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Background

The fifth Meeting of the Working Group on the State of the Environment and Nature Conservation ([STATE & CONSERVATION 5-2016](#)) was held in Tallinn, Estonia, 7-11 November 2016.

During the Joint session the meeting was requested to endorse core indicators and indicator concepts as well as the assessment tools to be used in the HOLAS II project. This document contains an extract from the State and Conservation 5-2016 outcome related to the agreements on core indicators and assessment tools. The document also contains an updated figure on how the HELCOM core indicators fulfils the different themes that will be addressed in HOLAS II based on the agreements of the meeting.

Action required

The Meeting is invited to:

- take note of the status of endorsement of indicators and how the anticipated set of indicators, pending remaining study reservations, match to the themes that will be assessed in HOLAS II;
- consider the questions addressed by State and Conservation 5-2016 regarding 1) use of results for indicators not yet operational on a regional scale (para 4J.32) and 2) to include additional results in the updated and final version of the 2nd holistic assessment in 2018 in the case that indicators are tested and made operational during 2017 (para 4J-4);
- take note of the proposed adjustments to the biodiversity and hazardous substance assessment tools;
- consider the view of State and Conservation 5-2016 that the integrated assessment of hazardous substances can be used for an overall assessment of contamination status in the Baltic Sea but not for assessing whether good environmental status (GES) has been reached or not.

Denmark is invited to clarify their position on indicators and assessment tools.

Sweden might wish to come back to their proposal flagged at the State and Conservation meeting to consider possible changes in terminology (e.g. in relation to the GES boundaries), pending the outcome of the tentative approval of the Commission Decision of GES criteria.

General conditions and comments regarding endorsement of indicators and assessment tools

4J.1 The Meeting took note of the following general information by the Contracting Parties in relation to the endorsement of the indicators and assessment tools:

- Denmark has a general study reservation on the proposal to endorse core indicators, GES boundaries, shift of status in indicators, and endorsement of assessment tools and can also not lift the existing study reservations on core indicators. Comments from experts of technical nature were provided to the Meeting.
- Germany has a general study reservation on all core indicators until HOD 51-2016, pending ongoing national processes. Comments from experts of technical nature were provided to the Meeting.
- Sweden is concerned about the general study reservations and sees a risk that the publication of the HOLAS II report can be delayed.

4J.2 The Meeting acknowledged that the State and Conservation Working Group will provide the scientific and technical advice related to the indicators and assessments, and that tentative issues linked to the European Commission Decision on GES criteria will be discussed at GEAR 15-2016 (17-18 November). The Meeting took note of the proposal by Sweden to consider possible changes in terminology (e.g. in relation to the GES boundaries), pending the outcome of the tentative approval of the Commission Decision of GES criteria.

4J.4 The Meeting discussed the possibility to include additional results in the updated and final version of the 2nd holistic assessment in 2018 in the case that indicators are tested and made operational during 2017. The Meeting was of the view that this possibility should be discussed at a national level and proposed that the GEAR Group could consider this issue further.

Endorsement of core indicators

The key outcome of State and Conservation 5-2016 regarding endorsement of indicator concepts and shift in indicator status is summarized in the following sections. For full information on discussions and statement by countries: please see [Outcome of STATE & CONSERVATION 5-2016](#). Also note that the general study reservations on all core indicators by Denmark and Germany for all indicators are in place as outlined in para 4J.1 (above) and not reflected separately in the following sections.

Clarification on remaining study reservation on core indicators

- Germany can lift their study reservations on the core indicators 'Distribution of seals', 'Population trends and abundance of seals', 'Nutritional status of seals' and 'Reproductive status of seals' (para 4J.11).
- Denmark can lift the study reservations for the core indicators 'Distribution of seals', 'Nutritional status of seals' and 'Reproductive status of seals' (para 4J-12). Denmark retains the study reservation on 'Population trends and abundance of seals' in relation the assessment of harbor seals as it is now proposed to assess the Southwestern Baltic Sea and the Kattegat populations together (para 4J.13).
- Denmark can lift the study reservations for 'White-tailed eagle production', 'Trends in arrival of new non-indigenous species', 'Abundance of salmon spawners and smolt', 'Abundance of sea trout spawners and parr', 'Abundance of coastal fish key functional groups' and 'Abundance of key coastal fish species' (para 4J.14).
- Denmark retains the reservations on 'Polychlorinated biphenyls (PCB) and dioxins and furans' for PCB-118 but can lift the reservations for the sum of congeners, and that the reservation is retained for 'TBT and imposex' (para 4J.15).

- Germany can lift the specific study reservation on the core indicators 'Oil-spills affecting the marine environment' (para 4J.16).
- Germany retains the study reservation on the core indicators 'Abundance of coastal fish key functional groups' and 'Abundance of key coastal fish species' (para 4J.17).
- Denmark is not in a position to lift their study reservation on the GES-boundary for the indicator 'Polyaromatic hydrocarbons (PAH) and their metabolites' (para 4J.18).

Endorsement of GES boundaries and assessment protocols for core indicators

- Finland and Sweden endorsed the GES boundary proposals for the core indicator 'Zooplankton mean size and total stock'. Other countries agreed to further discuss the issue at ZEN-ZIIM 2016 (24-25 November) and inform on their position at HOD 51-2016 (para 4J.19).
- The Meeting endorsed the proposed GES boundary for Cd and Pb in offshore assessment units for the 'Metals' core indicator, except for the proposed secondary GES boundary value for fish liver for which a study reservation was placed by Denmark (Cd) and Estonia (Cd and Pb) (para 4J.22). Poland and Sweden can lift their study reservation on the Metal indicator.
- The Meeting endorsed the expert level proposal from the HELCOM Expert Network on Hazardous Substances to use the OSPAR assessment approach ('MIME R-script') as the assessment protocol for the hazardous substances concentration core indicators, taking note of the Danish general study reservation (para 4J.24).
- The Meeting considered the trend-based GES boundary approach for the core indicator 'Proportion of large fish in the community (LFI)', taking note that Sweden supports the approach, but the Meeting did not endorse it (para 4J.26).
- The Meeting endorsed the GES boundary and sensitivity values for 'State of the soft-bottom macrofauna community' indicator in the Gulf of Bothnia and endorsed the proposed approach for defining the GES boundary values for the other assessment units using calculated sensitivity values and the use of either of the two approaches for setting the GES boundary value as presented in the document. The Meeting agreed to endorse the final proposals on GES boundaries intersessionally (para 4J.28-29).
- The Meeting endorsed the proposal to extend the core indicator on 'Oxygen debt' to assess oxygen status in the Åland Sea, Bothnian Sea and Bothnian Bay. The Meeting agreed to endorse the final proposals on GES boundaries intersessionally (4J.30).

Shift to core indicators status

The Meeting initiated the session with the following discussion and comments:

4J.31 The Meeting discussed in general the implications of shifting an indicator to 'core' and noted that core indicators will only be used to assess if good environmental status is achieved in HOLAS II in the case that the indicator is operational, i.e. that data is available and GES boundaries are agreed. The Meeting noted that several of the indicators proposed to be shifted to 'core' have not yet been tested in the whole Baltic Sea area and GES boundaries are, in some cases, only proposed for a limited number of assessment units and the indicators are thus not operational on a regional scale. The Meeting however recognized that several of the proposed core indicators could close significant gaps in the set of indicators.

4J.32 The Meeting acknowledged that endorsing a shift in status to core indicator implies a commitment and willingness of the Contracting Parties to test and operationalize the indicator as soon as possible. For core indicators that are not yet operational in the whole Baltic Sea area, the Meeting discussed two options for their use in HOLAS II:

- 1) that available results will be presented as examples of work in progress, for example in the planned web-based version of the report, and
- 2) that the indicators could be used as part of the HOLAS II status assessment for those assessment units in which GES boundaries have been agreed.

The Meeting was of the view that the second option needs further consideration before decision, e.g. on how the use of different numbers of indicators will affect the outcome of integrated assessments.

4J.33 The Meeting recognized that the further testing of core indicators may show that some of them are not suitable for specific areas and that in exceptional cases it may be scientifically justifiable not to use the core indicator in certain areas. Such situations should be discussed case by case, if need be.

- The Meeting endorsed the approach for defining GES, the assessment protocol and to shift the status of the 'Phytoplankton community composition as a food web indicator' from candidate to core indicator. Denmark placed a study reservation on the indicator (para 4J.34).
- The Meeting endorsed GES boundaries for the 'Diatom-Dinoflagellate index' for the Kiel Bay, Bay of Mecklenburg, Arkona Basin, Bornholm Basin and Eastern Gotland Basin, endorsed the assessment protocol for the indicator and endorsed the shift in status from pre-core to core indicator. The Meeting took note that Denmark places a study reservation on the indicator (4J.36).
- The Meeting agreed to shift the status from pre-core to core indicator for the indicator 'Seasonal succession of dominating phytoplankton groups', taking note of the study reservations by Denmark. The Meeting did not endorse the GES boundary approach of assessing trends against all available data, since it is restricted to historic data and asked for alternative approach (4J.38).
- The Meeting endorsed the GES boundary values in principle for the 'Cyanobacterial Bloom Index (CyaBI)', agreed to finalize the proposals on GES boundaries through HELCOM IN-Eutrophication, and agreed to endorse the GES boundaries intersessionally. The Meeting endorsed the proposal to shift the status of the pre-core indicator to core indicator, taking note that Denmark and Germany placed a specific study reservation on the indicator (para 4J.41).
- The Meeting considered the indicator 'Distribution, pattern and extent of benthic biotopes', and agreed to rename the indicator to 'Condition of benthic habitats'. The Meeting was of the view that the indicator needs further development before being shifted to core indicator. The Meeting welcomed the offer by Lead Country Estonia to continue developing the indicator in 2017 and the offer by Finland to complete an assessment of biotopes as an example. The Meeting agreed on the arranging of an online meeting in December 2016 to discuss and plan further development of the indicator (para 4J.42-43).
- The Meeting endorsed the assessment protocol for 'Total nutrients' and endorsed to shift the status from pre-core to core indicator, taking note of study reservations placed by Denmark and Poland. The Meeting agreed to endorse the final proposals on GES boundaries intersessionally so that the boundaries would be validated by HELCOM IN-Eutrophication (para 4J.46).
- The Meeting took note of the progress in developing an indicator on 'Beach litter'. The Meeting endorsed, in principle, the proposed indicator concept and the proposed interim definition of GES. The Meeting also endorsed, in principle, the proposed shift of status of the indicator from pre-core to core indicator, taking into account the Danish reservation and Germany's request to further harmonize the indicator with OSPAR monitoring protocol (4J.47).
- The Meeting considered the indicator 'Reproductive disorders' and noted that Finland and Sweden is willing to endorse the GES boundary and use of the indicator in HOLAS II, noting that Germany cannot accept the indicator as 'core' but only as 'supplementary' indicator as stated previously with

regard to bioeffects indicators in general. The Meeting noted that Finland and Sweden will consider the use of the indicator as supplementary in the Bothnian Bay and Bothnian Sea, and that Finland will explore the use of the indicator in the Gulf of Finland with Estonia and Russia (4J.49).

- The Meeting considered the pre-core indicator 'Cumulative impact on benthic biotope' and endorsed the assessment protocol and endorsed the shift of the indicator status from pre-core to core indicator, taking note of a specific study reservation by Denmark due to the lack of data and current state of the indicator. The Meeting noted that the indicator is not operational yet since it has not been possible to suggest a GES boundary, and that further work is needed to meet the current data gaps (e.g. the need for habitat maps in best available resolution) (para 4J.50-51).

Core indicators: progress reports and updated indicator reports

- The Meeting took note of the core indicators 'Abundance of waterbirds in the wintering season' and 'Abundance of waterbirds in the breeding season', and endorsed the updated assessment protocol, the proposal on presenting results for species, species groups and for all species, as well as the publishing of the indicator reports as soon as the results are available (para 4J.53).
- The Meeting took note of the progress with the core indicator 'Trends in arrival of new non-indigenous species'. The Meeting agreed to use the AquaNIS database as the data source for the indicator evaluation for HOLAS II purposes (para 4J.54).
- The Meeting took note of the progress made on the core indicator 'Number of drowned mammals and waterbirds in fishing gear'. The Meeting recommended that the information provided by the core indicator should be included in HOLAS II although a quantitative indicator evaluation will not be possible to prepare, noting that it needs to be clearly indicated that there is a severe data gap (para 4J.56).

Pre-core and candidate indicators: endorsement of assessment protocols, proposed shift in status from candidate to pre-core indicators

- The Meeting endorsed the shift of 'Litter on the seafloor' from candidate to pre-core indicator, taking note of the study reservation by Denmark (para 4J.58).
- The Meeting endorsed the shift of 'Distribution in time and space of loud low- and mid-frequency impulsive sounds' from candidate to pre-core indicator (para 4J.60).
- The Meeting endorsed the proposed indicator concept and assessment protocol for the indicator 'Continuous low frequency anthropogenic sound' (para 4J.62).
- The Meeting supported the continued development of the 'Shallow-Water Oxygen' indicator and endorsed the shift of the indicator status from candidate to pre-core, taking note of a study reservation by Denmark (4J.64).

Approval of data and core indicators evaluations for use in HOLAS II

The Meeting considered and endorsed the proposed arrangement for approval of the data and core indicator evaluations for use in HOLAS II integrated assessments (document 4J-26), noting that Poland will inform its view at GEAR 15-2015. The Meeting invited Contracting Parties to inform the Secretariat (ullali.zweifel@helcom.fi) by **30 November 2016** of State and Conservation contact points (name and e-mail) that will nationally approve of the data and calculated indicator evaluations under the respective themes (eutrophication, biodiversity, hazardous substances and non-indigenous species) as well as names of additional persons (name and e-mail) that the country wishes to give reading access to view the contents of the workspace (para 4.68-69).

Endorsement of status assessment tools for use in the second holistic assessment of the Baltic Sea (HOLAS II)

Regarding assessment tools the Outcome from State and Conservation 5-2016 is included in full in the below sections

Biodiversity assessment tool

Note that the biodiversity assessment tool was agreed to be adjusted compared to the proposal submitted to State and Conservation 5-2016. The adjusted version of the tool will be submitted for endorsement at HOD 51-2016.

4J.70 The Meeting considered the biodiversity assessment tool to be used in HOLAS II (document 4J-35, **presentation 11**), taking note of the Danish study reservation

4J.71 The Meeting supported in principle the weighted averaging approach of indicators in the integrated assessment, however agreed to use the assessment rules applied under the Habitat Directive for species and habitats considered in that directive, i.e. the OAO approach between indicators assessed for the species and habitats. The Meeting noted that according to the actual stand of knowledge the use of the Habitat Directive assessment rules will for the first version of HOLAS II only be applicable for seals

4J.72 The Meeting agreed that the integration should be made separately for each ecosystem component i.e. by birds, fish, mammals, pelagic habitats and benthic habitats. The Meeting agreed to use as a first option the assessment unit levels assigned as ecologically relevant for the respective indicator, and in the case that the levels do not coincide between indicators, assessment unit level 3 will be used.

4J.73 The Meeting was of the view that if a criterion lacks indicators the confidence should be reduced but not given zero confidence.

4J.74 The Meeting invited the BalticBOOST project to update the tool based on the agreements from the Meeting and provide an alternative proposal for assessing overall confidence and submit a revised proposal to the HOD 51-2016 meeting.

Hazardous substance assessment tool

Note that the hazardous substance assessment tool was agreed to be adjusted compared to the proposal submitted to State and Conservation 5-2016. The adjusted version of the tool will be submitted for endorsement at HOD 51-2016.

4J.75 The Meeting considered the hazardous substance assessment tool for use in HOLAS II (document 4J-36, **presentation 12**), including the test cases (Annex 2). The Meeting agreed that only core indicators should be used in the hazardous substances integrated assessment. The Meeting agreed that the biological effects compartment should be excluded from the integration. The Meeting was of the view that the assessment can be used for an overall assessment of contamination status in the Baltic Sea but not for assessing whether good environmental status (GES) has been reached or not.

4J.76 The Meeting considered the proposed approach for confidence assessment and the minimum requirement list, presented to the Meeting, and invited Contracting Parties to submit comments on the proposals by 18 November (CJM@niva-denmark.dk and [lena.avellan@helcom.fi](mailto:lana.avellan@helcom.fi)).

4J.77 The Meeting took note of the following specific comments by Contracting Parties:

- Denmark cannot agree to the use of the CHASE tool for HOLAS II until a test has been carried out based only on core indicators with agreed GES boundaries in Danish waters.

- Sweden and Germany underlined the need to improve the transparency in the presentation of results of the tool e.g. to clarify which substances have been included when the integration results are presented.
- Finland pointed out that to comply with the legal requirements, the hazardous substances assessment in HOLAS II can be achieved by use of a simple approach of summarizing the results of the core indicators, however that the CHASE tool provides a relevant tool to summarize and visualize the information.

4J.78 The Meeting agreed that work to develop the tool for use in the HOLAS II project should be continued and invited BalticBOOST to update the tool proposal based on the guidance provided by the Meeting and submit a revised proposal for endorsement at HOD 51-2016.

Eutrophication assessment tool

4J.79 The Meeting considered the proposed adjustments to the HELCOM Eutrophication Assessment Tool (HEAT 3.0) for use in HOLAS II (document 4J-4), in the event that the proposed revision to the European Commission Decision on GES criteria is agreed. The Meeting was of the view that the HEAT tool in its present structure is well established and is satisfying for use in the 2nd holistic assessment, however, proposed that the proposal should be discussed at the next meeting of the HELCOM IN Eutrophication, taking into account the outcome of the Commission Decision.

4J.80 The Meeting supported in general the further development of scaling (normalizing) the eutrophication indicators and to develop the assessment of confidence in the assessment, noting the study reservation by Denmark. The Meeting proposed that the two aspects should be further developed by the intersessional network of eutrophication and, since these proposal are not related to the calculation of assessment results, the Meeting was of the view that this development could continue in 2017 and proposed that the results of further developments should be presented to the planned HOLAS II meeting 4-6 April 2017 and to the State and Conservation 6-2017.

Baltic Sea Impact Index

4J.81 The Meeting considered and agreed on the method to calculate the Baltic Sea Impact Index (BSII) (document 4J-18, **presentation 13**) and endorsed its use in the HOLAS II project, taking note that Denmark agrees on the method but can at this time not endorse its use in HOLAS II.

4J.82 The Meeting took note that there are three possible methods to assess the impacts on ecosystem components i.e. to consider the sum of impacts, the mean impacts, or the impact on the most sensitive ecosystem component. To support a decision the three methods will still be tested by the TAPAS project. The Meeting took note of the planned workshop under the HOLAS II project to discuss and verify the results of the BSII, tentatively to be held in February 2017, and that this will offer an opportunity for the Contracting Parties to consider the results of the testing.

4J.83 The Meeting took note that the TAPAS expert survey to estimate the sensitivity of marine ecosystem components to pressures has received limited response, in particular regarding the topics on fish, underwater noise, and biological disturbance. The Meeting agreed to encourage experts to fill in the survey, in particular for the identified gaps, as soon as possible and no later than 18 November 2016. The Meeting welcomed the offer by SYKE, Finland, to introduce experts to the survey through an online meeting, if needed (samuli.korpinen@ymparisto.fi).

4J.84 The Meeting considered and endorsed the proposal for evaluating cumulative impacts on benthic habitats based on the BSII approach for HOLAS II purposes (document 4J-21, **presentation 15**), taking note of the Danish study reservation and recalling the longer term aim is to operationalize the indicator on 'Cumulative impact on benthic biotope'. The Meeting took note that the results of the assessment could be presented descriptively in the intended section on Seafloor integrity in the 2nd holistic assessment.

4J.85 The Meeting took note of the information on spatial datasets on human activities and pressures to be included in the Baltic Sea Impact Index (document 4J-19, **presentation 14**). The Meeting considered and endorsed the proposals by the HOLAS II core team regarding the use of ecosystem components layers in the BSII.

4J.86 The Meeting took note of information on the process to review and verify datasets used in the spatial maps for pressures and human activities and that the request will be sent to the HOLAS II core team representatives.

Any other business

7J.4 The Meeting agreed to convene an intersessional meeting with the State and Conservation Group on 26 January, 9.30 CET, to discuss and endorse the proposed GES boundary on the indicators on GES boundaries for BQI (para graph 4J.29), oxygen debt (para graph 4J.30), cyanobacterial blooms (para graph 4J.41) and total nutrients (paragraph 4J.46), to consider the outcome and recommendation of the planned meeting to discuss the development of the indicator on 'Condition of benthic habitats' . In addition, the coastal fish indicators and LFI could be discussed if there are remaining issues. Contracting Parties are invited to nominate a national Heads of Delegation of the group to participate in the online meeting.

7J.5 The Meeting welcomed the offer of Sweden to host STATE and CONSERVATION 6 - 2017 and agreed to arrange it on 15 - 19 May 2017, starting with the Monitoring and Assessment session. 7J.6 The Meeting welcomed the offer of Poland to host STATE and CONSERVATION 7 - 2017 and initially agreed on the dates of 23 - 27 October 2017.



Annex 1. Overview of availability of indicators for the HOLAS II assessment themes

Non indigenous species	Biodiversity, Commercial fish, Food web, Seafloor integrity			Contaminants
- Trends in arrival of new non-indigenous species	Birds	Mammals	Fish	- HBCDD - Metals (EE Cd/Pb fish liver, DK Cd fish liver) - PBDE - PFOS - PAH and metabolites (DK) - PCB, dioxin and furan (DK PCB-118) - TBT and imposex (DK) - Radioactive substances - White-tailed eagle productivity - Reproductive disorders (FI&SE use as supplementary)
Eutrophication	- Abundance of waterbirds in the breeding season - Abundance of waterbirds in the wintering season	- Distribution of Baltic seals - Population trends and abundance of seals (DK harbour seal) - Nutritional status of seals - Reproductive status of seals	- Abundance of coastal fish key functional groups (DE) - Abundance of key coastal fish species (DE) - Abundance of salmon spawners and smolt - Abundance of seatrout spawners and parr	Commercial fish
- Nitrogen/DIN - Phosphorous/DIP - Chlorophyll-a - Water clarity - Oxygen debt - Total nutrients (DK, PL) - Cyanobacterial bloom index (DK, DE) - Shallow water oxygen (DK)	- Number of drowned mammals and waterbirds in fishing gear (reservations for birds)		- ICES SSB for 12 species (as 22 stocks)	- ICES F _{MSY} 12 species (as 22 stocks) - ICES SSB for 12 species (as 22 stocks)
Seafloor integrity	Benthic habitats	Pelagic habitats		Pressure
- Cumulative impacts on benthic biotopes (DK)	- State of the soft-bottom macrofauna community - Condition of benthic habitats	- Zooplankton mean size and total stock - Seasonal succession of functional phytoplankton groups (DK, FI, DE, SE) - Phytoplankton community composition as a foodweb indicator (DK) - Diatom/Dinoflagellate index (DK)		- Inputs of nitrogen and phosphorous to the sub-basins - Operational oil spills from ships
	Marine litter	Energy and noise		
	- Beach litter (DK) - Litter on the seafloor	- Continuous low frequency anthropogenic sound (DK) - Distribution in time and space of loud low- and mid-frequency impulsive sound (DK)		

Annex 1 Figure 1. Overview of availability of indicators for HOLAS II themes, updated based on State and Conservation 5-2016. Blue colour indicates remaining specific national study reservations. Maroon colour identifies indicators for which assessment unit specific GES boundaries are to be endorsed. Red colour indicates indicators endorsed to be shifted to core status. Brown colour identifies pre-core indicators or candidates indicators endorsed to be shifted to pre-core status that have been proposed to be further developed with the aim to include in HOLAS II. Country codes in brackets identifies indicator specific national study reservations expressed at State and Conservation 5-2016.

Annex 1 Table 1. Overview of other HELCOM indicators currently not foreseen to provide a quantitative evaluation in time for HOLAS II mid-2017.

Indicator	Status	Comment on latest work
Biodiversity		
Harbour porpoise distribution and abundance	Candidate	Discussed at SEAL 10-2016 Concept drafted during CORESET II (2013-2015). Progress impeded by lack of relevant monitoring data, considered relevant to develop further and possibly use SAMBAH data as baseline.
Proportion of large fish in the community (LFI)	Core	State and Conservation 5-2016 A proposed pragmatic approach to assessing the indicator using a trend based GES-boundary approach and a pelagic dataset compiled based on data from Sweden, Germany, Latvia and Poland was presented as a meeting document however the proposal was not endorsed by State and Conservation 5-2016 recognizing that this will result in HOLAS II not containing any core indicator based assessment approach for the offshore fish community (outcome paragraph 4J.26).
Maximum length fish in the pelagic community	Candidate	CORESET II project (2013-2015) Approach drafted during the project. No progress during 2016
Population structure of long-lived macrozoobenthic species	Core	CORESET II (2013-2015) compiled information on known case studies. No progress made in 2016, progress impeded by the lack of monitoring data on size distribution.
Lower depth limit distribution of the macrophyte community	Pre-core	CORESET II (2013-2015) Regional approach drafted, however concluded at STATE & CONSERVATION 2-2016 not to prioritize further work for HOLAS II purposes and instead collate national WFD phytobenthos assessments
Biomass ratio of opportunistic and perennial macroalgae	Candidate	2016 - Lead Country Estonia worked to clarify if both biomass- and coverage monitoring data can be used, however was not able to conclude. Concept first drafted in CORESET II (2013-2015), noted that countries have either coverage or biomass monitoring and no approach for bringing the data together was found.
Phytoplankton species assemblage clusters based on environmental factors	Candidate	CORESET II (2013-2015) Approach drafted however no regional agreement on method found during the project. STATE & CONSERVATION 2-2015 did not endorse a shift to pre-core.
Eutrophication		
Phytoplankton spring bloom intensity based on chl-a	Pre-core	IN-EUTRO 2-2016 Development of other pre-core and candidate indicators for eutrophication was prioritized.
Deep-water oxygen consumption	Candidate	IN-EUTRO 2-2016 Development of other pre-core and candidate indicators for eutrophication was prioritized.
Hazardous substances		
Acetylcholinesterase inhibition	Pre-core	CORESET I (2010-2013)
Diclofenac concentration	Pre-core	CORESET II (2013-2015) The indicator development was placed on hold during 2016 pending the finalization of the HELCOM Pharmaceuticals assessment
Estrogenic-like chemicals and effects	Pre-core	CORESET II (2013-2015) The indicator development was placed on hold during 2016 pending the finalization of the HELCOM Pharmaceuticals assessment

EROD activity	Candidate	CORESET II (2013-2015) Indicator report was presented to STATE & CONSERVATION 2-2015 for shift to pre-core status and proposal on a GES boundary was included, however the proposal was not endorsed.
Lysosomal membrane stability (LMS)	Pre-core	CORESET II (2013-2015)
Fish disease index	Pre-core	CORESET I (2010-2013)
Micronucleus test	Pre-core	CORESET I (2010-2013)
Marine litter		
Microlitter in the water column	Candidate	State and Conservation 5-2016 Progress to developing the indicator concept and the indicator report (meeting document) was noted by the meeting (outcome paragraph 4J.67)