



Document title	Progress on BSAP update activities and the analysis of sufficiency of measures
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Background

According to the [Strategic plan](#) for the update of the Baltic Sea Action Plan, agreed by HOD 54-2018, an analysis of sufficiency of measures to reach HELCOM goals and objectives is carried out to support the selection of new and strengthened HELCOM actions for the updated BSAP. HOD 56-2019 endorsed the approach for analysing sufficiency of measures (SOM) and its use to support the BSAP update as contained in [document 2-3 to HOD 56](#). Specification of some of the steps of the approach, in particular the evaluation of effect of measures and response in state components to pressure reductions, was discussed and supported by [HELCOM SOM Platform 2-2019](#).

The timetable for preparing the SOM analysis is governed by the overall work plan for the BSAP update. A general time-table for the SOM analysis is included in the BSAP update work plan ([Outcome of HOD 56-2019, Annex 2](#)) and is also included in Annex 1 to this document for reference. In autumn 2019 a number of HELCOM workshops and sessions will take place to support the SOM analysis and Working Groups are furthermore requested, as relevant, to validate the data and information that goes into the analysis. In spring 2020 the Working Groups will carry out a review of proposals on new HELCOM actions (synopses). When the results of the SOM analysis and the review of synopses are ready a set of thematic BSAP UP workshops will take place in late spring 2020 with the aim to discuss the results and make proposals on new actions for the updated BSAP. The workshops will take place in addition to the regular Working Group meetings.

This document summarizes the activities that will support the agreement on new actions for the update of the BSAP, the steps taken to support the SOM analysis in autumn 2019, and the activities that will take place in spring 2020.

Action requested

The Meeting is invited to

- encourage submissions of synopses on potential new measures for the updated BSAP,
- take note of the planned review of synopses on potential new HELCOM actions to take place at the next meeting of the Working Group,
- take note of the proposed thematic BSAP UP workshops, in particular that MSP is to be addressed during a cross-cutting workshop during week 25-29 May 2020 (dates tbd).

Background

1) Ongoing activities to support the update of the Baltic Sea Action Plan

There are multiple ongoing activities to support the update of the Baltic Sea Action Plan. Figure 1 illustrates how some of the main activities are contributing to the agreement on the content of the updated BSAP. The results of the activities will jointly form the basis for a first selection of new actions for the BSAP, to take place at the planned thematic BSAP UP workshops in spring 2020.

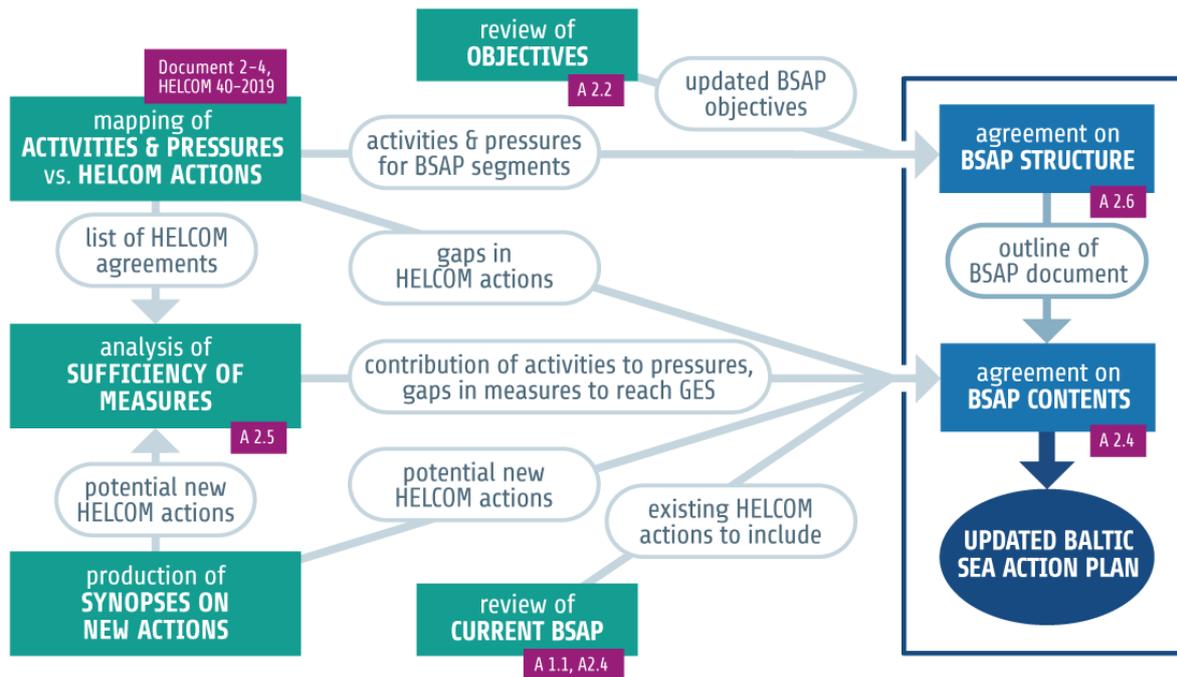


Figure 1. Ongoing activities that contributes directly to the updated Baltic Sea Action Plan.

Main components of Figure 1

Agreement on BSAP structure

The ‘BSAP structure’ refers to the strategic goals and objectives of the BSAP. HOD are currently reviewing the goals of the BSAP and HELCOM Working Groups are reviewing existing ecological and management objectives and proposing additional objectives for new topics covered by HELCOM work. The ‘BSAP structure’ is primarily meant to communicate HELCOM aims and main areas of work to the wider community and it will also be used to organize the final BSAP document. Information on a provisional ‘BSAP structure’ and the ongoing development of ecological and management objectives is available in a separate meeting document.

Agreement on the content of the updated BSAP

Three main activities will contribute to the agreement on the content of the updated BSAP; a) the SOM analysis, b) the production of synopses on new actions, and c) the review of the current BSAP.

a) Analysis of sufficiency of measures

The analysis of sufficiency of measures (SOM) will contribute to identifying gaps in measures to reach good environmental status. Such gaps will be possible to identify for a number of state components (mammals, birds, fish, benthic habitats) and pressures (input of nutrients, hazardous substances, litter, underwater noise, non-indigenous species, loss and disturbance to the seabed, by-catch). First

results of the SOM analysis should be prepared by March 2020 and an initial evaluation and interpretation of results will be carried out at the 3rd HELCOM SOM Platform meeting which will take place 24-26 March 2019.

It can be noted that spatial measures, including MSP, are being included in the evaluation of several Baltic Sea pressures including e.g. species disturbance and loss and disturbance of the seafloor.

Several sub-products of the SOM analysis can also provide standalone support for identifying and selecting new actions:

- list of existing agreements to improve the Baltic Sea environment have been collated, including HELCOM actions and relevant national and international measures agreed under other policies ([document 3-1 and 3-1 Att1](#), HELCOM SOM Platform 2-2019). These lists will be used to support the evaluation of effectiveness of measures but can also provide good examples on measures that may be considered for actions at the regional level. The lists also include spatial protection measures, including marine protected areas and coastal and marine spatial planning.
- the relative contribution of different activities to specific pressures is being estimated. This analysis will indicate which activities that are of main concern in the Baltic Sea region and will provide support for identifying how new actions and measures are best directed to improve the environmental status. The evaluation is ongoing through surveys carried out by HELCOM expert network e.g. EN Litter, EN Noise, and EN HZ.
- effectiveness of measures. The main mode for retrieving estimated effectiveness of measures will be an expert evaluation based on grouping of measures. In addition to the expert-based surveys, information on individual measures is also collected and will provide quantitative information on effectiveness for at least a sub-set of measures.
- activities and pressures of main concern to the Baltic Sea environment are furthermore mapped against existing HELCOM agreements and actions. This work will contribute to identifying qualitative gaps in HELCOM actions, i.e. to identify areas of work where HELCOM is currently less active. A progress report on this mapping was presented to HELCOM 40-2019 ([HELCOM 40-2019, document 2-4](#)).

A brief overview of the SOM approach is included in Annex 2. For information on the approach please see [document 2-2](#) to SOM Platform 2-2019 and the associated attachment.

b) Production of synopses on new actions of the updated BSAP

According to the agreement at HELCOM 40-2019, an invitation to make proposals on new actions for the updated BSAP has been extended to HELCOM Working Groups, expert groups and networks, observers, BONUS projects, as well as a general invitation to international projects. The synopses on potential new HELCOM actions and measures should follow a [predefined format](#). One type of required information is on the effectiveness of the proposed new action. While quantitative estimates of effect may be difficult to provide with regard to MSP, the effects could also be evaluated qualitatively e.g. to indicate which activities that would be affected or what pressures that can be expected to be reduced.

The deadline for submitting synopses is end of 2019. According to the work plan for the BSAP update the synopses are to be reviewed by Working Groups in spring 2020. More information on this review is addressed in section 3 of this document.

c) Review of the current BSAP

In addition to new actions, the updated BSAP document will include existing HELCOM actions that are not fully implemented by 2021. HELCOM Working Groups are currently reviewing the implementation of the existing BSAP and HELCOM Ministerial Declarations 2010 and 2013 and will propose actions to be included also in the updated BSAP. In this step the Working Groups are also considering potential needs to rephrase existing actions, e.g. to ensure that they are up to date.

2) Ongoing work under the SOM Platform and ACTION project

The SOM analysis is supported by two coordinated activities:

- a) The HELCOM platform for analyzing sufficiency of measures (SOM Platform), established by HOD 55-2018. The second meeting of the SOM Platform was held 16-17 September 2019 ([HELCOM SOM Platform 2-2019](#)).
- b) The HELCOM ACTION project which is co-funded by the EU and will run in 2019-2020. The kick-off meeting of the project was held 25-27 February 2019.

The organization of work under the HELCOM SOM Platform is briefly:

- HELCOM ACTION project addresses measures related to by-catch of mammals and birds, impacts on the seafloor, MPAs as a conservation and protection measure, and eutrophication.
- The SOM Platform focuses its work on complementary topics to the ACTION project, i.e. hazardous substances, non-indigenous species, marine litter, underwater noise, and biodiversity aspects not covered by the ACTION project.
- For the analyses under the SOM Platform, 'Topic teams' have been established based on a lead country approach, expertise on economic and social analyses (ESA), and engagement of relevant HELCOM expert groups and networks. The topic teams work mainly intersessionally and contribute with data and information to the analyses to the SOM analyses.
- The contribution to the SOM analyses under the ACTION project is carried out by the project partners and a dedicated work package for analyzing sufficiency of measures.
- The Topic Teams and partners of the ACTION project are providing input and information to the SOM analysis, either through the collation of quantitative data or through expert-based evaluations.

For the topic teams that work under the SOM Platform, updated workplans were presented and discussed at the 2nd SOM Platform meeting. The updated plans can be retrieved through the following links:

- [Mammals, waterbirds, migratory fish](#) (led by Secretariat; migratory fish now led by Finland)
- [Hazardous substances](#) (Lead Sweden, Co-lead Denmark, Support Finland)
- [Underwater noise](#) (Lead Denmark)
- [Marine litter](#) (Lead Estonia)
- [Non-indigenous species](#) (led by Secretariat)
- [Biodiversity – coastal and commercial fish](#) (Lead Sweden)

The ongoing work by the ACTION project is summarized in [document 3-6](#) to HELCOM SOM Platform 2-2019.

For more detailed information on the organization of work under the SOM Platform see e.g. [document 3-7](#) to Maritime 19-2019.

c) Contribution from Working groups in autumn 2019/spring 2020

Validation of input to the SOM analysis

Heads of Delegation agreed intersessionally on a dedicated workshop on hazardous substances to support the SOM analysis to be held 22 October 2019, Brussels, prior to Pressure 11-2019.

HOD 56-2019 also agreed to convene a set of biodiversity related workshops and sessions to support the SOM analysis in autumn 2019 ([Outcome para 2.6](#));

- Mammals: 26-27 September, back-to-back with EG MAMA 13-2019, (24-26 September), Helsinki, Finland
- Birds: 3 October linked to HELCOM-OSPAR-ICES JWGBird, 2019, (30 September-4 October), Tartu, Estonia
- Fish: workshop 4-6 November 2019, Warsaw, Poland.
- Benthic habitats: 14 November incorporated in the agenda of EN-BENTHIC 3-2019, (14-15 November 2019), Helsinki, Finland

A key role of the Working Groups is to validate the data and information that goes into the SOM analysis, including the identification of main pathways for pressures, effectiveness of measures, and linking reduction in pressures to improvement in state components. This information is gathered from existing literature and models or by the implementation of expert-based surveys. The validation steps are primarily carried by HELCOM Pressure, State and Conservation, Fish, Maritime Groups. With maritime spatial planning being a tool for marine management rather than a measure, HELCOM-VASAB MSP will not be directly involved in the validation of data for the analysis but can contribute with important background information and proposals on how MSP can contribute to reaching the HELCOM goals and objectives through proposals on new HELCOM actions.

[Review of synopses of potential new actions for the updated BSAP](#)

HELCOM SOM Platform 2-2019 discussed how the evaluation of proposed new actions (synopses) should be carried out and supported a three-step approach (Figure 2) which includes an initial technical review by Working Groups (in accordance with work plan for the BSAP update), the application of criteria for consideration of new actions at the thematic BSAP UP workshops, and the evaluation of cost-effectiveness on proposed new actions as prioritized by the thematic workshops. The review by the relevant HELCOM Working Groups will take place at their spring meetings in 2020 or intersessionally as needed, focusing on:

- a) evaluating if the proposals are sufficiently substantiated, i.e. if appropriate supporting references and evidence of effect have been provided,
- b) if it is technically feasible to implement the proposed actions, e.g. is a proposed technique sufficiently developed to be considered for practical implementation,
- c) identify potential gaps in the proposed new actions.

The Secretariat and the Chair of the SOM Platform will elaborate on the guidance of the technical review by the Working Groups and share it with the SOM Platform representatives for further development by end of 2019.

The criteria to be applied at the thematic BSAP UP workshops will be developed intersessionally under the Lead by Sweden and Latvia and input from the SOM Platform representatives, with a view of presenting them for consideration by HOD 57-2019. The proposal for the analysis of cost-effectiveness was presented to HELCOM SOM Platform 2-2019 and will be further discussed at the 3rd meeting of the SOM Platform.

Any proposals related to MSP will be presented for consideration by HELCOM-VASAB MSP in early spring 2020 and discussed at the thematic BSAP UP workshops in late spring 2020 (see next section).

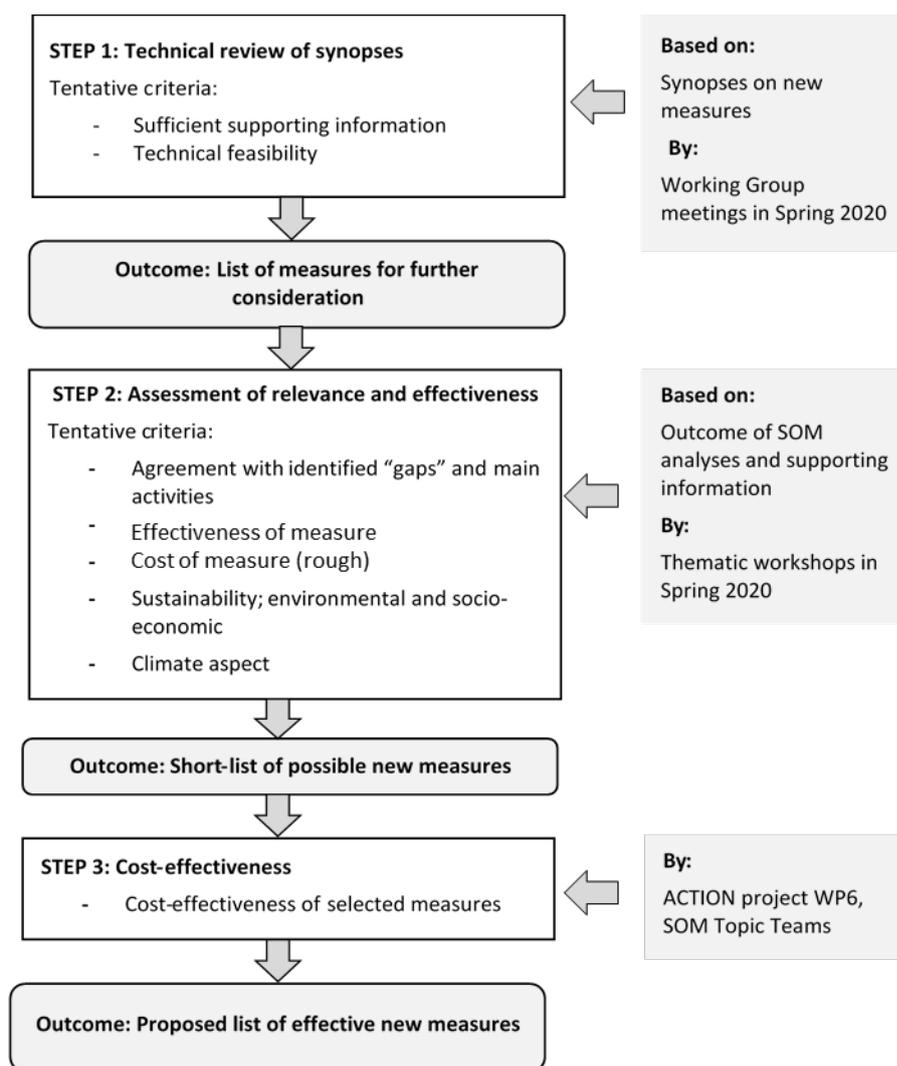


Figure 2. Draft step-wise approach for consideration of proposed new actions for the updated BSAP. Note that the criteria will be further developed in autumn 2019.

d) Themes and timing of BSAP UP thematic workshops

According to the workplan for the BSAP update, dedicated thematic workshops will be held in spring 2020. The workshops will consider the combined results of ongoing activities, i.e. results of SOM analysis and mapping exercises, synopses on new actions, lists of existing HELCOM actions etc. The outcome of these workshops is expected to provide first proposals of new actions for the updated BSAP, corresponding to step 2 in Figure 2.

HELCOM SOM Platform 2-2019 discussed the grouping of themes and timing of the thematic BSAP UP workshops, taking into account dates of already planned HELCOM meetings and other meetings that may attract the intended expertise. SOM Platform agreed on the following proposals:

- back-to-back workshops on hazardous substances and litter (2 days), and eutrophication (1.5 days) in the period 11-15 May (exact dates to be tbd),
- cross-cutting workshop on maritime activities, underwater noise, non-indigenous species, response actions, 18-20 May,
- cross-cutting workshop on biodiversity, loss and disturbance to the seabed, extraction of species (including by-catch, hunting) and spatial measures (MPA, MSP), in the period 25-29 May (days tbd)

e) Next steps; activities in autumn 2021

In autumn 2020, further deliberations of proposed new actions will take place based on the outcome of the thematic workshops. Such deliberations are planned to take place through regular Working Groups meetings. This will be supported by continued work of the SOM Platform and ACTION project by a) re-running the SOM analyses with the proposed new actions included to evaluate how the new actions will contribute to reaching good status, and b) analysing cost-effectiveness of proposed new actions. A full draft of the updated BSAP should be ready for consideration by HOD in December 2020. It should however be noted that HOD are informed of and have the possibility to guide all the steps leading up to the draft updated BSAP. 2021 is planned to be used for deliberations and finetuning of the BSAP content, primarily by HOD.

Annex 1. Timetable for Tasks of the SOM Platform (as of HELCOM SOM Platform 1-2019)

YEAR	2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Indicative steps								
Approach	ACTION/ SOM proposal 2nd version end of March	GEAR agreement 15-17 May 2019						
Collation of data and information input to analyses		SOM Platform/ ACTION End of June						
Synopses on potential new measures		Lead countries, international projects, NGOs	Lead countries, international projects, NGOs	Lead countries, international projects, NGOs				
2 nd meeting SOM Platform			16-17 September 2019					
Expert-based input to SOM analyses. review of synopses			WGs, EGs, (SOM Platform, ACTION project)	WGs, EGs (SOM Platform, ACTION project)				
Running BAU on existing measures				SOM Platform/ ACTION	SOM Platform/ ACTION			
3 rd SOM Platform meeting					March 2020 (joint meeting ACTION WP6)			
Thematic workshops, to discuss results and propose potential new actions						WGs, EGs, experts May/June 2019		
Assess status with potential new HELCOM actions							SOM Platform/ ACTION	
Cost-effectiveness analyses							SOM Platform/ ACTION	
4 th SOM Platform meeting							September 2020	
Continued elaboration and endorsement of new/strengthened HELCOM actions							WGs	WGs
[Benefits of the BSAP as a whole]							SOM Platform	SOM Platform

Annex 2: SOM approach in brief

Overview in brief

The aim of the analysis of sufficiency of measures (SOM) is to assess whether existing policies are sufficient to achieve good environmental status (GES) in the Baltic Sea. It relies on estimating the status of the marine environment at some specific future point in time, given measures in existing policies, their implementation status, natural time lags, and predicted development of human activities/pressures over this time period. This is called the 'business-as-usual (BAU) status' (Figure 1). If the analysis indicates that GES is not achieved, then existing measures are not sufficient and additional measures are needed (or existing measures strengthened).

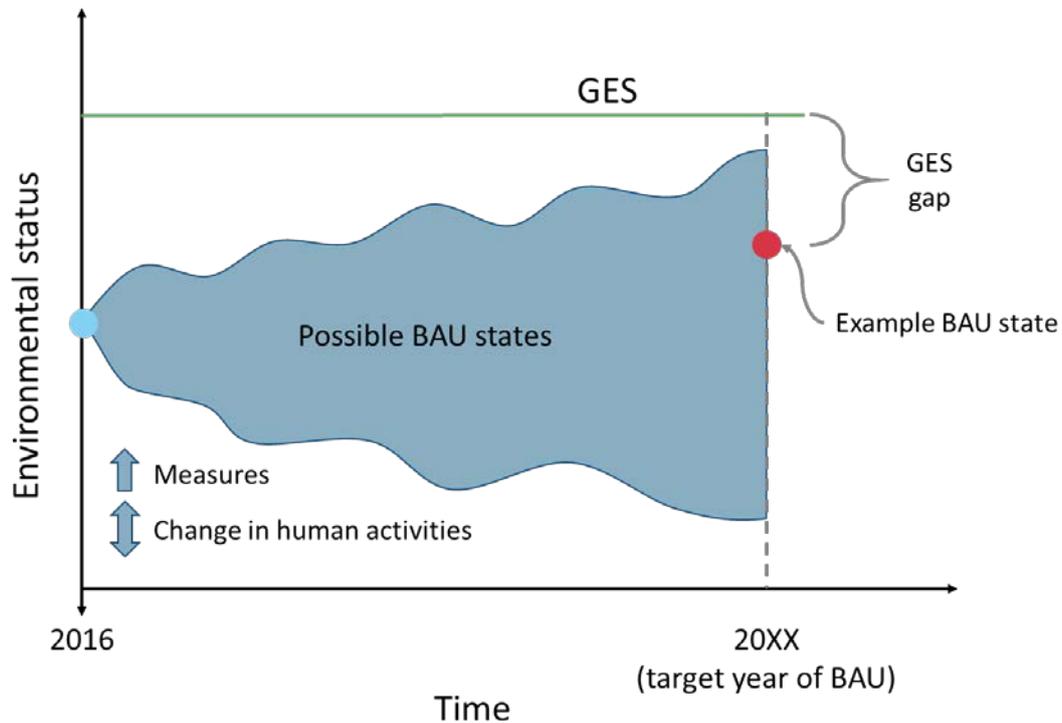


Figure 1. Illustration on the use of the BAU in the gap analysis.

The SOM model tracks the impact chains and effects of existing and proposed measures through the activities/sectors they moderate, to the pressures the activities/sectors generate, and on to how those pressures affect the state of the Baltic Sea (Figure 2). This is done by estimating how much existing measures will reduce anthropogenic pressures in the time frame of the BAU (linked through the activities/sectors the measures target), the consequent change in each of the state components analysed, and whether this will be sufficient to achieve GES for these components.

Model data gathering builds on input from dedicated Topic teams that have been established by the HELCOM SOM Platform, partners of the HELCOM ACTION project, HELCOM expert groups and networks, and dedicated workshops for the implementation of expert-based surveys.

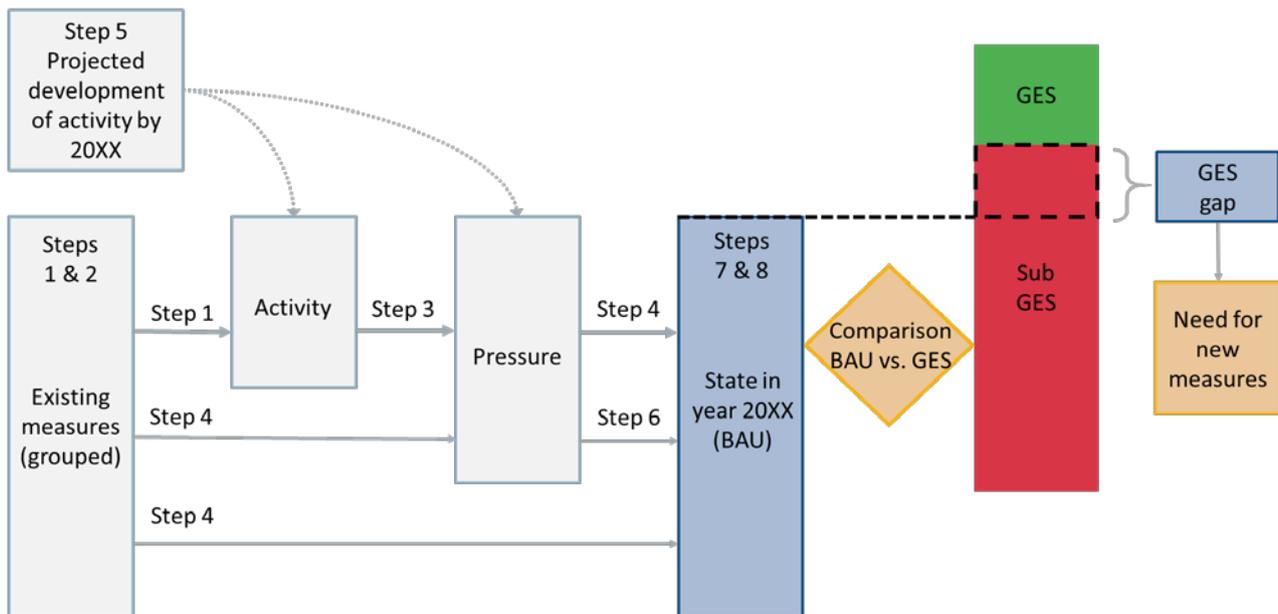


Figure 2. Structure of the SOM analysis: Linking measures with activities, pressures or state components; predicted changes in activities and pressures; comparison of the BAU state with GES; and estimation of the need for new measures.

Detailed approach in brief

Step 1. Existing measures

Lists of existing measures have been compiled by the Secretariat and topical experts involved in the HELCOM SOM Platform. The lists are then reviewed by the Contracting Parties, and the measures are categorized into 'Measure types'. The measure type is determined by general measure characteristics as well as more concrete descriptions of the measure. An example of a measure type is 'Technical modification of fishing gears to reduce bycatch of harbour porpoise'. This categorization allows for simplification of the analysis (i.e. by aggregating similar types of measures).

Step 2. Estimating time-lags in measure-pressure links

This step involves the methods and assumptions for identifying 'old' measures that will not have further effect on the environment and 'new' measures that will still have effects on the environment.

Step 3. Identifying main pathways for pressures using activity-pressure-linkages

Relevant HELCOM expert groups have evaluated the contributions of the activities included in the SOM analysis to various pressures. In this step experts have been asked to estimate the most likely contribution of relevant activities to specific pressures, as well as, the lower and upper bounds of contribution for each relevant activity. This data is then used to scale the impact of the effectiveness of measures surveys from step 4 and helps to identify activities/sectors that could be targeted for future measures.

Step 4. Estimation of effects of measures

In this step, experts are asked to evaluate the effectiveness of various measure types (step 1) on important activity-pressure linkages (step 3). The approach is carried out through surveys. Briefly, the evaluations first occur using a relative scaling approach looking at specific activity-pressure pairings (e.g. fishing industry contributions to marine litter). The experts are then asked to provide a numeric impact (% reduction in pressure from the specified activity; maximum, minimum, and most likely) to one of the measure types evaluated. This provides a scale that can then be applied to all of the measure types previously analysed. In addition to these single scaling values, effectiveness of measures values from literature will be used to provide a more robust estimation of measure effectiveness.

Step 5. Projected development of human activities/pressures

This step provides methods for considering projected changes in human activities/pressures between now and the end year of the BAU scenario. By including this step, the SOM model can account for dynamic societies and economies.

Step 6. Linking reduced pressures with state components

In this step, HELCOM experts are asked to evaluate the impact of pressures on specific state components using a semi-quantitative approach which will be introduced in detail to the workshop. The state components considered in the analysis are directly linked to HELCOM core indicators when available (e.g. grey seal population size) or other ecosystem components as reflected in the HELCOM State of the Baltic Sea report (e.g. harbour porpoise population size).

Only the top six pressures are assessed, some of which are preselected based on literature. Following this evaluation, experts are asked how much all pressures need to be reduced to reach GES assuming equal reduction of all identified pressures.

Step 7. Comparison of BAU and GES and assessing sufficiency of measures

Following primary model runs in December 2019, projected values for pressure and state components will be available to compare to existing HELCOM pressure targets and threshold value for state indicators. This will identify areas where additional measures may be needed to reach HELCOM goals and objectives.

The results of the model will be discussed at thematic BSAP UP workshops to be held in spring 2020.

Step 8. Time lags in state recovery

Time-lags in state recovery (e.g. recovery of benthic habitats following removal of trawling) are not included in the BAU scenario. Instead they will be evaluated as additional information alongside threshold values for state components as in Step 7. By separating pressure-state time lags from the BAU scenario, the effect of measures can be separated from unavoidable time-lags (e.g. population growth) and allow for the consideration of the sufficiency of measures in the case of avoidable time-lags (i.e. topic is projected to eventually reach GES under BAU conditions, but GES could be reached sooner if additional measures were implemented).