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Reports and Tools from project Pan Baltic Scope

This is a list of tools and reports we produced in the Pan Baltic Scope project, with descriptions.

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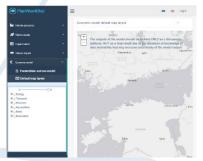
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Tools online

Pan Baltic Scope Online Tools

1. PlanWise4Blue – Estonian Online Application for MSP



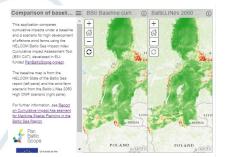
PlanWise4Blue is an application that combines models of marine economy and cumulative impact assessment. Such a model allows one to **assess** the **economic benefits** of various management **scenarios** along with **their environmental impact** across Estonian sea space. Outcomes of the model make it possible to work towards sustainable solutions to maximize the economic benefit gained from the use of marine resources with minimum damage to the environment. The aim of the economy model is to increase the capacity for knowledge-based management of marine resources and accounting for their potential economic benefits. The aim of the cumulative impact model is to identify various human pressures and account for their cumulative effects on the natural environment, while considering regional differences of nature. The spatial resolution of the model is 1 km2, and the temporal timescale is 1 year.

2. <u>BASEMAPS – Distributed MSP Data in the Baltic Sea</u>



BASEMAPS is a map service to **access Baltic Sea** maritime spatial **planning** relevant **data** from the original source where it is stored. BASEMAPS allows users to view and download data/metadata published by national data providers through OGC open geospatial standards – WMS and WFS. It is aimed for planners, data providers and authorities dealing with maritime spatial planning in the Baltic Sea.

3. Comparison of baseline and 2050 High OWF scenarios



This application **compares cumulative impacts** under a baseline and a **scenario** for high **development of offshore wind** farms using the HELCOM Baltic Sea Impact Index Cumulative impact Assessment Tool (BSII CAT), developed in EU co-funded Pan Baltic Scope project. The baseline map is from the HELCOM State of the Baltic Sea report (left pane) and the wind farm scenario from the Baltic LINes 2050 High OWF scenario (right pane). For further information, see <u>Report on Cumulative Impact Assessment for</u> <u>Maritime Spatial Planning in the Baltic Sea Region</u>

4. <u>The Baltic Sea Impact Index (BSII) Cumulative impact</u> Assessment Toolbox

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The Baltic Sea Impact Index (BSII) Cumulative impact Assessment Toolbox includes following tools:						
Baltic Sea Impact Index tool (BSII tool) – calculates the Balti and pressures (grid layers), as well as a sensitivity scores ma creates a BSII statistics matrix, which shows how much each	trix as input, and creates a BSII grid lays	er as output	The tool also			

BSII Cumulative impact Assessment Toolbox (BSII CAT) was developed to facilitate **regionally coherent assessments of cumulative impacts**. The toolbox includes tools for calculating the Baltic Sea Impact Index and the Baltic Sea Pressure Index. It also supports the identification of areas with high ecological value or high potential provision of ecosystem services, supporting the green infrastructure concept as developed in Pan Baltic Scope. The toolbox enables batch impact assessments and impacts assessments targeting ecosystem components important for green infrastructure in a balanced way. The tool uses regional data as default, but it can also be applied using data layers, if these align with the basic requirements of the tool.

- Open the Toolbox page on GitHub
- Online version coming 2020.

Reports

Pan Baltic Scope Reports

5. Project Summary: Pan Baltic Scope – Bringing Better Plans



The Pan Baltic Scope project has been a successful cross-border cooperation in the Baltic Sea with the aim of bringing better maritime spatial plans.

Standing on a solid base of previous maritime spatial planning-related projects in the Baltic Sea region, most notably the Baltic SCOPE project, we cooperated on 12 activities in three thematic groups:

- Cross-border collaboration to support national maritime spatial planning where planners and researchers cooperated in five activities.
- Implementation of the Ecosystem-Based Approach and Data Sharing created methods and tools to support maritime spatial planning in the Baltic Sea.
- Integration of Land-Sea interaction into maritime spatial planning connected to both themes and explored the concept of Land-Sea Interaction.

The tools and methods created in the Pan Baltic Scope project are presented in this brochure. Each activity presents their work, as well as their final products and where to find them.

English version

Polish version

6. <u>Project recommendations for bringing better maritime spatial plans in the Baltic</u> <u>Sea Region</u>



These are the **recommendations** from the Pan Baltic Scope collaboration.

We hope they will help in bringing even better maritime spatial plans in the Baltic Sea Region in the

years to come. The recommendations can be useful to **planners, authorities, policymakers and others** dealing with maritime spatial planning in the Baltic Sea, and possibly beyond.

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7. <u>The Planning Forum – Experiences from Pan Baltic Scope</u>



This report is about **experiences** from the Planning Forum and serves as an institutional memory of the work done in the Pan Baltic Scope collaboration.

The Planning Forum was a practical, hands-on means to deal with planning issues in the Baltic Sea Region, ensuring cross-border perspective and increased coherence. The Planning Forum supported informal collaboration and knowledge exchange between partner countries and regions, which was very much appreciated. With this report, the Planning Forum of Pan Baltic Scope hopes to inspire current and future planners to work together for coherent cross-border maritime spatial planning.

8. Lessons Learned in Cross-border Maritime Spatial Planning



The Lessons Learned Report is a **summary and analysis** of two intensive years of collaboration to achieve the set goals, joint **learning** and knowledge co-creation within the Pan Baltic Scope project.

The report provides an **account of** project participants' expectations, experiences and the learning processes that occurred within the project activities, including their personal reflections on the main **challenges and enablers** for transboundary Maritime Spatial Planning in the Baltic Sea Region.

9. <u>Cumulative Impact Assessment for Maritime Spatial Planning in the Baltic Sea</u> <u>Region</u>



Cumulative impact assessments make it possible to understand the **combined effects on the environment from many human activities** taken together. In maritime spatial planning (MSP), evaluation of cumulative impacts represents both a necessity

and a way to support long-term sustainability in alignment with the ecosystem-based approach.

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10. Ecosystem-Based Approach in MSP – a Sub-basin SEA Inclusive Handbook



The **handbook** aims to be a practical tool for the daily-plannerswork in a transboundary environment – in the Baltic Sea and beyond. Addressing the implementation of an Ecosystem-based Approach (EBA), guiding through the comparison of different

Strategic Environmental Assessments (SEA) and linking MSP to other key policies like the EU Marine Strategy Framework Directive (MSFD.) It is based on literature research, analyses of existing plans and interviews with experts.

11. <u>Synthesis Report on the Ecosystem-Based Approach</u> to Maritime Spatial Planning



The present synthesis report engages with the concepts of ecosystem approach and maritime spatial planning and the relationship between them with a particular focus on the Baltic Sea context.

The report is **based on a review of scientific literature**, **selected reports and pertinent guidance documents**. It aims to analyse the **consistency** between the identified perspectives and recommendations and the **manner in which the ecosystem approach is characterised and operationalised** in the HELCOM-VASAB Guideline for the implementation of ecosystem-based approach in Maritime Spatial Planning in the Baltic Sea area.

12. <u>Recommendations on Developing a Framework for Economic and Social Analyses</u> in MSP



The following recommendations build on a review of existing literature and a survey sent to national authorities in the Baltic Sea countries on the assessment of **economic and social impacts** and **ecosystem services in national MSP**. Both of these

activities were conducted as part of project activity on Economic and Social Analyses in the Pan Baltic Scope project. Furthermore, the recommendations are based on collaboration within Work Package on the Ecosystem-Based Approach in the Pan Baltic Scope project, as well as on previous experiences in regional economic and social analyses, mainly in HELCOM HOLAS II.

13. <u>Assessing economic, social, cultural and ecosystem service impacts in MSP in the</u> <u>Baltic Sea Region</u>



The aim of this report is to provide insights into **how economic**, social, cultural and ecosystem service impacts could be understood and assessed in the context of MSP, what kind of methods, approaches and concepts are available for their

assessment, examples of studies that could provide useful results, and what is the current status of the assessment of these impacts in the Baltic Sea. The report includes a literature review and the results of a survey to MSP authorities in Baltic Sea region of existing data and approaches to assess economic, social, cultural and ecosystem service impacts in MSP.

14. Mapping of Green Infrastructure: Pan Baltic Scope Approach



The Pan Baltic Scope project has developed a **concept of marine green infrastructure** (GI), defining it as a spatial network of ecologically valuable areas which are significant for the maintenance of ecosystems' health and resilience,

biodiversity conservation and multiple delivery of ecosystem services essential for human well-being. The project has **tested** GI mapping at the scale of the Baltic Sea, covering the two essential aspects – identification of areas of high ecological value and potential supply of ecosystem services. The **brochure** outlines the concept of marine GI, briefly describes the GI mapping approach applied by the Pan Baltic Scope project and the obtained results, as well as discuss opportunities to apply the concept in ecosystem-based maritime spatial planning. **For the detailed and explicit description see report** *Green Infrastructure Concept for MSP and Its Application Within Pan Baltic Scope Project*.

English version

Polish version

15. <u>Green Infrastructure Concept for MSP and Its Application</u> <u>Within the Pan Baltic Scope Project</u>



The Pan Baltic Scope project has developed a **concept of marine green infrastructure** (GI), defining it as a spatial network of ecologically valuable areas which are significant for the maintenance of ecosystems' health and resilience,

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biodiversity conservation and multiple delivery of ecosystem services essential for human well-being. The project has **tested GI mapping** at the scale of the Baltic Sea, covering the two essential aspects – identification of areas of **high ecological value** and potential **supply of ecosystem services**. The report gives an overview of the concept of GI, explores the existing approaches to GI mapping, describes the methodology developed by the Pan Baltic Scope project for marine GI mapping as well as concludes about the future research needs and opportunities to apply this information in the MSP process.

16. <u>Climate Refugia in the Baltic Sea: Modelling Future Important Habitats by Using</u> <u>Climate Projections</u>



Habitat-forming species are key in providing ecosystem services, green infrastructure and a blue economy. This report presents **modelled spatial distributions for key species** based on two IPCC climate change scenarios.

Our models indicate there is a risk that many species will have a **radically different distribution** in the year 2100:

- Species limited by salinity will be radically reduced and may even disappear in the northern and central Baltic Sea, as well as the Bothnian Sea, and some will relocate to new areas
- Distribution of freshwater species will remain similar or with slight changes
- Particularly hard bottoms but also sandy bottoms will lose ecosystem functions
- Certain areas stand out as especially important as cores, refugia or "last stands" for species

These predictions indicate that climate change is a **significant threat** to **ecosystem functions** and to the basis of the **blue economy** within

the **next 80 years**. Immediate actions to mitigate climate change and to restore damaged habitats to salvage ecosystem functions seem highly warranted.

17. Assessment of Application of Baltic Sea Common Regional MSP Framework



The objective of the Assessment was to analyse the application, implementation, achievements and possible future adjustments to update the **joint regional framework** for the Maritime Spatial Planning process in the Baltic Sea Region:

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- Baltic Sea Broad-Scale Maritime Spatial Planning Principles (MSP Principles),
- Guidelines on transboundary consultations, public participation and cooperation (Guidelines),
- Regional Baltic Maritime Spatial Planning Roadmap 2013-2020 (Roadmap).

The implementation of the Assessment demanded to apply several methods, which were relevant to all three components of the Assessment. The experts used available published information and reports as well as on-line survey, interviews, face-to face meetings and workshops. Also, direct experiences and emerging ideas from the on-going MSP process were used. The assessment was carried out in close cooperation with

the VASAB Secretariat, HELCOM-VASAB MSP WG and other activities of the Pan Baltic Scope project.

18. Lessons, Stories and Ideas on How to Integrate Land-Sea Interactions into MSP



The Pan Baltic Scope Synthesis Report "Lessons, Stories and Ideas on how to **integrate Land-Sea Interactions** into MSP" **showcases** how planners from the Baltic Sea have tried to tackle Land Sea Interactions (LSI) in countries and regions at

different stages of developing marine and coastal planning. It presents experiences, challenges and enablers when integrating LSI in cross-border contexts, based on cases in Finland, Åland, Sweden, Estonia, Latvia and Germany. This report is **aimed at** coastal and marine planners and experts from all institutional levels working at the land-sea interface.

19. Pilot Thematic Plan for Salacgriva (Latvia)



Within the framework of the service "Guidelines for Planning Marine Coastal Waters and the Adjacent Land Areas at the Local Level (Latvia)" a case study was carried out in one of the **coastal municipalities** of Latvia – Salacgriva municipality – and

a Pilot Thematic Plan has been developed for integral planning of the marine coastal waters and the adjacent land areas of Salacgriva municipality at the local level.

The Pilot Thematic Plan aims to provide **proposals for integral planning and efficient development of marine coastal waters and the adjacent land** areas of Salacgriva municipality by harmonizing the coexistence of different interests in territory use.

20. Planning Marine Coastal Waters and the Adjacent Land Areas at Local Level



Guidelines. Planning approach within the integrated planning of marine coastal waters and the adjacent land areas is based on the understanding of local conditions and the linkage between environmental (natural resources and nature

protection, marine and terrestrial biodiversity, marine and terrestrial natural processes), socio-economic (infrastructure, business activities, mobility) and sociocultural aspects (habits, traditions, events). At the same time, in order to achieve a functional link between sea and land, it is necessary to ensure that the various expectations and needs are aligned. Planning at local level requires not only the involvement of different organizations in the planning process, but also the participation of the local population.

21. <u>The Blue Sectors of the Åland Islands: the current status and future visions (in</u> <u>Swedish)</u>



The Blue sectors of the Åland Islands is a study on the **current state of the Blue Economy sectors** that function within the Åland Islands. The study was conducted by WSP Sweden and aimed to describe the current economic value of the "Blue

Sectors". A few prioritized sectors, such as shipping, aquaculture and fishing, were also studied in more depth to analyze the current status, sectoral goals and strategies on EU-, National, and Åland-level, an overview of the sectors economic contribution to Åland, and SWOT analyses.

22. <u>Åland Islands: The local perspective and opinions on Marine- and Coastal</u> <u>planning (in Swedish)</u>



The study was co-organized by the consultant from the Swedish University of Agricultural Sciences, Centre for Biological Diversity and the Government of Åland. The study was conducted to **collect and analyze local-level knowledge and**

information about the **coastal and marine environments** surrounding the diverse archipelago surrounding the Åland Islands. Local-level meetings were held, organized across the group of islands, to ask the local communities to tell "us" what is meaningful in the local communities regarding the marine environment, and what

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were the local perspectives on the Government of Ålands work so far. The information collected throughout these meetings were analyzed and had a substantial impact on the MSP. For example, the culturally valuable areas in the MSP proposal consist of areas that were identified to be relevant for the local-level culture, and these areas were identified during the meetings with a diverse group of stakeholders.

23. Story Map of the Finland, Åland and Sweden (FIAXSE) Case



Finland, Åland and Sweden (FIAXSE) subcases **mapped and investigated similar issues** in **different scales** and different **size** areas in the Gulf of Bothnia. The idea was to zoom in on different levels, from strategic-scale such as national and

regional plans to local-level actors and effects, so everything that was discussed in the level above would also have been considered more thoroughly in the scale below.

24. Monitoring and Evaluation of Maritime Spatial Planning



This report compiles the results of the Pan Baltic Scope project activity that focussed on the **monitoring and evaluation** of MSP. The work consisted of two parts. The first was to develop **conceptual basis** for monitoring and evaluation. For this

purpose, we reviewed **literature** on evaluation of MSP and spatial planning on land, as well as literature on evaluation of broad-scale, multi-level and multisectoral policies that have a lot in common with broad-scale spatial planning such as MSP. The second part of this project activity consisted of **practical work together with** Latvian and Polish MSP **authorities** to follow how they are planning to monitor and evaluate their national MSP. The report focuses thus on monitoring and evaluation of national level MSP. Both countries are doing their first MSP cycle. Latvia had its MSP plan approved in 2019, and Poland is following close behind with its schedule. Consequently, they are planning for the monitoring and evaluation of MSP for the first time.

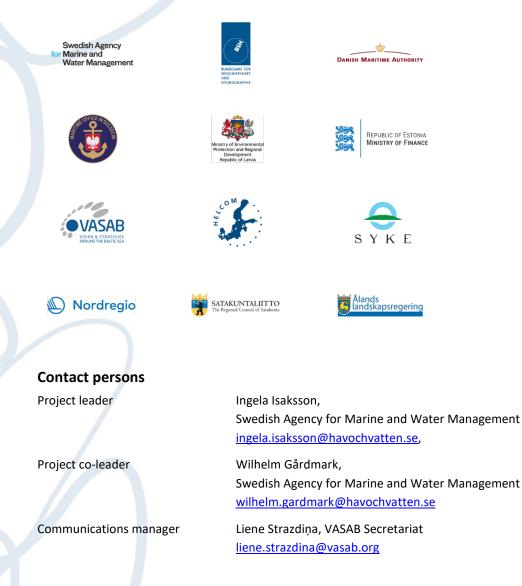
About Pan Baltic Scope

Pan Baltic Scope was a collaboration between 12 planning authorities and organisations from around the Baltic Sea in 2018 and 2019. We worked towards bringing better maritime spatial plans in the Baltic Sea Region and enhance the lasting macro-regional mechanisms for cross-border maritime spatial planning cooperation.



The Partnership

These 12 organisations were partners in the project. In addition to these, there were associated partners too.



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