



## Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature  
Conservation

STATE & CONSERVATION  
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### Background

This Add.1 to document 6J-2 'Analysis of BSEFS and recommendations for action' contains comments from Germany, Intersessional Network on Eutrophication and Expert Network on Hazardous Substances on actions agreed on updating the BSEFS in STATE & CONSERVATION 9-2018.

### Action requested

The Meeting is invited to:

- Take note of the information

Table 1. Comments from Germany regarding the BSEFS

Name	Lead	updated	Actions approved by State & Conservation 9-2018	Comments from Germany
Bacterioplankton growth	SE	2015	Should be developed further as a core indicator if possible. Germany to check nationally and reports to State & Conservation.	Germany has no data to contribute to the fact sheet "Bacterioplankton growth" and does not intend to develop an equivalent indicator.
Hydrography related BSEFS with DE lead: -Sea Surface Temperature in the Baltic Sea in 2017 -Water Exchange between the Baltic Sea and the North Sea, and conditions in the Deep Basins -Wave climate in the Baltic Sea in 2016	DE		Sea surface temperature and Wave climate BSEFS should be kept and possible combined with "The Baltic Sea Ice Season" and the acidification BSEFS to a climate BSEFS.  Water Exchange BSEFS is still valid but should be developed as a core indicator for the next HOLAS assessment. Sweden is working on the development.	No information on update or changes

Table 2. Comments and actions agreed regarding the eutrophication related BSEFS by IN EUTROPHICATION 12-2019

Name	Lead	updated	Actions approved by State & Conservation 9-2018	Comments and actions agreed by IN EUTROPHICATION 12-2019
An unusual phytoplankton event five years later: the fate of the atypical range expansion of marine species into the south-eastern Baltic	PEG	2010	The BSEFS should be not updated anymore and marked as such	The fate of the atypical range expansion of marine species into the south-eastern Baltic' was based on single event and should not be updated, as agreed in State & Conservation 9-2018
Bacterioplankton growth	SE	2015	Should be developed further as a core indicator if possible. Germany to check nationally and reports to State & Conservation.	Clearly useful in terms of eutrophication, especially in the northern parts like Bothnian Bay. The development of the indicator is of interest to IN EUTROPHICATION, though its development within the group would depend on resources.
Concentrations, temporal variations and regional differences from satellite remote sensing	JRC	2006	This BSEFS should be kept but must be updated regularly. Could be used as a basis for an indicator in the future.  Goes to IN EUTRO for evaluation of how the information could be incorporated into the relevant fact sheet.	Remote sensing on chlorophyll-a is already included in the chlorophyll-a indicator, and hence new indicator should not be developed. It can be checked if information from the BSEFS would give added value that could be included to the existing indicator. Checking could be started by contacting JRC which is responsible for the BSEFS.
Cyanobacteria biomass 1990-2016	PEG	2017	This BSEFS should not be updated anymore and marked as such, since indicator report is available or could be included in such if relevant.  Goes to IN EUTRO for evaluation of how the information could be incorporated into the relevant indicator report.	The information in the BSEFS is already included in the indicator 'Cyanobacterial bloom index', and hence the BSEFS should not be updated any longer.
Cyanobacteria bloom index	FI	2008	This BSEFS should not be updated anymore and marked as such, since indicator fact sheet is available or could be included in such if relevant.  Goes to IN EUTRO for evaluation of how the	The BSEFS is not seen to give any additional value for the relevant indicator.

			information could be incorporated into the relevant indicator report.	
Cyanobacterial blooms in the Baltic Sea in 2017	SE	2017	This BSEFS should be kept updated until the information is integrated to the relevant indicator report.  Goes to IN EUTRO for evaluation of how the information could be incorporated into the relevant indicator report.	The satellite data based BSEFS includes relevant information summarizing the cyanobacterial blooms of the previous year that is not presently integrated to the relevant indicator. The Meeting did not come up with a solution on how to easily incorporate the BSEFS to the indicator report and what would be the added value. It was agreed that the scientists responsible for the BSEFS could be contacted for ideas on how to proceed.
Impacts of invasive phytoplankton species on the Baltic Sea ecosystem in 1980-2008	PEG	2009	This should be combined with the Biopollution Index	-
Atmospheric nitrogen depositions to the Baltic Sea during 1995-2015	EMEP	2017	Still relevant and should be updated regularly.	-
Nitrogen emissions to the air in the Baltic Sea area	EMEP	2018	Still relevant and should be updated regularly.	-
Phytoplankton community composition in relation to the pelagic food web in the open northern Baltic sea	FI	2015	This BSEFS should not be updated anymore and marked as such, since indicator report is available or could be included in such if relevant.  Goes to PEG and IN EUTRO to see how it could be incorporated into the indicator report	Cannot be incorporated to eutrophication indicators
Shifts in the Baltic Sea summer phytoplankton communities in 1992-2006	PEG	2007	This BSEFS should not be updated anymore and marked as such, since indicator fact sheet is available or could be included in such if relevant.  Goes to PEG and IN EUTRO to see how it could be incorporated into the indicator report.	Cannot be incorporated to eutrophication related indicators

Spatial distribution of the winter nutrient pool 2017	SMHI	2018	<p>This BSEFS should not be updated anymore and marked as such, since indicator fact sheet is available or could be included in such if relevant.</p> <p>Goes to PEG and IN EUTRO to see how it could be incorporated into the indicator report</p>	<p>Integration of the BSEFS to indicator reports on nutrients will be considered. Integration is problematic, as there is a mismatch between data used for the indicators and the fact sheet, and the BSEFS includes data for only one season. Spatial maps could be produced for 6 year cycles, interpolating data for the latest MSFD cycle, and added as illustration to the indicator reports, given that they do not give contradictory information. Descriptive information from the BSEFS could be added to the indicator report.</p>
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Table 3. Comments from Expert Network on hazardous substances on BSEFS

Name	Lead	updated	Actions approved by State & Conservation 9-2018	Comments and actions agreed by EN HZ
Temporal trends in contaminants in Herring in the Baltic Sea in the period 1980-2010	ICES	2012	<p>Important information should be updated more frequently, minimum every second year.</p> <p>Goes to EN HAZ for discussion on content and to check if reporting frequency is suitable.</p>	<p>The data used in the BSEFs is a selection of the data used in the r-script and the indicators, and provides similar information as given in the r-script and what is included in the indicators. The information is important to update but it is suggested that the r-scripts annual update (as discussed at last meeting) is used as a base for the BSEF to avoid double work. Which then also would include time trends for other species.</p>
Trace metal concentrations and trends in Baltic surface and deep waters	EN HAZ	2009	<p>Important information should be updated more frequently, minimum every second year.</p>	<p>This BSEFS should not be updated anymore and marked as such, since indicator fact sheet is available including the same 3 metals as in the BSEFS or could be included in such if relevant</p>