



Baltic Marine Environment Protection Commission

Seventh Meeting of the Working Group on Reduction of Pressures from the Baltic Sea Catchment Area

PRESSURE 7-2017

Vilnius, Lithuania, 24-26 October 2017

Document title	Current activities of the HELCOM EN-Noise
Code	4-1
Category	INF
Agenda Item	4 – Underwater noise
Submission date	17.10.2017
Submitted by	Chair HELCOM EN-Noise
Reference	Annex 5 of the Outcome of PRESSURE 6-2017

Background

Action 6 in the Work Plan of the Pressure Working Group 2017-2018 refers to Pressure as lead of the work on underwater noise, in coordination with State and Conservation and Maritime. Within Pressure the work is to be conducted by the HELCOM EN-Noise.

This document provides an update on the activities of the HELCOM EN-Noise since the last PRESSURE 6-2017 ([Annex 5 of the Outcome of PRESSURE 6-2017](#)).

Action requested

The Meeting is invited to take note of the information.

Current activities of the HELCOM EN-Noise

Two indicators, one on continuous and one on impulsive sound are under development to follow up anthropogenic sources of underwater noise.

Work on the continuous sound pre-core indicator has been led by Poland, with Denmark, Finland, Germany and Sweden as co-lead countries. There has not been specific work on this indicator since PRESURE 6-2017¹. However, the EN-Noise has recently (4 October 2017) agreed on the following priorities for further development of this indicator ([Outcome of HELCOM EN-Noise 1-2017](#), para. 2.3):

- Discussion of how to include higher frequency bands (tentative proposals 2 and 5 kHz third octave bands);
- Further work on the assessment protocol of the [continuous sound] pre-core indicator;
- Address the issue of statistical power in the monitoring data, i.e. determining how the ability to detect statistically significant trends in the indicators depends on the number of years of monitoring data available.

There is a revised proposal for regional monitoring sub-programme of continuous noise that contemplates two alternating monitoring programmes: a yearly minor monitoring in a few prioritized locations and a major monitoring in more stations at a suitable time interval to be considered by the upcoming State and Conservation meeting (STATE & CONSERVATION 7-2017, [doc 2MA-12](#)).

Work on the impulsive sounds pre-core indicator has been led by Germany, with Denmark, Finland and Sweden as co-lead countries. There has not been specific work on this indicator since PRESURE 6-2017². However, likewise with the continuous noise indicator the EN-Noise has recently (4 October 2017) agreed on the following priorities for further development of this indicator ([Outcome of HELCOM EN-Noise 1-2017](#), para. 2.3):

- Further development of the register of impulsive events is needed:
 - Currently the registry only compiles information required as part of the MSFD, so HELCOM countries may agree on reporting additional detailed information (position of the sources, number of pulses, and so on). The meeting proposed to consider this in order to increase the accuracy and usefulness of the registry;
 - There is a need to clarify minimum levels for activities, below which reporting to the registry is not required, and to clarify how mitigation measures, such as bubble curtains, are dealt with. There is a German proposal on how to address this issue to be considered in the meeting of the TG Noise to be held in November.
- Discuss possibilities for, and potential added values of developing a common monitoring programme involving measurements of impulsive noise.

In relation to the [registry](#) of impulsive events, it currently contains data reported by Denmark (2015), Estonia, Finland (2008 and 2010-2011), Germany (2013-2016), Lithuania (2013 and 2016) and Sweden (2015), whereas Poland has informed of being in the submission process.

Since there is no core underwater noise indicators a descriptive approach in the presentation of [underwater noise](#) was included in the 'State of the Baltic Sea report, June 2017'. This section is currently being revised based on the feedback provided by Contracting Parties at HODs 52-2017 (Annex 4 of [Outcome of HOD 52-2017](#)) and subsequently (e-mail communication). The HELCOM EN-Noise has recently agreed on further steps to revise this section aiming at submitting the revised document to the upcoming HOLAS II Core team meeting, to be held on 28-29 November 2017 for consideration ([Outcome of HELCOM EN-Noise 1-2017](#), para. 3.4-3.5).

¹ Current version of the pre-core indicator can be found [here](#).

² Current version of the pre-core indicator can be found [here](#).

Regarding the report on noise sensitivity of aquatic animals in the Baltic Sea introduced in PRESURE 6-2017, following a long and fruitful commenting process with contribution from experts from EN-Noise, SEAL EG, as well as GEAR and State & Conservation WGs the report is to be published as a BSEP ([Outcome of HOD 51-2016](#), para. 6.88 and [document 6-6](#)). The document is pending its finalization on a final revision to address comments received after HELCOM 38-2017.

Effects of noise on the level of population are still very poorly understood, and good status for populations has therefore not yet been defined in relation to underwater noise. To guide further work, HOD 52-2017 agreed on the “HELCOM input to the process of establishing environmental targets for underwater noise” ([Outcome of HOD 52-2017](#), para. 3.18-3.19 and [document 3-6](#)) pending the clarification of the study reservation by Germany and Russia to be clarified through written procedure by 21 July 2017 and that it could serve as regional input to other fora, including other Regional Sea Conventions as well as European processes. Germany provided specific proposals to the document which were discussed during the on-line meeting of the HELCOM EN-Noise held 16 August 2017 reaching an expert agreement on the document ([Memo of the working meeting of the HELCOM EN-Noise](#)). HOD 52A-2017 welcomed the information that Germany has lifted the study reservation on the document, and invited Russia to clarify their study reservation ([Outcome of HOD 52A-2017](#), para. 3.1 and [document 3-1](#)).

The follow-up of the possibility to determine acceptable levels of underwater noise for marine species has been considered by the HELCOM EN-Noise who agreed that establishing threshold values for underwater noise indicators is the top priority in the next couple of years and that the need to establish threshold values is closely linked to the need for operationalisation of the pre-core indicators, also in line with the MSFD requirements for those HELCOM countries being EU members ([Outcome of HELCOM EN-Noise 1-2017](#), para. 2.3).

Finally, in relation to knowledge gathering, the EN-Noise recently agreed to revise the [background report](#) compiling the internationally available reviews on underwater noise mitigation measures in two years’ time, acknowledging the evolution on techniques (explosions, pile driving, seismic events) and knowledge. Also to compile knowledge on impacts and severity of impacts, since it is evolving very rapidly ([Outcome of HELCOM EN-Noise 1-2017](#), para. 2.3).