



Document title	Outcome EN-HZ 4-2016
Date	29.9.2016

4th meeting of HELCOM expert network on hazardous substances (EN-HZ 4-2016)

Time: Friday 23 September 13:00 – 14:30 (CET)

Venue: Online meeting (Skype for Business)

Agenda Item 1. Adoption of the agenda

1. The meeting was opened by the Co-Chairs, Sara Danielsson and Elisabeth Nyberg, Sweden, and the agenda was approved.
2. The meeting was attended by representatives from Estonia, Germany, Lithuania, Poland and Sweden. Full list of participants in **Annex 1** of the meeting outcome.

Agenda Item 2 Development of a proposal for the core indicator 'Metals' GES boundary

3. The Secretariat presented proposals and comments received on the GES boundary by countries with remaining study reservations (Document 2-1).
4. The Meeting noted that one of the countries with a remaining study reservation Denmark, did not submit proposals or comments but did inform prior to the meeting that Denmark is currently working on clarifying their study reservation, and that the Danish reservation is of a more general/political nature and therefore, the planned scientific and technical discussions regarding these GES-boundaries can continue in HELCOM.
5. The Meeting agreed on a principle level that the same GES boundary should be applied in the coastal- and the offshore assessment units, and that the lead (Pb) and cadmium (Cd) threshold values should be derived using the same approaches.
6. The Meeting agreed that the Cd and Pb threshold values agreed for sediment in the coastal assessment units should also be applied in the offshore assessment units.
7. The Meeting considered the proposal by Sweden to use OSPAR BAC values for Pb and Cd for mussels and fish liver as secondary GES boundaries, and noted that as BAC values are not effect-based threshold values however considered to be relevant for the purpose of assessing the concentration of metals in the marine environment as a reflection of the status. The meeting further noted that if BAC values are not used, then Pb and Cd could only be assessed using measurements from sediment and water matrices, and that especially in the offshore assessment units this would not be acceptable as the biota matrix is considered to be the most relevant.
8. The Meeting agreed that the OSPAR BAC values for Pb and Cd for fish liver and mussels can be used as tentative secondary GES boundaries in HELCOM, being aware that these OSPAR BAC values are proxy BACs of unknown origin. The Meeting agreed that the optimal approach would be to calculate these BAC values for the HELCOM area using COMBINE data, and agreed to attempt completing this calculation before the submission dead line of 14 October to State and Conservation 5-2016.

9. The Meeting noted that Poland has evaluated national data to establish a background concentration value (BAC) for Pb and Cd using data from the last 35 years when the 15th percentile was used as the threshold value. The calculated threshold value for Pb was 25 µg/kg ww which is very close to the OSPAR BAC value of 26 µg/kg ww.
10. The Meeting noted that Poland will make an attempt to calculate the Pb and Cd in fish liver BAC values using COMBINE data, noting that data might only be available by the end of September and that the work is substantial given the short timeframe. Sweden agreed to support Poland with recalculating Swedish data that has been submitted as dry weight values to COMBINE with the aim to include them in the analysis. The meeting agreed that at this time any data that has been submitted to COMBINE without information on the basis will be excluded from the calculation. The meeting agreed that it should be considered if the 10th percentile would be a more appropriate threshold value than the 15th percentile, and agreed that the methods applied in OSPAR and the WFD CIS methods should be considered as guidance.
11. The Meeting agreed to submit a new 'Metal' core indicator GES boundary proposal to State and Conservation 5-2016 as detailed in **Annex 2**.

Agenda Item 3 [MIME R-script as core indicator assessment protocol](#)

12. The Co-Chairs presented the work done to clarify the use of the OSPAR assessment method ('MIME R-script') as the assessment protocol for HELCOM core indicators.
13. The Meeting concluded that the OSPAR assessment method can be used for the core indicators related to concentration of contaminants and agreed that the script should be modified so that the HELCOM threshold values are applied.
14. The Meeting recalled that in order to achieve an assessment of the core indicators in the HOLAS II schedule, the assessment system needs to be developed allowing for automated extraction- and calculation steps from COMBINE. The Meeting reiterated the importance of all Lead Countries to verify the so called 'extraction table' developed by ICES and requested the Secretariat to ensure that all experts have checked that the indicator specific information is up to date.
15. The Meeting agreed that the Co-Chairs and the Secretariat will draft a proposal to be submitted to State and Conservation 5-2016 detailing the assessment method for the concentration based core indicators. The Meeting was of the opinion that the proposal should reflect the benefits of the 'MIME R-script' compared to alternative methods that have been considered, and that it has been found to be a well developed and adopted method for assessment of biota and sediment, and that it will allow for development of comparable results between the HELCOM and OSPAR regions as well as a common way of evaluating data between indicators within the HELCOM region. In order to provide a complete description of the data that will be assessed using the 'MIME R-script' it was concluded that also the extraction table should be included in the proposal.

Agenda Item 4 [Outcome of the second HELCOM BalticBOOST workshop on the HOLAS II hazardous substances assessment](#)

16. The Secretariat presented the outcome of the second HELCOM BalticBOOST workshop on the HOLAS II hazardous substances assessment ([HELCOM BalticBOOST HZ WS 2-2016](#)), held 13-14 September 2016 in Copenhagen, Denmark.

Agenda Item 5 Future work and any other business

17. The Meeting agreed to come back and agree on a date for the next meeting of the network when the national data submissions to COMBINE have been completed, and a clear picture is available on the needed verification and data checks.
18. The Meeting recalled that some data streams needed for the assessment will need to be compiled through other means than the COMBINE dataflow. ICES has previously informed that it will be possible to include these data into the 'assessment database' and that such data streams need to be solved on a case by case basis.
19. Lithuania informed of dioxin data stemming from monitoring carried out for food safety and veterinary purposes that should be included in the assessment database, and agreed to inform the HELCOM and ICES Secretariats at first convenience about the specific specifications of the dataset in question.



Baltic Marine Environment Protection Commission

4th meeting of HELCOM expert network on hazardous substances EN-HZ 4-2016

Online meeting, 23 September 2016

Annex 1. List of Participants.

Representing	Name	Organization	E-mail
Co-Chairs			
Sweden	Sara Danielsson	Swedish Museum of Natural History	sara.danielsson@nrm.se
Sweden	Elisabeth Nyberg	Swedish Museum of Natural History	elisabeth.nyberg@nrm.se
Contracting Parties			
Estonia	Mailis Laht	Estonian Environmental Research Centre	mailis.laht@klab.ee
Germany	Berit Brockmeyer	Federal Maritime and Hydrographic Agency	Berit.brockmeyer@bsh.de
Lithuania	Galina Garnaga-Budrė	Environmental Protection Agency	g.garnaga@aaa.am.lt
Poland	Tamara Zalewska	Institute of Meteorology and Water Management - National Research Institute, Maritime Branch	tamara.zalewska@imgw.pl
Sweden	Maria Linderöth	Swedish Environment Protection Agency	Maria.linderöth@naturvardsverket.se
HELCOM Secretariat			
Secretariat	Lena Avellan	HELCOM Secretariat	lena.avellan@helcom.fi



Annex 2. Metal core indicator GES boundary proposal

The Meeting agreed to submit a new proposal on the 'Metal' core indicator GES boundary for cadmium (Cd) and lead (Pb) to State and Conservation 5-2016 (Table 1.).

Table 1. GES boundary proposal for the 'Metals' core indicator in relation to cadmium (Cd) and lead (Pb) to be applied in both coastal- and offshore assessment units. The indicator is to be used for assessing D8 in MSFD.

Metal	GES boundary proposal			Comment
	Matrix	Threshold value	Reference	
Cd	Water	0.2 µg/l	EQS	
	Secondary GES boundary Mussels	960 µg/kg dw	OSPAR BAC	Tentative, long-term aim to calculate HELCOM BAC
	Secondary GES boundary Fish liver	26 µg/kg ww	OSPAR proxy BAC	Tentative, long-term aim to calculate HELCOM BAC
	Secondary GES boundary Sediment	2.3 mg/kg	QS from EQS dossier	
Pb	Water	1.3 µg/l	EQS	
	Secondary GES boundary Mussels	1300 µg/kg dw	OSPAR BAC	Tentative, long-term aim to calculate HELCOM BAC
	Secondary GES boundary Fish liver	26 µg/kg ww	OSPAR proxy BAC	Tentative, aim to calculate HELCOM BAC by State and Conservation 5-2016 submission
	Secondary GES boundary Sediment	120 mg/kg	QS from EQS dossier	

Threshold values from the EC foodstuff directive can be used when assessing D9 for MSFD purposes (Table2).

Table 2. Proposal on threshold values to use when assessing cadmium (Cd) and lead (Pb) for D9 purposes in the MSFD for both coastal and offshore assessment units.

Metal	Matrix	Threshold value	Reference
Cd	Fish muscle	50 µg/kg ww	EC 1881/2006
	Bivalves	1000 µg/kg ww	EC 1881/2006
Pb	Fish muscle	300 µg/kg ww	EC 2006/1881
	Bivalves	1500 µg/kg ww	EC 2006/1881