FACTSHEET

CLEAN SHIPPING & MARITIME SAFETY IN THE BALTIC SEA REGION

Interreg Baltic Sea Region — Co-funded by the European Union

SUMMARY

This factsheet provides an overview of the achievements gained by the transnational projects within the **Interreg Baltic Sea Region Programme 2014-2020** thematic priority and the objective "**clean shipping**" and "**maritime safety**". In this factsheet, you will find examples of the projects´ solutions, and for more information visit the **project library**. Many of these projects contributed to progress towards the objective of the **EU Strategy for the Baltic Sea Region (EUSBSR)** and helped to advance the implementation of the EUSBSR action plan in the policy areas of Ship and Safe.

Besides, some of the projects´ solutions can help developers of new project ideas see what has already been developed and what could be a new step towards more sustainable societies under the new objectives of the **Interreg Baltic Sea Region Programme 2021-2027 "blue economy"**.

What?

The projects tackled the following challenges and opportunities:

- Shipping footprint on the environment, including water and air pollution;
- A coordinated search and management of alternative fuels for the shipping industry;
- Inefficiencies in the maritime industry processes;

- Need for a harmonised approach to rescue operations;
- Safer navigation in the Baltic Sea.

Who?

The solutions are for national and regional public authorities, shipyards, port operators, ship companies, national rescue authorities and services, rescue coordination centres, divers, coast guards, technology developers, maritime service providers, manufacturers of navigation equipment, pilots, and nautical staff.

- **ACHIEVEMENTS**

Cleaner and more sustainable shipping

Action plan and solutions for green cruise tourism (GREEN CRUISE PORT)

- Action plan sets up a sustainability vision for the cruise tourism industry together with solutions for port authorities and cruise lines on how to reduce negative ecological and social impacts of cruise port operations;
- Report on solutions for onshore power supply for cruise vessels including costs and benefits for vessel operators and ports;
- Common standards in the measurement of economic effects of cruise tourism, in particular at the regional and local levels. These standards support making sound investment decisions on cruise port infrastructure;
- Sustainable energetic solutions for the cruise terminal buildings in the northern climate. It describes technical solutions, e.g. for heating, cooling, automation, or lighting.

Decision support for the shipping industry to control air pollution (ENVISUM)

- Decision support tool “SECA Investment Tool” -helps maritime fuel producers as well as ship-owners to identify the best short or long-term investment. It supports in the estimation of capital budgeting strategies for the future to comply with SECA regulation (Sulphur Emission Control Area);
- Policy brief “SECA Regulation's benefits exceed the cost. Both are distributed unevenly” provides policy makers and authorities with recommendations for the development of future environmental regulations. Besides, it guides the shipping sector on how to support future investment decisions;
- Overview of emission abatement strategies with measurement results from different types of vessels;
- Interactive online storymap “Baltic Sea Region Shipping Towards Better Air Quality” is for authorities, ports and further air emission experts.

Strategic approach to Liquefied Natural Gas (LNG) as a green fuel for shipping (Go LNG)

- Go LNG online information platform for LNG developers from business and science. It provides access to the news from the industry, to a business cluster and a scientific LNG competence centre;
- "Liquid biogas business concept" is a business model concept for renewable shipping fuel from local resources in coastal communities.

Improved monitoring and assessment to prevent invasive species (COMPLETE)

- Proposal for a "Regional Baltic Biofouling Management Roadmap" serves as a recommendation for policymakers to implement harmonised biofouling management strategies in shipping and boating;
- Risk Assessment tool under the HELCOM-OSPAR Joint Harmonised Procedure allows authorities as well as shipping companies to quickly evaluate the risk of non-indigenous species. The area covers two ports within the OSPAR and HELCOM territories;
- The monitoring programme of non-invasive species (NIS) for all HELCOM countries allows to monitor new NIS introductions and assess the main introduction vectors. It is needed in order to optimise management and meet the targets of the Baltic Sea Action Plan and the EU Marine Strategy Framework Directive.

Optimised processes at shipyards, ports and shipping companies (ECOPRODIGI)

- Two roadmaps "Maritime in the 21st Century" (Ro-Ro shipping) and "Road to Shipyard 4.0" (shipyard processes) guide the industry in digitalisation, including current state analysis and the future technology roadmap. The roadmaps are for policymakers, industry, technology developers and researchers;
- Two training programmes contain two modules. One module is for shipyard eco-systems and focuses on the optimisation of shipbuilding processes at shipyards. Another module is for shipping companies and ports to enable RO-RO shipping companies, terminals, and clients to ensure fuel savings, improved RO-RO vessel utilisation and reduced waiting times for clients;

- Concept for mobility in research and higher education covers summer schools with a focus on large research infrastructures as well as research internships and short-term scholarships for PhD students
- Policy briefs on digital performance monitoring, cargo stowage optimisation and process optimisation at shipyards. The briefs contain the key findings of each technological case as well as practical recommendations on how to strengthen digitalisation and eco-efficiency.

Improved maritime safety

Harmonisation of maritime search and rescue operations (ChemSAR)

- The Standard Operational Procedures (SOPs) support national maritime rescue authorities in maritime search and rescue operations in incidents involving hazardous and noxious substances (HNS). They help in using more human and technical resources more efficiently and working in a more coordinated manner;
- Chemical data portal helps national maritime rescue authorities and services find relevant information for rescue operations where HNS are involved. It helps plan and respond to chemical emergencies at sea;
- The eLearning material helps maritime rescue authorities and services improve knowledge in chemical emergencies at sea, following the operational plan and standard operating procedures.

Saving more lives thanks to aligned rescue operations (DiveSMART-Baltic)

- Standard Operational Procedure (SOP) includes guidelines, manuals and checklists for rescue coordination centres, rescue services, coast guards, fire departments, police, armed forces and other services involved in diving search and rescue missions in an underwater environment;
- The Jira tool is an online inventory of the diving resources, capacities, mobilisation times and alarming procedures from the EU countries around the Baltic Sea. The database enables Rescue Coordination Centres (RCC) in Denmark, Sweden, Finland, Latvia, Poland and Norway, diving organisations and local and regional authorities to better prepare for and coordinate activities in case of accidents in the Baltic Sea.

Safer ship navigation (R-Mode Baltic)

- Introduction of terrestrial navigation system called R-Mode technology which is an alternative technology for situations when GPS is not functioning. It includes R-Mode signal design for two communication systems, the approaches for digital signal processing and methods for positioning. The solutions are for maritime service providers, manufacturers of navigation equipment, ship owners, pilots, and nautical staff;

- Upgraded eight maritime radio beacons help to transmit synchronised R-Mode signals. It is done by spanning transnational network which enables terrestrial navigation in coastal waters. The results are useful for national maritime service providers and standardisation organisations to develop R-Mode as a worldwide accepted terrestrial navigation system.

TAGS: clean shipping, smart green mobility, inland waters, coastal areas, environmental protection, low carbon transport systems, hazardous substances, industry, tourism, logistics and freight transport, digital technologies, digital transformation