Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature Conservation

Tallinn, Estonia, 7-11 November, 2016

STATE & CONSERVATION 5-2016

Document title	Update of the general text in the Monitoring Manual regarding monitoring of underwater noise
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Background

STATE & CONSERVATION 4-2016 (Outcome of STATE & CONSERVATION 4-2016, para. 2MA.35) agreed to update the general text in the Monitoring Manual regarding monitoring of underwater noise to reflect the current knowledge and ongoing monitoring and invited the HELCOM EN-Noise to revise the text.

The HELCOM EN-Noise agreed, in their working meeting held on 23 June 2016, to update the general text in the Monitoring Manual regarding monitoring of underwater noise (Annex 2 of the Memo of the working meeting).

This document contains the proposed update of the general text in the Monitoring Manual regarding monitoring of underwater noise.

The Meeting updated the text as contained in this document.

Update of the general text in the Monitoring Manual regarding monitoring of underwater noise

Please find below the updated text on HELCOM Monitoring Programmes included in the introduction section of the HELCOM Monitoring Manual related to noise

'Noise

Noise is a new topic for the HELCOM community and core indicators are currently under development to assess impulsive and ambient noise levels. The aim of the monitoring programme is to provide data and assessments on the status of the marine environment. The monitoring programme is of relevance to both the biodiversity and maritime traffic segments of HELCOM work.

The current development work on noise monitoring in HELCOM builds on results from the Technical Sub Group Noise that was established in the MSFD-GES framework. Research projects on optimal monitoring methodologies are currently underway in the Baltic Sea area.

Programme topics: Underwater noise

Please find below the updated text on HELCOM programme topics and sub-programmes on noise (section 7 of the HELCOM Monitoring Manual)

'Underwater noise

General information

At present there is no regular coordinated environmental monitoring of ambient noise in the Baltic Sea region. However, national monitoring programs or surveys are on-going (Denmark, Estonia, Finland, Germany and Sweden) or under development (~~Estonia,~~ Latvia, Lithuania and Poland).

Sub-programme: Ambient noise

NOTE: This sub-programme is still under development.

The Life+ project Baltic Sea Information on the Acoustic Soundscape (BIAS project) produced soundscape maps in 2016, showing the underwater noise generated by commercial vessels, the major source of human-induced underwater noise in the Baltic Sea. Seasonal soundscape maps were produced for the demersal, pelagic and surface zones. These soundscape maps will serve as a baseline for the development of monitoring and assessment of ambient noise in the Baltic Sea.

A proposed regional monitoring programme of ambient noise based on the output from the BIAS project was considered at STATE & CONSERVATION 4-2016 (document 6J-2-Rev.1). The proposal is based on two alternative monitoring programmes proposed based on yearly minor assessment in a few prioritized locations and major assessment every e.g. 6 years. Further discussion on the monitoring proposal will continue under the State and Conservation Working Group.

Sub-programme: Registry of impulsive events

NOTE: This sub-programme is still under development.

There is currently a regionally organized registry of impulsive events in the Baltic Sea region. The registry is hosted by ICES and the development of the registry follows the same approach as for the OSPAR region. Such registry makes an account of the number of days with selected activities that create impulsive sounds that can be harmful for marine animals and make it possible to evaluate cumulative impacts of noise.

The registry of impulsive events requires information on e.g. position data of the activity, licensing block/area, date of operation, source operation, sound mitigation system. The registry is implemented as a GIS-based tool where sound levels of events (or proxies for sound level, such as air gun array size and hydraulic hammer energy) are stored and a map visualisation is enabled.

Responsible HELCOM subsidiary bodies

Pressure

State & Conservation

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