



## Baltic Marine Environment Protection Commission

HELCOM expert network on economic and social analyses  
meeting

Helsinki, Finland, 14 December 2018

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<b>Document title</b>	Document 4 – Initial ideas for evaluating sufficiency of measures regarding legacy pollutants
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### Initial ideas for evaluating sufficiency of measures regarding legacy pollutants

#### Background

At the GEAR 19-2018 meeting, Contracting Parties were requested to come in with proposals on how to carry out the analyses of sufficiency of measures (SOM) for topics not covered by the ACTION project (item 3.22 in the [Outcome of HELCOM GEAR 19-2018](#)). This document introduces initial ideas for evaluating the SOM regarding hazardous substances for the HELCOM BSAP update. The proposal illustrates how the SOM analysis could be conducted for a topic that is not covered by the ACTION project. In addition, it shows how SOM could be assessed when there is limited information available on the effectiveness of measures. The proposal has been shared by the Swedish Agency for Marine and Water Management (SwAM).

The aim is to provide an example of an approach for SOM analysis to be used as background information for the discussions in the workshop.

#### Action requested

The meeting is invited to

- take note of the information as background for the discussion in the meeting.

## Initial ideas for evaluating sufficiency of measures regarding legacy pollutants

### Background

Analyses of effectiveness of measures to reduce input of hazardous substances to the Baltic Sea appear limited (see e.g. [PA Hazards report, 2018](#)). For the evaluation of sufficiency of measures related to hazardous substances it is therefore not likely purposeful to attempt a quantitative BAU scenario.

The proposed approach to support the BSAP update is based on collating information on existing measures but also on sources and pathways of input of hazardous substances to the Baltic Sea to clarify which type of measures that are most meaningful and where they should be employed. The proposal is moreover based on focusing on a few selected substances of major concern to the Baltic Sea environment based on results of the State of the Baltic Sea report which means that the selected substances are mainly legacy pollutants. The evaluation of sufficiency of measures is proposed to be based on an expert based approach, e.g. through a HELCOM workshop, supported by information from the proposed analyses.

### 1. Scope

- a) Focus the analyses on substances that fail to achieve the threshold values (mercury, cadmium, lead, TBT and PBDE ) or are otherwise considered to be problematic according to HELCOM indicator reports/State of the Baltic Sea report (dioxins and dioxin-like PCBs<sup>1</sup>).
- b) For additional focus the task should consider three different sources and input pathways:
  - Long range/significant sources outside HELCOM (atmospheric deposition, e.g. dioxins, mercury, possibly PBDE).
  - Short range/significant sources within HELCOM (point sources on the coast and riverine transport, e.g. Cd and Pb).
  - Historic contamination at sea (waste- and dumping sites, marinas, harbours and shipping lanes, e.g. TBT, dioxins and PCB:s, Hg, Cd).

### 2. Source of information and supporting analyses

The analyses outlined below are proposed to be carried out via EG SOM by use of a Lead country approach (e.g. steps 2b-f) or by use of existing HELCOM expertise (e.g. step 2a). Opportunities for collaborating with PA Hazards should be investigated. It could be considered to run the task jointly with Ospar to share resources.

- a) In many but not all cases sources of the substances (direct point sources, riverine input, deposition) is available from HELCOM work on input of hazardous substances (PLC). Methods for statistical analysis and quantification of trends regarding inputs should be agreed, preferably using the same methods as for eutrophication (N and P). For each substance under point 1a the importance and trends of different sources and input pathways according to point 1b should be determined

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<sup>1</sup> Dioxins and dioxin-like PCBs fail thresholds under MSFD Descriptor 9 on contaminants in fish and other seafood for human consumption; relevance to BSAP objective "all fish safe to eat". For Sweden, Finland and Latvia this also puts restrictions on the putting of wild caught fish on the EU market (see Article 7 of Regulation EC 1881/2006 <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02006R1881-20180319&from=EN>). Moreover, the European Food Safety Authority just lowered the estimated tolerable daily intake of these substances which increases the health concerns from consuming fatty fish from the Baltic Sea (see <https://www.efsa.europa.eu/en/press/news/181120>)

quantitatively where possible or otherwise qualitatively. See examples in figures 1 and 2. This part of the task could be done under HELCOM Pressure and EN-HZ.

- b) Synthesize good examples from EU SBSR, BONUS, AMAP, including examples of successful measures, and information on sources and pathways, in particular for historical contaminations.
- c) EU SBSR PA Hazards has compiled information on measures taken to reduce input of hazardous substances under the WFD. Measures from Denmark and Russia are missing but may be added in the future together with existing MSFD measures (the latter is already planned to be compiled through the BSAP update). This compilation, complemented with HELCOM actions and relevant agreements under HELCOM recommendations, is proposed to be used as starting point for an overview of existing measures. The compilation should also include information on the applicability of and results from global conventions on persistent hazardous substances Stockholm convention and Minamata convention as well as EU Industrial Emissions Directive.
- d) Where possible gather information predictions on future trends in inputs of hazardous substances or discuss and highlight current knowledge gaps and uncertainties for making such predictions.
- e) Analyse how the existing measures match the hazardous substances listed under point 1 and sources under points 2 and 3, and where in the DPSIR cycle that the existing measures fit.
- f) Based on the above analyses evaluate what type of measures and where in the DPSIR cycle measures are most efficient for reducing input of the selected substances.

### 3. Sufficiency of measures

- g) Based on the analyses outlined above, carry out an HELCOM expert workshop to evaluate the sufficiency of existing measures, to identify knowledge and information gaps, and to contribute to the formulation of new or strengthened HELCOM actions for the BSAP update. The approach and form for carrying out such workshop should be developed jointly by EG SOM.

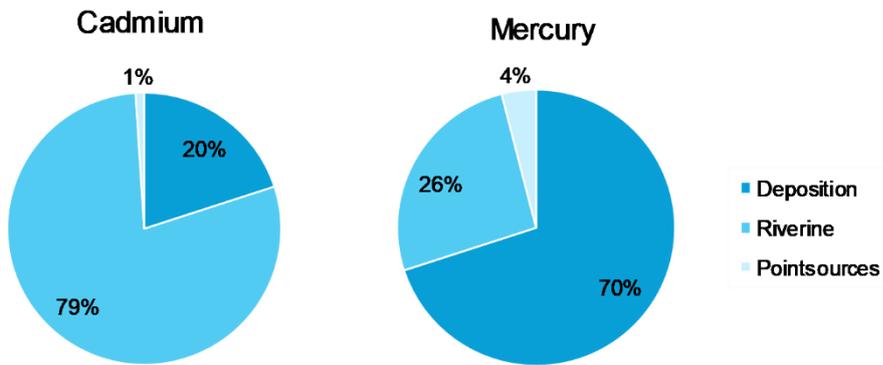


Figure 1. Relative contribution of different sources and pathways to the amounts of cadmium and mercury that reach the Baltic Sea. From Helcom PLC 6, 2018.

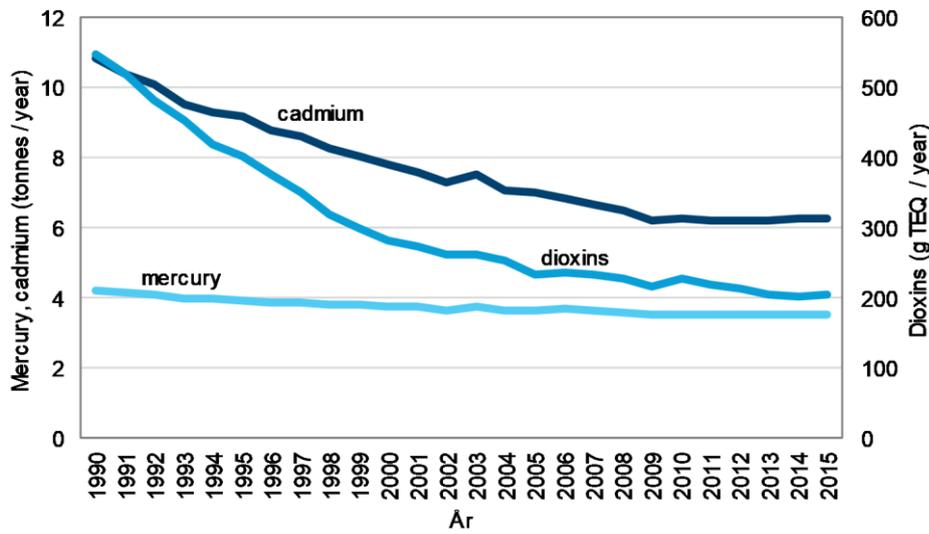


Figure 2. Trends in atmospheric deposition of cadmium, dioxins and mercury over the Baltic Sea. From Helcom PLC 6, 2018.