

Informal consultation session of HELCOM BLUES – final project conference

(IC BLUES 1-2023)

17th January 2023

9:00 – 16:00 CET

Moderator: Otilia Thoreson

Opening words & introduction to results on biodiversity

Jana Wolf, HELCOM BLUES project coordinator; Johanna Laurila, Communications Advisor, HELCOM.

Project website [HELCOM BLUES – HELCOM](#)

Discussion of results and deliverables.

Welcome from the moderator.

Biodiversity, marine litter and underwater noise are the key focus areas of HELCOM BLUES, along the effectiveness of measures geared towards improving the state of the Baltic Sea and data accessibility. The results are to underpin the implementation of the revised BSAP.

Good environmental status, or GES, and a Baltic Sea in a healthy state are at the core of the **“HELCOM Biodiversity, Litter, Underwater noise and Effective regional measures for the Baltic Sea” (HELCOM BLUES) project**. Co-funded by the European Union and led by HELCOM, the Baltic-wide effort will run through 2022, for a total period of two years.

To help attain GES in the Baltic Sea, the HELCOM BLUES project will support the development of new and regionally coordinated measures addressing various pressures affecting the sea. It will also back assessments of the state of the Baltic Sea through improved monitoring, notably on biodiversity, marine litter and underwater noise.

In total, 14 partners and seven subcontractors with various backgrounds such as policy, research, academia or civil society and hailing from six Baltic Sea countries are involved in the project.

The project also closely links to other processes related to GES in the Baltic Sea, such as the EU Marine Strategy Framework Directive (MSFD), the HELCOM Baltic Sea Action Plan (BSAP) and the next HELCOM Holistic Assessment of the Baltic Sea (HOLAS III).

On the MSFD, the specific requests expressed by the EU in its initial call for project proposals – which is at the origin of HELCOM BLUES – were taken into account, notably regarding the development of effective regional measures to reduce existing pressures on the Baltic Sea, with a focus on biodiversity, marine litter and underwater noise. Furthermore, all results of the project will be made accessible to the Baltic Sea countries who are also EU member states to support them in meeting their national obligations under the MSFD.

The outcomes of the project will also underpin the implementation of the updated Baltic Sea Action Plan that is due to be adopted in October 2021 by providing monitoring data and guidance on the implementation of measures.

It will also support HELCOM’s next Holistic Assessment of the Baltic Sea (HOLAS

III), which will run in 2022-2023 and look at the state of the sea in the period from 2016 to 2021. The project will notably provide improved assessment results, for instance by improving the capacity for biodiversity reporting and assessment, and the assessment of marine litter and underwater noise, as well as by establishing closer links to between the state of the marine environment and human well-being.

Bycatch, Volker Dierschke, Gavia EcoResearch

Activity 2.1 Sub-tasks in the project:

- Regional bycatch risk maps and corresponding confidence evaluation for key species, done for numerous combinations of gears and species.
- Test cases evaluations for bycatch. Very precise data on bycatch per unit is needed to estimate bycatch mortality. Marine mammals threshold values: zero bycatch for endangered species.
- Improved state indicator assessment for by-catch.

The results are feeding into HOLAS III assessments. Assessments of marine mammals and waterbirds were carried out.

Key messages:

For science: bycatch assessments indicated negative impact on marine mammals and waterbirds. More precise data on fishing effort and bycatch is needed to quantify the impact of bycatch on the population level.

For policy makers: bycatch threatens the viability of marine mammal and waterbird populations. Bycatch monitoring needs to be implemented. Measures against bycatch must be taken to prevent deterioration of marine ecosystems.

Questions:

In which fishing gears are the estimated by-catch rates the highest? Coastal static gears or offshore trawls? Answer: static nets, placed close to the coast.

How much must bycatches in general decrease to be considered as not threatening mammals and bird populations?

For endangered species zero bycatch is recommended (harbour porpoise), but for more abundant species we need to have population modelling to see the consequences of bycatch. No data at the moment to set the thresholds. Plea for more monitoring.

Fish, Elisabeth Bolund, Swedish University of Agricultural Sciences

BLUE focused on coastal fish assessment (applied to stickleback and flatfish).

Activity 2.2. Results:

- Application of an improved methodology (ASCETS) for state assessment for non-commercial fish.
- Application of size-based assessment for key fish species and interim threshold values.

Pelagic habitats Marie Johansen, Swedish meteorological and hydrological institute

Results:

- Operational indicators for zooplankton and phytoplankton, including threshold values and Pan-Baltic coverage. Operationalised in 10 sub-basins. The data availability hampers the procedure.

- Approach for a more informative and integrated assessment of pelagic habitats.
- Evaluation of unified pelagic habitat assessment approaches and development towards a viable assessment in the Baltic.

GES not achieved in approx. 70% of Baltic units.

Question from Sven Koschinsky: is the predation of herring responsible for reduced zooplankton size or that of invasive comb jellies Mnemiopsis. How about the role of stickleback in the Baltic Proper? Regarding the stickleback they can play a role, but still only comprise around 10% of the total pelagic fish biomass in the Baltic Proper.

Harbour porpoise Anita Gilles, University of Veterinary Medicine Hannover, OSPAR marine mammal expert.

Harbour porpoise – knowledge on population trends is limited. There are 3 populations in the Baltic – genetically distinct.

Sub-tasks:

- Improved harmonisation between HELCOM and OSPAR, assessment of trends in abundance of the Belt Sea harbour porpoise population. HELCOM/OSPAR workshop in April 2021¹ on improved harmonisation of planned HELCOM indicators on harbour porpoise with those under OSPAR. The aim of the workshop was, to the extent possible, to align the planned HELCOM indicator development for harbour porpoise to the approach used in OSPAR.
- Test evaluation and threshold value application for the Belt Sea porpoise population trend in abundance evaluation. Evaluated data at hand. Decline of population.
- Expert-based qualitative assessments of abundance and distribution of the Baltic Proper population assessments. The Baltic Proper population does not achieve GES for both abundance and distribution, it needs urgent abundance estimate.

New methods for setting thresholds need to be taken into account and long-term data sets are needed. Useful data can be obtained from old sources.

Foodweb/BEAT Henrik Nygård, Finnish Environment Institute

- Adaptation of BEAT assessment flow to include new approved indicators.
- Review of food web assessment approaches and summary of knowledge on the Baltic Sea.
- Test application of adapted BEAT assessment flows to address food webs.

Food web aspects need to be better included in the management.

Introduction to results on marine litter Otilia Thoreson

Activity 3 of the project:

Lead: HELCOM

- An overview of the effectiveness of EU regulations and actions within the HELCOM Regional Action Plan on Marine Litter.
- Beach litter assessment

¹ [Harbour porpoise \(helcom.fi\)](https://www.helcom.fi)

- Standard Operating Procedures (SOPs) for monitoring of seabed sediment and water samples.
- Survey and dataset for consideration to calculate baseline and threshold values.

Activity 3 provides support to the work of the EU's MSFD Technical Group on Marine Litter (TG Litter), as well as to promote the harmonisation of regional work on marine litter indicators and threshold values with TG Litter work. The activity further aims to conduct an assessment of the status of beach litter in the Baltic Sea, as well as to produce Standard Operating Procedures (SOPs) for monitoring microlitter. The SOPs will cover both the water column and the sediment, so that a more holistic perspective of the input of microlitter to the Baltic Sea can be obtained at a later stage. Both the work on beach litter and the SOPs builds on the outcomes of the concluded EU co-financed SPICE project and will be aligned with and support the ongoing work under EU TG Litter.

Beach litter Eva Blidberg, Keep Sweden Tidy Foundation

Analysis and assessment of beach litter. Single-use plastic items - Gdańsk Basin shows upward trend. Fishing related litter items – downward trend. Most common litter plastic items. Harmonisation of work on beach litter protocols is needed. Better geographical coverage is also needed. More attention to sub-basin assessments and more research is needed. Further work on action against litter is also required.

Introduction to results on underwater noise Otilia Thoreson

Support for, and harmonisation of, regional work on MSFD Descriptor 11 (underwater noise).

- New soundscape maps
- Quantitative continuous noise assessment for HOLAS III
- Improve calibration standards for monitoring of continuous noise
- Quantitative impulsive noise assessment for HOLAS III

Activity 4 supports the implementation of GES assessment methodology according to Descriptor 11 of the EU Marine Strategy Framework Directive (MSFD). This will be achieved by updating the soundscape maps and by using the latest available regional information on noise sensitive species and estimating their exposure to the pressure of anthropogenic noise. Harmonisation of the measurement data through the standardization of calibration is of particular importance, in order to establish a solid foundation for successful underwater sound propagation modelling.

Impulsive noise is addressed through the development of the HELCOM registry on impulsive events in order to make it a planning tool, further enabling GES assessment for past events as well as for the management of future noise generating activities.

Premiere: short new video on economic and social analyses

Jana Wolf, HELCOM introduced the new video.

Introduction to results on effectiveness and measures Otilia Thoreson

Assessing the effectiveness, sufficiency and socioeconomic aspects of measures geared towards improving the state of the Baltic Sea Antti Iho, Natural Resources Institute Finland Luke Dodd, HELCOM

Analyses to support effective regional measures

- Description of the improved assessment framework for sufficiency, effectiveness and economic impacts of measures.
- Data for assessing the effectiveness and costs of regionally coordinated actions.
- Literature review on marine valuation studies.
- Improved approach for assessing regional benefits.
- Regional benefit estimates of achieving good environmental status.
- Results of regional analyses of the use of marine waters and cost of degradation.
- Results for the improved sufficiency and effectiveness of measures analysis.
- Approach for and results of a regional cost-benefit analysis of achieving good environmental status for 1-2 environmental topics.
- Description of incentives and regulations around the Baltic Sea countries to mitigate nutrient loading.

Activity 1 assesses the effectiveness, sufficiency and socio-economic aspects of measures geared towards improving the state of the Baltic Sea. The activity builds on the approaches and data developed and gathered for the sufficiency of measures SOM and cost-effectiveness analysis conducted by HELCOM, further advancing the framework, methodology and data developed in these former projects and activities. Focussing on benefit estimates, a cost-benefit analysis of achieving good state for selected environmental topics is one of the activity's main outcomes. The assessment framework enables region-level analysis for the Baltic Sea, while the general methods and tools may also be usable in other marine areas. In the longer term, the approaches and results produced within BLUES contribute to the development of effective measures in the later cycles of the BSAP and Programme of Measures (PoMs). Activity 1 utilizes the outputs and expertise from Activities 2, 3 and 4 to ensure that the approaches are relevant and appropriate to each environmental topic and results are interpreted correctly.

Key messages for science:

Databases for costs and benefits should be further developed.

Set of measures still requires development.

Cost-effectiveness analysis should take into account the incentives to implement the intended set of measures.

Key messages for policy makers

Value derived from Baltic can be increased through environmental improvement.

To increase the value, coordination of Baltic protection policies needs to be maintained.

Data sharing and centralisation needs to be the priority, as well as effectiveness of environmental measures.

Premiere: short new video on the next Holistic Assessment of the Baltic Sea (HOLAS 3).

Coordination and use of all BLUES project results Jannica Haldin, HELCOM
focused on bigger picture of the project. The ultimate objective of the project is to support

regional capacity, coordination and cooperation with regard to developing effective measures to secure good status of the Baltic Sea. BLUES is a platform to coordinate development and an instrument for regional cooperation. BLUES links directly with HELCOM working groups. This mobilises the work within the project.

BLUES works on increasing regional capacity: the project has enabled to make progress across all topics.

The representative of the European Commission expressed appreciation of this project and promised to report on good outcomes to the Commission.

HELCOM expressed gratitude to all partners in the project.