



## Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature  
Conservation

STATE & CONSERVATION  
5-2016

Estonia, 7-11 November, 2016

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<b>Document title</b>	Lead and co-Lead countries for HELCOM Monitoring Programme topics
<b>Code</b>	2MA-2
<b>Category</b>	INF
<b>Agenda Item</b>	2MA – Revision of HELCOM monitoring
<b>Submission date</b>	22.8.2016
<b>Submitted by</b>	Secretariat

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### Background

HELCOM STATE & CONSERVATION 2-2015 agreed on a Lead Country approach for the review and development of HELCOM monitoring guidelines.

The Lead and Co-Lead countries for specific HELCOM monitoring guidelines and links to existing HELCOM monitoring guidelines are outlined in this document. The document has been updated based on the outcome of STATE & CONSERVATION 4-2016.

### Action required

The Meeting is invited to take note of this information.

## HELCOM Programme topics, links to existing HELCOM monitoring guidelines and Lead & co-Lead countries

Programme topic	Sub-programmes	Link to existing HELCOM monitoring guidelines	Lead and co-Lead countries/Need for review
<b>Birds</b>	Marine wintering birds abundance and distribution	No counterpart in existing HELCOM guidelines.	HELCOM guidelines for monitoring of wintering birds agreed at STATE & CONSERVATION 2-2015 (2N.6). No need for review.
	Marine breeding birds abundance and distribution	No counterpart in existing HELCOM guidelines.	Will be considered by ICES/OSPAR/HELCOM JWG Birds
	Marine bird health	No counterpart in existing HELCOM guidelines.	<b>Lead: Sweden</b>
<b>Mammals</b>	Seal abundance	Monitoring guidelines for seal abundance have been developed by the BALSAM project and HELCOM SEAL and endorsed at STATE 1-2014. The guidelines are available separately at the <a href="#">HELCOM web-site</a>	HELCOM guidelines for monitoring of seal abundance agreed at STATE 1-2014. No need for review.
	Health status	No counterpart in existing HELCOM guidelines.	<b>Lead: Sweden</b>
	Harbor porpoise abundance	No counterpart in existing HELCOM guidelines.	<b>HELCOM Seal Expert Group</b> will coordinate
<b>Fish, shellfish and fisheries</b>	Coastal fish	[Annex C10 Guidelines for fish monitoring sampling methods of HELCOM]	New version is available separately at the <a href="#">HELCOM website</a> (adopted by STATE 1-2014). No need for review.
	Migratory fish	No counterpart in existing HELCOM guidelines.	No need for review
	Offshore fish	No counterpart in existing HELCOM guidelines.	No need for review
	Commercial shellfish	No counterpart in existing HELCOM guidelines.	<b>Not concluded.</b> Nephrops are monitored through <a href="#">ICES coordinated Nephrops underwater TV surveys</a> . Monitoring of bivalve populations is not coordinated Baltic wide.
	Fisheries by-catch	No counterpart in existing HELCOM guidelines.	Initiated through contributing to the regional DCF process by the Fish group.
<b>Hydrography</b>	Water column hydrological characteristics (temperature, salinity, transparency, turbidity)	<ul style="list-style-type: none"> <li>- Annex B8 Technical note on the determination of hydrographic parameters</li> <li>- Appendix 1 Technical note on the determination of salinity and temperature of seawater</li> </ul> Parts of Annex C2 Hydrographic and hydrochemical variables	<b>Lead: Sweden, co-Lead: Poland</b> <b>Use of satellite data: Finland</b>
	Water column physical characteristics (waves, currents, sea level)	Parts of Annex C2 Hydrographic and hydrochemical variables	<b>Lead: Sweden, co-Lead: Poland</b> <b>Use of satellite data: Estonia and Finland</b>
	Ice	No counterpart in existing HELCOM guidelines.	No need for review.
<b>Hydrochemistry</b>	Water column chemical characteristics (O <sub>2</sub> , pH, pCO <sub>2</sub> , H <sub>2</sub> S)	- Annex B8 Technical note on the determination of hydrographic parameters	<b>Lead: Sweden, co-Lead: Poland</b>

Programme topic	Sub-programmes	Link to existing HELCOM monitoring guidelines	Lead and co-Lead countries/Need for review
		<ul style="list-style-type: none"> <li>- Appendix 2 Technical note on the determination of dissolved oxygen in seawater</li> <li>- Appendix 3 Recommended equations for the calculation of solubility and saturation of dissolved oxygen in sea water</li> <li>- Appendix 4 Technical note on the determination of hydrogen sulfide in seawater</li> <li>- Annex B14 Technical note on the measurement of pH in seawater</li> </ul> Parts of Annex C2 Hydrographic and hydrochemical variables	
	Nutrients	<ul style="list-style-type: none"> <li>- Annex B9 Technical note on the determination of nutrients</li> </ul> Parts of Annex C2 Hydrographic and hydrochemical variables	<b>Lead: Sweden, co-Lead: Poland</b>
<b>Phytoplankton</b>	Phytoplankton – Pigments	Annex C4 Phytoplankton chlorophyll a	<b>Lead: Sweden and Finland</b> <b>Use of satellite data: Finland</b>
	Phytoplankton - Species composition, abundance and biomass	Annex C6 Guidelines concerning Phytoplankton species composition, abundance and biomass	Review ongoing by PEG.
<b>Zooplankton</b>	Zooplankton - Species composition, abundance and biomass	Annex C7 Mesozooplankton	Review ongoing by ZEN-ZIIM
<b>Seabed habitat distribution and extent</b>	Habitat-forming species and substrates	Annex C9 Guidelines for monitoring of phytobenthic plant and animal communities in the Baltic Sea	<b>HELCOM intersessional network of benthic experts, considering</b>
	Seabed habitat physical characteristics	No counterpart in existing HELCOM guidelines.	<b>No regular monitoring. Update and improvement of broad scale habitat maps.</b>
<b>Species distribution and abundance (benthic community)</b>	Hardbottom Species	Parts of Annex C9 Guidelines for monitoring of phytobenthic plant and animal communities in the Baltic Sea	<b>Lacking lead and assisting countries.</b>
	Softbottom fauna	<ul style="list-style-type: none"> <li>- Annex C8 Soft bottom macrozoobenthos</li> </ul> Parts of Annex C9 Guidelines for monitoring of phytobenthic plant and animal communities in the Baltic Sea	<b>Lead: Finland</b>
	Softbottom flora	Parts of Annex C9 Guidelines for monitoring of phytobenthic plant and animal communities in the Baltic Sea	Monitoring guidelines are proposed to be developed <b>linked to the tentative development of indicators on softbottom flora.</b>

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<b>Non-indigenous species</b>	Non-indigenous species <sup>1</sup>	No counterpart in existing HELCOM guidelines. At present referring to the respective monitoring of phytoplankton, zooplankton, macrophytes, benthic fauna. <a href="#">Agreed port monitoring protocol exists</a> and is currently being updated	<b>Lead: Lithuania</b> <b>Co-lead: Germany</b>
<b>Inputs</b>	Nutrient inputs from atmosphere	No counterpart in existing HELCOM guidelines	No need for review.
	Nutrient inputs from landbased sources	PLC-WATER GUIDELINES	Guidelines are being revised within the <b>PLC-6 project</b> and will be published during Spring 2015.
	Contaminant inputs from atmosphere	No counterpart in existing HELCOM guidelines	No need for review.
	Contaminant inputs from landbased sources	PLC-WATER GUIDELINES	Guidelines are being revised within the <b>PLC-6 project</b> and will be published during Spring 2015.
	Acute pollution	<a href="#">HELCOM Response Manual</a> .	No need for review.
<b>Concentration of contaminants</b>	Contaminants in water	<ul style="list-style-type: none"> <li>- Annex B11 Technical note on the determination of heavy metals and persistent organic compounds in seawater</li> <li>- Appendix 1 Technical note on the determination of tracemetals (Cd, Pb, Cu, Co, Zn, Ni, Fe), including mercury, in seawater</li> <li>- Appendix 2 Technical annex on the determination of heavy metals and persistent organic compounds in seawater</li> <li>- Parts of Part D Programme for monitoring of CONTAMINANTS and their effects</li> </ul> Guidelines for Monitoring of Radioactive Substances	<b>Lead: Germany</b>
	Contaminants in sediment	<ul style="list-style-type: none"> <li>- Annex B13 Technical note on the determination of heavy metals and persistent organic compounds in marine sediments</li> <li>- Appendix 1 Technical note on the determination of polycyclic aromatic hydrocarbons (PAHs) in sediment</li> <li>- Appendix 2 Technical note on the determination of chlorinated biphenyls in sediment</li> <li>- Appendix 3 Technical note on the determination of heavy metals and persistent organic compounds in marine sediment</li> </ul>	<b>Lead: Germany</b> <b>Co-lead: Poland</b>

<sup>1</sup> Note that [agreed HELCOM port monitoring protocol exists](#) and is currently being updated. What is lacking is a common approach for reporting and using information on non-indigenous species from regular biological monitoring programmes such as for phytoplankton, zooplankton, macrophytes, benthic fauna.

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		<ul style="list-style-type: none"> <li>- Parts of Part D Programme for monitoring of CONTAMINANTS and their effects</li> </ul> Guidelines for Monitoring of Radioactive Substances	
	Contaminants in biota	<ul style="list-style-type: none"> <li>- Annex B12 Technical note on the determination of heavy metals and persistent organic compounds in biota</li> <li>- Appendix 1 Technical note on biological material sampling and sample handling for the analysis of persistent organic pollutants (PAHs, PCBs and OCPs) and metallic trace elements</li> <li>- Appendix 2 Technical note on the determination of polycyclic aromatic hydrocarbons in biota</li> <li>- Appendix 3 Technical note on the determination of chlorinated biphenyls and organochlorine pesticides in biota</li> <li>- Appendix 4 Technical note on the determination of trace metallic elements in biota</li> <li>- Appendix 5 Technical note on the determination of total mercury in marine biota</li> <li>- Parts of Part D Programme for monitoring of CONTAMINANTS and their effects</li> </ul>	<b>Lead: Germany</b> <b>Co-lead: Poland and Sweden</b>  <b>MORS guidelines up to date</b>
<b>Biological effects of contaminants</b>	TBT/imposex	No counterpart in existing HELCOM guidelines	<b>Lead: Sweden</b> <b>Co-Lead: Finland and Poland</b>
<b>Contaminants in seafood</b>	Contaminants in seafood	No counterpart in existing HELCOM guidelines	CPs to inform on national approaches/links between environmental and health authorities.
<b>Litter</b>	Macrolitter characteristics and abundance/volume	HELCOM RECOMMENDATION 29/2 (Marine litter within includes 'Guidelines on sampling and reporting of marine litter found on beach')	Development of monitoring guidelines is included in the ToR of marine litter expert network.
	Microlitter particle abundance and characteristics	No counterpart in existing HELCOM guidelines.	The network is working on the guidelines, but appropriate compartment is not agreed yet so timing of guidelines not known.
<b>Underwater noise</b>	Ambient noise (no info yet)	No counterpart in existing HELCOM guidelines	Proposed guidelines were presented by the BIAS project to STATE & CONSERVATION 3-2016 (para 2MA-18, document 2MA-4) but they were not agreed on.

<b>Programme topic</b>	<b>Sub-programmes</b>	<b>Link to existing HELCOM monitoring guidelines</b>	<b>Lead and co-Lead countries/Need for review</b>
	Registry of impulsive sounds (no info yet)	No counterpart in existing HELCOM guidelines	Visualization of registry of impulsive sounds is available. PRESSURE 4-2016 will discuss when countries should report.
<b>Benthic Physical loss and damage</b>	No info yet	No counterpart in existing HELCOM guidelines	No monitoring. Estimated based on impacts from pressures.