



# Digital@Sea

## concept and scope

Minsu JEON  
Technical Operations Manager



# e-Navigation underway

## Conferences



## Organized by





# Beginning

## DAY 1 SETTING THE SCENE CHAIRMAN: MR OMAR FRITS ERIKSSON

11:00	Check-in	
12:00	Lunch	
13:00	Opening of the conference	Mr Omar Frits Eriksson, IALA / Danish Maritime Safety Administration, Chairman of the Conference
13:30	Key note speech	Mr Gary Prosser, IALA, Secretary General
14:00	The IHO's role in e-Navigation	Mr Robert Ward, IHO, Director
14:30	The work of the IALA e-Navigation Committee	Mr Nick Ward, IALA e-Navigation Committee, Vice Chair
15:00	Users' involvement in test beds	Mr David Patrakeo, Nautical Institute, Director of Projects
15:30	Coffee break	
16:00	The importance of testing applications	Mr John Murray, International Chamber of Shipping, Director Marine
16:30	Value of test beds for the implementation of e-Navigation	Mr John Erik Hagen, IMO e-Navigation correspondence group, Chairman
17:00	Commonalities between e-Navigation and e-Maritime	Mr Christos Pipitsoulis, European Commission - DG MOVE, Maritime transport policy, Ports & Inland waterways, Project Officer
17:30	From test bed to implementation	Mr Michael Rambaut, The International Association for Marine Electronics Companies (CIRM), Secretary General
18:00	Photo shoot	AI

## DAY 2 REPORTS FROM TEST BEDS CHAIRMAN MORNING SESSION: MR JON LEON ERVIK CHAIRMAN AFTERNOON SESSION: MR ROLF ZETTERBERG

09:00	UKC management in Torres Strait	Mr Nick Lemon, Australian Maritime Safety Authority
09:30	Admiralty e-Navigator, UKHO take on e-Navigation?	Mr Thomas Mellor, United Kingdom Hydrographic Office
10:00	Portable Pilot Unit – a trendsetter for e-Navigation and an essential part of Vessel Traffic Management in ports?	Mr Maarten Botlam, Dutch Pilot Association
10:30	Coffee break	
11:00	The Baltic Sea e-Navigation test bed in the EfficienSea project	Mr Thomas Christensen, Danish Maritime Safety Administration
11:30	Making the phantom real: a case of applied maritime human factors	Mr Erik Styliir Petersen, SAM Electronics, Lyngsø Marine
12:00	What can shore-side authorities bring to e-Navigation?	Mr Nick Ward, General Lighthouse Authorities of the UK & Ireland
12:30	High Speed Maritime Mesh Network System for e-Navigation	Mr Panajj Sharma, Institute of Infocomm Research, Singapore
13:00	Lunch	
14:00	e-Navigation test beds in the United States - interagency cooperation in alignment with international efforts	Mr Brian Tetreault, Coastal and Hydraulics Laboratory, US Army Corps of Engineers
14:30	AIS+, facilitating on-board use of AIS Application Specific Messages	Mr Markus Porthin, Baltic Sea Action Group/VTT Technical Research Centre of Finland
15:00	Testing of AIS Application Specific Messages to Improve U.S. Coast Guard VTS Operations	Mr William Burns, U.S. Coast Guard Headquarters
15:30	Coffee break	
16:00	Satellite based AIS	Mr Robert Tremlett, exactEarth
16:30	New opportunities with AIS information from satellite	Mr Jon Leon Ervik, Norwegian Coastal Administration
17:00	Visits to the bridge of the ferry, in groups	

## DAY 3 CONCLUSIONS AND DIRECTIONS CHAIRMAN: MR OMAR FRITS ERIKSSON

09:00	Conclusions of day 1 and 2 of the conference	Mr Omar Frits Eriksson, IALA / Danish Maritime Safety Administration
09:30	Discussion in plenum	Panel: Mr Omar Frits Eriksson (chair), Mr Gary Prosser, Mr Robert Ward, Mr Christos Pipitsoulis and Mr John Erik Hagen
10:30	Coffee break	
11:00	The way ahead	Mr Nick Ward, IALA e-Navigation committee
11:30	Integration of test bed outcomes in the e-Navigation implementation strategy	Mr John Erik Hagen, IMO e-Navigation Correspondence Group, Chairman
12:00	Closing remarks	Mr Gary Prosser, IALA, Secretary General
13:00	End of conference	

The conference is jointly organised by the EfficienSea project and IALA.



Lead Partner for the EfficienSea project



The conference is supported by

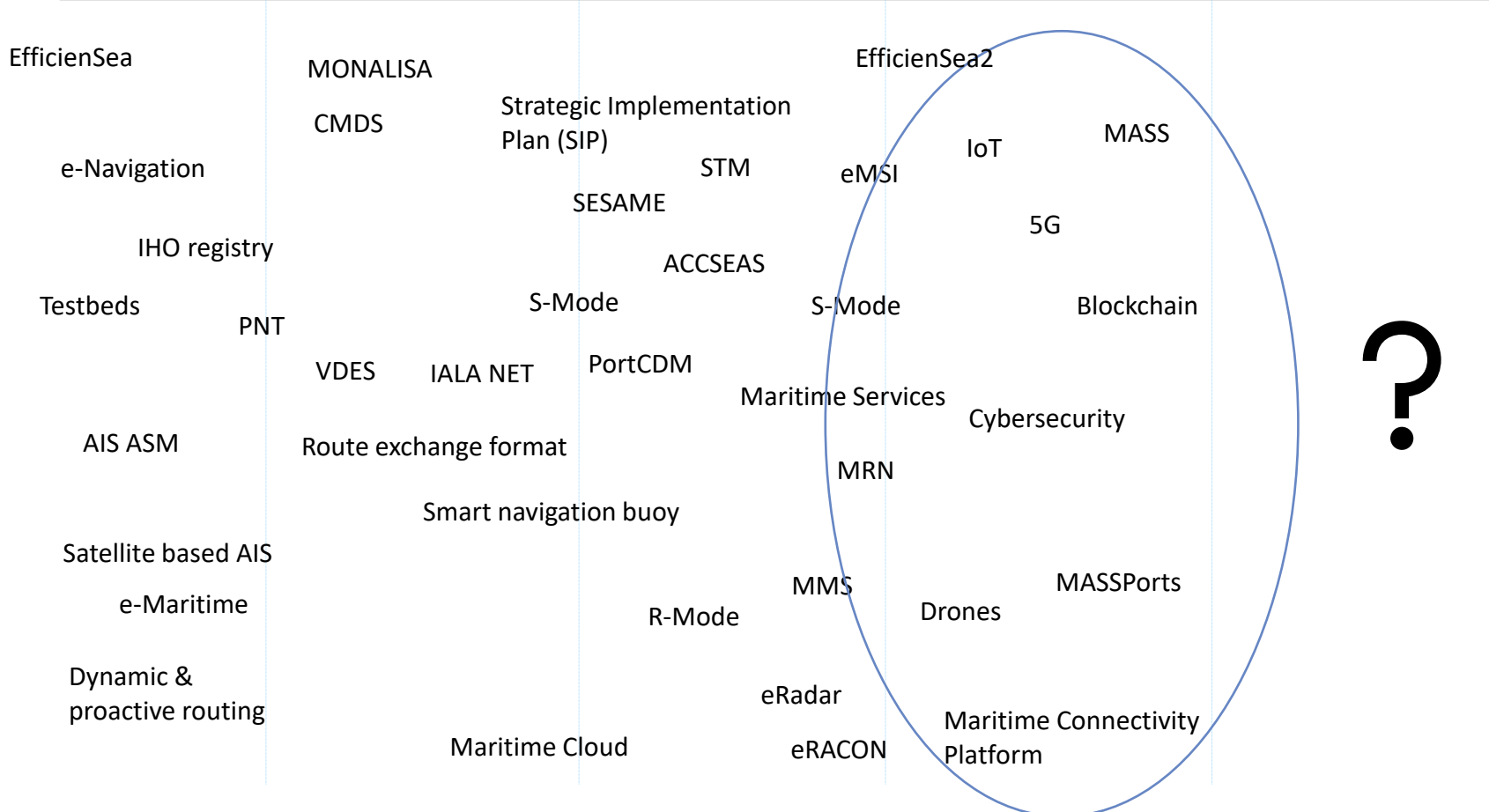






# Key words from 2011 to 2019

ENUW 2011 → ENUW 2020 Digital@Sea





# Conference conclusions and recommendations 2011-2019

- The e-Navigation implementation should be a process of **evolution** rather than revolution.
- Need for **standards and regulations**, existing standards and data structures should be used in testbeds.
- **User centered design** is important to ensure the success of e-Navigation both onboard and ashore
- A roadmap for the future implementation of further proposed solutions should be developed as part of the **Strategic Implementation Plan (SIP)**
- **Commercial benefits** to the whole supply chain were considered to be a major driver for the development of e-Navigation and quantified examples were given
- e-Navigation should **reduce the workload** of the mariner by automating routine tasks, allowing the mariner to focus on **situational awareness** and the **main task of navigating**.
- The risk of **cyber security** issues should be considered in the implementation of e-Navigation.
- Participants considered that the concept of the **Maritime Cloud (MCP)** could support e-navigation infrastructure and trials are underway.
- There is a need to identify **reliable business cases** for e-navigation addressing the interests of various maritime stakeholders.
- **Connectivity and Data sharing** will be key elements of any e-Navigation solution moving forward





# Digital@Sea



Digital@Sea Conference series

Digital@Sea Capacity Building Workshop

Digital@Sea Cluster

The series of Digital@Sea Conferences is composed of Digital@Sea International, Digital@Sea Asia-Pacific, and Digital@Sea America.





Digital@Sea







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