
Document title	Future work on HELCOM indicators - By-catch
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Background

The following document contains a brief topic summary that addresses the overall aim of indicator work and assessments on the given topic. It outlines the current status and gives an indication of the work needed to adjust/develop the identified indicators. Potential avenues of cooperation are also described. Where possible the information has been compiled based on responses received from the HELCOM indicator questionnaire process and revised based on comments received at the 1st HELCOM Indicator Workshop. This is particularly the case for the section on the aims of the work, which was a focus of attention at that 1st indicator workshop.

Action requested

The Workshop is invited:

- to take note of the information and use it as needed to support the discussion
- provide comments or corrections as needed

By-catch

Future work on HELCOM indicators – towards the 3rd Holistic Assessment of the Baltic Sea 2023.

Indicators under discussion

1. *Number of drowned mammals and waterbirds in fishing gear

This indicator appears in the additional document that considers the HELCOM indicator-policy match and scoring (Document 17 - HELCOM indicator-policy matching and draft scoring, and annex).

Aim

A Baltic Sea regional assessment of by-catch of mammals, birds and selected fish species (based on regionally agreed species lists). Such an assessment should be tied to suitable species that are vulnerable to by-catch and be assessed against suitable threshold values that are indicative of levels that may cause harm to a species or population.

General introduction and current status

The [indicator](#) was updated in 2018 and it was used in the [2018 State of the Baltic Sea report](#). The indicator is highly descriptive and, although the concept is well developed, is not operational due to the lack of suitable data and agreed threshold values to support a full assessment. The leads and co-leads presented in the current summary need clarifying.

Relevant species (regional lists of species for the assessment)

The four marine mammal species are all relevant for this topic and regional lists of bird and fish species need to be addressed. Relevant species information for the HELCOM Contracting Parties that are also EU Member States is also provided in [Table 1D of the Annex to Commission Implementing Decision \(EU\) 2016/1251](#). An initial draft matching of this information against the HELCOM 2012 species checklist has been carried out (Document 14 - Draft HELCOM species list matching, and annex).

Development/adjustment work

This indicator is of relevance since it provides a clear link between human activities and biodiversity components. Furthermore, for HELCOM Contracting Parties that are also EU Member States it is also a requirement to carry out such assessments. To operationalise the indicator there is an urgent need for reliable data on the number of bycaught marine mammals and waterbirds, as well as on fishing effort in the relevant métiers (gill nets and allied methods, fyke nets, longlines) in meaningful units. An agreement has to be found in HELCOM FISHDATA in order to initiate the necessary steps for overcoming the data problem. Monitoring of marine mammal and waterbird bycatch has to be implemented or conducted in the frame of DC-MAP (e.g., EFARO initiative). Other relevant data to assess anthropogenic mortality, for instance on hunting bags, is also needed for a proper evaluation of the indicator to take place.

Target setting is still under discussion. An approach based on population modelling, such as Catch Limit Algorithm (CLA) or Population Viability Analysis (PVA) needs to be developed. CLA was recommended by ICES WGBYC for Harbour Porpoise, but has to be developed for seal and waterbird species – not only for the three waterbird species (long-tailed duck, greater scaup, common guillemot) tested in the recent indicator report, but also for the other species bycaught in fishing gears (other

seaducks, divers, grebes, other alcids). Furthermore, it has to be ensured that relevant data for target setting such as population sizes and trends are available from other indicators or additional sources.

Note: many of the above issues or potential obstacles also have resource implications.

Potential obstacles

While no particular obstacles are provided a number of relevant issues and steps outlined in the development/adjustment work above could also represent potential obstacles (e.g. data needs or agreement on threshold values).

Frequency

An annual assessment should be viable once developed and operational. Full assessments and updates should also be timed with other relevant assessment deadlines and with the update of associated indicators.

Potential for cooperation

Optimal indicator development would take place in a collaboration of the expert groups ICES WGBYC, JWGBIRD (OSPAR/HELCOM/ICES) and the HELCOM SEAL EG. ICES WGBYC has a database and data collation system for DC-MAP requirements, which could be used for the indicator. A HELCOM-OSPAR workshop on this topic is due to take place in autumn 2019 (September).

Other issues

The workshop is invited to document other aspects they consider to be relevant to the development of this specific indicator category.

A number of issues raised previously (though not an exclusive list) that may be relevant for discussion include: integration rules, appropriate coordination with MSFD CIS processes, and appropriate coordination with OSPAR.