



Paving the path to a connected & digitalised future

Innovation, Standardization and Collaboration

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CIRM and EfficienSea2

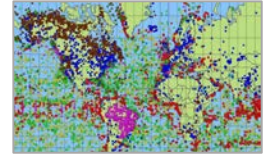


Comité International Radio-Maritime

- International non-profit association with 100 members
- Representing global marine electronics industry
- Involved in development of regulations and standards
- Members include manufacturers, service providers, software houses, system integrators, etc.

CIRM members in EfficenSea2

- Cobham SATCOM (Denmark)
- Collecte Localisation Satellites (France)
- Danelec Marine (Denmark)
- Furuno Finland Oy (Finland)
- Wärtsilä Lyngsø Marine (Denmark)
- Transas (UK)
- United Kingdom Hydrographic Office (UK)



CIRM's direct participation

- CIRM participated through the Secretariat

WP1

WP2

- CIRM on project Executive Board
- Other members have been informed of project developments



Project aims

- Improved connectivity
- Development of innovative solutions
- Maturing e-navigation



The future of the shipping industry: Connectivity and Digitalisation





Connectivity

- Today's ships connected in various ways
- Essential for ship operations
- Will continue to grow and evolve
- Connectivity critical to e-navigation and key enabler of maritime digital transformation

Digitalisation

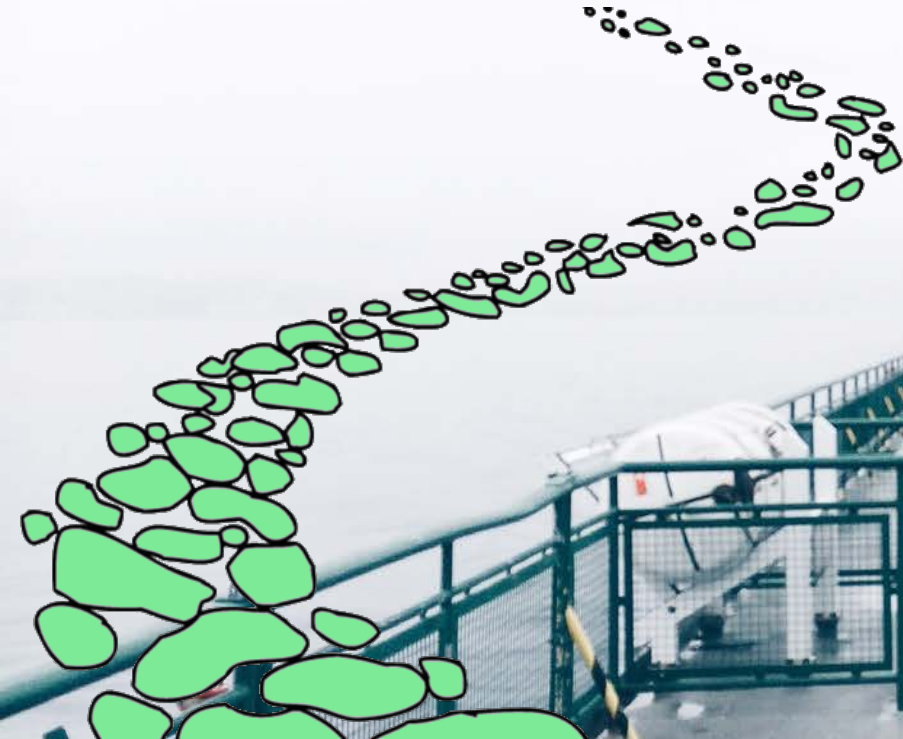
- Digitalisation = “digital transformation”

The profound transformation of an industry to be able to take advantage of digital technologies and data

- Digital transformation of shipping is underway
- Lies at the core of e-navigation
- Presents challenges alongside benefits



Paving the path to a connected & digitalised future



Key EfficienSea2 outputs

1 Innovation

2 Standardisation

3 Collaboration

1 Innovation

- Seamless roaming
- VDES
- Smart buoys
- MCP

2 Standardisation

- S-100 developments
- RTZ format
- IALA guideline on specification of e-Navigation technical services

3 Collaboration

- Project partners
- Web-based platforms
- Demonstration test-beds



Harmonization

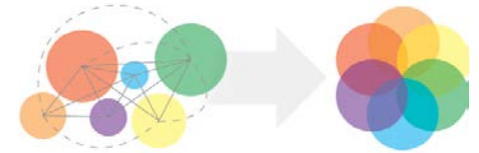
- E2 outputs support harmonisation
- Essential for enabling manufacturer innovation
- Harmonization key paving stone in path to a connected and digitalized future

1 Innovation

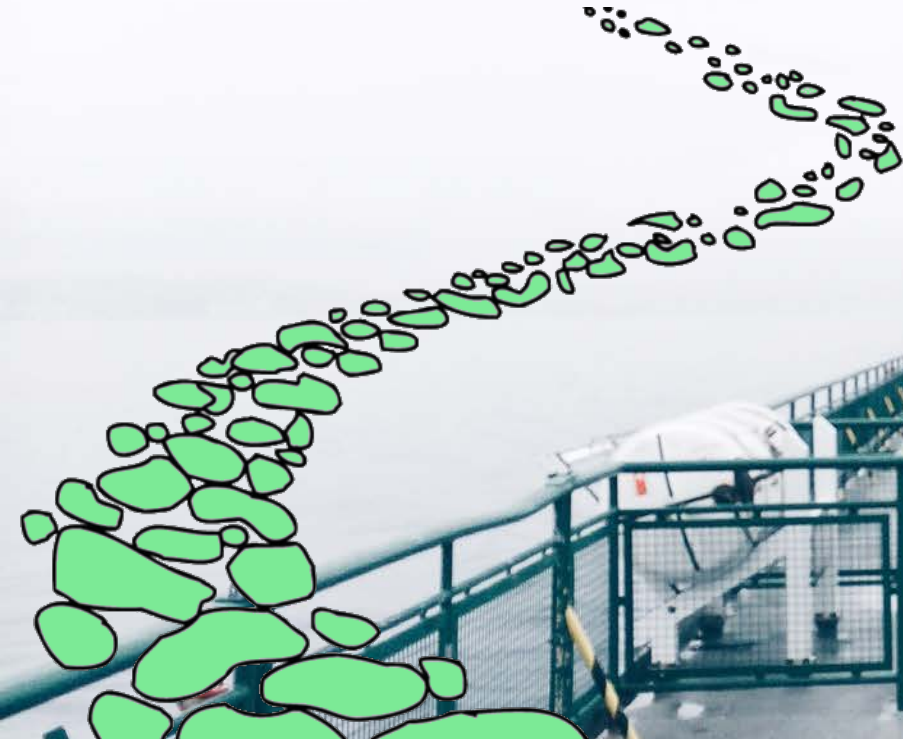
2 Standardisation

3 Collaboration

Harmonization



Where will the path lead?



Connectivity + Digitalisation = ...?





Moving forwards from EfficienSea2



Next steps for manufacturers (short term)

- SMART-Navigation Project & MCP
- Ongoing development of VDES
- Service delivery onboard
- Opportunities for automation



Summary

- Industry headed towards a connected, digitalized future
- Outputs of E2 pave the way forward; promote harmonization and innovation
- Manufacturers will be involved at every step, in collaboration with stakeholders
- The future is bright!



Thank you

