



### Terms of Reference for HELCOM Expert Group on Zooplankton (EG Zoo)

*Adopted by HOD 61-2021, December 2021*

#### Background

Zooplankton is a major link in aquatic ecosystems and integral to food web dynamics, ecosystem productivity, and nutrient and carbon cycling. Given its key position linking phytoplankton to higher trophic levels, an improved understanding of zooplankton as a part of pelagic environments, is a prerequisite for an ecosystem approach to management, a cornerstone to HELCOM, Baltic Sea Action Plan, Marine Strategy Framework Directive and EU Common Fisheries Policy.

The HELCOM Zooplankton Network started developing indicators in 2010 within the CORESET I project using zooplankton monitoring data from the Baltic Sea. It oversees development of the Zooplankton mean size and total stock (MSTS) indicator, which is currently being further developed under the HELCOM BLUES project. The Network has previously completed two projects: ZEN-QAI, the Quality Assurance and Integration of Zooplankton Monitoring in the Baltic Sea (2011-2014) and ZEN-ZIIM, the Zooplankton Indicator Integration to Monitoring in the Baltic Sea (2015-2017).

#### Main aims and focus of the group

The HELCOM Zooplankton Expert Group (EG Zoo) works on developing zooplankton-based indicators to follow-up the implementation of the Baltic Sea Action Plan and supports the Joint Baltic Sea zooplankton monitoring and status assessments within HELCOM. The Group contributes to the core indicator reports and data products regarding use of zooplankton in environmental status assessment, including the State of the Baltic Sea Assessment (HOLAS). The Group further provides a forum for experts involved in the Baltic Sea zooplankton monitoring to share information on methodological aspects of collecting and analyzing samples, data storage, statistical treatment, quality assurance and taxonomical aspects of zooplankton research.

The Group focuses on the overall quality, evaluation and reporting of the national marine zooplankton monitoring data, on developing the use of long-term data for environmental assessment in the Baltic Sea as well as improving the efficiency of the monitoring data use and developing pelagic habitat assessments and their viability for use in HOLAS with respect to e.g., indicator aggregation.

In addition to the work on zooplankton indicators, the Group's work focuses on zooplankton as a part of pelagic habitats and food webs and providing guidance on these topics in HELCOM processes and projects.

#### Tasks:

- Update core indicator reports and participate in assessments of pelagic habitats at intervals as decided in HELCOM, including regular review of the data and assessment products.
- Work towards the harmonization of the zooplankton monitoring guidelines.
- Intercalibrations to keep the high standard of zooplankton monitoring in the Baltic Sea, to assure the comparability of results.
- Initiate and maintain regular training courses on taxonomy and other issues relevant for zooplankton work (e.g. sampling, biomass determination).

- Establish a common procedure to maintain a joint list of Baltic zooplankton species for all subregions.
- Oversee recommendations on data reporting formats for HELCOMs database (including those hosted by ICES) and other relevant related databases (e.g., WoRMS, AquaNIS etc).
- Revise recommendations for zooplankton biomass assessment as necessary.
- Further development of the pelagic habitat and food webs assessment methodologies in HELCOM as concerning zooplankton as well as zooplankton indicators, including regular scientific review of the agreed GES boundaries and integration of indicators.
- Cooperate with all Contact Points and interested HELCOM observers.
- Contribute to HELCOM assessments.
- Provide annual progress reports to HELCOM State and Conservation WG.

### Reporting

The Chair of the Group will report to State and Conservation WG once a year on the Group's activities. A template for the reporting will be provided by the Secretariat.

### Membership

The Group will consist of experts nominated by Contracting Parties, including those experts already involved in the ZOO project group and will be open to Observers according to HELCOM procedures.

### Work plan:

A work plan for 2023-2024, aligned with the review period of the ToRs, will be prepared for and elaborated at the first meeting of the Group, after which the workplan will be reviewed and updated in the EG ZOO meetings prior to the end date of the workplan, to be presented for approval by State and Conservation WG.

### Validity of ToR

The work of the group is open ended. The Terms of Reference are subject to review and, as appropriate, revision by the expert Group every 2 years and approval by the HELCOM State and Conservation Working Group.

### Organization of work

The expert Group will function under and receive guidance from the HELCOM State and Conservation Working Group and will collaborate with and support the work of other HELCOM groups, particularly the Phytoplankton Expert Group (PEG) and the HELCOM Correspondence Group on Food webs (CG Foodwebs) and the OSPAR/HELCOM Joint Working Group on Non-Indigenous Species.

The Group can request input from the State and Conservation WG as appropriate.

The mode of work for the expert group will include correspondence and 1-2 online meetings per year, with the option of physical workshops to tackle specific issues, facilitated by the HELCOM Secretariat. Subgroups may be defined in order to work more thematically. Chair(s) will be elected by the members of EG Zoo. The products will be handled at HELCOM Meeting Portal workspaces dedicated to this purpose. The HELCOM Secretariat will provide administrative support to the Group.