



Document title	Possible future improvements of the BSPI/BSII for HOLAS III
Code	5-5
Category	CMNT
Agenda Item	5 – Activities of relevant HELCOM projects or processes
Submission date	16.10.2019
Submitted by	Secretariat
Reference	

Background

GEAR 20-2019 noted that the proposed timeline outlines a HOLAS III process in which development work takes place prior to the start of the assessment process. The assessment process strives to have assessment results and supporting material in place for approval in time to make them available for national reporting purposes, and includes only one iteration of assessment. The meeting discussed components of HOLAS III, including aspects possibly missing, needing further development or benefitting from a different approach based on the work done under HOLAS II, and start considering what might be needed for HOLAS III in terms of e.g. MSFD requirements.

The meeting agreed to further elaborate the initial proposal of the components of HOLAS III and began the work in as included in Annex 3 of the Outcome of that meeting. The meeting invited the Secretariat and the relevant Expert Groups to prepare more specific information on identified gaps and development needs for the various work strands not covered by the indicator work, as identified in the HOLAS II process or in subsequent work. The meeting further agreed to continue the discussion on the topic in GEAR 21-2019.

This document contains initial proposals for further improvements of the of the Baltic Sea Pressure and Impact indices, respectively. The proposals are based in the input received during HOLAS II process. Actual improvements and development of the indices would be included in step 2 and 3 of the HOLAS III preparatory phase, as outlined in [document 5-4](#).

Action requested

The Meeting is invited to consider and provide input on the proposals for further improvements of the of the Baltic Sea Pressure and Impact indices in HOLAS III.

Possible future improvements of the BSPI/BSII, as identified in HOLAS II

Overall BSPI/BSII

- Improved consistent, preferably annual, dataflows for underlying data layers, including improved datasets with addition of data from Russia.
- Improvements to confidence assessment.
- Improvement of spatial information on underlying assessment units.

BSPI

- The relative contribution of an activity to the resulting pressures should be incorporated into the indices.
- Where possible include remote sensing information, e.g. updating data layer for reproductive surface waters (Chl-a) with Sentinel-3 EO data.
- Deep water habitat (bottom oxygen) would be improved with data from the Gulf of Finland.
- Spatial information of temporary/seasonal anoxia in shallower water would be beneficial.

BSII

- Adjust the magnitude of a given pressure to the resulting impact
The further refinement of the BSII also involves exploring and re-assessing the relative weights of aggregated pressure layers. The BSII calculation is based on aggregated pressure layers and ecosystem components and the sensitivity scores linking these datasets. All these layers have the same values (scale 0-1) in the analyses. This means that all the aggregated pressure layers have equal impact, e.g. hunting of seals is considered to have the same impact than physical loss. For the updated version of BSII the aggregated pressure layers to examine with respect to the need to get more realistic and harmonized intensity distribution of pressures.

Ecosystem components

- Development and incorporation of further ecosystem component layers, developing data driven layers wherever possible to account for spatio-temporal changes, and that the layers could be updated.
- Improved habitat maps (both in spatial scale and reliability) using improved data and modelling techniques would be beneficial.
- Improved (data driven) information on species distribution (all available species, not only threatened).
- Data driven information on biodiversity.
- Trait diversity maps.
- (Re-)Consider the sensitivity of each component to the all given pressures.