

Terms of Reference for a joint OSPAR-HELCOM workshop to examine possibilities for developing indicators for incidental by-catch of birds and marine mammals

1. The neighbouring Regional Seas Conventions OSPAR and HELCOM are organizing a joint workshop to progress work on assessing the pressure from incidental by-catch of birds and marine mammals. This workshop is proposed as a forum to progress work on assessing the pressure from incidental by-catch and developing regional indicators.

Location: Copenhagen, Denmark

Date: 3 - 5 September 2019

Background to the workshop

OSPAR

2. OSPAR has committed to halt and prevent loss of biodiversity by aiming to ensure that effects of human activities and pressures on the marine environment do not adversely affect species in the North East Atlantic Environment Strategy 2010-2020. Incidental by-catch has been identified as a serious pressure on several species, however currently OSPAR does not have any operational common indicators assessing the impact this pressure has on the marine environment.

3. In the OSPAR Intermediate Assessment 2017 (IA2017) an assessment of *by-catch of harbour porpoise* (common indicator M6) was presented, however it was solely based on estimates of by-catch published by ICES and, as OSPAR noted concerns over the accuracy and reliability of the available estimates of harbour porpoise by-catch, it was not deemed appropriate to present an assessment against any threshold value. OSPAR has developed a candidate indicator for bird incidental by-catch but it has not been operationalised due to a scarcity in incidental by-catch monitoring data in the OSPAR Maritime Area. Thus, incidental by-catch remains a pressure in the OSPAR Maritime Area where no agreed assessment methods exist and it is not possible for OSPAR to determine whether this pressure is at a sustainable level based on current knowledge as an input to the Quality Status Report 2023.

4. The OSPAR Biodiversity Committee (BDC) meeting in 2018 agreed to develop a process on improving the capacity for assessing incidental by-catch. The work which was identified as needing to be undertaken included a clearer identification of the data needs for the assessments, and identifying appropriate means of accessing the data. BDC identified the need to cooperate with other regional bodies on the issue.

HELCOM

5. HELCOM's vision for the future is a healthy Baltic Sea environment with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable economic and social activities. Fisheries are one of the areas where HELCOM has renewed its efforts, aiming to ensure ecological sustainability of Baltic fisheries by 2021. This has been agreed on Ministerial level in the context of the Baltic Sea Action Plan (BSAP), which also specifically addresses the matter of incidental by-catch.

6. In the HELCOM State of the Baltic Sea report, published in July 2018, incidental by-catch was addressed descriptively, using estimates of numbers of by-caught animals. A HELCOM core indicator to assess the number of drowned mammals and waterbirds caught in fishing gear is undergoing further development. This indicator is intended to provide an evaluation of whether the number of incidentally by-

caught marine mammals and waterbirds are below mortality levels that enable reaching good environmental status. Currently no quantitative threshold values have been defined for the core indicator, but the concepts for determining the threshold values based on removal- and conservation targets have been described and are proposed to form the basis of future core indicator threshold setting activities. Other processes are ongoing within HELCOM to support the operationalization of the indicator, including to identify gaps in the current collection of fisheries data. Further, the HELCOM ACTION project (2019-2020) is currently examining by-catch issues in a designated work package, focusing on creating high-risk maps for by-catch for harbor porpoise and birds, estimating by-catch rates of birds and marine mammals and examining the cost and effect of implementing mitigation measures to reduce by-catch of harbour porpoise.

7. HELCOM has initiated an overall process to review its indicator catalogue and map existing indicators against relevant policy documents. This will include the Baltic Sea Action Plan and the MSFD, also encompassing the EU Commission MSFD GES Decision (2017/848/EU). This process will address the indicator related needs, including those for indicators on by-catch, and assign priority for future development work, to ensure the needs of Contracting Parties are met.

Objectives

8. The objective of the workshop is to develop methods to assess, for conservation purposes, the pressure of incidental by-catch of birds and marine mammals. The focus is on the identification of cost-effective assessment- and data collection approaches. Conservation objectives based on already existing agreements will frame and form the basis for exploring the sustainable level of incidental by-catch pressure but are not intended to be the focus of the workshop.

9. The following aims will guide the work towards the objective;

- I. Data needs for carrying out assessments should be identified and compared to current data availability. Where monitoring programmes are currently not generating suitable data, the workshop should investigate barriers to monitoring data becoming available and develop proposals for improved monitoring approaches and data collection in order to move towards operational assessments.
- II. Approaches to identify areas of increased and decreased risk of incidental by-catch (i.e. high risk/low risk areas) should be explored. Different methods may be considered for birds and marine mammals as relevant. This information may contribute to proposals on improved monitoring approaches.
- III. Regionally harmonised indicators are strived for, and therefore consideration should be given to proposals for approaches to setting thresholds as part of the proposal indicator assessment method.

10. To achieve the workshop objective, work should focus on practical aspects and develop proposals on which assessment method to use with different levels of data availability. Model-based assessments should be included in the considerations, in particular to explore possibilities to define and assess thresholds without high quality by catch and/or abundance data (e.g. aiming to take high inter-annual variability into consideration). The workshop should also consider how to calculate numbers for total by-catch from existing monitoring data and levels of rigour in the data required to inform on management action.

11. Birds and marine mammals were selected to be the focus for the workshop, as most comprehensive information is believed to exist for these ecosystem elements. OSPAR and HELCOM also recognize the importance of by-catch of turtles and non-commercial fish as significant pressures on these ecosystem elements, however these species groups will not be directly addressed during the workshop.

Preparation

12. A task force consisting of the nominated Chairs, task leads, OSPAR and HELCOM Secretariats will carry out preparatory work prior to the workshop.

13. The following information would be collated for the workshop to consider and build on:

- existing conservation objectives on already existing agreements which could be of relevance for incidental by-catch;
- an overview on the EU legal framework related to by-catch, including MSFD and CFP, Regulations 1224/2009, 404/2011 (Control Regulation), 2017/1004 (DCF), Implementing Decision 2016/1251 (DC-MAP), Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora and Directive 2009/147/EC on the conservation of wild birds;
- possible risks for species groups associated with specific fishing gear;
- national and/or regional proposals for high risk areas based on species occurrence/density and occurrence/effort of gears associated with risk including the methods used to identify the areas (i.a. FishPi at WGBYC 2018, UK seabird by-catch approach, ACTION project);
- an overview of nationally available data and monitoring programs (utilizing work conducted under ICES WGBYC);
- data sources related to by-catch numbers and associated fishing effort, e.g. from the HELCOM Roadmap on Fisheries Data;
- national or regional indicator assessment methods of threshold setting for the species group, such as Catch Limit Algorithm advised by ICES for marine mammals;
- overview of cost of mitigation measures from current ASCOBANS work.

Tasks to be carried out during the workshop

14. To achieve the workshop objective of developing methods for assessing incidental by-catch of birds and marine mammals, the following tasks are to be carried out during the workshop;

a. Data requirements, sources and monitoring:

- Compare the data needs to current data availability, and as relevant identify possible additional data sources;
- Identify barriers to preventing appropriate monitoring data becoming available;
- Develop practical proposals on how to address data gaps, taking into consideration and approximating the associated costs, with an aim to enable assessments both in the short- and long-term.

c. Identifying areas of increased risk/low risk of incidental by-catch:

- explore methodologies for identifying incidental by-catch high risk (and if possible also low risk) areas based on the collated background information;
- consider spatial and temporal aspects of identifying areas of high risk/low risk (e.g. due to changes in spatiotemporal distribution of fisheries and the species at risk of incidental by-catch) and how to incorporate this information when defining high risk/low risk areas.

d. Methodologies for indicator assessment, including threshold setting:

- explore alternative metrics/parameters, and model-based approaches for regional indicator based assessment;
- explore the relevant resolution of data for assessments, taking into consideration spatial-, temporal and taxonomic resolution;
- consider if different methods need to be proposed for data rich and data poor species;
- compare available methods for threshold setting, such as Catch Limit Algorithm, and propose the most suitable methods to be used.

e. Identify next steps for developing monitoring and assessment of bycatch by OSPAR and HELCOM

15. The workshop should look for synergies between species groups and, where possible, identify methodologies (or elements of methodologies) that can be relevant across species groups.

16. The workshop should also make use of existing assessment processes (e.g. ICES, ASCOBANS) or obligations (e.g. DCMAP) to avoid duplicating effort and to potentially use them to help implement its proposals.

Workshop participants

17. The workshop will be open to all Contracting Parties and observers of OSPAR and HELCOM. There would be a specific relevance to include the following participants:

- indicator leads and experts on assessment methods, indicators or seabirds and marine mammals from the OSPAR and HELCOM expert groups i.e those under OSPAR BDC and HELCOM Fish and State and Conservation i.a. JWG BIRD, HELCOM EG Fishdata, ICG-COBAM expert groups;
- representatives of national fisheries authorities and authorities responsible for collecting by-catch data
- representatives working with EU DC-MAP including relevant regional cooperation meetings/groups;
- representatives working with remote monitoring systems;
- chairs of the ICES Working Group on Bycatch of Protected Species (WGBYC) and a representative from the ICES Data Centre;
- representatives from DG Mare and DG Environment working on CFP and MSFD as well as HBD;
- representatives of the HELCOM coordinated ACTION project (Actions to evaluate and identify effective measures to reach GES in the Baltic Sea marine region), in particular of WP.1 (By-catch);
- representatives from other relevant international organisations and/or projects, e.g. ASCOBANS, ACCOBAMS, IWC, Barcelona Convention, BALTFISH, Scheveningen Group, North Sea- and Baltic Sea Regional Coordination Group, as well as the MISTIC Seas project.

Outcome

18. The outcomes of the workshop would be forwarded to the relevant subsidiary bodies in OSPAR and HELCOM for further consideration, and made available to Contracting Parties. The outcome could be presented as proposed next steps to be taken if a single, final proposal could not be reached.

19. The expected outcomes of the workshop are;

- a) identified data gaps, e.g. in terms of metiers/types of fisheries, or population parameters, to be considered for forwarding towards appropriate data collection actors;

- b) recommendations on the feasibility and cost-efficiency of proposals to appropriately monitoring incidental by-catch in various fisheries to generate information needed for assessments. A prioritization of what areas should be covered first in terms of which fisheries may have the highest importance to be covered thorough additional monitoring;
- c) a proposed common approach for identifying hot-spot areas where there is an increased incidental by-catch risk;
- d) a proposed common approach for incidental by-catch assessment and associated data needs, including proposals on threshold-setting methods;
- e) a proposal for an action plan to implement the workshop proposals, feeding in e.g. to the implementation of the HELCOM Roadmap on fisheries data.