



EUSBSR EU STRATEGY FOR THE BALTIC SEA REGION

PA SHIP

MaDaMe - Maritime Data Methods for safe shipping

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Interreg
Baltic Sea Region



Co-funded by
the European Union

 BLUE ECONOMY
MaDaMe

MaDaMe: Background

- The Baltic Sea is one of the world's most significant maritime regions, with dense traffic and the transportation of hazardous cargoes
- This congestion poses substantial risks to navigational safety, highlighting the need for advanced digital solutions
- Maritime digitalization is advancing rapidly, particularly with IMO's decision to approve the new ECDIS (Electronic Chart Display and Information System) performance standards, which will allow ships to receive real-time digital information directly into their ECDIS.
- While this shift will enhance decision-making by providing more accurate and timely data to support navigators, it also presents challenges for maritime authorities and service providers tasked with implementing these new digital services in the future.



Why MaDaMe was needed

The starting point for the maritime services

1. Fragmented – Several separate information channels for maritime information
2. Time-critical – Reliable information needed at the right moment
3. Cross-border – Services are needed across systems and countries
4. Trusted – Standards and cyber-secure exchange of the information needed

MaDaMe response: common S-100-based digital services, using MCP and VDES + mobile networks

Three services, two enabling solutions

What we developed and piloted

S-124

Digital Navigational Warnings

Structured, timely safety information

S-125

Digital Aids to Navigation

Up-to-date AtoN status and changes

S-212

VTS Traffic Clearance

Digital two-way vessel–VTS communication

Connectivity
technology

VDES + mobile networks

Digital data connectivity for the services

MCP

Maritime Connectivity platform

Framework for secure, reliable, and standardized exchange of digital maritime information



DEVELOP → PILOT → EVALUATE → STANDARDISE → PREPARE FOR DEPLOYMENT

Highlights

Dissemination of results, Online Training Material and Roadmap creation ongoing

-> <https://interreg-baltic.eu/project/madame/>

Finalizing deliverables and outputs

Services piloted (S-124, S-125 and S-212) both on simulator and onboard

Final seminar held 30.9. in Turku, Finland

S-124 – “Results demonstrated that S-124 could successfully be carried from shore to ship, both with IP and VDES connectivity.”

S-125 – “Near real-time AtoN status delivery was demonstrated over IP/5G connections. Overall user feedback was positive. AtoN status information and Navigational Warnings improved situational awareness.”

S-212 – “Improves the clarity of communication. Improves the traceability of the communication. Helps reduce congestion on VHF channels by moving routine communication to digital channels, leaving VHF capacity for urgent, safety-critical or more complex situations”

Outputs of the pilots fed to the standardization

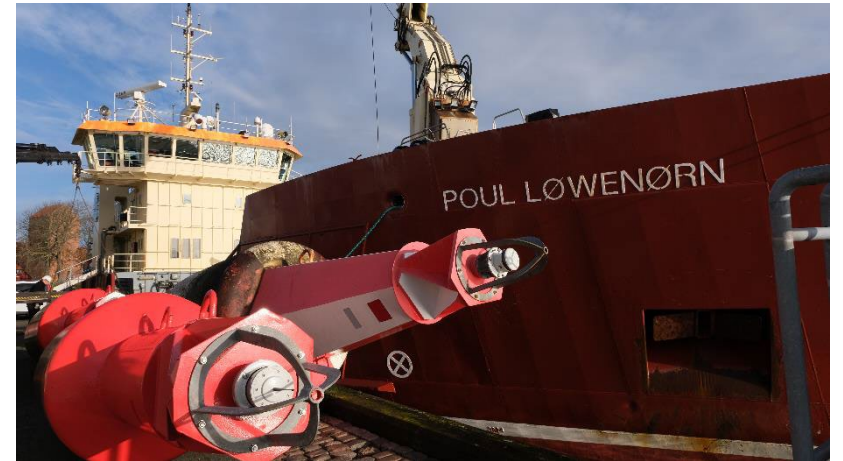


The transition continues

What comes after the pilots

1. Pilot evidence – connect standards with operational needs
2. Cooperation – Align authorities, industry, users and international bodies
3. Standardisation – Turn practical findings into interoperable solutions
4. Deployment path – Support implementation, maintenance and replication

The project is ending. The work is not.



Consortium

Duration: 1.11.2023-
31.10.2026

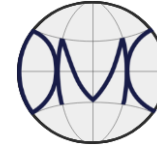
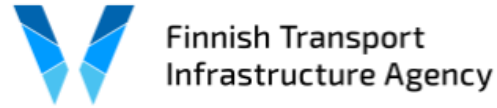
Budget: 3,4 M€ (80% ERDF
Interreg Baltic Sea region
funding)

Coordinator: Turku University
of Applied Sciences

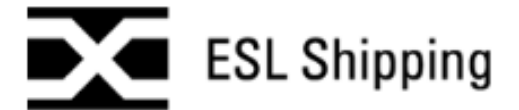
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Partners



Associate partners





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Thank you!

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