EUSBSR
EU STRATEGY
FOR THE BALTIC
SEA REGION

EUSBSR PA SAFE Operational Advisory Board

April 28, 12.30-15.30 CEST
Online - Zoom

Interreg
Baltic Sea Region

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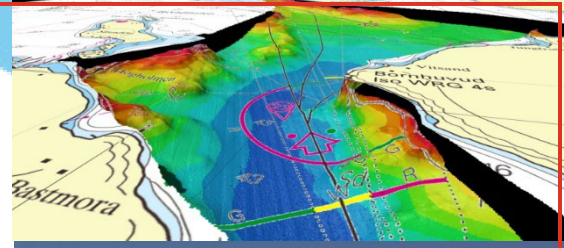
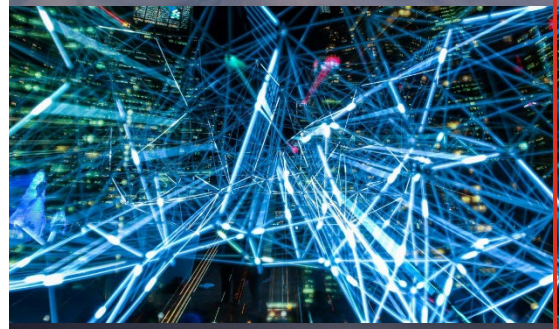
the European Union





PA MARITIME SAFETY - maritime safety and security

Action 1: Enable reliable and secure navigational conditions to the Baltic Sea.

Action 2: Develop navigation in ice to meet future challenges

Action 3: Enable efficient traffic management and implement maritime services.

Action 4: Ensure accurate preparedness and response for maritime accidents and security incidents.

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Agenda - Projects: results & ideas for the future

12.30 Tour de table – Short intro of everybody online

12.45 OPTIMISM – training of seafarers on new ISM code

13.00 NELSON – smart fairways and what to do with them

13.15 WINMOS IV – icebreaker new build and lifetime extensions

13.30 MARISEC – best practices for oil & chemical spills

13.40 DIGIMARIS – a digital service for oil spill response operators

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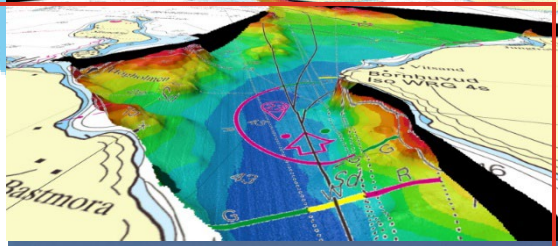

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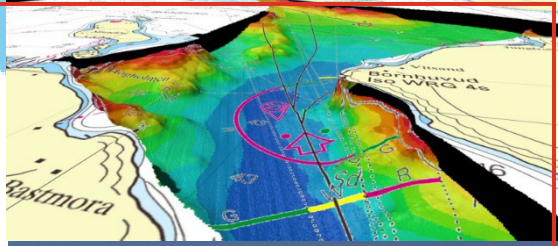

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Tour de table - Short intro of everybody online

- Name
- Role
- Organisation

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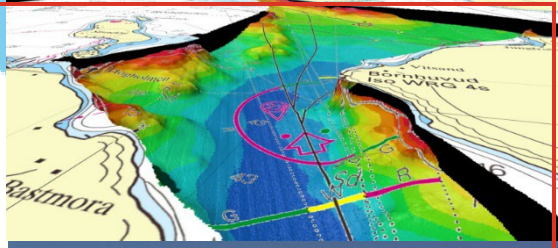

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OPTIMISM
SAFETY@SEA

Project facts

From compliance to competence –
When safety becomes behavior,
not just documentation.

Cooperation partnership
in higher education

Erasmus+ program funding
from the European Union

PARTNERS from Greece, Spain,
Sweden, Finland & Poland

idec

UPC UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH
Facultat de Nàutica de Barcelona

C4FF
Developing the Future

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the European Union

Crescat

MUS

Challenges & Objectives

OPTIMISM

SAFETY@SEA

Objectives

A maritime safety training programme with the aim to:

Deepen understanding of the ISM Code, risk assessment & human factors

Strengthen practical safety competence

Bridge the gap between regulations and real-life behaviour onboard

Foster a strong safety culture within organisations

Challenges

The main challenges are:

- Safety culture itself – changing deeply rooted behaviours takes time and sustained effort
- Reaching the wider maritime community with the course and its benefits

Addressing these challenges requires long-term commitment, clear communication, and active engagement across the industry.

OPTIMISM

SAFETY@SEA

Status & Results

Almost at the finish line!

- Publication of multiple articles in industry-relevant journals
- Participation in major conferences such as IAMUC 2025, MT’24, TransNav 2025, and IMLA 2025
- Lectures at universities in participating countries
- Workshops with students and industry stakeholders

In addition to the core training programme, the project has also produced a **dedicated book** and developed a **unique assessment and evaluation system**, including a confidence-based testing approach.

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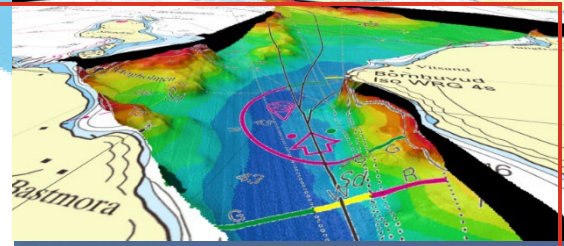

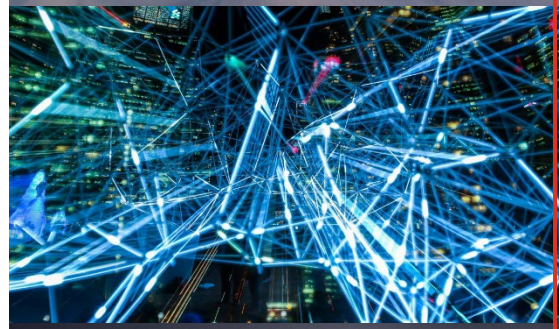

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NELSON
Innovative Solutions for Maritime Services

NELSON in Support of Future Maritime Services

Hanna Kajander, NELSON Project Manager and Consortium Lead

2026-04-28 EUSBRS

Co-funded by the European Union

The contents of this publication are the sole responsibility of NELSON partner(s) and do not necessarily reflect the opinion of the European Union.

NELSON

Innovative Solutions for Maritime Services

Co-funded by the European Union

Project in Short

To support future maritime services and improve information flow between maritime stakeholders, NELSON will develop the physical and digital fairway infrastructure by:

- *creating new digital maritime solutions*
- *providing support for the adoption of remote pilotage.*

Duration

1.9.2025–31.8.2028

Budget

~15 million euros, of which 50% is funded by the European Union (70% for partners in the Canary Islands)

Further Information

www.fintraffic.fi/en/maritime_traffic/projects-and-development/nelson

Collaboration of 10 Partners in 3 Countries

Fintraffic Vessel Traffic Services Ltd

Fintraffic

Swedish Maritime Administration

SJÖFARTSVERKET

Finnish Meteorological Institute

ILMATIETEEN LAITOS
METEOROLOGISKA INSTITUTET
FINNISH METEOROLOGICAL INSTITUTE

Finnpilot Pilotage Ltd

FINNPILOT

Hiades Business Patterns, S.L.

hiades
Consulting

Aalto University

Aalto University

Advian Software Ltd

advian

Brighthouse Intelligence Ltd

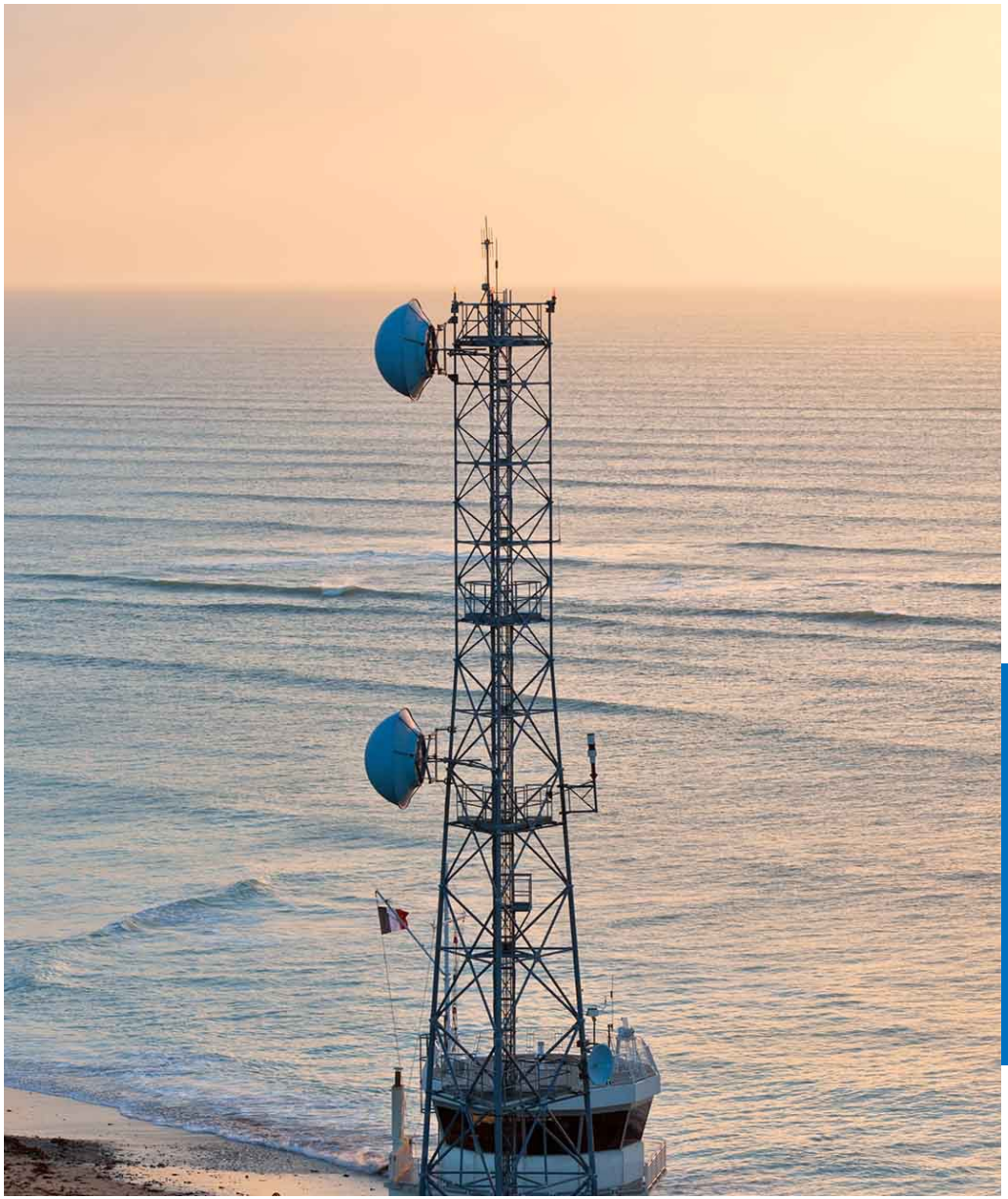
BRIGHTHOUSE
INTELLIGENCE

Port Authority of Huelva

Port of Huelva
Port Authority of Huelva

Port Authority of Las Palmas

Puertos de Las Palmas
Autoridad Portuaria de Las Palmas



To facilitate real-time situational awareness and improved ship-shore data exchange:

46 milestones

30 deliverables

- Development of VDES infrastructure
- Novel digital VTS & route exchange services
- Advancing remote pilotage system and operations
- Harmonised reporting systems (MRS–MSW–EMSA integrations)
- Real-world testings and validation of services

NELSON

Innovative solutions for future maritime services |
https://www.fintraffic.fi/en/maritime_traffic/projects-and-development/nelson

How Do We Get There?

Work Packages and Scopes 1/2

WP1

Project management and communication

Efficient implementation of project management, coordination, communication and stakeholder activities.

- **Lead: Fintraffic VTS**

WP2

Fairway infrastructure

Development of fairway infrastructure to support ships' safe navigation by improved information exchange in digital format in Finland and in Sweden.

- **Lead: Fintraffic VTS**

WP3

Remote Pilotage

The objective of WP3 is to develop remote pilotage concept and consistent operational approach to be utilised by pilotage service providers, authorities, and manufacturers.

- **Lead: Finnpilot Pilotage**

How Do We Get There?

Work Packages and Scopes 2/2

WP4

VTMIS services and MRS reporting harmonisation

The primary goal of is to establish a technical platform for digital traffic management information services that authorities offer to traditionally manned, remotely controlled, or remotely piloted vessels.

- **Lead: Fintraffic VTS**

WP5

Testing and validation

The objective of WP5 is to technically and functionally test and validate the developed maritime digital information service interfaces against specifications.

- **Lead: Fintraffic VTS**

WP6

Enhanced connectivity by maritime solutions

The objective of WP6 is to develop and deploy innovative digital maritime service solutions tailored for the Canary Islands.

- **Lead: Hiades Business Patterns**

Status and Highlights April 2026 (1/2)

WP1

- Newsletter 1/6 published: https://uutiskirje.fintraffic.fi/a/s/108315190-44bb0f6d55442b539b6823a14a247f56/2618073
- Remote Pilotage Days 2026 to be held on 16–17 September in Helsinki

WP2

- 7/34 VDES base stations installed in Sweden, Finland to start installations 2027

WP3

- Remote pilotage conseptualisation work continues and has included numerous Advisory Group workshops online
- Wärtsila simulator installed, and the first development version of the remote operation center (ROC) installations on Wed 29 April and testings to begin

Status and Highlights April 2026 (2/2)

WP4

- Technical road map for MCP developed
- 75% of S-421 Route Exchange use cases developed

  → Testing of the both to follow
- Development continues to establish harmonised information flow between EMSA's integrated ship report servise (IRD) to the Finnish MRS system and to Swedish MRS system

WP5

- Planning started

WP6

- Development of MCP, MRS reporting and remote pilotage software solution in cooperation with key stakeholders.

Thank you!

Hanna Kajander
NELSON Project Manager and Consortium Lead

Further Information

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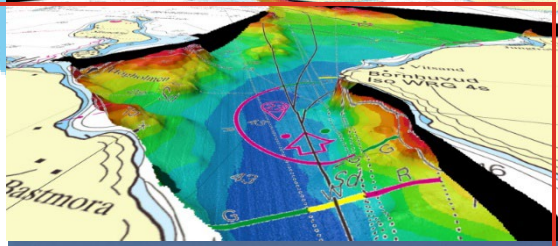

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WINMOS IV status

Helena Orädd

27.4.2026

Finnish Transport Infrastructure Agency

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WP1 Project management, coordination and communication

- We have project managed, coordinated and communicated well, in schedule and within budget

WP2 Modernisation of Icebreakers and Upgrade for Icebreaking Assistance

- WP2 is intended to extend the service life and improve the performance of the icebreaker fleet by modernising critical onboard systems and adapting vessels for more efficient and reliable icebreaking operations.
- WP2 budget for the first reporting period is approximately €7.3 million, of which €2.41 million had been incurred during months 1–12.
- **Total budget for WP2 is €9.9 million.**
- Grant is 50%

T2.1 Upgrade of three existing Atle class icebreakers

Finnish Transport Infrastructure Agency

- For **IB Atle and IB Frej**, successful upgrade of the vessels' **navigation systems**. Updated chart display and information systems, ice radar functionality, and interfaces connected to other onboard ship systems.
- For **IB Ymer**, work has focused on **preparations for the installation of a new emergency/auxiliary generator**. Procurement activities have been initiated.
- Work on the **new control and monitoring systems** for all three vessels has also progressed. On **IB Frej**, new system is installed and accepted. For **IB Atle and IB Ymer**, procurement activities and preparation for installation.
- Renewal of **fire protection piping** on all three vessels has also progressed. Old pipes have been removed and new installed. Work continues.
- Overall, T2.1 has delivered substantial technical modernization, especially on **IB Frej**, while **IB Atle and IB Ymer** are progressing through a combination of completed upgrades, procurement, and phased installation work.

T2.2 Conversion of existing icebreaker IB Idun for full icebreaking assistance operations

Finnish Transport Infrastructure Agency

- **Installation of a towing notch** is completed. This is an important upgrade for towing-related icebreaking operations.
- The vessel's **onshore power connection system** has also been upgraded. Equipment was installed to adapt the system to the Swedish power grid.
- Preparatory and procurement is ongoing for a
  - **new bridge design** to improve visibility, safety, and working conditions
  - **upgrades to the towing winch and related control stations**
  - an **increase in accommodation capacity**
  - a **new emergency/auxiliary generator**
  - and a **new crane**, which is planned for a later phase of the project
- Vessel's **lighting system** has been partially upgraded with LED-based solutions and presence sensors, improving both compliance and energy efficiency.
- Overall, T2.2 has delivered some important physical and technical upgrades on IB Idun and work continues.

T2.3 Upgrade of the existing icebreaker IB Oden

Finnish Transport Infrastructure Agency

- Work has been carried out on the vessel's **fire protection piping**. Installation of new piping in the deckhouse area was completed, while the machinery-space portion is planned for the next phase.
- Preparatory work has been undertaken for the **replacement of the vacuum tank system used for handling catering waste**, including technical specification work and material planning.
- Upgrade of vacuum tank system is ongoing and is influenced by the vessel's demanding operational schedule, including both icebreaking duties and Arctic expedition work.

WP3 Construction of an agile and low-emission B+ icebreaker operating in the Gulf of Finland

- T3.1 Construction of B+ class icebreaker is the only task, and it has not yet begun, nor should it have begun
- Building contract due in September 2026 with building starting early 2027

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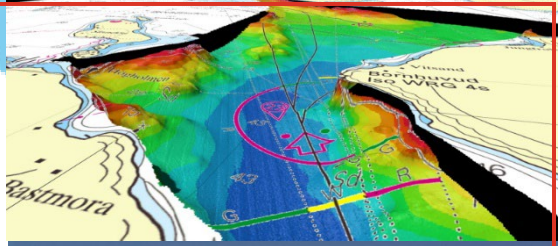

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MARISEC
2024 - 2026
New Technologies Supporting the Prevention of Environmental Damage on the Coast of the Baltic Sea
XAMK
Kaakkois-Suomen ammattikorkeakoulu
Kymenlaakso Rescue Services
Wellbeing services county of Kymenlaakso
MERIKOTKA

Technical Details

Partners:

Kymenlaakso Rescue Services

South-Eastern Finland University of Applied Sciences - Xamk

Kotka Maritime Research Centre - Merikotka

Kymenlaakso Rescue Services
Wellbeing services county of Kymenlaakso

XAMK
Kaakkois-Suomen ammattikorkeakoulu

MERIKOTKA

Sisäministeriö
Inrikesministeriet

Ulkoministeriö
Utrikesministeriet

Funding: Finnish Ministry for Foreign Affairs – Funding for Baltic Sea, Barents and Arctic cooperation (IBA)

Responsible Ministry: Ministry of the Interior of Finland

Total Budget: EUR 260,000

Project Period: November 2024 – January 2026

Motivation:
The changing risk landscape of the Baltic Sea

New and changing hazardous substances with potential marine release

Geopolitical tensions leading to decreased navigational safety and security

Digitalisation bringing along new risks and opportunities

Need for efficient cross-border collaboration (organisations, countries)

Objectives of the project

- Improve preparedness for hazardous substance response in coastal waters by strengthening:
  - risk awareness
  - cooperation
  - authorities’ expertise and networks
- Evaluate current response capacities
- Identify new solutions to complement existing capabilities

Kymenlaakso Rescue Services
Wellbeing services county of Kymenlaakso

XAMK
Kaakkois-Suomen ammattikorkeakoulu

MERIKOTKA

Work packages

WP1: Response and recovery equipment testing – Xamk

- Tested the efficiency of existing oil spill response equipment for new fuel types
- Evaluated state-of-the-art oil spill response technologies to enhance performance

WP2: Risk landscape change analysis – Merikotka

- Reviewed the earlier oil and chemical spill risk analyses for the Baltic Sea
- Analysed changes in the risk landscape and situational awareness

WP3: Project management and stakeholder cooperation – Kympe

- Compiled best practices among operative actors related to spill response in the Baltic Sea region
- Organised workshops and an international seminar, built and strengthened the actor network

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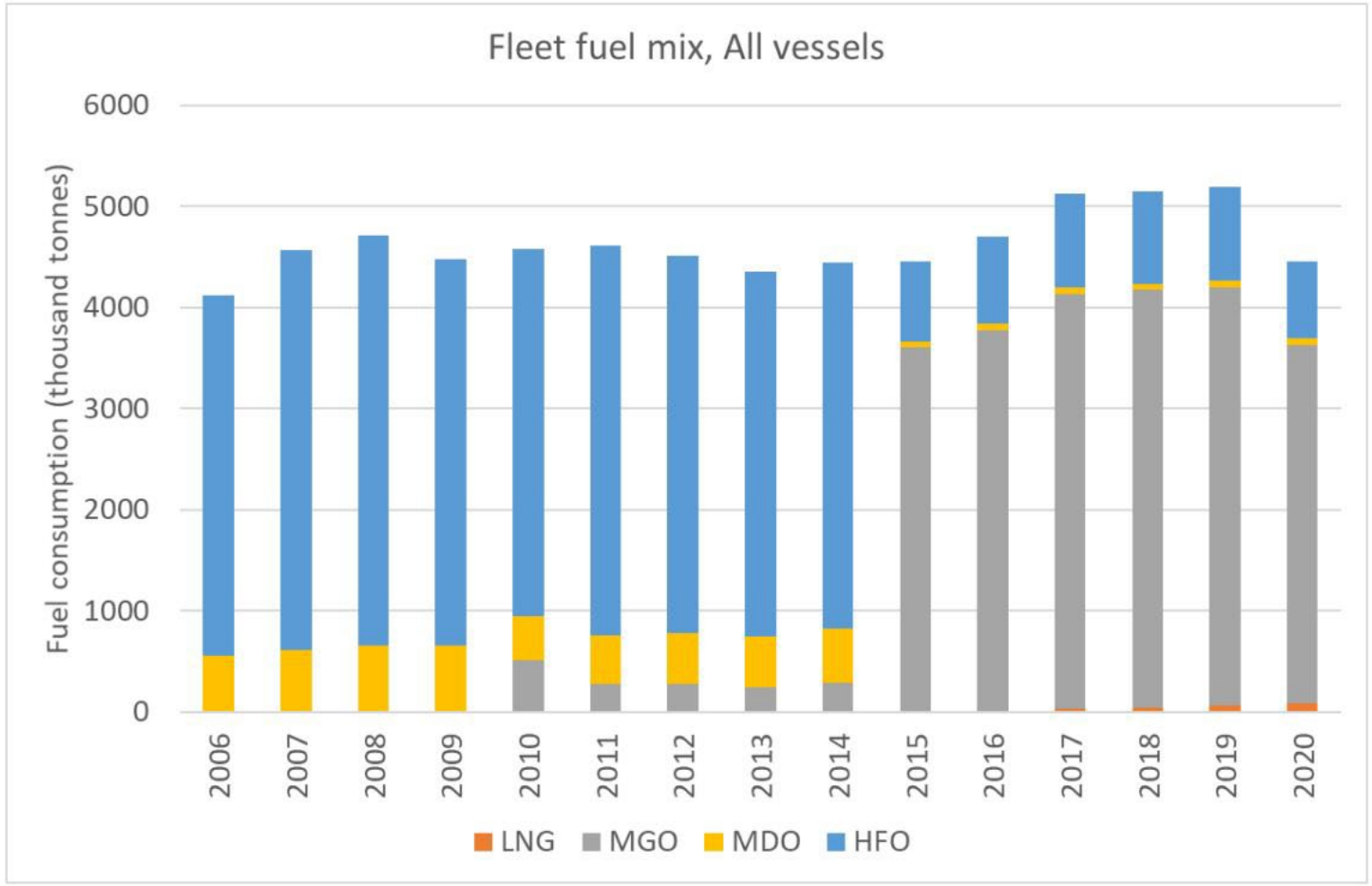
Fuel profile of maritime traffic in the Baltic Sea (2006–2020)



- Transition in 2014–2015 with the entry into force of the Sulphur Directive
- Prior to this, heavy fuel oil (HFO) was the most common – and therefore the most likely – spill substance
- Response preparedness was accordingly designed primarily for HFO spills
- Today, the most common fuels are MGO (DMA) and MDO (DMB)
- How well does the existing response equipment perform with the new fuels?

Jalkanen J.-P.; Majamäki E. & Johansson L. 2020. Emissions from Baltic Sea shipping in 2006–2020. Atmospheric Composition Research, Finnish Meteorological Institute. In: Maritime Working Group Meeting document MARITIME 21-2021 of Baltic Marine Environment Protection Commission

WP1: Testing effectiveness of the current oil recovery equipment for new marine fuels

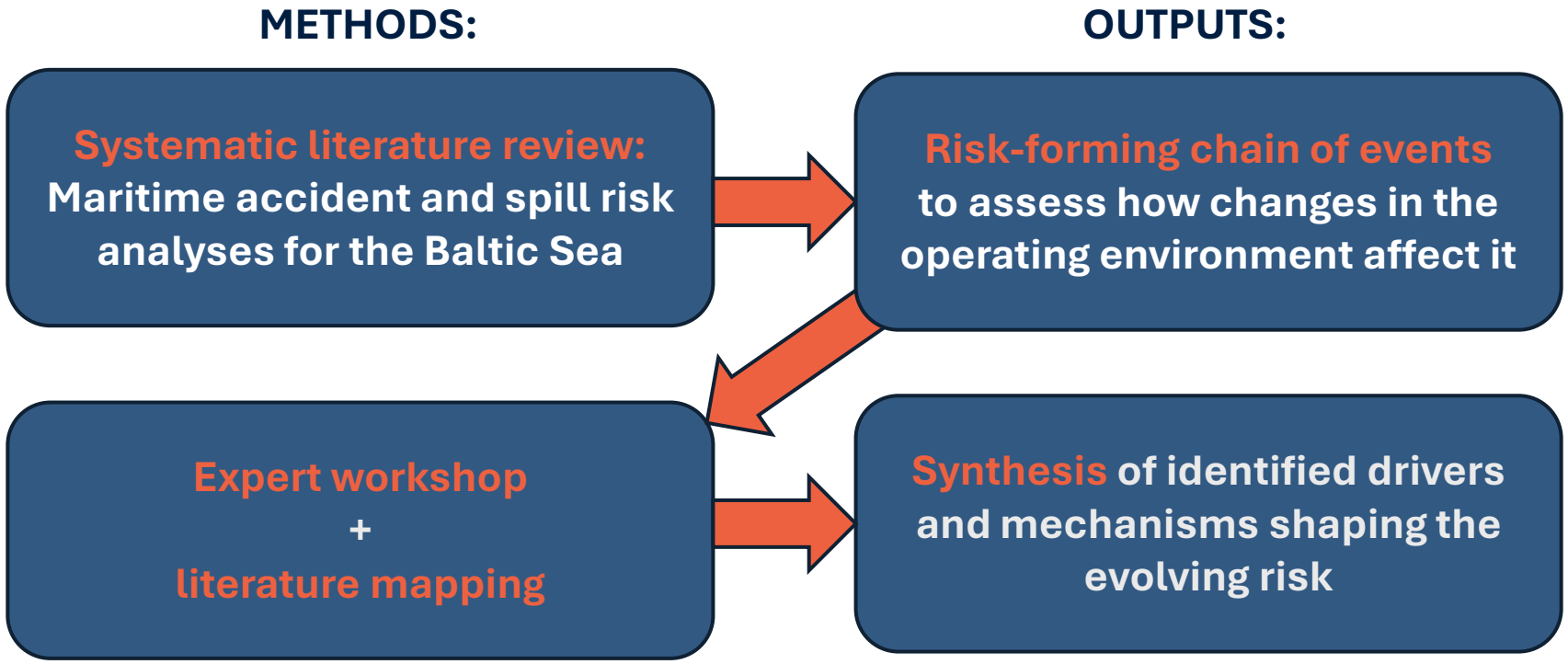
- XAMK's Oil Response Test Basin in Kotka
- Two fuel types tested
  - Marine Diesel Oil (MDO DMB)
  - Ultra Low Sulphur Fuel Oil (RMD80)
- In different temperatures
- With different skimmers (a variety of brush and disc collectors)

- Example findings
  - Disk skimmers performed better than brush skimmers.
  - The pour point (30 °C) of the ULSFO -> solidification in water, makes it hard to collect.
  - For more, see Halonen et al. (p. 26) in:

Kaakkois-Suomen ammattikorkeakoulu

WP2: Risk Landscape Change Analysis

Purpose: To make the mechanisms through which risks emerge visible and to identify changes that preparedness and response need to address.



Reflection: How should we respond to these changes?

WP2 Outputs

For conclusions, see article Lehikoinen et al. (p. 15):

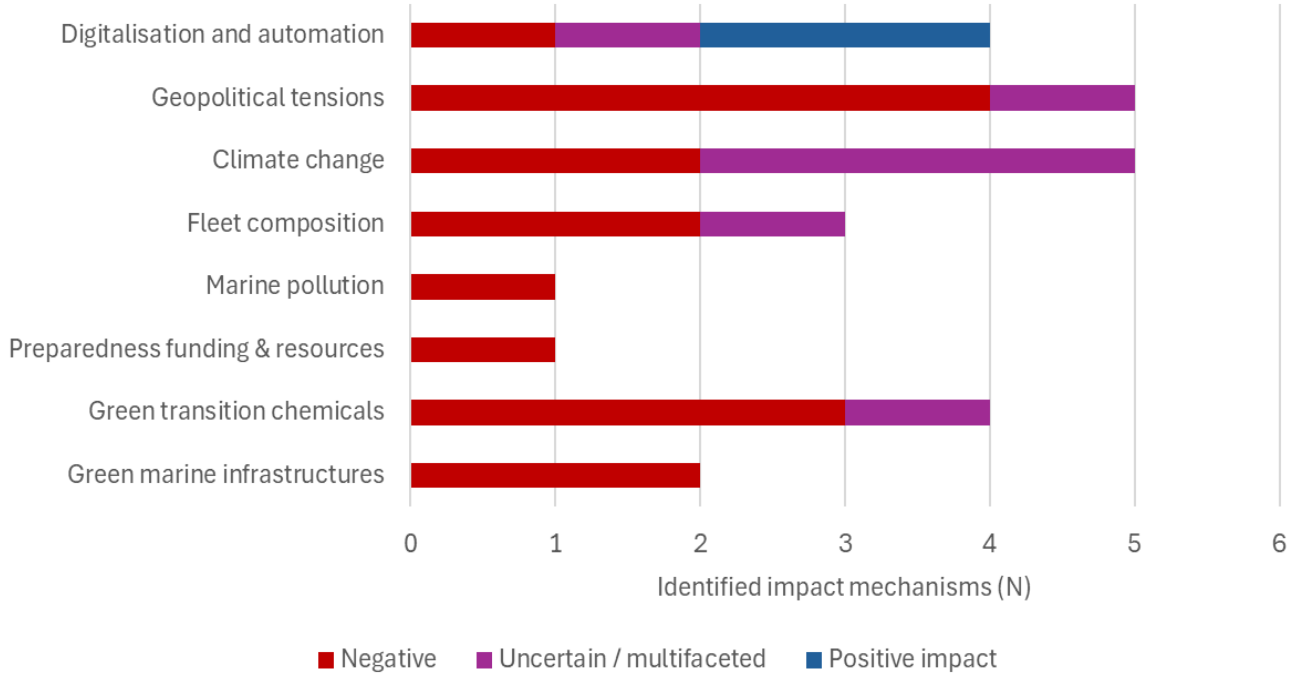
RISK FORMATION CHAIN:

Tanker accident → **Hazardous spill** → **Spill recovery** → **Consequences**

IMPACT TABLE:

Change factor	Impact mechanisms	Impact on the probability of accidents
Geopolitical tensions	*Russian shadow fleet (-), Interference (-) (AIS-spoofing, GNSS-interference, Cyber disruptions), Terrorism targeting critical infrastructure (-)*	**Increases the probability of shipping accidents.**
Digitalisation and automation	*AI-assisted operations (+), Vulnerability to cyber-security threats (-), Digital competence of crews (±)*	**Both increases and decreases the probability of shipping accidents.**
Fleet composition	*Larger vessels: fewer accident candidates vs. challenges of navigating in Baltic Sea conditions (±)*	**Uncertain, location-specific effect on the probability of shipping accidents.**
Green marine infrastructures	*Offshore windfarms: obstruct maritime traffic and complicate ice conditions in winter (-)*	**Increase the probability of shipping accidents locally.**
Climate change	*Uncertain future development of ice conditions (±)*	**Uncertain and multifaceted effect. Requires adaptation of maritime operations and icebreaking services to the evolving conditions.**

IMPACT COUNTS per driver:



WP3: BEST PRACTICES IN OIL SPILL RESPONSE AND TRAINING

- Mapping and compiling best practices related to oil and chemical spill response
- Strengthening national and international networks
  - Organising visits, workshops, and surveys

For results and conclusions, see article by Lauri Hanski (p. 39):

Annual Cycle of Joint Training Activities 2026–2023	2026	2027	2028	2029	2030
Eastern Uusimaa Rescue Department	Lead responsibility	Participant	Participant	Support	Support
Helsinki City Rescue Department	Participant	Lead responsibility	Support	Participant	Support
Kymenlaakso Rescue Department	Participant	Support	Lead responsibility	Support	Support
Western Uusimaa Rescue Department	Support	Participant	Support	Lead responsibility	Participant
Southwest Finland Rescue Department	Support	Support	Support	Participant	Lead responsibility

Figure 1. Proposal for an annual training schedule from the MARISEC project workshop.

Kymenlaakso Rescue Services
Wellbeing services county of Kymenlaakso

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Societal implications

- Maintaining preparedness in changing conditions requires increasing
  - testing and research activities
  - education and training activities
  - updating response equipment
  - close cooperation both among different stakeholders and between countries
- This creates a need for growing and long-term resourcing.

For final reflections and recommendations of the project, see Lehikoinen et al. (p. 46):

Kymenlaakso Rescue Services
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ANNEX 1

MARISEC project implementation recommendations

	Political decision-making	Regulatory and strategy authorities	Oil and chemical spill response authorities
Funding	Ensure sustained and sufficient funding for the development of preparedness for oil and chemical spill response in an evolving risk landscape.	Funding should be targeted at the development of up-to-date oil spill response equipment, training activities, situational awareness tools, and preparedness planning.	Capability requirements should be identified and communicated to maintain and develop response readiness.
Research and innovation	Research and development should be enabled to support risk management that is future-oriented, systemic, and considers a safety perspective.	Risk assessment methods that combine statistical data with scenario-based and systemic analyses should be developed, taking uncertainties into account.	Participation in research and development activities should include incorporating the experience of authorities responsible for oil and chemical spill response into risk analyses and method development.
Equipment preparedness	Strategic investments should be guided to strengthen response and recovery capabilities as well as critical infrastructure.	Efforts should be made to promote compatible systems, databases, and analytical tools to create a comprehensive situational picture across the entire Baltic Sea.	Response and recovery equipment should be maintained and updated to meet evolving hazardous substances and operational environments.
Training and exercise activities	Resources should be secured for long-term training and exercises, including both proactive and reactive preparedness drills.	Training exercises should be directed and promoted to strengthen both proactive and reactive operational capabilities.	Competence and training should be developed to support both incident command and practical equipment-handling skills, as well as decision-making, situational awareness, and improvisation in unprecedented situations.
Cooperation and networks	Cross-governmental and international cooperation should be promoted to strengthen shared situational awareness and operational capabilities.	Permanent structures should be created for information exchange, joint analyses, and shared resources at both national and international levels.	Information exchange and other forms of cooperation with other authorities and neighbouring countries should be strengthened.

Thank you!

Kymenlaakso Rescue Services
Wellbeing services county of Kymenlaakso

Halonen, J. & Hanski, L. (eds.) 2026. Preparing for oil and chemical spills in the changing operating environment of the Baltic Sea. Results and recommendations of the MARISEC project. Xamk Development 257.

https://urn.fi/URN:ISBN:978-952-344-649-6

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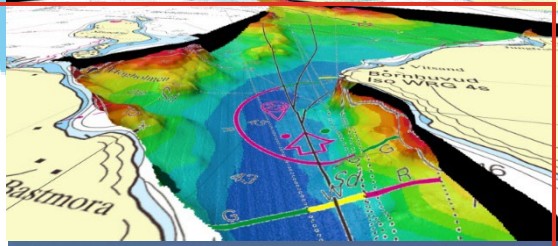

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Central Baltic Programme

DIGIMARIS

PA Safe Meeting
Operational Advisory Board
28.4.2026

Digimaris

Emilia Pussinen

Kymenlaakso Rescue Services
Wellbeing services county of Kymenlaakso

MERIKOTKA
KOTKA MARITIME RESEARCH CENTRE

XAMK

ESTONIAN STATE FLEET

TAL TECH

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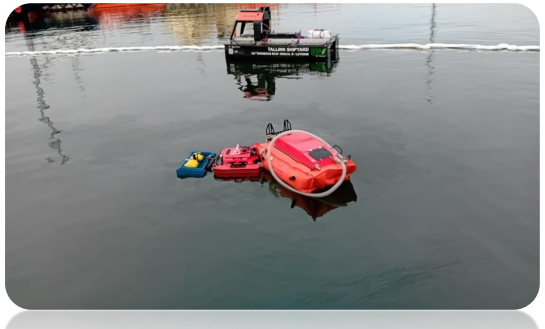
DIGIMARIS

Project basics

- New technological innovations create expanded potential for enhancing preparedness through systems that support the efficient detection and analysis of marine pollution events. So, there is a growing need to evaluate and advance robotics, such as unmanned surface vessels (USV) and unmanned ground vessels (UGV) and sensors and other parts for effective tracking and assessment of marine spills.
- Therefore, right on the pulse of current developments **aim of DIGIMARIS** is evaluating the criteria for a new digital device for marine spill response teams in Finland and Estonia.



Demo USV device's photos from the Digimaris Kick Off day 10.12.2025 at Tallinn.

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Central Baltic Programme

DIGIMARIS

Project basics

- Implementing time: 9/2025 – 2/2028.
- Funded by Central Baltic Programme.
- Duration 30 months
- Total budget: 2 923 429 €
- Project consortium**:** Estonian State Fleet, Kotka Maritime Research Association (LP), Kymenlaakso Rescue Services, South-Eastern Finland University of Applied Sciences, Tallin University of Technology.

ESTONIAN STATE FLEET

MERIKOTKA KOTKA MARITIME RESEARCH CENTRE

Kymenlaakso Rescue Services Wellbeing services county of Kymenlaakso

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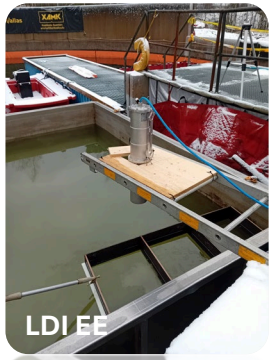
DIGIMARIS

First phase

- Equipment selection. This will rely on surveys and expert consultations. Followed by field tests in various environments such as oil test basin and open sea.
- Field tests: Testing the required sensors, other parts and digital devices in oil test basin and at sea. This steps focuses on selecting essential components and parts.
- The outcome is a technical review which leads to investments. This is defining criteria for the suitability of devices in response work and their usability.
- This leads procuring and purchasing necessary equipment in both countries.

Xamk's Oil Spill Response Test Basin at Kotka



Different types of oil detection sensors at test

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DIGIMARIS

Second phase

- Integration of data into existing oil spill operative systems.
- This is ensuring that the information generated by the new devices can be fully utilized and is compatible with activities.

Third phase

- Cross-border exercises, trainings and pilots
- Produce operational guidelines and technical documentation for end users
- A strategic roadmap. The roadmap outlines the lessons learned and the processes in place, enabling knowledge to be shared and passed on to others.
- Engagement of external experts

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DIGIMARIS

Outcomes

- New technology and devices
- A new service concept that integrates new data sources and types
- User guides, training materials and strategic road map

Thank you!

Questions?

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Central Baltic Programme

DIGIMARIS

More from Digimaris:

https://merikotka.fi/digimaris/

Contact information:

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Project Manager Digimaris; Lead Partner representative

Kotka Maritime Research Centre

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emilia.pussinen@merikotka.fi

Agenda - Projects: results & ideas for the future

12.30 Tour de table – Short intro of everybody online

12.45 OPTIMISM – training of seafarers on new ISM code

13.00 NELSON – smart fairways and what to do with them

13.15 WINMOS IV – icebreaker new build and lifetime extensions

13.30 MARISEC – best practices for oil & chemical spills

13.40 DIGIMARIS – a digital service for oil spill response operators

13:50 BREAK

14:00 Three areas for project information, ideas and participant input

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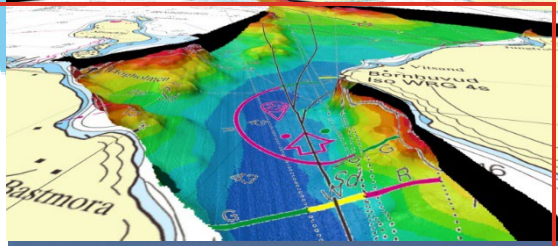

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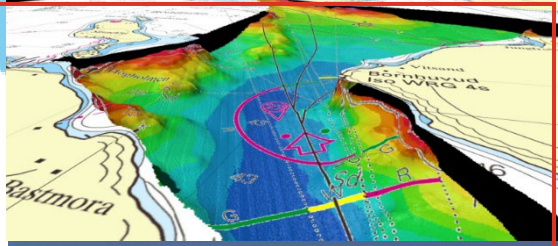

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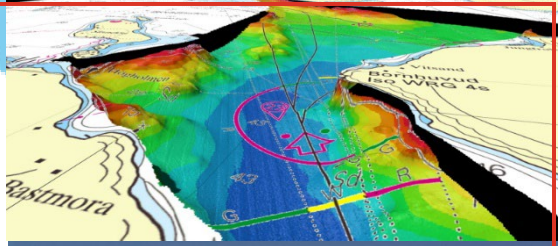

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Off-shore Wind Farms & winter navigation - seminar March 2026

- A limited ice thickness study show **average thickness 2 meters** in March-April 2024 – much more than thermodynamic growth indicating lots of ridges
- Another study predicts that **climate change will lead to less ice**. Gradually smaller ice area, thinner ice and shorter season, with ice only present in the Bothnian Bay
- An **ice model** is developing that takes into account of offshore wind farms. Within a year it should be able to **simulate cumulative effects of several wind farms**
- Lack of **cross-border policy planning**
- Current **ice breaking fleet is old** and ageing, new icebreakers are an urgent need.
- **Traffic is expected to increase** due to industrial initiatives in the very North.
- **New ships need more assistance** due to lower ice capacity as a result of fuel savings and emission restrictions in ice free conditions
- Off-shore **wind farms will limit** the waters available for efficient **winter navigation**.

Off-shore Wind Farms & winter navigation - seminar March 2026

Suggested next steps

- Closer cross-border cooperation on Maritime Spatial Planning – similar to ice-breaking
- A high level recommendation based on current knowledge, to be updated based on continuous studies

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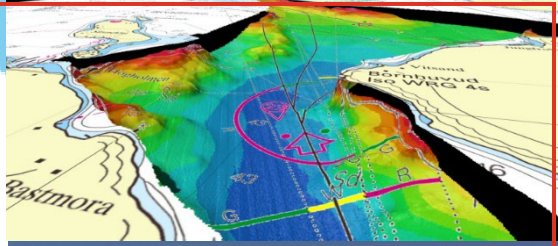

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Organisation and Tasks of the Maritime Safety and Security Center (MSSC)

BUNDESPOLIZEI
FEDERAL POLICE

ZOLL

Federal Office for Agriculture and Food

WSV.de
Federal Waterways and Shipping Administration

BUNDESWEHR

HAVARIEKOMMANDO
CENTRAL COMMAND FOR MARITIME EMERGENCIES

Welcome at the area of the waterways and shipping authority Cuxhaven

The network

Maritime Safety and Security Centre
of the Federal Government and the Coastal States

Communication and cooperation network of the Federal Government and the coastal states

BUNDESPOLIZEI
FEDERAL POLICE

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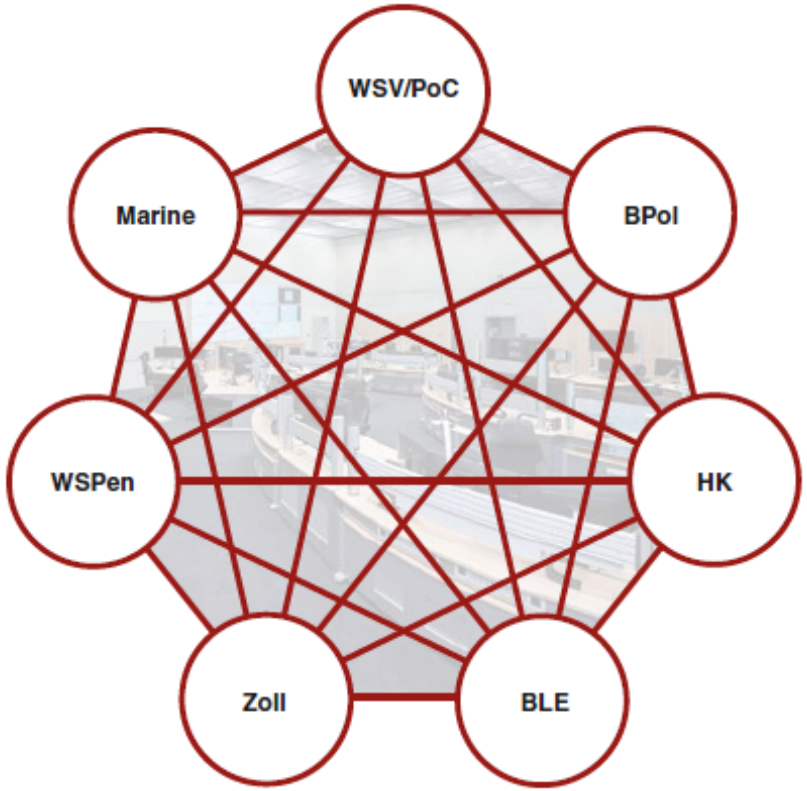
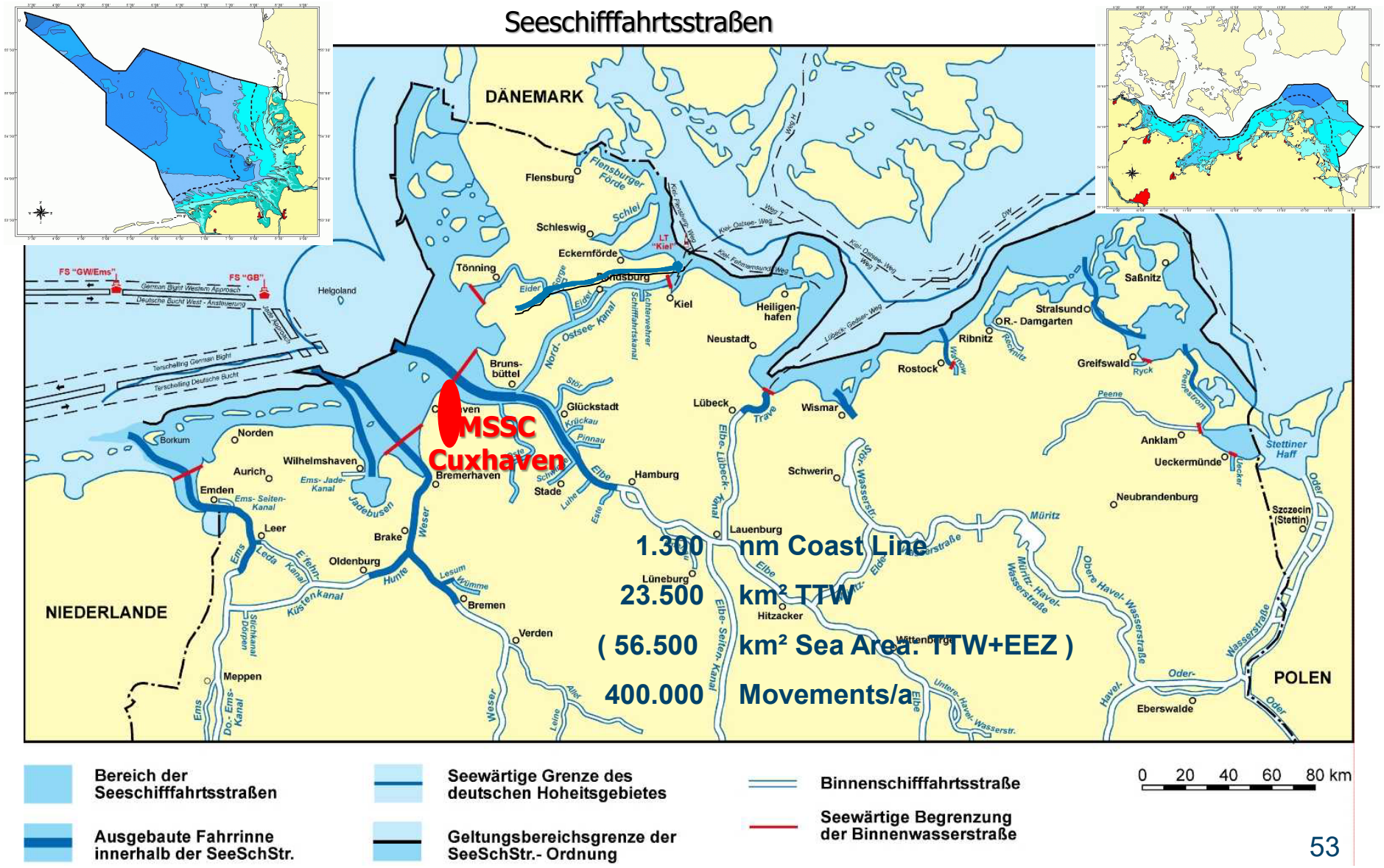


Under one roof

Area of responsibility

Maritime Safety and Security Centre
of the Federal Government and the Coastal States



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Cooperation in the network

Maritime Safety and Security Centre
of the Federal Government and the Coastal States

The building

Maritime Safety and Security Centre
of the Federal Government and the Coastal States

© E. Krüger

Conditions for this construction

Maritime Safety and Security Centre
of the Federal Government and the Coastal States

- Police building
- “Critical infrastructure“
- Highest IT security standards for confidential data
- Redundancies for the technical equipment
- High availability

→ Total costs appr. 25 Mio. Euro

Resources of the partners

Maritime Safety and Security Centre
of the Federal Government and the Coastal States

Thanks for your attention!!

Administration of the
Maritime Safety and Security Center
Am Alten Hafen 2, 27472 Cuxhaven

Internet: www.msz-cuxhaven.de

The Finnish Border Guard

Safety and security in all circumstances

EU’s Action Plan on Cable Security

- The EU Action Plan on Cable Security, published by the European Commission in February 2025, aims to reduce disruptions to cable infrastructure through four core pillars:
  - Prevention
  - Detection
  - Response and repair
  - Deterrence
- Measures are being actively piloted in the Baltic Sea region, where the Finnish Border Guard plays a central role.

Development of an Integrated Surveillance Mechanism in the Baltic Sea

Prevent - Detection
Response - Deterrence

- **Finland has taken on a leading role in the implementation of the Integrated Surveillance Mechanism (ISM) in the Baltic Sea region.**
- **Status:**
  - **Application in progress** for EU *Digital Europe* (Regional Cable Hubs).
  - **Partnership:** Consortium of Northern Baltic Sea states led by Finnish Border Guard.
  - Submission deadline: **March 31, 2026**.
  - Project duration: **36 months** (Starting Q3/2026).

- **Objectives of the ISM Project**
  - **Enhanced Information Sharing:** infrastructure owners, law enforcement, and military/NATO. Aim to use **CISE**.
  - **Technology testing:** Pilot new **underwater surveillance** solutions.
  - **Streamlined Risk Analysis:** Harmonize risk analysis and information sharing across the Baltic Sea region.
  - **Joint Exercises:** Develop and execute large-scale drills (e.g., **MARSEC EU 26**).
  - **Operational Network:** Launch Security Operation Centers (**SOCs**) to detect and react to infrastructure threats.

MARSEC EU 26 Exercises

- **EU MARSEC 26 TTX was held in Helsinki, Finland on 15-16 April 2026**
  - Experiences from previous operations (EstLink2, Balticconnector, Cinia, FEC-2, EESF-2)
  - Monitoring and information sharing on shadow fleet vessels
  - Legal framework for authorities' action in the Exclusive Economic Zone (EEZ)

- **EU MARSEC 26 LIVEX consists of two parts**
- Part 1: 1-15 September 2026, Baltic Sea
  - Tracking of suspicious vessel, information exchange between authorities across the Baltic Sea
- Part 2: 15-17 September 2026, Helsinki (LIVEX)
  - Ship boarding operations
  - Use of force during interventions
  - Inspection of vessel
  - …

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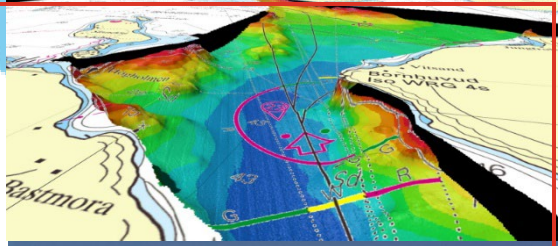

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Under Keel Clearance services

What is the benefit

- Ships can load more goods per voyage
- A service giving **commercial benefits** and not only safety benefits

How does it work

- Determining a safe draft of a ship based on all available S-100 information
- AND of the individual ship properties
- Using S-129 standard

When will it be available

- UKC services are using information from other S-100 standards: ENC (S-101), bathymetric surface (S-102), water level (S-104), surface currents (S-111) and weather info.
- All above must be in place in the whole Baltic Sea before operational UKC services can be in place

Who will provide it

- NOT public authorities
- Perhaps UKC specialists, ECDIS providers, other commercial actors or a combination

Tour de table - Urgency, comments, ideas, participation

Three areas for project information, ideas and participant input

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Next Operational Advisory Board - Autumn 2026

Results from more projects ending in autumn

- Baltic Sea e-Nav – harmonised S-100 implementation
- MaDaMe – smart fairways and possible applications
- ORMOBASS – R-MODE, land based positioning, backing up SatNav
- OpenRisk II – Digital tools assisting in spill & pollution risk assessment
- BRISK II – Regional wide long-term spill & pollution risk analysis

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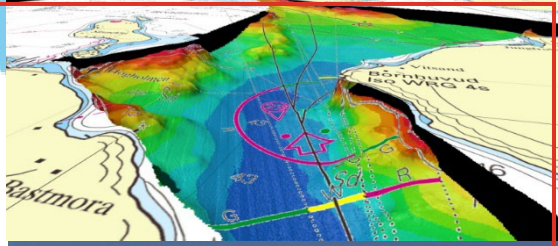

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