



Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature
Conservation

STATE & CONSERVATION
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Background

The document below provides a template filled by indicator leads to provide an overview of progress to STATE & CONSERVATION 15-2021. Key aspects such as methodologies, spatial extent changes, assessment scales and threshold values are presented, identifying ongoing work and other relevant issues towards HOLAS III. This process builds on the prior review of indicator development carried out under STATE & CONSERVATION 14-2021 (summarised in [document 4J-16 Rev.1](#), and detailed within numerous documents under agenda item 4J). The focus of these development works is the completion of indicator development and adjustment work for HOLAS III by the end of 2021, as previously agreed under HOD 57-2019 ([document 4-20](#), [Outcomes paragraph 4.51](#)).

The aspect of threshold values in particular is a key issue as threshold value approval will be carried out at HOD 61-2021, with these same templates being submitted to HOD at the same stage as submission to State and Conservation 15-2021 (to allow for the longer national processes required that culminate in approval at HOD).

The document below addresses a single indicator and as well as the generic 'action requests' relating to endorsement of the proposed application in HOLAS III (and the threshold values proposals, where relevant), specific additional requests or statements are also indicated within the separate sections of the document to help guide where further input/discussion/guidance may be needed.

This template aims to report the indicator development for HOLAS III, allowing for technical guidance and endorsement by STATE & CONSERVATION 15-2021 and also simultaneously to facilitate the threshold value approval process by HOD 61-2021.

Action requested

The Meeting is invited to:

- provide further technical guidance to the indicator leads and experts, including specific requests defined within the document;
- consider and endorse the proposed developments of the indicator for use in the HOLAS III assessment.

Zooplankton mean size and total stock (MSTS)

Indicator name	
Zooplankton mean size and total stock (MSTS)	
Scale of assessment for HOLAS III and rational	
The assessment scale is not expected to change from Scale 2, as applied in HOLAS II. The rationale for that is the sampling methodology based on the long net sampling the water column, with a tow starting at a certain distance from the bottom, which precludes sampling in shallow areas.	
Spatial coverage of the indicator for HOLAS III	
<p>The spatial coverage of this indicator will be increased by HOLAS III as the required parameters have been produced within HELCOM BLUES project by Latvia and Estonia for the Gulf of Riga. Additionally, several Contracting Parties are underway with national monitoring or national projects of relevance and the indicator may therefore become applicable across a wider area. These areas include the Bornholm basin and Eastern Gotland basin, and the countries of relevance include Germany, Poland, Estonia, and Sweden.</p> <p>The spatial coverage in Kattegat will not be achieved until the Danish data will become available, and no suitable data are currently collected for the Quarken. There is ongoing discussion with experts from Denmark to determine if the data can be made available to further develop threshold values.</p> <p>Data from Russia have been explored but the current data collection is carried out with a methodology that is unfortunately incompatible with the indicator.</p>	
Methodology to be applied for HOLAS III and rational	
No methodological changes are planned. The existing methodology will be applied to other relevant areas.	
Threshold value setting logic and rational	
The threshold value setting approach will not change and will follow the existing published protocol set out in the current indicator. This protocol represents a standardised procedure applied to all assessment units to derive the specific threshold values.	
Threshold value(s)	
The threshold value for this indicator are generated based on a published approach already approved and applied in the existing core indicator. The methodology generates threshold values for a 2-component indicator (mean zooplankton size [MS: $\mu\text{g}/\text{ind.}$] conditional on the total zooplankton stock [TS: mg/m^3] that are specific to the assessment unit and are dependent on the specific input data (i.e., the results or monitoring data reported to COMBINE).	
GES thresholds for specific assessment units	
Assessment unit	Threshold value mean size($\mu\text{g wet weight ind}^{-1}$) / total stock(mg m^{-3})
Bornholm Basin	To be provided by joint assessment (Poland, Germany and Sweden)
Gdansk Basin	10.2/103
Western Gotland Basin	5.0 / 220
Gulf of Riga	4.7/253

Eastern Gotland Basin	To be provided by joint assessment (Sweden and Estonia)
Gulf of Finland	8.6 / 125
Åland Sea	10.3 / 55
Bothnian Sea	8.5 / 84
Bothnian Bay	23.7 / 161

Those identified in grey highlight have already been approved in previous processes under HOLAS II.

The work under HELCOM BLUES has focussed strongly on harmonising the data sets that are available for the indicator application, so that threshold values can be derived using the standard procedure. The work has also focussed on the appropriate way to harmonise data in subbasin where there are more than one Contracting Party carrying out monitoring. This is a critical component of the assessment structure to ensure that the data is harmonised and that data from all relevant stations (all Contracting Parties) in a given assessment unit can be utilised for HOLAS III. This step has been completed for the Gulf of Riga and ongoing in the two identified areas where it would be possible to achieve threshold values for HOLAS III (Eastern Gotland basin and Bornholm basin).

It is anticipated that the final work will be completed by 12 November 2021 and that numeric threshold values for these three assessment units will be possible to present at that stage.

The State and Conservation meeting is invited to support the ongoing development of indicator, approve the proposed threshold values for the Gulf of Riga, and consider the proposed timeline for presenting the final numeric threshold values for the Eastern Gotland basin and Bornholm basin once the ongoing evaluation work has been completed.

Other significant issues that need to be addressed or presented to State and Conservation

Under the HELCOM BLUES project the experts are also developing a simplified tool to support threshold value setting. The tool aims to allow others to run the threshold value setting approach on their own (e.g. national) data without requiring extensive statistical and analytical software experience. The aim is to have the tool available during October 2021.

Latest indicator report or (for new indicators) initially completed indicator template

The latest version of the indicator is available on the HELCOM indicator web page, [here](#).