

NATURE-INCLUSIVE MSP IN THE BALTIC SEA

POLICY BRIEF

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MAINSTREAMING BIDIVERSITY IN MSP



POLICY BRIEF FRAME

Marine biodiversity is in rapid decline across all European sea basins. To meet the EU's environmental and sustainability objectives, it is essential to integrate biodiversity considerations more effectively into marine and maritime policies, including Maritime Spatial Planning (MSP). However, despite recent policy advancements, progress remains constrained by fragmented governance, limited access to data, insufficient funding, and the absence of legally binding biodiversity targets.

With MSP4BIO, an integrated and modular Ecological-Socio-Economic (ESE) management framework was developed, uniting marine protection/restoration and societal interest including sustainable blue growth. By validating the ESE framework in six test sites across Europe - including the Baltic Sea - policy solutions were created to support nature-inclusive MSP and strengthen the implementation of MSP and MPA processes.



THE BALTIC SEA TEST SITE

The Baltic Sea, a semi-enclosed inland sea located in Northern Europe, serves as a transboundary sea basin with eight EU coastal countries sharing the Baltic coast. Implementing ecosystem-based management across key economic sectors in the Baltic Sea reveals persistent structural challenges, but also growing institutional momentum and policy mechanisms that enable more integrated, sustainable approaches.

SCAN



DEVELOPMENT

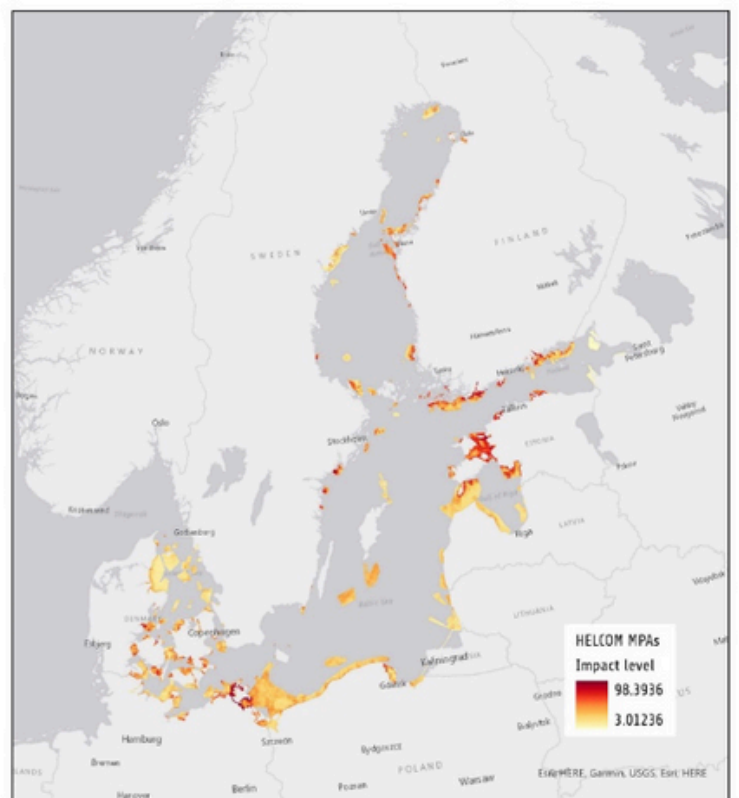


ANALYSIS

The main focus for validating the ESE Framework in the Baltic Sea test site was to assess the spatial distribution of cumulative pressures and impacts within HELCOM Marine Protected Areas (MPAs) using the HELCOM⁺ SPIA (Spatial Pressure and Impact assessment) tool, and SeaSketch. Objectives included identifying the most impacted ecosystem components, understanding key pressures affecting MPAs, and determining which MPAs are most vulnerable. Key findings revealed bottom-water habitats, grey seals, and harbour porpoises as the most impacted components. Pressures such as hazardous substances, eutrophication, and physical disturbances were identified as the most significant, primarily originating outside MPA boundaries.

THE STUDY HIGHLIGHTED THE NEED FOR REGIONAL STRATEGIES TO ADDRESS THESE WIDESPREAD CHALLENGES. ANALYSIS FURTHER INCLUDED THE PROPOSAL AND EXPLORATION OF MPAS WITHIN GDANSK BAY USING PARTICIPATORY MAPPING EXERCISES WITH SEASKETCH. THE RESULTS OF TRADE-OFF ANALYSES HAVE PUT FORTH CRITICAL PROPOSALS THAT UNDERSCORE THE COMPLEX INTERPLAY BETWEEN ENVIRONMENTAL CONSERVATION AND HUMAN ACTIVITIES.

Figure 1: SPIA tool outcome showing the most impacted areas in HELCOM MPAs (red represents high impact and yellow represents the low impact areas).



DEVELOPMENT



CHALLENGES


Major challenges in the Baltic Sea Region emerging from the analyses included

- 1) the inability of MPAs to control widespread, external pressures** such as hazardous substances and eutrophication
- 2) transboundary pressures that remain inadequately addressed** (e.g. the introduction of non-indigenous species and the impact of anthropogenic noise through shipping) and
- 3) tourism as a growing source** of conflict overshadowing traditional sectors in terms of environmental impact.

THESE CHALLENGES ARE COMPOUNDED BY INSUFFICIENT COHERENCE BETWEEN MSP AND MPA MANAGEMENT PROCESSES, INSUFFICIENT FINANCIAL AND HUMAN RESOURCES, FRAGMENTED DATASETS, AND LIMITED STAKEHOLDER ENGAGEMENT.

RECOMMENDATIONS

Sector-specific legislative gaps and resource limitations including a lack of comprehensive data were described as two main factors hindering the mainstreaming of biodiversity in the Baltic Sea region. To tackle these emerging obstacles, MSP4BIO co-developed policy solutions, **validated through engagement with the local Community of Practice, regional dialogues, and EU-level discussions.** The importance and feasibility of respective solutions were determined by questionnaires disseminated to Baltic countries' representatives.

A vibrant underwater scene featuring a coral reef. The reef is covered in various types of coral, including branching and brain coral. Numerous small, bright orange fish are swimming around the reef. The water is clear and blue.

Build on existing regional MSP governance structures to integrate MSP4BIO tools into regional MSP and MPA planning cycles.

This could involve piloting the use of SeaSketch in the next cycle of national MSP revisions and reporting outcomes to HELCOM-VASAB MSP Working Group.

Ensure national MSP updates adopt ecosystem-based approaches, supported by cumulative impact tools with higher spatial resolution.

Member States could integrate outputs from the cumulative impact tools at local and national scale to better assess and mitigate ecosystem pressure hotspots.

RECOMMENDATIONS

Incorporate MSP4BIO outcomes (e.g., pressure and impact levels of HELCOM MPAs) into green infrastructure maps, as highlighted in the objectives of the Baltic Sea Regional MSP Road Map.

This may include overlaying pressure and biodiversity impact data from MSP4BIO into national and regional spatial planning portals such as BASEMAPS for shared use.

Improve alignment between fisheries management, MPAs, and biodiversity restoration targets through the uptake of HELCOM recommendations and regional indicators.

A coordinated update of management plans for key fish stocks and MPAs could be initiated, using indicators.

Expand capacity-building and stakeholder dialogue to better integrate socio-economic and cultural ecosystem services into MSP.

Workshops and training sessions using SeaSketch trade-off assessments could be held with municipalities, fishers, and tourism operators to co-develop spatial priorities and trade-off scenarios.

Use existing regional strategies (e.g., BSAP, MSP Roadmap 2030) to anchor strict protection and ecological coherence principles in upcoming MSP reviews.

This includes designating areas of high ecological value as no-take zones based on criteria aligned with BSAP and the EU Biodiversity Strategy targets.

A LOOK AHEAD

NEXT

MSP4BIO recommendations provide a structured roadmap for policymakers, planners, and stakeholders to take decisive steps in ensuring the EU's maritime spaces are managed sustainably, aligning with long-term biodiversity conservation goals. To support local efforts, stakeholders can explore and utilize MSP4BIO's ESE Framework, an open-access online platform with a holistic approach to MSP and MPA management.

The achievements and lessons learned from MSP4BIO will be sustained and further developed through the implementation of the NESBp project, ensuring continued progress toward biodiversity goals.




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