Baltic Marine Environment Protection Commission

HELCOM expert network on economic and social analyses (EN ESA) meeting

Online, 18 September 2020

Document title	Document 2 – ESA in HOLAS III – MetDev draft plan
Category	INF
Submission date	26.8.2020
Submitted by	Secretariat

Background

HELCOM HOLAS III assessment (Third holistic assessment of ecosystem health) is planned to take place in 2021–2023. The preparatory phase for HOLAS III (2020–2021) has been proposed to include methodological development for ESA, as part of the HELCOM Holistic Assessment Methodology Development (MetDev) Project. A draft work package for ESA has been outlined, based on the proposal prepared by EN ESA for ESA in HOLAS III that was presented to GEAR 21-2019 (Document 5-1). GEAR 21-2019 supported the proposal for ESA in HOLAS III, noting that priorities and ambition level need to be adjusted when resources for the work have been secured (Outcome, paras 5.29-5.31). The intention is to obtain approval for the full MetDev project plan in autumn 2020, enabling the work to start in early 2021.

This document includes the draft plan for the work package on ESA in the MetDev project, as it was submitted to HOD 58-2020 for information.

ESA in HOLAS III – MetDev draft plan

Work package 2: Economic and Social Analyses

Project staff: Project researcher (located at Secretariat)

The aim of the work package on ESA within MetDev is to further develop regional methods and results for economic and social analyses (ESA) to support the holistic assessment of the marine environment by addressing some of the shortcomings and development needs identified in previous regional ESA work. It builds on previous HELCOM experiences and work on ESA for the State of the Baltic Sea report in HOLAS II (TAPAS and SPICE projects, 2016-2018), maritime spatial planning (Pan Baltic Scope project, 2018-2019) and analyses of existing and new measures to support the BSAP update (ACTION project and SOM Platform, 2019-2020), as well as reflects the ToR for HELCOM EN ESA and Roadmap for continued HELCOM work on ESA. Implementing ESA for HOLAS III as proposed here would meet some of the aims of the ESA roadmap.

The economic and social analyses (ESA) for State of the Baltic Sea report in HOLAS II covered the entire Baltic Sea region but were limited to selected human activities (use of marine waters) and environmental themes/ecosystem services (cost of degradation). Furthermore, although a conceptual framework for linking the use of marine water and cost of degradation analyses was developed, they were conducted separately in HOLAS II due to lack of suitable data, approaches and resources, and the link between the environmental status assessment and ESA was missing. An important development area is the improved integration within the components of ESA, and between ESA and environmental assessments, which enables a meaningful evaluation of how the marine environment affects human welfare and ensures improved relevance of the assessment for future management.

Following an invitation from GEAR 20-2019 to prepare more specific information on identified gaps and development needs for HOLAS III, a proposal for ESA in HOLAS III was presented to GEAR 21-2019 (Document 5-1). GEAR 21-2019 supported the proposal and the integration of ESA to other work strands in HOLAS III, and took note that priorities and ambition level of the work needs to be adjusted depending on the resources (Outcome, paras 5.29-5.31). The following is based on that earlier proposal for ESA in HOLAS III.

These have been identified as priority areas for ESA in HOLAS III:

A. Improved integration of ESA and environmental assessments
B. Improved implementation of the ecosystem services approach
C. Assessment of economic benefits due to marine protection
D. Cost-benefit analysis of policy measures
E. Pilot assessment of the prospects of marine ecosystem accounting

Although listed separately, the priority areas are interlinked, and will be developed in parallel. The work entails some conceptual development, in particular related to items A and E, and development of approaches, data collection and analyses for regional assessments. In addition to regional approaches, the outcomes of the work are aimed to support national ESA assessments, e.g. related to EU MSFD Programmes of Measures.

To achieve its objectives, the work package works closely together with the other work strands in MetDev and the two other preparatory projects, HELCOM Indicators and HELCOM DataFlow. In addition, contribution from the HELCOM EN ESA is required in terms of concrete inputs, guidance and review of the work. This

activity can also support the development and operationalization of the causal framework developed in the state/pressure indicators process.

A. Improved integration of ESA and environmental assessments (EN ESA, Project researcher)

Activity A establishes conceptual and operational relationships between the marine environment and human welfare by linking measures/actions, human activities, pressures, state, ecosystem services and human welfare in a causal framework. It is necessary for developing a connection between ESA and other components of HOLAS III, and the elements within ESA (e.g. use of marine waters and cost of degradation analyses). The activity enables assessing the connections between economic activities, current and future use of the sea, as well as human welfare and the state of the Baltic Sea. This activity is linked to developing the ecosystem services approach under activity B and uses inputs from the other activities in the work package.

Furthermore, activity A would directly support and provide added benefit for the application of the HELCOM indicators. The methodology would enable data collection that could be described and visualized to highlight trends and changes in human activities and drivers (i.e. supporting indicators) that help outline the root cause of the pressures or state changes monitored by HELCOM Contracting Parties. In doing so, the HELCOM indicator catalogue would be better integrated into a causal framework and build structures that would enable improved follow up for the BSAP in the future.

The activity builds on the development of concepts, approaches and data in the HELCOM SPICE, Pan Baltic Scope and HELCOM ACTION projects. The sufficiency of measures (SOM) analysis, carried out by the ACTION project and SOM Platform to support the BSAP update, can provide a partial basis for integrating ESA and environmental assessments in a causal framework. The SOM assessment links measures, activities, pressures and environmental state, but additional development is required for covering ecosystem services and human welfare, as well as linkages between the use of marine waters and cost of degradation analyses.

Although being a part of the ESA work package, the work is interdisciplinary in nature and requires the involvement of economists, marine scientists and experts from other fields for successful assessment. To that end, regular planning and working meetings between the Work Packages under MetDev, as well as the other preparatory projects HELCOM Indicators and HELCOM DataFlow, ESA, relevant HELCOM EGs and other experts involved in the preparatory work for HOLAS III are organized.

This activity would start at the beginning of the project and run until the end of the project.

B. Improved implementation of the ecosystem services approach (Project researcher)

Activity B entails developing approaches and collecting background information for identifying and assessing marine and coastal ecosystem services, including how the marine ecosystem contributes to the provision of ecosystem services, and what benefits and socioeconomic values people derive from these ecosystem services. It is tightly linked to activity A and supports the integrated assessment of the marine environment by developing an approach and providing information on one of the linkages.

The activity builds on previous work on ecosystem services in HOLAS II and other assessments, such as BONUS projects. It collects information from existing assessments on the provision and value of Baltic Sea ecosystem services. It advances the use of ecosystem services approach in regional ESA.

C. Assessment of economic benefits due to marine protection (Project researcher)

Activity C advances the assessment of the economic benefits of marine protection, or in other words, the assessment of cost of degradation. Building on the approaches in HOLAS II for the regional assessment of cost of degradation, it develops methods for additional adjustments of existing valuation results that improve

the accuracy of the regional benefit estimates, such as adjusting the value estimates for the extent of the environmental change.

This activity produces the benefit component for the cost-benefit analysis in activity D.

D. Cost-benefit analysis of policy measures (Project researcher)

Activity D develops a conceptual approach for a regional cost-benefit analysis of achieving good status of the marine environment. The cost-benefit analysis compares the costs and benefits of policies to improve the state of the marine environment and allows examining the economic efficiency of such policies. It builds on the approach for benefit assessment in activity C and the approach and results for the cost-effectiveness analysis of potential new actions, carried out in the HELCOM ACTION project and SOM Platform to support the BSAP update.

E. Pilot assessment of the prospects of marine ecosystem accounting (Project researcher)

Activity E develops an approach for a marine ecosystem accounting pilot to describe and quantify interactions between the economy and marine environment. It describes how and to which extent the Baltic Sea provides benefits to people, as well as how social and governance factors affect the status and associated benefits. Ecosystem accounting provides an additional perspective for linking the ecosystem and socio-economic system in activity A. The work builds on the data, methods and expertise in the HELCOM EN ESA.