



Memo of the Extra Meeting of the Group for the Implementation of the Ecosystem Approach (GEAR 18E-2018)

Introduction

In accordance with decision of the eighteenth meeting of the Group for the Implementation of the Ecosystem Approach (Outcome of GEAR 18-2018, paragraph 3.65), an Extra Meeting of the Group (GEAR 18E-2018) was convened as an Online meeting on 2 May 2018.

The Meeting was attended by Denmark, Estonia, Finland, Latvia, Germany, and Sweden. The List of Participants is contained as **Annex 1**.

The Meeting agreed Ms. Ms. Monika Stankiewicz, Executive Secretary will chair the Meeting in absence on Ms. Heike Imhoff, Germany, Chair of the GEAR Group. Ms. Jannica Haldin, Professional Secretary and Ms. Ulla Li Zweifel, HOLAS II Manager acted as secretaries of the Meeting.

The Meeting solely focused the development of a HELCOM coordinated project proposal to the call for projects to support cooperation needs of EU Member States in the second cycle implementation of the MSFD as supported by GEAR (Outcome of GEAR 18-2018, para. 3.62), with the focus of reaching agreement on topics to be covered by the proposal.

Agenda Item 1 Development of a HELCOM coordinated project proposal

The initial ideas on focal topics for a regionally developed HELCOM application are available in Outcome of GEAR 18-2018, para. 3.58 and Presentation 1).

The participants took note of the detailed feed-back on proposed topics for a HELCOM application as provided by Denmark, Estonia, Finland, Germany Latvia and Sweden and the compiled overview table of the feedback received, together with the slightly amended background information document (all circulated via e-mail correspondence in advance of the meeting). The participants took note that the background document has been amended mainly for the purpose of clarification. Input from the countries have been highly appreciated, providing the basis to conclude on the project topics in the meeting.

The participants took note of the information by Finland that SYKE aims to join the HELCOM project.

The participants discussed the proposed topics of the project application:

- **Theme 1:** Methods and analysis to assess and quantify the effect of selected regional or regionally prioritized measures: a) method to evaluate effectiveness of HELCOM MPAs, b) methods to analyse effect of existing measures to reduce nutrients. Could feed into BAU analysis.
- **Theme 2:** Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor: a) focusing on the reduction of by-catch of mammals and birds, including data needs, and b) methods to assess/measures to reduce physical disturbance to the seafloor.
- **Theme 3:** Why the Baltic Sea cannot reach GES by 2020? Analysis of measures still needed to reach GES for selected topics, including an analysis of the regional conditions that have an influence on

reaching GES, and projections on when GES can be reached. Climate change addressed as a horizontal theme.

The participants discussed the proposal regarding Theme 1 and noted that the link to Theme 3 will be given special consideration when writing the application as Theme would provide quantitative input to theme 3.

The Meeting agreed to include subtopic 1a) with the following clarifications:

- The method to consider the prevailing/specific pressures in the MPAs and the effects of measures to manage these.
- Possibility take into account socio economic analyses, and consider including also other spatial measures (aside from MPAs), however there is need to carefully delineate e.g. to not cross over into MSP.
- Identify the regional versus national priorities with regard to MPAs and measures, especially in regards to transnational MPAs.
- Link to previous HELCOM work on assessing the ecological coherence of the network.

The Meeting agreed to include subtopic b) with the following clarifications:

- While the aim is towards a quantitative analysis as far as and where possible, the scope should be broadened by developing the methodology to also assess the topic qualitatively when data is currently lacking.

The participants discussed the inclusion and specifications regarding **Theme 2**.

The Meeting agreed to include subtopic a) in the application as a data mapping and consolidation exercise in support of the work currently being done under WG FISH, CG FISHDATA and WG S&C.

The participants took note that the activities will not to duplicate ongoing HELCOM work and the consortium will be requested to communicate closely with the indicator leads on by-catch and cumulative impacts on the seafloor respectively. Although not directly developing the relevant indicators, the work is expected to support the ongoing work on the further development, and data provisions, of the indicators on bycatch and impact on the seafloor.

All participants present agreed to include subtopic b) with the following suggestions:

- The sub topic would be an exercise in consolidating the already available results from previous HELCOM projects in a first step, and secondly to further the work in cooperation with, and where possible contributing to, OSPAR and the efforts under the EU.
- ICES would be informed on the progress and good information exchange is to be ensured.
- The project would provide data and scientific background but the policy and decision making process will continue to take place under regular HELCOM processes.
- The work is linked to theme 3 as there are sub regional specificities to take into account (e.g effects of trawling). The link to work on cumulative impact, as well as to MPAs and the coastal zones is to be considered.

The participants took note that the intention is for this to be a moderately sized work package.

The participants discussed the inclusion and specifications regarding **Theme 3**.

The Meeting agreed to include theme 3 in the project proposal with the following suggestions:

- The work would, to the extent possible, synthesize the information available to provide information on sufficiency of measures. It was acknowledged that expert judgements will be needed as a contribution to the analyses.
- The work would support a more unified approach for reporting exemptions, e.g. by developing a summary of natural conditions in the Baltic Sea as commonly understood in HELCOM and by experts (as opposed to a definition of natural conditions in a strict sense of MSFD).
- The project could compare pressures to identify which pressures are the main reasons behind why GES is not reached, both regionally and sub-regionally.
- The method for BAU that has been proposed by the SPICE project is still to be agreed in HELCOM.
- Climate change issues need to be delineated e.g. Identify how climate change could be addressed in analysis of effectiveness or measures and projections

The participants discussed issues related to forming the consortium as well as how co-funding. Potential partners were identified by some of the Contracting Parties and others indicated they will come back on this issue as soon as possible. The Secretariat will contact the potential partners and the expertise of partners will be used to build the details of the application. If the Secretariat identifies additional suitable partners, the Secretariat will first inform the national authorities.

The participants took note that co-funding amounts to 20% of the partners allocated budget within the project. The Secretariat invited proposed partners to direct further questions regarding co-funding requirements or any other project related matters to monika.stankiewicz@helcom.fi.

The Meeting agreed to aim for the maximum project length (2 years).

The Secretariat together with proposed project partners will start work to develop the HELCOM coordinated project application on Themes 1-3, noting that the structure of the application might change.

Agenda Item 2 Outcome of the Meeting

2.1 The participants adopted the memo of the Meeting via correspondence. The memo, considered by the Meeting is available in the [document library](#) of the [GEAR 18E-2018 Meeting Site](#) via the [HELCOM Meeting Portal](#).

Annex 1: List of participants

Representing	Name	Organization	E-mail
Contracting Parties			
Denmark	Lone Sjøderberg	Ministry of Environment and Food	lomu@mfvm.dk
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Annex 2 Compilation of feed-back on proposed topics for a HELCOM developed application

DENMARK

19 April 2018

Priorities set for the Baltic Sea marine region:

Priority 1: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor from fisheries and other relevant activities. The work should build on previous projects and aim to fill the gaps identified by HELCOM in the State of the Baltic Sea report5.

Priority 2: Analysis of the natural conditions and reasons for not reaching GES, linking it to exceptions reported under MSFD. The work should improve the understanding of the regional conditions as well as the reasons why the Baltic Sea cannot reach GES by 2020 (e.g. historical-natural conditions, not enough implementation, climate change, continuous load) and link the results to particular exceptions reported under MSFD.

Background information on the rationale for the proposed selection of topics

Theme 1: Methods and analysis to assess and quantify the effect of selected regional or regionally prioritized measures: a) method to evaluate effectiveness of HELCOM MPAs, b) methods to analyse effect of existing measures to reduce nutrients

Rationale and background:

- a) HELCOM recommendation 35/1 stipulates the assessment of effectiveness of the management plans or measures taken in the HELCOM MPAs. The effect of MPAs on meeting their conservation objectives can be evaluated based on monitoring of the targeted protection features (e.g. species or habitat) and their threats before vs after the designation of the MPA or within the MPA vs outside reference sites. Assessments of ‘management effectiveness’ is however typically broader, also including evaluating the management actions (e.g. zoning, temporal closure for fishing), enforcement of regulations, socio-economic aspects (e.g. benefits from the MPA), governance, information and communication, and more. Most countries in the HELCOM area has performed some form of assessment of MPA effectiveness but there are many different approaches, no regional wide compilation of results, and no common agreement on HELCOM guidelines.

HELCOM has thus far evaluated the areal coverage or MPAs and the potential ecological coherence of the MPA network (HELCOM 2016). Assessing the management effectiveness could give important guidance to improve the performance of MPAs as a measure to improve the state of the Baltic Sea. A link to Theme 2 could be established on the topic of measures to reduce impact from fisheries.

Initial ideas (to be developed with partners):

- Develop a possible tool to assess management effectiveness of MPAs, taking into account experience from existing approaches. Such tool could consider that the level of data and information will differ between MPAs, and thus include alternative assessment routes depending on data availability.
- Test the tool in one or a set of pilot areas (based on existing data and information).

Tentative Guiding: State and Conservation WG

Commented [LOMU1]: In general Denmark is concerned that the suggested wide range of topics and themes will be too much to include in such a project (250,000 to 1,000,000 euro + 20 %). We would prefer fewer topics to ensure that we will have a substantial and in depth analysis.

Commented [LOMU2]: We find that this is not of highest priority for us. It is not long ago that a similar analysis was carried out without substantial results.

Commented [LOMU3]: We place a study reservation on Theme 1 b, as we need more time to involve the relevant actors.

b) State of the Baltic Sea report shows that eutrophication remains the main pressure on the marine environment having strong transboundary dimension. HELCOM countries have established and/or implemented numerous measures aimed at reducing input of nutrients, as seen for example through recent national PoMs, the reporting of actions to the HELCOM Explorer ([HELCOM 2018](#)), as compiled by the AGRI group ([AGRI 5-2017](#)) and as reported to PLC-6/Pressure WG ([Pressure 7-2017](#)). The effectiveness of such measures, i.e. the expected quantitative reduction of nutrients, and in particular in relation to reaching HELCOM CARTs, has only been comprehensively evaluated by a few Contracting Parties. In the plans for the update of the BSAP, an analysis of sufficiency of measures has been outlined with the aim of identifying the need for additional actions to support the development of the update of the BSAP by 2021. This requires firstly analysis of effectiveness of current implemented measures. While data limitations are evident, the aim would be towards quantitatively based assessment of one (input of nutrients) or a few selective topics (and some selected measures).

Initial ideas:

- Evaluate the methods used by those countries that carried out comprehensive analyses of effectiveness of measures nationally and explore the transferability of methods to other countries
- Carry out the analyses building on work developed by the PLC project
- Consider the implications of climate change on measures taken, quantitative or qualitative as deemed possible

Tentative guiding: Pressure WG, EGs as relevant, a BSAP update task force

Theme 2: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor: a) focusing on the reduction of by-catch of mammals and birds, including data needs, and b) methods to assess/measures to reduce physical disturbance to the seafloor.

Rationale and background:

a) Drowning in fishing gear is considered as a major pressure on Baltic Sea mammals and birds and is considered as the greatest source of mortality for the threatened harbour porpoise population in the Baltic Sea ([HELCOM 2017](#)). Still, the full extent of this pressure is unknown due to lack of consistent and regular collection of data. Spatial and temporal data collection on by-catch, as well as on fisheries activities and species density and distribution, would not only make it possible to assess the level of the problem but also to define hotspot areas where by-catch is more likely to occur. Such information could in turn be used to identify areas that could be targeted for measures to mitigate by-catch of mammals and birds. The topic has been identified as an area for cooperation with OSPAR from point of data collection it is also an area for collaboration with ICES, in particular WGBYC.

Initial ideas (to be further developed with partners):

- Build on the initiative under HELCOM to collect information on data for by-catch and fishing activities, with a focus on gill-nets fisheries (identified as the gear type causing most by-catch, [CG-FISHDATA 1-2018](#)).
- Consider a pilot on exploring data and information flows between MSFD and CFP, possibly in cooperation with OSPAR

Commented [SJ4]: This is a very difficult task and somewhat overlapping with the analysis performed in the PLC-6 chapter: "effectiveness of measures". The Redcore group learned that it was very difficult to obtain the necessary information from the countries to perform such an analysis.

Commented [LOMU5]: To be discussed if also cost-effectiveness should be considered.

Commented [LOMU6]: This seems like a difficult exercise to do. We suggest to remove climate change under this theme.

Commented [LOMU7]: It is important to use the data collected under DCF as the starting point and then as a second step identify further possible data needs. And to include cooperation with ICES.

- Convene workshop(s) to evaluate the outcome of national testing of alternative fishing gear or fishing techniques as a measure to mitigate by-catch from fisheries ([FISH 6-2017](#)). Such workshop to be preceded by substantial collection of background information and to be followed up by a report.

Tentative guiding: FISH G, State and Conservation WG, JWG Bird, Seal EG

- b) Physical disturbance to benthic habitats has been identified as wide-spread with potential impact on benthic habitats; about half of the Baltic Sea is disturbed by human activities with the most wide-spread disturbance caused by trawling and shipping ([HELCOM 2017](#)). Also other human activities, such as dredging, sand and gravel extraction, constructions, contribute to the disturbance as well as to permanent loss of benthic habitats. HELCOM has addressed impacts on benthic habitats in three recent projects: [BalticBOOST](#), TAPAS and SPICE. The projects have summarized available studies on impacts on benthic habitats, including impacts on the status of benthic species and habitats as well as on the spatial extent of impact. The most recent project, SPICE, explored data-driven approaches to develop and test quantitative threshold values for impact on benthic habitats. The final reports from the project have been prepared but results have not yet been discussed jointly in HELCOM.

Initial ideas:

- Collect the information from different HELCOM projects, and other sources as relevant, to a comprehensive summary of relevant information on the impacts of human activities on benthic habitats (database?). Contribute the information to and coordinate with the ongoing pan-European process to develop assessments of impacts on benthic habitats including potential cooperation with OSPAR and ICES.
- Convene, through suitable platform, workshops and meetings with the aim of reaching a HELCOM consensus view on how the information can be used for further development and testing of threshold values for adverse effects in the Baltic Sea region as well as how it can be used to identify needs for measures to reduce impact on seabed habitats
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Tentative guiding: GEAR (overall), Fish (impacts from fisheries), Pressure (impacts from extractive and dredging activities), State and Conservation (impacts on status of species and habitats), EGs as relevant.

Theme 3: Why the Baltic Sea cannot reach GES by 2020? Analysis of measures still needed to reach GES for selected topics, including an analysis of the regional conditions that have an influence on reaching GES, and projections on when GES can be reached. Climate change addressed as a horizontal theme.

Rationale and background:

With the current state of the environment, as indicated in the State of the Baltic Sea report, there is limited prospect to achieve good environmental status by 2020/2021, with the exception for a limited number of indicators. A majority of EU Member States have in their reporting of Programme of Measures advocated for “exceptions” to reaching GES by 2020 with reference to the natural conditions of the Baltic Sea, in particular but not exclusively for eutrophication. But importantly, there is still an apparent shortage in the implementation of measures, including agreed HELCOM actions ([HELCOM 2018](#)).

This theme would aim at analysing the reasons (historical-natural conditions, not enough implementation including socio-economic aspects of implementing the measures needed, climate change, continuous load) for why the Baltic cannot reach GES by 2020 and identifying where measures are still needed to reach GES. A realistic proposal will require a selection of topics and while the aim would be to base such an analysis as far as possible on data, semi-quantitative approaches and expert judgements is also foreseen as necessary

Commented [LOMU8]: This is more in line with priority 2 in the call.

components. This theme would essentially provide a BAU ([business as usual](#)) scenario where estimates of future changes in human activities creating a pressure on the Baltic Sea are combined with estimates of impacts of implemented measures to estimate the gap to GES by a specific target year. The activity is linked to Theme 1 on effectiveness of measures and would directly support the planned regional work on the BSAP update.

Initial ideas:

- Carry out a regional BAU analysis, building on the proposal by the ESA network and SPICE project, and complementing the analysis as far as possible with quantitative information, e.g. on effectiveness on implementation of measures.
- The regional natural conditions that potentially limits or delays the effect of impacts on measures are well known, and their impact could be included as part of the analysis.

Tentative guiding: a BSAP update task force, GEAR WG, ESA network, other WGs as relevant.

Commented [LOMU9]: We suggest to take into account sub-regional differences.

ESTONIA

We have looked through them and Estonia is interested in combining all three proposed topics. However, our specific interest would be:

- in quantification of the effects and sufficiency of the PoMs concerning nutrients reduction,
- developing by-catch measures and monitoring,
- measures still needed to reach GES (emphasis on eutrophication, hazardous substances and fishing) and projections on when GES can be achieved.

FINLAND

	SYKE interest!	What to do! (at least)	Theme 1: Methods and analysis to assess and quantify the effect of selected regional or regionally prioritized measures	Theme 2: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor	Theme 3: Why cannot the Baltic Sea reach GES by 2020?
WP1 MPAs (SYKE INTERESTED IN WP-LEAD)	X	MPA effectiveness			
	X	MPA socio-economic aspects and BAU			
	X	Effect of other spatial protection measures			
WP2 Nutrients (SYKE INTERESTED IN WP-LEAD)	X	Effect of reducing nutrients			
		Reduce nutrients under climate change scenarios			
	X	Indicators and thresholds linking eutrophication and seafloor integrity			
		Socio-economic aspects of nutrient reduction measures and BAU			
WP3 Seafloor		Activities disturbing seafloor habitats (fishing, etc)			
	X	Seafloor eutrophication effects			

	Scenarios for reducing disturbance to seafloor habitats			
	Socio-economic aspects of seafloor measures and BAU			
WP4 Biodiversity	Reduction of by-catch of mammals and birds			
	Socio-economic aspects of biodiversity measures and BAU			
WP5 Inter-regional cooperation	Inter-regional cooperation			

LATVIA

Latvia is willing to participate in the joint project and is ready to contribute in preparing the proposal.

As a feedback to your message and request by the GEAR meeting let me share with you some initial views.

The call is aimed at supporting EU Member States in the MSFD 2nd cycle implementation.

The precondition for proposal is that it should include MSFD competent authorities and shall cover one or more of the general objectives and one or more of the regional priorities.

So, the call is primarily aimed at implementation of the **MSFD** in countries and regionally. It means that all countries should be involved as full-fledged partners.

The result of the project should support Member States in implementing the Directive in its 2nd cycle, e.g., updating/ preparing the 2nd cycle PoMs.

Therefore, from our point of view, project proposal should address:

- 1) EU Member States` needs in implementation of the Directive and at the same time
- 2) to support and favour most actual regional priorities.

A theme which covers both MSFD and current regional needs, and also fulfills the set precondition for proposal - to cover general objective(s) and regional priorities - is related to **Programmes of Measures** and the **BSAP updating** as decided by the Brussels Ministerial meeting. This could insure synergies of both.

Such project could support the *(sub)regional assessment of the extent to which GES has been achieved and support the quantification of the effect of the PoMs*. Analysis could include:

- Effectiveness of existing and planned measures (“business-as-usual scenario”), assessment of sufficiency of these measures to achieve GES.
- Where additional measures are necessary for achieving GES – assessing effectiveness, costs, cost-effectiveness and other socioeconomic impacts of alternative additional measures.
- Evaluations for assessing possible justifications for MSFD exceptions (due to natural and/or socioeconomic reasons).
- etc.

From the **proposed themes** in your background information **Latvia would be interested in:**

Theme 3: Why cannot the Baltic Sea reach GES by 2020? (point b) methods to analyse effect of existing measures to reduce nutrients from Theme 1: Methods and analysis to assess and quantify the effect of selected regional or regionally prioritized measures - is related with Theme 3; besides, some countries have defined D5 Eutrophication as an exception in their PoMs) and

Theme 2: Support to the development of effective regional measures for physical disturbance to the seafloor: b) methods to assess/measures to reduce physical disturbance to the seafloor.

We are doubtful about a) on effectiveness of MPAs in Theme 1 and its added value.

SWEDEN

EU call for proposals on MSFD implementation 2018

SwaM experts preliminary views (working material, proposals, not final views) on the topics proposed for a Helcom proposal

From EU Call text: Measures in relation to pressures that need consistent or coordinated action across the (sub)region in order for the measures to be effective, measures that have synergistic effects for several descriptors or that have transboundary implications.

1. Methods to assess and quantify the effect of selected regional or regionally prioritized measures:

~~method to evaluate effectiveness of HELCOM MPAs (good geographical coverage but how effective are they?) + a possible pilot of testing a method~~

We propose: development of measures to reduce pressures for Helcom threatened species and habitats. This could include:

- 1) identifying the relevant pressures to focus on (major threats to listed species and habitats on Helcom red list)
- 2) identifying relevant measures and methods to evaluate their efficiency,
- 3) developing methods to evaluate measure effectiveness where necessary
- 4) identifying measures which would benefit from a regional approach.

(Important link to BSAP via Helcom red list.)

Method: Compiling and analysis of existing measures in BSAP, other Helcom agreements, and national PoMs. Compiling results on efficiency studies.

We could also assess the efficiency of protection of (threatened?) habitats in existing MPA networks. For example, whether MPAs are efficient for achieving better fish recruitment (are the relevant activities limited).

We could also consider a possible pilot study, for example of the effectiveness of improving bottom fauna through reducing trawling pressure in protected areas of the southern Baltic.

New potential task/subtask (to identify measures through linking pressures to environmental effect): Measures to reduce the impact of eutrophication on biodiversity

Links between hypoxia, especially intermittent or episodic events, and biology would be investigated. Relevant both for Baltic Priority 1 and 2 of the EU call. Is it only the fishing that prevents GES for key species such as Cod? What is, relatively, the impact from oxygen depletion? Impact on recruitment on young cod? Are there efficient measures available? (Weakness: the expected result in terms of new relevant and feasible measures may be low. But there may be relevant measures especially in the coastal zone, restoration, etc). Could be extended to include soft bottoms and impact from trawling, but also investigations as to what is the biggest threats for soft bottoms, why not GES in certain areas?

(Alternative/additional topics:

analysis of ecosystem resilience in MPA:s to main pressures such as eutrophication.)

Commented [LR10]: We propose to prioritize other themes or develop as below. MPA:s in themselves do not necessarily reduce pressures. Management measures in MPA is closely connected to fishing regulation, where Helcom has limited influence. Efficiency of management in MPA:s has been evaluated in a previous Helcom study 2017, where lack of information was a major issue and connection to management targets was lacking.

Commented [LR11]: It would be important to link the tasks to the potential use to support national PoMs, this is highlighted in the call.

- methods to analyze effect of existing measures to reduce nutrients (some countries have done such analysis on national level, needed to move forward with the implementation of the nutrient reduction scheme). A regionally coherent picture is needed, SwAM supports this.

2. Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor:

- on reduction of by catch of seals and mammals + additionally a possible pilot on exploring data and information flows between MSFD and CFP? (a topic for cooperation with OSPAR?);
- Methods to assess/measures to reduce physical disturbance to the seafloor e.g. (taking the work further in line with the Brussels Ministerial Declaration, linking to other regions and pan-European work)

See above approach as regards measures for biodiversity.

One approach could be to investigate methods to reduce physical impact in coastal waters (boat traffic, dredging etc). Reducing the impact here may improve habitat quality for habitats used by fish as spawning grounds and nursery areas, and also direct habitat restoration measures.

(Weakness: Data on habitat quality and extent is limited).

3. "Why the Baltic Sea cannot reach GES by 2020"

- Topics/descriptors to be selected (eutrophication and hazardous substances?)
- Analysis of measures (knowledge) still needed to reach GES (direct link to the BSAP update): We would support work to develop gap analysis methodology to support both BSAP update and the development of national Programs of Measures. This would include: methodology for listing, evaluating implementation levels, sufficiency of measures, and follow up of both implementation and efficiency (in the environment). What parts of this work would benefit from being done regionally?
- Include in the analysis the regional conditions that have an influence on reaching GES
- Provide projections on when GES can be reached for the selected topics (and on uses of marine waters). We need an evidence based timeline. Some work is already ongoing but there is no available regional material. It would be an advantage if all CP:s could respond coherently as to why GES cannot be reached (and when it might?).
- Climate change as a horizontal theme - a new priority for HELCOM. Possibly: How can climate impact be taken into account when assessing the need for, and scale of, new measures (in the gap analysis). However, this should not be a too big part of the proposal.

This could be an important topic also as regards communication to public; we need to be able to explain why GES seems far away.

Commented [LR12]: We would preliminarily not prioritize this.
We are not sure that new regional Helcom action is a priority here, there is a need rather for national action (or in working groups?).

This would be a joint analysis for the whole of the HELCOM area, presenting a joint gap analysis for all descriptors (which we need for the coming MSFD PoM). Where a connection between descriptor and pressure is well established, then it should be possible to say what additional measures are required or what the response time of the system is. This in order to explain when GES could be reached. Where the pressure/status link is not so well defined, then the gap analysis needs to describe the knowledge gaps, and then potentially do some sort of trend analysis to estimate time to GES. This would also contribute to PoM.

(More scientifically, we also need to manage the result of multiple regime shifts. We are in a process of oligotrophication due to reduced nutrient inputs from land, which is turning some archipelago areas from sources to sinks of nutrients. Despite this, because of changes in fish population (perhaps) we have a stable situation dominated by filamentous algae and mesopredators which gives rise to the same symptoms as eutrophication. How do we reduce the fish dominance on the eutrophication signal? Also: What is the effect of invasive species on the ecosystem services we need from our coastal waters?)

Annex 3 Background document

This document provides an overview of national responses to the proposed topics distributed by Secretariat 19 April 2018. The full response from countries is provided separately.

Priorities set for the Baltic Sea marine region: Deadline for application: 20 June 2018.

Priority 1: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor from fisheries and other relevant activities. The work should build on previous projects and aim to fill the gaps identified by HELCOM in the State of the Baltic Sea report5. □

Priority 2: Analysis of the natural conditions and reasons for not reaching GES, linking it to exceptions reported under MSFD. The work should improve the understanding of the regional conditions as well as the reasons why the Baltic Sea cannot reach GES by 2020 (e.g. historical-natural conditions, not enough implementation, climate change, continuous load) and link the results to particular exceptions reported under MSFD.

General remarks

Denmark: Range of topics too wide. Preferably fewer topics.

Estonia: Interested in combining all three proposed topics.

Finland: Additional topics proposed.

Latvia: Latvia is willing to participate in the joint project and is ready to contribute in preparing the proposal.

Sweden: Preliminary views provided.

Theme 1: Methods and analysis to assess and quantify the effect of selected regional or regionally prioritized measures:

Proposal	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Sweden
a) method to evaluate effectiveness of HELCOM MPAs, testing of method in pilot area	Not a priority (possible misunderstanding if this has been done already)		Special interest to participate. Include also other spatial measures and BAU		Not a priority.			Not a priority. Focus instead on measures to reduce pressures for threatened species and habitats. (Possible misunderstanding if this has been done already)

Proposal	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Sweden
b) methods to analyse effect of existing measures to reduce nutrients, analysis of effectiveness, consider climate change implications	Position to be clarified 2 May Remove climate change under the theme	Special interest to participate	Special interest to participate		Special interest to participate			Support

Theme 2: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor:

Proposal	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Sweden
a) reduction of by-catch of mammals and birds, data needs, consolidation of national tests of alternative fishing gear	Use existing data as starting point. Include cooperation with ICES	Special interest to participate	Include also socio-economic aspects and BAU					Not a priority
b) methods to assess/measures to reduce physical disturbance to the seafloor, summarize existing HELCOM work, develop guidelines/recommendation	Not to include guidelines/recommendation as a deliverable		Include also indicators and thresholds linking eutrophication and seafloor integrity, seafloor eutrophication affects, scenario for reducing disturbance to seal floor habitats, socio-economic aspects and BAU		Special interest to participate			Support. investigate e.g. methods to reduce physical impact in coastal waters

Theme 3: Why the Baltic Sea cannot reach GES by 2020?

Proposal	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Sweden
Analysis of measures still needed to reach GES for selected topics (BAU, gap analysis), analysis of the regional conditions that have an influence on reaching GES, projections on when GES can be reached.	Analyse reasons why the Baltic sea cannot reach GES by 2020. Proposal to also consider sub-regional differences when considering natural conditions	Special interest to participate	Special interest to participate		Special interest to participate			Support for gap analysis and reasons why GES cannot be reached. Climate change not to be big part of project

Updated background information on the rationale for the proposed selection of topics

[distributed 19 April, updated in tracked changes]

19 April 2018

Priorities set for the Baltic Sea marine region:

Priority 1: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor from fisheries and other relevant activities. The work should build on previous projects and aim to fill the gaps identified by HELCOM in the State of the Baltic Sea report5. □

Priority 2: Analysis of the natural conditions and reasons for not reaching GES, linking it to exceptions reported under MSFD. The work should improve the understanding of the regional conditions as well as the reasons why the Baltic Sea cannot reach GES by 2020 (e.g. historical-natural conditions, not enough implementation, climate change, continuous load) and link the results to particular exceptions reported under MSFD.

Background information on the rationale for the proposed selection of topics

Please note the structure might be adjusted for the application. Here the original structure retained to make it easier to keep track for the 2 May meeting.

Comments by CPs to the proposed topics below attached separately.

Theme 1: Methods and analysis to assess and quantify the effect of selected regional or regionally prioritized measures: a) method to evaluate effectiveness of HELCOM MPAs, b) methods to analyse effect of existing measures to reduce nutrients

Rationale and background:

Agreement in HELCOM: YES (HELCOM Recommendation 35/1). Note that this type of assessment has not been carried out in HELCOM previously.

- c) HELCOM recommendation [35/1](#) stipulates the Contracting Parties agree to assess effectiveness of the management plans or measures taken in the HELCOM MPAs. The effect of MPAs on meeting their conservation objectives can be evaluated based on monitoring of the targeted protection features (e.g. species or habitat) and their threats before vs after the designation of the MPA or within the MPA vs outside reference sites. Assessments of 'management effectiveness' is however typically broader, also including evaluating the management actions (e.g. zoning, temporal closure for fishing), enforcement of regulations, socio-economic aspects (e.g. benefits from the MPA), governance, information and communication, and more. Most countries in the HELCOM area has performed some form of assessment of MPA effectiveness but there are many different approaches, no regional wide compilation of results, and no common agreement on HELCOM guidelines.

HELCOM has thus far evaluated the areal coverage of MPAs and the potential ecological coherence of the MPA network ([HELCOM 2016](#)). However, assessing the management effectiveness could give important guidance to improve the performance of MPAs as a measure to improve the state of the Baltic Sea. A link to Theme 2 could be established on the topic of measures to reduce impact from fisheries.

Initial ideas (to be developed with partners):

- Develop a tool to assess management effectiveness of MPAs, taking into account experience from existing approaches. Such tool could consider that the level of data and information will differ between MPAs, and thus include alternative assessment routes depending on data availability. The tool would be proposed for Contracting Parties.
- Test the tool in one or a set of pilot areas (based on existing data and information).

Tentative Guiding: State and Conservation WG

Rationale and background:

Agreement in HELCOM: YES (effectiveness of measures included in PLC-6 project, upon GEAR request, and also in PLC-7). However, such analysis has not been carried out yet. Questionnaire results have been collated but the material will not provide for a full quantitative analysis and a narrative description of the compiled information is instead planned for. With this project proposal the ambition to make, as far as possible, a quantitative assessment of effectiveness of measures to address eutrophication could again be attempted.

- d) State of the Baltic Sea report shows that eutrophication remains the main pressure on the marine environment having strong transboundary dimension. HELCOM countries have established and/or implemented numerous measures aimed at reducing input of nutrients, as seen for example through recent national PoMs, the reporting of actions to the HELCOM Explorer ([HELCOM 2018](#)), as compiled by the AGRI group ([AGRI 5-2017](#)) and as reported to PLC-6/Pressure WG ([Pressure 7-2017 and Pressure 8-2018](#)). The effectiveness of such measures, i.e. the expected quantitative reduction of nutrients, and in particular in relation to reaching HELCOM CARTs, has only been comprehensively evaluated by a few Contracting Parties. In the plans for the update of the BSAP, an analysis of sufficiency of measures has been outlined with the aim of identifying the need for additional actions to support the development of the update of the BSAP by 2021. This requires firstly the analysis of effectiveness of current implemented measures. While data limitations are evident, the aim would be towards quantitatively based assessment of one (input of nutrients) or a few selective topics (and some selected measures).

Initial ideas:

- Evaluate the methods used by those countries that carried out comprehensive analyses of effectiveness of measures nationally and explore how methods could be applied to other countries
- Consider if and how cost-effectiveness analysis of selected measures fit/could be included in the project
- Carry out the analyses building on work developed by the PLC project
- Consider the implications of climate change on measures taken, quantitative or qualitative as deemed possible

Tentative guiding: Pressure WG, EGs as relevant, a BSAP update task force

Theme 2: Support to the development of effective regional measures for biodiversity and physical disturbance to the seafloor: a) focusing on the reduction of by-catch of mammals and birds, including data needs, and b) methods to assess/measures to reduce physical disturbance to the seafloor.

Rationale and background:

Agreement in HELCOM: YES

(2013 Ministerial Meeting 15(B): "WE DECIDE to take action to reduce negative impacts of fishing activities on the marine ecosystem and to this end, SUPPORT the development of fisheries management and technical

measures to minimize unwanted by-catch of fish, birds and mammals, in order to achieve the close to zero target for by-catch rates of BSAP and minimize damage to sea bed habitats”

Task in HELCOM FISH work plan: “Provide an overview of data collection activities related to i.a.: • incidental catch of marine mammals and water birds”)

- c) Drowning in fishing gear is considered as a major pressure on Baltic Sea mammals and birds and is considered as the greatest source of mortality for the threatened harbour porpoise population in the Baltic Sea ([HELCOM 2017](#)). Still, the full extent of this pressure is unknown due to lack of consistent and regular collection of data. Spatial and temporal data collection on by-catch, as well as on fisheries activities and species density and distribution, would not only make it possible to assess the level of the problem but also to define hotspot areas where by-catch is more likely to occur. Such information could in turn be used to identify areas that could be targeted for measures to mitigate by-catch of mammals and birds. The topic has been identified as an area for cooperation with OSPAR from point of data collection it is also an area for collaboration with ICES, in particular WGBYC.

Initial ideas (to be further developed with partners):

- Build on the initiative under HELCOM to collect information on data for by-catch and fishing activities, with a focus on gill-nets fisheries (identified as the gear type causing most by-catch, [CG-FISHDATA 1-2018](#)).
- This would constitute a pilot on exploring data and information flows between MSFD and CFP, possibly in cooperation with OSPAR (*such a pilot mentioned as an example in the call*)
- Convene workshop(s) to evaluate the outcome of national testing of alternative fishing gear or fishing techniques as a measure to mitigate by-catch from fisheries ([FISH 6-2017 and document 3-1 for FISH 7-2018](#)). Such workshop to be preceded by substantial collection of background information and to be followed up by a report/overview document.

Tentative guiding: FISH G, State and Conservation WG, JWG Bird, Seal EG

Rationale and background:

Agreement in HELCOM: YES

2018 HELCOM Ministerial Meeting: agreement related to a) threshold values and quantitative targets (*however not the topic of the call!*), b) regional and national actions, based on best available scientific advice.

- d) Physical disturbance to benthic habitats has been identified as wide-spread with potential impact on benthic habitats; about half of the Baltic Sea is disturbed by human activities with the most wide-spread disturbance caused by trawling and shipping ([HELCOM 2017](#)). Also other human activities, such as dredging, sand and gravel extraction, constructions, contribute to the disturbance as well as to permanent loss of benthic habitats. HELCOM has addressed impacts on benthic habitats in three recent projects: [BalticBOOST](#), TAPAS and SPICE. The projects have summarized available studies on impacts on benthic habitats, including impacts on the status of benthic species and habitats as well as on the spatial extent of impact. The most recent project, SPICE, explored data-driven approaches to develop and test quantitative threshold values for impact on benthic habitats. The final reports from the project have been prepared but results have not yet been discussed jointly in HELCOM.

Initial ideas:

- Collect the information from different HELCOM projects, and other sources as relevant, to a comprehensive summary of relevant information on the impacts of human activities on benthic habitats (database?). Contribute the information to and coordinate with the ongoing pan-European

process to develop assessments of impacts on benthic habitats including potential cooperation with OSPAR and ICES.

- Convene, through suitable platform, workshops and meetings with the aim of reaching a HELCOM consensus view on how the information can be used for further development and testing of threshold values for adverse effects in the Baltic Sea region as well as how it can be used to identify needs for measures to reduce impact on seabed habitats

Tentative guiding: GEAR (overall), Fish (impacts from fisheries), Pressure (impacts from extractive and dredging activities), State and Conservation (impacts on status of species and habitats), EGs as relevant.

Theme 3: Why the Baltic Sea cannot reach GES by 2020? Analysis of measures still needed to reach GES for selected topics, including an analysis of the regional conditions that have an influence on reaching GES, and projections on when GES can be reached. Climate change addressed as a horizontal theme.

Tentative resource allocation: minimum 40%

Rationale and background:

Agreement in HELCOM: YES

Outcome HOD 52A-2017: "The Meeting discussed the need to explore the reasons for not reaching GES yet and causes for short-falls and recognized that the report could provide first insights to a limited number of topics based on the existing material while a more complete and in depth analyses will be required to support future HELCOM work, in particular with regard to the update of the BSAP."

[document 2-6/Rev](#) from HELCOM 39-2018: "As a next step, HELCOM will carry out an analysis of sufficiency of measures to reach HELCOM objectives and targets, to support selection of new actions."

With the current state of the environment, as indicated in the State of the Baltic Sea report, there is limited prospect to achieve good environmental status by 2020/2021, with the exception for a limited number of indicators. A majority of EU Member States have in their reporting of Programme of Measures advocated for "exceptions" to reaching GES by 2020 with reference to the natural conditions of the Baltic Sea, in particular but not exclusively for eutrophication. But importantly, there is still an apparent shortage in the implementation of measures, including agreed HELCOM actions ([HELCOM 2018](#)).

This theme would respond to the priority "analyse the reasons (historical-natural conditions, not enough implementation including socio-economic aspects of implementing the measures needed, climate change, continuous load) for why the Baltic cannot reach GES by 2020" and will aim at identifying where measures are still needed to reach GES. A realistic proposal will require a selection of topics and while the aim would be to base such an analysis as far as possible on data, semi-quantitative approaches and expert judgements is also foreseen as necessary components. This theme would essentially provide a BAU ([business as usual](#)) scenario where estimates of future changes in human activities creating a pressure on the Baltic Sea are combined with estimates of impacts of implemented measures to estimate the gap to GES by a specific target year. The activity is linked to Theme 1 on effectiveness of measures and would directly support the planned regional work on the BSAP update, as well as will utilize the existing information on climate change.

Initial ideas:

- Carry out a regional BAU analysis, building on the proposal by the ESA network and SPICE project, and complementing the analysis as far as possible with quantitative information, e.g. on effectiveness on implementation of measures.
- The regional and sub-regional natural conditions that potentially limits or delays the effect of impacts on measures are well known, and their impact could be included as part of the analysis.

Tentative guiding: a BSAP update task force, GEAR WG, ESA network, other WGs as relevant.