



Baltic Marine Environment Protection Commission

HELCOM Platform for sufficiency of measures

SOM Platform 2-2019

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Background

HOD 55-2018 agreed to establish an *ad hoc* platform for analysing sufficiency of measures (SOM Platform) to support the update of the Baltic Sea Action Plan ([Outcome HOD 55-2018](#)). To implement the framework and contribute with the required data and information for the analyses, topic teams were established for each of the topics addressed by the SOM Platform. The topic teams work intersessionally and report to SOM Platform meetings and relevant Working Groups during the course of their work. The SOM Topic Team for hazardous substances submitted an [initial work plan](#) to PRESSURE 10-2019 describing the work before them and how it was to progress.

This document is an update of that work plan, outlining the progress, proposals, and ongoing work of the topic team.

Action requested

The Meeting is invited to consider the document and guide the topic team's ongoing work.

Organization of work

The SOM analysis for hazardous substances is supported by a topic team (HZ Topic Team) consisting of Sweden (lead), Denmark (co-lead), Finland (support) and an ESA expert also from Denmark. In addition to those core individuals above, there are also persons following and contributing to the work the HZ Topic Team, from Sweden, Germany, Estonia and Denmark, and relevant contact points at the Secretariat.

The team has been active, meeting 6 times since the Platform kick-off: 29.3, 30.4, 21.5, 11.6, 26.6, 19.8. The HELCOM expert network on hazardous substances has also been engaged in the work with several issues discussed at [EN HZ 10-2019](#). The next Topic Team meeting is scheduled for 11 October at 10 EET to be held online, and EN HZ 11-2019 will also consider issues related to SOM. The HELCOM correspondence group on pharmaceuticals (CG PHARMA) will also be approached when the date for the autumn meeting is established.

Timetable

The timetable of work follows the preliminary timetable for action by the topic teams according to the below. Activities for 2020 are still to be outlined.

Task	Outcome/contribution	Timeline 2019
Identify relevant measures frameworks (step 1 SOM approach)	Very short information document	Complete
Identify presence of time-lags between measures and pressures (step 2 SOM approach)	Very short information document	Complete
Propose geographic scale of analysis	Proposal	Complete
Expert evaluation: identifying main pathways for pressures (step 3 SOM approach)	Participate in survey	October, EN-HZ
Pressure-state time-lags	Data (models, project outcomes, literature)	September-November
Measure-pressure time-lag verification	Verify time-lag effected measures from list provided by Secretariat	September, ongoing
Measure list verification	Verify no missing relevant measures from list provided by Secretariat	September, ongoing
Effect of measures data	Data (models, project outcomes, literature, national reports)	September-November
Expert evaluation: effectiveness of measures (step 4 SOM approach)	Participate in survey/workshop	October, tentatively 22 October linked to Pressure 11-2019 (pending approval by HOD)
Expert evaluation: pressure-state linkage (step 6 SOM approach)	Participate in survey/workshop	October, tentatively 22 October linked to Pressure 11-2019 (pending approval by HOD)
Projected development of human activities/pressures (step 5 SOM approach)	Data (models, project outcomes, literature, national reports)	Late fall
Synopses on potential new measures	Information document	End of year

Updated plan for work

The general approach for the SOM analysis is described in [Document 2-3](#) for HOD 56-2019. The ongoing work related to the SOM analysis for hazardous substances is outlined below.

1) Analysis structure

To address hazardous substances as one joint pressure was discussed but not considered a realistic approach, and inclusion of each substance covered by HELCOM core indicators was also not considered practical. Grouping of substances was considered by either type (e.g. organic, inorganic etc) or ongoing use (e.g. legacy or not) but the structure of existing measures is often substance specific and this approach was also rejected. The Topic Team decided to focus on Mercury, TBT, PFOS, and Diclofenac as substances for the model and supplement the model outcome with qualitative descriptions or follow-up work with other substances. The selected topics were chosen, in consultation with EN hazardous substances, as they represent a variety of sources and pathways, regulatory status, and different data richness, as cases for exploring the possibilities and limitations of the SOM assessment of the hazardous substances topic.

- Diclofenac: pharmaceutical emitted mainly from sewage treatment plants,
- PFOS/PFAS: highly fluorinated, persistent and bioaccumulating industrial substances and additives with both diffuse and point sources,
- Mercury: legacy contaminant and new emissions from e.g. gold mining and burning of fossil fuels, with main sources outside of the HELCOM area,
- TBT: since 2008 globally banned antifouling agent with substantial legacy contamination associated with Baltic Sea ports, shipping lanes and marinas.

These selected substances will be analysed on the whole Baltic scale due to e.g. data uncertainties, high proportion of atmospheric deposition, and/or widespread legacy deposits.

2) Measures

An inventory of measures for the 4 primary substances and additionally for dioxins, PBDEs, PCBs have been gathered by the Secretariat and distributed to national contact points of the SOM Platform on 12 July. Responses were requested by 15 September. The additional substance measures lists will be used by the Topic Team for supplementary analyses. The measures list included national MSFD reporting, the SWECO report “Study on measures applied in the EU Water Framework Directive programmes of measures of EU Baltic Sea region countries for hazardous substances”, and online searches of global and regional measures frameworks.

The Topic Team will be involved in final preparation of the measures lists once responses are received from the Contracting Parties. Contributions will primarily include issues of data completeness and measure-pressure time lags.

3) Sources, pathways, trends – and relative contributions to pressure

Substance overviews are being developed by the Topic Team in support of the SOM analysis. The report on Mercury is complete and reports on TBT, PFOS, and diclofenac are expected in the coming months. The reports give an overview of how hazardous substances enter and impact on the marine environment.

A survey on the relative importance of activities to specific pressures has been developed and will be introduced and distributed at the EN Hazardous Substances meeting 7 October 2019. In addition to clarifying major sources and exposure pathways, such information will guide the evaluation of measures, including new measures, by the identification of major entry routes and sources, the identification of data gaps, collating information on direction of time trends, and by the comparison with time trends in the physical environment/biota. This information will be collated from existing studies and resources. In cases where data are not available to make certain evaluations (e.g. on relative contributions of an activity to pressures), the expert-based opinion will be utilised to complement the existing data compilation.

Similar information, where available, is also being compiled for dioxins, PBDEs, PCBs, and other PFAS. Where possible relevant information will be compiled to be compatible with the SOM approach and analysis. This information will be critical for later stages of the work, in particular when proposing new action for the updated Baltic Sea Action Plan.

4) Effectiveness of Measures and Pressure-State

Efforts are being made to organize a workshop for SOM HZ associated with PRESSURE 11-2019 to gather the required data on effectiveness of measures and pressure-state links. An online survey will be used for this purpose if a workshop is not possible. A decision on this situation is expected in late August/early September.

5) Time-lags

Time-lags are likely to be an important consideration at both the measure-pressure and pressure-state transitions. The Topic Team is prepared to assist in evaluating missing measure-pressure time-lag data in the finalized measures lists. Discussions are developing on how to best gather the data for calculating removal rates for various pathways (burial, breakdown, etc.), with a request associated with the potential workshop identified as a likely target.

6) Overview

The gathered information will, where possible, represent synthesised collations of information linking sources-pathways-trends-measures, and ranking their relative contributions to pressures. Gaps in these areas of knowledge or information will also be highlighted to ensure confidence in any assessment can be provided. This information will directly support the SOM analysis and the overall update of the Baltic Sea Action Plan.