



Document title

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Agenda Item 5 – Ecosystem-based approach in MSP
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Background

The Work Plan 2017-2019 of the HELCOM-VASAB MSP Working Group includes the activity on the practical use of socio-economic parameters including ecosystem services in MSP. This document presents the plans for Economic and Social Analyses (ESA) and assessment of cumulative impacts in MSP in the Pan Baltic Scope project (activities 1.2.5 and 1.2.3) led by HELCOM.

Action requested

The Meeting is invited to take note of and discuss how the activities can support the work of the group.

Plans for Economic and Social Analyses (ESA) and assessment of cumulative impacts in MSP in the Pan Baltic Scope project

Economic and social analyses (ESA)

Economic and social analyses (ESA) illustrate the importance of the Baltic Sea marine environment to society, the contribution the marine environment makes to the well-being of current and future generations, and to national and regional economies. The economic impacts originate from two sources: the use of marine waters and the state of the marine environment. Human activities that are dependent on the sea bring substantial economic benefits, both in terms of their effect on the national economy and employment and more broadly on citizens' well-being. Actions to protect the marine environment may also create economic benefits for economic sectors as well as citizens.

The European Union (EU) maritime policy builds on the adoption of ecosystem-based approach in the Marine Strategy Framework Directive (MSFD) as well as in the Directive on Maritime Spatial Planning (MSP). Additionally, economic and social analyses, such as the use of marine waters and cost of degradation analysis, are required in MSFD. MSP calls for the sustainable growth of maritime economies as well as the sustainable use of maritime space and marine resources, highlighting the role of the ecosystem services and the land-sea interactions within the interrelated marine and coastal activities. The European Commission's Blue Growth strategy acknowledges EU's commitment to the sustainable development goals, and aims to ensure that marine resources are used sustainably to reach healthy marine ecosystems and a strong blue economy.

The Pan Baltic Scope activity 1.2.5 under WP 1.2 MSP in BSR: Advancing the Implementation of the Ecosystem-Based Approach and Data Sharing builds upon previous work on the economic and social analyses that has been developed in HELCOM under the TAPAS¹ project in 2016 and the SPICE² project in 2017, co-financed by the EU. TAPAS and SPICE projects have conducted economic and social analyses of the use of marine waters and cost of degradation for the Baltic Sea Region. Additionally, in the SPICE project an approach for the ecosystem services, baseline scenario and integrating economics into the assessment of activities, pressures, state and impacts were developed. Both TAPAS and SPICE support the Project for Developing the Second Holistic Assessment of Ecosystem Health in the Baltic Sea (HOLAS II), which runs from December 2014 to June 2018. The results of the regional use of marine waters and cost of degradation analysis have been included in Chapters 3, 4 and 5 of the first version of the [HELCOM 'State of the Baltic Sea' summary report](#) (HOLAS II) and the methodology and results have been presented in more detail in the [supplementary report on economic and social analyses](#), published in the summer 2017. The updated report will be published by HELCOM in June/July 2018.

The main objective of activity 1.2.5 is to establish a shared basis for further work on inclusion of social and economic analyses in MSP. The inclusion of social and economic analyses in MSP advances the implementation of the ecosystem-based approach. Activity 1.2.5 is carried out in a close collaboration with Activity 1.2.3. Links to other activities are identified in the interaction plan.

¹ HELCOM [TAPAS](#) is an EU co-financed project aimed at supporting the [HOLAS II project](#) in its development of the Second HELCOM Holistic Assessment of the Ecosystem Health of the Baltic Sea.

² [SPICE](#) is a HELCOM coordinated project that is co-financed by the EU. The project is designed to contribute directly to the finalization of the 'Second HELCOM Holistic Assessment of Ecosystem Health in the Baltic Sea' that is carried out by HELCOM through the HELCOM [HOLAS II](#) project.

Pan Baltic SCOPE

Activity 1.2.5 Economic and Social Analyses

Activity lead: **HELCOM**
 Participating: **Ministry of Finance, Estonia**
Nordregio, BSR
 Swedish Agency for Marine and Water Management (SwAM)
 Federal Maritime and Hydrographic Agency (BSH), Germany
 Maritime Office in Szczecin (UMS), Poland
 Danish Maritime Authority (DMA)
 Ministry of Environmental Protection and Regional Development
 (MoERPD), Latvia
 VASAB secretariat, BSR
Finnish Environment Institute (SYKE)
 Satakunta Regional Council (RCS), Finland
 Government of Åland (GoA), Finland

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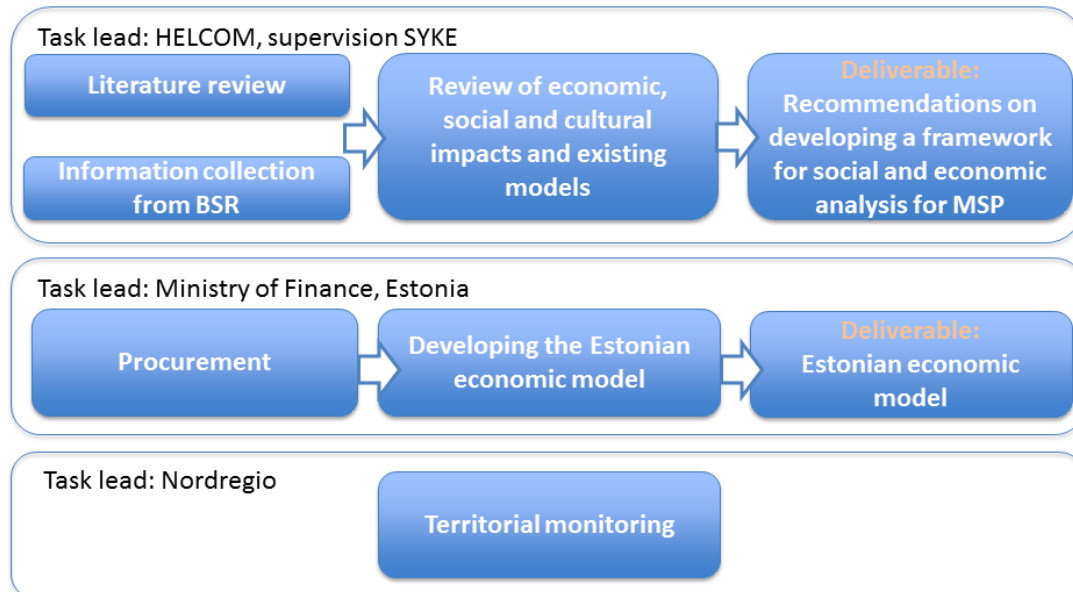
Activity 1.2.5 Economic and Social Analyses

- **Review** of economic, social and cultural impacts and existing models in national MSP in the Baltic Sea Region including ecosystem services (HELCOM, supervision from SYKE)
- **Recommendations** on developing a framework for economic and social analyses in MSP (HELCOM)
- Developing the Estonian **economic model** (Ministry of Finance, Estonia)
- **Territorial monitoring** (Nordregio)

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Activity 1.2.5 Economic and Social Analyses



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Overall timetable and connection points

Timing	Gathering/ Milestone/ Deliverable	Task	Responsible partner
M9 (September 2018)	G	Economic and Social Analysis: Small working meeting	HELCOM
M11 (November 2018)	G / M	Workshop on Economic and Social Analysis	HELCOM
M11 (November 2018)	G	Estonian Model	Ministry of Finance/EE
M15 (March 2019)	G	Economic and Social Analysis: Small working meeting	HELCOM
M18 (June 2019)	G	Workshop on Economic and Social Analysis	HELCOM
M21 (September 2019)	D	Recommendations on how to develop a framework for social and economic analysis for the purposes of MSP	HELCOM
M21 (September 2019)	D	Further developed Estonian economic model	Ministry of Finance/EE

Connection points:

- Activity 1.2.3 Cumulative Impacts
- Activity 1.2.4 Green Infrastructure
- WP1.3. Integration of the land-sea interactions in MSP

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Cumulative impacts

Cumulative impacts assessments measure the potential total impacts on the environment from co-occurring human activities, based on information on the spatial distribution of pressures from human activities, and the spatial distribution of species/habitats. The results are typically presented as maps which show areas where the impact from human activities is expected to be the highest. If the underlying data is of sufficient quality, different quantitative outputs can also be compared, for example by estimating the total cumulative impact in a region or sub-region, by comparing different planning scenarios or by relating potential impacts from different activities to each other. The assessment can further potentially be linked to economic and social analyses and conservation issues, including green infrastructure.

The cumulative impacts can be assessed by identifying areas where pressures and species/habitats co-occur, and the strength of the impact estimated by sensitivity scores which are identified for each combination of pressures and species/habitat. A key aspect of the assessment is to have spatial data sets of sufficient quality, coverage and adequate spatial resolution.

The Pan Baltic Scope activity 1.2.3 has the task to advance the implementation of cumulative impact assessments as a tool in MSP. The work will build on recent experiences from developing the regional Baltic Sea Impact Index (BSII) under the project for developing the Second Holistic Assessment of Ecosystem Health in the Baltic Sea (HELCOM HOLAS II), as well as on experiences from national projects on MSP and cumulative impact assessment. The aim of the activity is to find and develop on connection points between MSP and cumulative impact assessment, as well as to explore possibilities to share and compare assessment results at different spatial scales, from local/national to regional. The activity will also seek exchange of experiences with other marine regions.

The most recent results from the BSII are presented in Chapter 6 of the first version of the [HELCOM 'State of the Baltic Sea' summary report](#) (HOLAS II) A revised version is currently under review and the updated report will be published by HELCOM in June/July 2018. The cumulative impacts assessment of HOLAS II will be supplemented with a thematic assessment with more detailed description of the underlying methods and data for the BSII.

Pan BalticSCOPE

Activity 1.2.3 Cumulative impacts

Activity lead: HELCOM
Participating: Swedish Agency for Marine and Water Management
Ministry of Environ. Protection and Regional Development, Latvia
German federal maritime and hydrographic agency
Satakunta regional council, Finland
Estonian ministry of finance
Maritime office in Szczecin, Poland

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1.2.3 Cumulative impact assessment

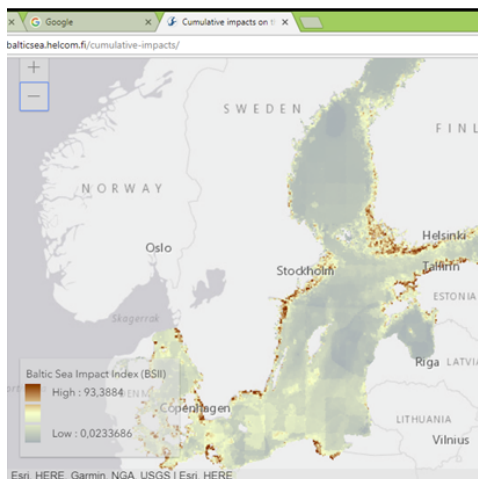


Figure 6.2. Map of the cumulative impacts of anthropogenic pressures based on (BSII). The cumulative impacts are calculated based on the method of the Baltic Sea

Work based on existing tools, such as the Baltic Sea Impact Index and national MSP tools



Mutual gains from integrating frameworks!

Lena Bergström



1.2.3 Cumulative impact assessment

Results:

- Aligned spatial metadata **Enhanced national and regional use**
- Increased capacities and expert cumulative impact assessment
 - **Improved cumulative impact assessment tool!?**



Deliverables

- Report on cumulative impacts in MSP (M20)
 - **Integrated ecosystem-based framework!**



Human activities and pressures considered

