EFFICIENSEA 2.0 GETTING CONNECTED

Maritime safety and security in the Baltic Sea region – the future

Navigating the smart way

09-11-2017, PA Safe Steering Committee, Gdynia

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GETTING CONNECTED FOR EFFICIENT, SAFE AND SUSTAINABLE TRAFFIC AT SEA

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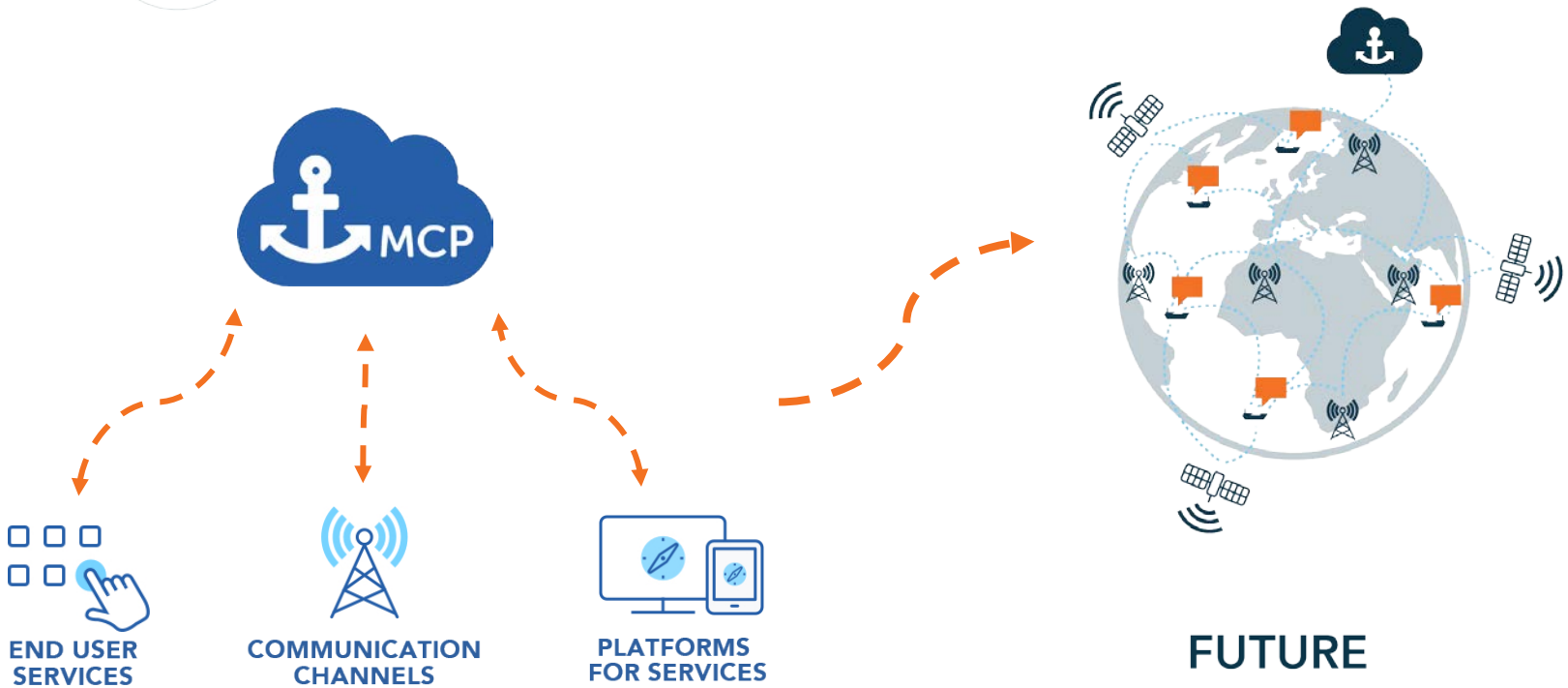

EfficienSea2: A part of *Horizon 2020*

- 3 year project
- Ends in five months
- €11,5 million
- 32 partners
- Covers the Baltic and the Arctic
- Flagship project

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Danish Maritime Authority

Danish Geodata Agency

dmi Danish Meteorological Institute

Liikenne ja Viestintävirasto Finnish Transport Agency

Instytut Łączności Państwowy Instytut Badawczy

Swedish Maritime Administration

CHALMERS

University of Copenhagen Department of Computer Science

The Transport Innovation Network

OFFIS

BIMCO

CIRM

IALA

Urząd Morski w Gdyni

FORCE TECHNOLOGY

CLS Collecte Localisation Satellites

danelec marine

FREQUENTIS

SSPA

LITEHAUZ Maritime Environmental Consultancy

WÄRTSILÄ

MARSEC

rocket brothers

VISSIM

United Kingdom Hydrographic Office

GateHouse

TRANSAS

FURUNO

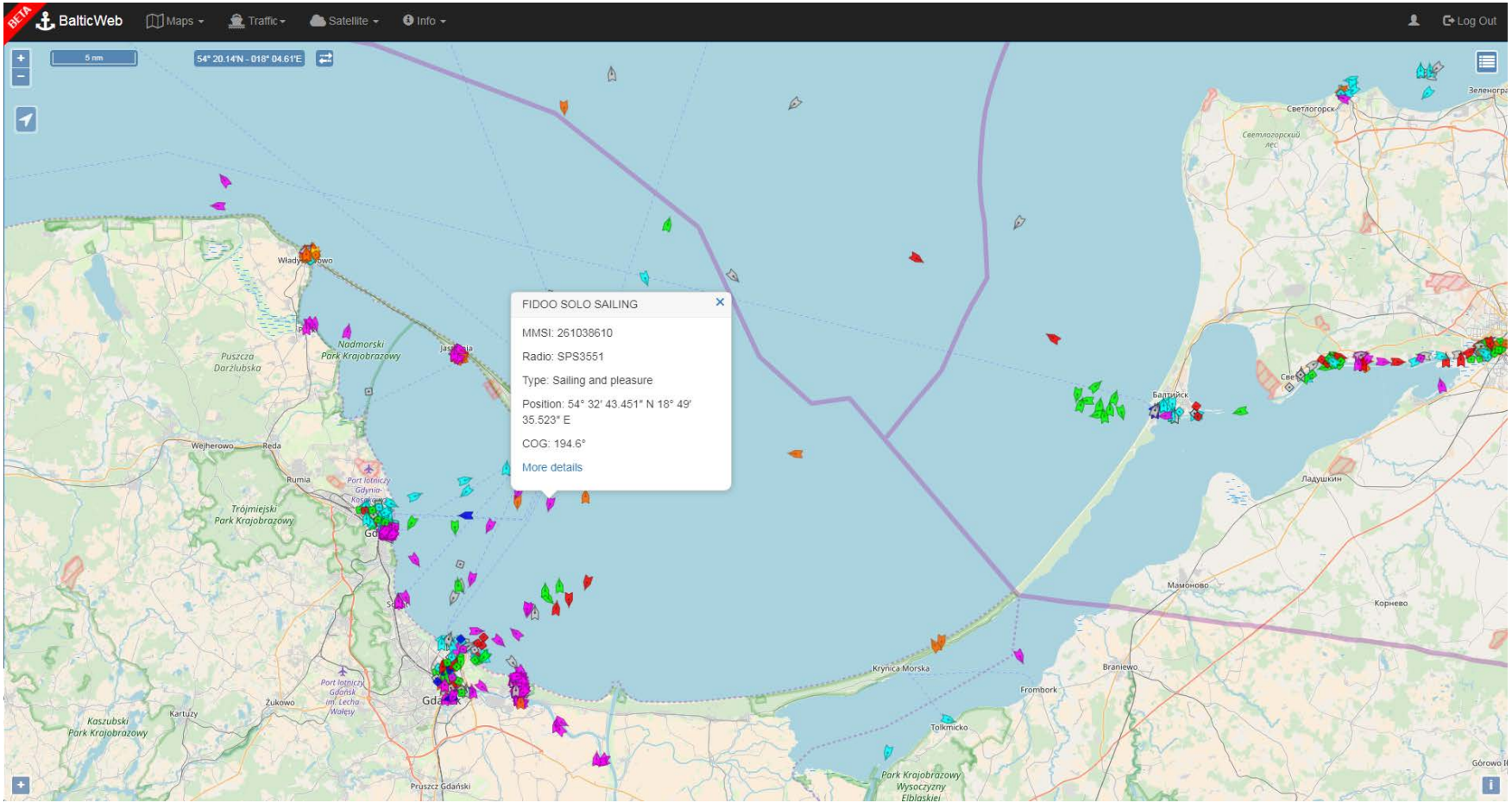
LJA

COBHAM

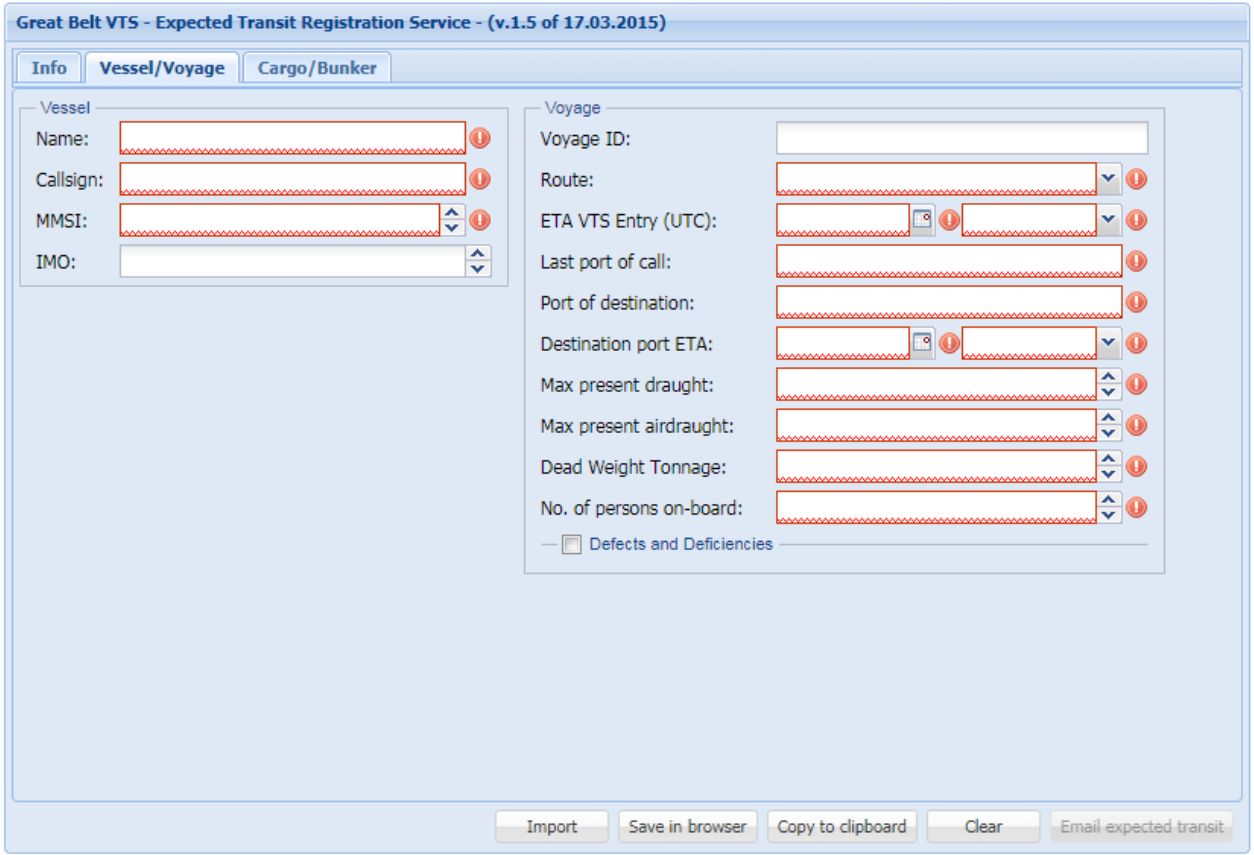
DTU Technical University of Denmark

EU Strategy for the Baltic Sea Region Flagship

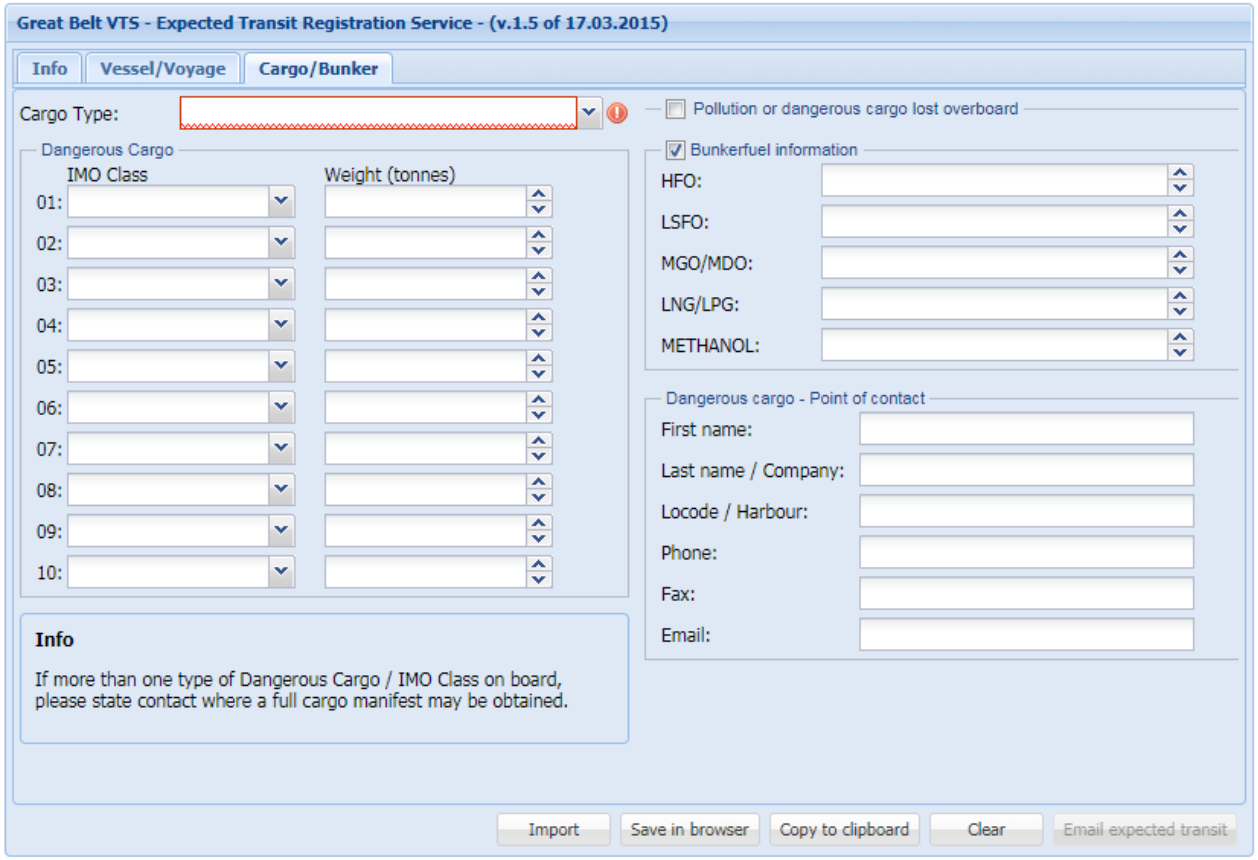
AIS Data in BalticWeb



VTS Reporting Now



VTS Reporting Now



Vessel Traffic Service - VTS report form for GOFREP-Tallinn

GOFREP-Tallinn

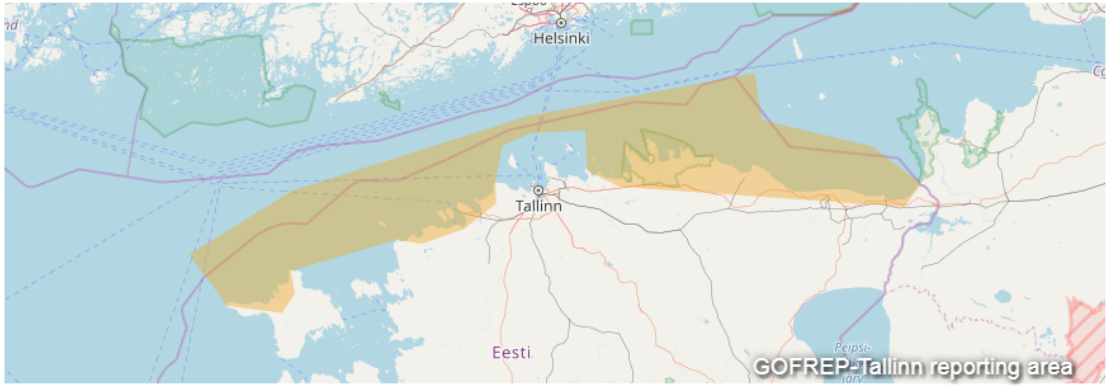
Estonia - GOFREP Tallinn - Gulf Of Finland Vessel Traffic Service View Master's Guide online

Call sign: "Tallinn Traffic" - VHF ch. 61

Reserve channels: *VHF 81*

Email: gofrep@vta.ee - Phone: +372 6 205 764 - Phone2: +372 6 205 777

Fax: +372 620 5766



Estimated Time of Arrival at GOFREP-Tallinn reporting area: Thu 13 Nov 2017 - 09 : 41 UTC

13 Nov 2017 | 09 : 41 | UTC

Vessel information

MMSI: 265177000

265177000

Vessel name:

Callsign:

IMO

Number of people on board

Present max. draught (m)

Defects, deficiencies or limitations?

Vessel Type:

Select a type:

Vessel length (m):

Total Fuel (MT)

(if over 5000 MT fuel)

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Cargo information - detailed cargo description

Select a cargo type:

Pollution or dangerous cargo lost overboard:

Please describe the pollutant and where it was lost. Any additional information may be of great value.

Voyage information

Vessel actual position longitude:

deg. min. E

Vessel actual position latitude:

deg. min. N

Use GPS

Vessel speed:

True course:

Login Cancel

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Cargo information - detailed cargo description

Chemicals

☑ Dangerous cargo on board

Please select an IMO dangerous goods classification:

Class 1	Class 2.1	Class 2.2	Class 2.3	Class 3	Class 4.1	Class 4.2	Class 4.3
1.6 N 1	FLAMMABLE GAS 2	NON-FLAMMABLE GAS 2	INHALATION HAZARD 2	3	4	4	4

Class 5.1	Class 5.2	Class 6.1	Class 6.2	Class 7	Class 8	Class 9
5.1	5.2	6		7	8	9

Poisonous gas

IMO class 2.3 Metric tonnes

Additional cargo information

+ Add to manifest

IMO classes of dangerous cargo on board:

Total tonnage of dangerous cargo on board:

Designated Person Ashore (DPA) or cargo agent:

Name:

Telephone:

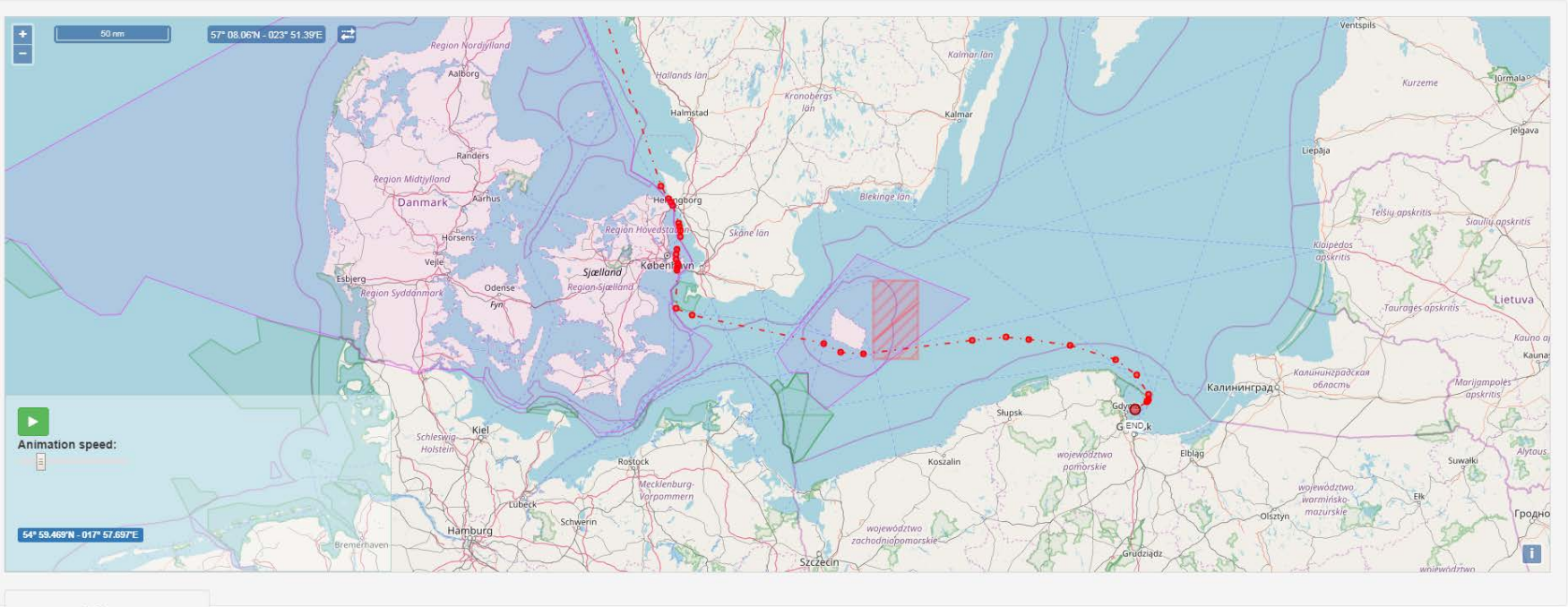
Email:

Additional contact details for information of cargo:

Pollution or dangerous cargo lost overboard:

Please describe the pollutant and where it was lost. Any additional information may be of great value.

Route Exchange and Optimization in BalticWeb



Waypoints: 33
Active Waypoint: #
Distance: 379.23 Nautical miles

Increasing efficiency and safety

- Co-creation and deployment of smart solutions →
  - increases efficiency and safety
  - improves environmental impact through improved connectivity for ships
- Making important and relevant information available in a safe, easy and efficient way →
  - reducing the time spent on retrieving and sorting information and reducing the risk of human errors.
- Establishing “operational” platforms and solutions, which can be used in the implementation of EU’s maritime policies.

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The route to success: Based on real-life and industry

- Inclusion of the human factor and the human element – real-life testing and verification of concepts
- Embedded within the industry – ship owners, service providers, manufacturers (also academia and authorities)
- Solutions, which can easily be implemented in real-life by the industry
- Open-source and global standards – collaboration with international safety regimes and other projects

Results: First generation of a real-life solution

- Online internationally standardised services on the BalticWeb platform, e.g.: Navigational Warnings, chart data, route optimisation – smart navigation
- Online single point port reporting and emission monitoring – reducing work load and making efficient emission monitoring
- MCP – Safe and verified data sharing. Providing a possible platform for e-Customs, e-Freight, e-Maritime, etc. with European roots and a global perspective
- VDES and roaming service – cost efficient and reliable data exchange at sea

- Reduction in emissions
- Safer navigation
- Secure data exchange
- Harmonisation/standardisation
- Reduction in workload on board and ashore
- First steps towards digitalisation

Adoption of four navigational services will decrease navigators' inattention and work overload by 5%, and ***prevent 50 fatalities and 44 navigational accidents*** *in a 10 years timespan*

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The future

- Ends in April 2018, but the voyage towards fully digitised e-navigation has just started.
- New systems have been developed, but they still need maturing to become operational. As of now, the solutions are mostly at a showcasing stage.
- The leap towards the digital ship requires a strong cooperation within the industry, and it will improve safety, efficiency, sustainability and economic growth, while it holds new possibilities for the established companies and for entrepreneurs in the industry.

Final steps

- Final conference in April
- As many demonstrations as possible
- Passing on the torch
- Videos

Stay connected

Learn more at

www.efficiensea2.org

Contact Ann Lemming:

alj@dma.dk

Join EfficienSea2 on LinkedIn