Baltic Marine Environment Protection Commission

HELCOM Platform for sufficiency of measures — SOM Platform 3-2020

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## Background

The HELCOM ACTION Project is an EU co-funded project for which HELCOM is the coordinator. The project works closely with the HELCOM *ad hoc* Platform on Sufficiency of Measures (SOM Platform). This document provides a brief overview of progress made in the ACTION Project for the work packages addressing more technical aspects (i.e. aspects other that the main SOM analysis and methodology).

The detailed reports and outcomes of the project will be provided to relevant HELCOM Working Groups during 2020. This will provide an opportunity for detailed commenting before the project deliverables are finalised. It is anticipated that a suitable commenting period will be provided for Contracting Parties to review the deliverables once they have been finalised.

## Action requested

The Meeting is invited to take note of the information presented.

# Technical progress within the ACTION Project

The ACTION project is an EU co-financed project to support the update of the Baltic Sea Action Plan. A major focal point of the project is the development of the Sufficiency of measures (SOM) analysis carried out by work package 6 (WP6), as introduced with other documents to this meeting, with other work packages additionally addressing technical developments of relevance to the region. The following work packages are summarized:

- WP1 By-catch: identifying high-risk areas for by-catch of mammals and birds, evaluating technical measures to reduce by-catch of harbour porpoise, estimating the effect and cost of these mitigation measures.
- WP2 Impacts on the seabed: evaluating restoration measures in coastal areas and impacts of spatial regulation of offshore fisheries, including effects on benthic communities and costs of measures
- WP3 Marine protected areas (MPAs): developing a method to assess management effectiveness of MPAs, assessing how MPAs contribute to achieving GES in the Baltic Sea
- WP4 Input of nutrients: analysing sources and trends of nutrient input and compatibility of nutrient reduction targets under different policies, evaluating the combined effect of existing measures
- WP5 Conditions that influence GES: analysing the conditions of the Baltic Sea that influence achievement of GES, including climate change


The most recent overview of progress took place at the HELCOM ACTION Project partner meeting in February 2020 and based on this the document below provides a brief summary of technical progress per work package.

## WP1 By-catch

WP1 has completed data collation of available mammal by-catch (harbour porpoise, grey seals and harbour seals), and for certain bird species (Eider ducks and cormorants). The data collected cover the ICES areas 20 – 32 (i.e. the whole Baltic Sea region) with data availability in these areas ranging between a single year and up to six years of data (between 2008 and 2017 and mainly from data records in ICES WGBYC reports).

The strongest data was provided by Remote Electronic Monitoring approaches (as yet unpublished data) as this provides a stronger linkage between the numbers of by/caught animals and the fishing effort, as well as the possibility to explore seasonal variation more fully. This approach has been developed further with a focus on ICES areas 21, 22 and 23 (equivalent to the Kattegat, Great Belt and The Sound assessment units). This approach utilises data from 2010-2018 and provides an overall indication of the overall rate of by-catch and the seasonal rate of by-catch. The video footage enable division of by-catch into categories (e.g. seals (grey and harbour combined), eiders and scoters, and cormorants). Such data, in addition to modelling approaches, will provide an increased understanding of how high risk areas can be identified, an initial indication of high risk areas, and input on potential new measures, including an evaluation of the cost effectiveness and effectiveness of using deterrents (pingers).

The final report is being prepared and is anticipated to be complete during the first half of 2020. The final report will be shared with relevant HELCOM Working Groups.

## WP2 Impacts on the seabed:

WP2 is composed of three major components: an overview report summarising the current knowledge on impacts on the seafloor and benthic habitats in the Baltic Sea region, an overview and evaluation of coastal restoration approaches, and an evaluation of a model-based approach for devising spatial fisheries management.

The overview report is being finalised and a final version is anticipated in April 2020. The report covers a range of issues including: pressures and their impacts on benthic habitats, the sensitivity of habitats, approaches to assess adversely affected habitats, habitat integration across different hierarchical levels, methods for assessment of impact on benthic habitats, and measures to reach Good Environmental Status of benthic habitats and seafloor integrity. The report once finalised with represent a compilation of the latest knowledge on benthic habitats and the assessment of the seabed in the Baltic Sea region.

An overview and cost-effectiveness of coastal restoration measures has been compiled. The compilation is also widely reflected in proposed new actions/measures delivered in the form of synopses and explores if the measure or restoration technique is shown to have success for the restoration of habitats or be beneficial to fish communities. This was also discussed at the recent workshop (see below) and a score card approach applied to develop an understanding across the region of effectiveness and feasibility. The final report will compile all the information and aims to provide an overview of habitats and sub-regions where risk may be highest, but also indicate where the restoration measures may be most effective.

The potential for spatial regulation of offshore fisheries was explored using the DISPALCE model. The model examines the potential for displacement of fisheries activity from peripheral areas (e.g. areas where fishing activity is relatively infrequent) to areas where fishing activities are more extensive. The model incorporates an economic component and assesses the impact on and recovery of the benthic species due to the imposed changes (the latter based predominantly longevity). The study carried out a comparison between areas in the southern Baltic proper and the Kattegat and a final report is in the process of being developed.

A number of synopses (proposals on potential new measures/actions) have also been provided to the Baltic Sea Action Plan update (BSAP UP) process by the WP, including via associated processes (e.g. workshops and partner meeting).

The work of this WP was most recently presented at the HELCOM ACTION 2.2 Workshop: Existing and tentative new measures and the status of benthic species and habitats. The final reports on these three items will be presented to relevant HELCOM Working Groups (including FISH, PRESSURE and State and Conservation) shortly, with a period for review provided.

## WP3 Marine protected areas (MPAs):

WP3 has completed the provisional assessment of management effectiveness of the Baltic Sea MPA network. The applied methodology was implemented in the form of a questionnaire distributed via State and Conservation and was successfully applied to a large selection of MPAs across the Baltic Sea region, acting as a good proof of concept. The preliminary results were presented at the recent workshop, HELCOM ACTION Workshop 3: MPA network effectiveness. The approach targeted selected habitat types (e.g. sandbanks, estuaries, coastal lagoons, reefs etc) and selected species (e.g. *Phocoena phocoena*, *Anser fabalis*, etc) to create a functional data set for the analysis and examined MPAs of different types (e.g. those that were fully marine, and those with different degrees of total area being marine).

The results of the preliminary assessment were provided to the workshop, identifying aspects such as national differences, spatial differences in the management of activities, different approaches and at times low management of certain activities for some habitat types, and the fact that a significant portion of activities are managed via related instruments and not directly via MPA management plans.

The WP, working closely with the workshop participants, developed three synopses and a number of recommendations (see workshop outcome notes). A final report will be shared with relevant Working Groups and Expert Groups in the first half of 2020.

### WP4 Input of nutrients:

WP4 has so far compiled information relevant to developing test cases (planned to examine two good and two poor examples per country where measures have/have not been effective in reducing inputs of nutrients), and utilised information from the HELCOM Pollution Load Compilation (PLC) to develop an understanding of source apportionment of nutrient inputs (for activities or sectors). This latter aspect has been a direct contribution to the SOM analysis. WP4 has also worked on effectiveness of measures by estimating the potential to reduce nutrient input from wastewater treatment plants and creating a questionnaire on measures to reduce nutrient runoff from agriculture that has been developed in cooperation with HELCOM Agri group.

In addition, the WP has developed an overview and comparison of how the regional Water Framework Directive (WFD) targets compare to the BSAP input targets. The process has identified a number of aspects such as the differences across borders in closely geographically located regions, the different approaches used in setting targets under the WFD, and the fact that the BSAP and WFD targets often differ markedly for countries, the BSAP targets generally being more precautionary.

One other aspect closely linked to this WP and the assessment of eutrophication is the progress made with the ATLANTIS model. Scenarios looking at eutrophication and also climate change are being prepared and this model aims to provide an overview of the complexities of the ecosystem in light of these pressures.

The WP has contributed to the recent PLC meeting and also significantly to the two workshops within the WP: HELCOM ACTION Workshop with River Basin Management Authorities and the recent HELCOM ACTION workshop 4.2 - BSAP and MSFD measures to abate eutrophication.

The final report bringing together all aspects of this WP will be available later in 2020 and the WP additionally contributed to providing synopses to the BSAP UP process.

### WP5 Conditions that influence GES:

WP5 has developed an overview of the use of exemptions by HELOCM Contracting Parties that are also EU member States in their Marine Strategy Framework Directive (MSFD) reporting. This provides an indication of commonalities across the region and aspects where further study is relevant to understands the scientific reasoning behind the exceptions applied. In addition to this the WP has focussed on natural conditions that are relevant and cause time lags in recovery or the achievement of Good Environmental Status.

Two major approaches are being taken with this aspect, a predictive modelling approach and a literature survey approach. The focus has also been set around eutrophication, selected hazardous substances and selected aspects of or related to biodiversity. Additionally, climate change in relation to some of these components is also considered, such as: meteorological conditions, temperature, salinity, sea level, stratification and ice conditions.

A summary report from this WP will be available in the latter part of 2020 and the findings will also be used to support the descriptive interpretation of time lags components in the SOM analysis.