standards by using the IMO and IALA guidance documents.

The successful Conference was attended by 57 participants from around the world and generated the following highlights:



## **Conclusions**

1. Connectivity and Data sharing will be key elements of any e-Navigation solution moving forward
2. Standardization and harmonization of e-Navigation aspects, including ship reporting elements is paramount
3. Ship owners/operators will likely invest in on board ship reporting apps if they address reporting requirements in most ports
4. Adding recognition of Iridium and BeiDou as GMDSS service provider will expand the communication capabilities
5. Cyber Security is a growing concern. MSC-FAL.1/Circ.3 and MSC.428(98) are addressing cyber risks and risk management
6. Maritime Services (MS) are under development. Korea's SMART Navigation Project is developing several Maritime Services utilizing the Maritime Connectivity Platform
7. MCP Consortium formed to provide development of reference Maritime Service implementations to enable others to adopt the implementation and provide the service
8. Augmented and Mixed Reality can be used to improve maintenance but also support other Maritime Services including Maritime Service 9 – Telemedical Assistance Service
9. The USACE initiative RIS - River Information Services – will make navigation data more accessible to users in operational decision making

## **Recommendations**

1. Automated ship reporting systems should allow countries to continue to receive PDF forms created out of the ship reporting database
2. Consider using the future standard for Route Plan Exchange (S-421, IEC 63173) as a basis and integrate other data elements as extensions to this standard
3. Cyber Security needs to be considered, including a framework for secure identity management (as provided by the MCP)
4. Existing data standards need to be enhanced. The IMO Common Maritime Data Structure (CMDS), i.e. S-100 standards, are to be used to ensure compatibility between different data sets
5. Any activities need to ensure they consider improving standardization for the maritime domain
6. MS expansions should be worked on to ensure harmonization of services in the maritime domain
7. Continue development of autonomous maritime radio devices and identities
8. Continue to monitor and support work by Public Authorities to establish compatible systems for the electronic exchange of information
9. Monitor the deployment and testing of new satellite systems coming online such as OneWeb

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

### **3. THE NEXT ENUW NA CONFERENCE**

The next e-Navigation Underway North America will most probably also be hosted by RTCM together with National Marine Electronics Association (NMEA) in September 2020 in Orlando, USA.



**4. THE PANEL IS REQUESTED TO**

NOTE the information provided.