



Outcome of the First Meeting of the HELCOM Correspondence Group on Food webs (CG FOODWEB 1-2021)

Table of Contents

Introduction	2
Agenda Item 1	Adoption of the Agenda	2
Agenda Item 2	Context and introductions of CG FOODWEB.....	2
Agenda Item 3	Setting the scene: assessing food webs	2
Agenda Item 4	Existing approaches	2
Agenda Item 5	Linkage with HOLAS III.....	4
Agenda Item 6	Next steps for CG FOODWEB.....	4
Agenda Item 7	Outcome of the Meeting	5
Annex 1	List of participants of CG FOODWEB 1-2021	6
Annex 2	Next steps for an assessment/methodology for HOLAS III	7

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Introduction

0.1 With reference to the [Outcome](#) of the 59th Meeting of the Heads of Delegation (HOD 59-2020, para 6.7 and 6.10) and after consultation with the nominated experts, the First Meeting of the HELCOM Correspondence Group on Food webs (CG FOODWEB 1-2021) was held online on 15-16 April 2021.

0.2 The Meeting was attended by delegations from Denmark, Estonia, Finland, Germany, Sweden and Latvia. Representatives of the NEA PANACEA and the HELCOM BLUES projects as well as the OSPAR food web expert group attended the Meeting as invited guests to present their respective work. The list of participants is contained as **Annex 1**.

0.3 The Meeting was chaired by Ms. Jannica Haldin, Professional Secretary. Mr. Florent Nicolas, Associate Professional Secretary, Ms. Jana Wolf, Project Coordinator and Mr. Owen Rowe, Project Manager acted as secretaries of the Meeting.

0.4 The nominations for the Chair for CG FOODWEB will be received intersessionally, with elections at the next meeting of CG FOODWEB. The Secretariat invited the Meeting participants to send potential nominations to the HELCOM Secretariat (florent.nicolas@helcom.fi).

Agenda Item 1 Adoption of the Agenda

1.1 The Meeting adopted the Agenda.

Agenda Item 2 Context and introductions of CG FOODWEB

2.1 The Meeting took note of the presentation as introduction of the CG FOODWEB Meeting and its connection to HELCOM work, the HELCOM BLUES project and the third holistic assessment of the Baltic Sea (HOLAS III), as presented by Ms. Jannica Haldin ([presentation 1](#)).

Agenda Item 3 Setting the scene: assessing food webs

3.1 The Meeting took note of the presentation for discussion starter and policy relevance of the CG FOODWEB Meeting, as presented by Mr. Owen Rowe ([presentation 2](#)).

3.2 The Meeting discussed different concepts of food webs, how to manage them, policy perspective (Baltic Sea Action Plan, BSAP, EU Marine Strategy Framework Directive, MSFD, and Common Fisheries Policy, CFP), as well as synergies and projects dealing with policy needs among HELCOM, OSPAR, ICES and the EU, (e.g. sister projects of HELCOM BLUES and NEA PANACEA). The key notes for this discussion are noted via Miro ([Attachment 1](#)).

Agenda Item 4 Existing approaches

4.1 The Meeting took note of the presentation on HELCOM BLUES initial ideas for work towards a food web test assessment, using the HELCOM Biodiversity Assessment tool (BEAT), and review of the ICES WGGIAB approach, as presented by Mr. Henrik Nygård ([presentation 3](#)). Key notes and further discussions are noted on the Miro board ([Attachment 2](#)).

4.2 The Meeting took note of the presentation on the review of food web indicators for the Baltic Sea Area based on the BONUS XWEBS project, as presented by Mr. Henn Ojaveer (presentation 4, not publicly available as the presentation contains currently unpublished information). Key notes and further discussions are noted on the Miro board ([Attachment 2](#)).

4.3 The Meeting took note of the presentation about Coastal fish indicators and assessment, as presented jointly by Mr. Jens Olsson and Lena Bergström ([presentation 5](#)). Key notes and further discussions are noted on the Miro board ([Attachment 2](#)).

4.4 The Meeting took note of the presentation by Mr. Henn Ojaveer on the Meta-analysis on the ecological impacts of widely spread non-indigenous species of the Baltic Sea (presentation 6, not publicly available as the presentation currently contains unpublished information). Key notes and further discussions are noted on the Miro board ([Attachment 2](#)).

4.5 The Meeting took note of the presentation about BONUS BLUESWEBS: Blue growth boundaries in novel Baltic food webs - past and present state of Baltic Sea food webs, as presented by Ms. Marie Nordström ([presentation 7](#)). Key notes and further discussions are noted on the Miro board ([Attachment 2](#)).

4.6 The Meeting took note of the presentation by Ms. Ulrike Schückel about the Food web assessment within OSPAR with special focus on FW9: Ecological Network Analysis Indices ([presentation 8](#)). Key notes and further discussions are noted on the Miro board ([Attachment 2](#)).

4.7 The Meeting took note of the summary presentation of day 1 ([presentation 9](#)), as presented by Owen Rowe. The Meeting advised to have a broad approach with all major (but not all) players of the food web being addressed by the concept. The meeting clarified that the term “broad approach” also means the assessment being approached from different angles and considering several options for methods and assessment.

4.8 The meeting discussed the timeline to evaluate the status of food webs by 2026 (as proposed in the latest draft for actions planned in the updated Baltic Sea Action Plan, see presentation 9), and noted concerns about the target year being challenging with regards to thresholds in food webs. The Participants took note of the clarification that this schedule was chosen to fit with the timeline for the next holistic assessment.

4.9 The Meeting reviewed the summary table notes for the presentations of the first day. The Meeting also discussed if the work from ATLANTIS model should be considered and noted that this was a consideration in the HELCOM BLUES project application.

4.10 The Meeting also noted that other work from ICES Working groups could give helpful input (especially WGSAM - Working Group on Multispecies Assessment Methods and WGINOSE - Working Group on Integrated Assessments of the North Sea), for example on species or trophic guild of relevance in selected Baltic Sea sub-basins.

4.11 The Meeting reviewed the notes from the Miro board from day 1 of the definitions of concept about food webs and discussed working definitions and assessment aspects of food webs (Annex 2). The Meeting considered that defining the aims of the CG would be a stronger approach than potentially limiting the scope based on a selective or narrow definition.

4.12 The Meeting discussed the aims of the CG FOODWEB and decided that several aspects are important for future work:

- a list of suitable trophic guilds for the assessment should be created, as well as the development of an overview of the structures and dynamics of those guilds within the food web;
- drivers of changes in the food web (such as pressures and human activities to link this to other work within HELCOM);
- Reviewing the available data, methods, indicators and assessment approaches will be needed to select which is the most appropriate way to address food webs for the HELCOM region and how they are applicable to policy needs.

4.13 Other relevant EN and WG (ZEN, PEG, EG MAMA, STATE & CONSERVATION) will be asked to consider and give feedback for these aims and provide input to CG FOODWEB. The key points are summarized in the [presentation 9](#).

Agenda Item 5 Linkage with HOLAS III

5.1 The Meeting discussed if other available methods which were not considered during day 1 could be used for the upcoming HOLAS III assessment. The Meeting agreed that the most important ones were already discussed, but other options such as stable isotope analysis or molecular analyses could be relevant to consider in the future.

5.2 The Meeting noted that current food web and ecosystem models are often applied at level of the Baltic Sea scale (e.g. sub-areas) and thus generally not usable at the scale of HELCOM assessment area (e.g. applying the HELCOM assessment units and scales), due to the spatial coverage and data issues, and can thus generally provide only supporting contextual information, not a full assessment.

5.3 The Meeting took note of the information that some of the aims of CG FOODWEB (listed in [presentation 9](#)) are also discussed within HELCOM subsidiary bodies and projects as general preparation for HOLAS III. For example, driver indicators are already identified by the MetDev project, and the Meeting suggested exploring collaboration.

5.4 The Meeting took note of the information on linkages between HELCOM BLUES, MetDev project and CG FOODWEB concerning HOLAS III as highlighted in the presentation ([presentation 9](#), slides 12 and 13).

5.5 The Meeting agreed that it is too early to discuss detailed steps for HOLAS III and that this issue would be revisited at the next meeting to provide input to STATE & CONSERVATION 15-2021, though good progress to review options had been made and the steps outlined would support further progress. The Meeting also discussed the need to submit an update on, and a suggestion for, an assessment methodology and approaches to the autumn meeting of STATE & CONSERVATION. The Meeting took note of the information on the submission deadline for STATE & CONSERVATION 15-2021, i.e. 7 September 2021.

5.6 The Meeting discussed further steps to be able to have a proposal for the methodology/assessment of food webs for HOLAS III. The Meeting agreed to formulate such proposal on the approach/methodology but also concluded that it was unlikely that specific proposals on threshold values would be achievable by HOLAS III. The proposal will be presented to STATE&CONSERVATION 15-2021 (submission deadline 7th September) and HOD 61-2021 (**Annex 2**).

5.7 The Meeting discussed how HELCOM BLUES could support the work for HOLAS III and took note of the suggestion to have a structural overview of the food webs, trophic guilds/functional groups and a potential list of species groups within guilds which should be addressed at a regional level. Furthermore, the Meeting discussed that energy transfer dynamics could be included as a descriptive information, based on literature and expert knowledge, and thus be without exact threshold values. Afterwards sub-area(s) could be tested for this approach. This initial proposal will be reviewed by the project partners and carried out in close cooperation with the support of CG FOODWEB.

5.8 The Meeting took note of possibilities for collaboration for data exchange with ICES, including related to further Baltic Sea test cases being carried out under ICES/ICES WGGIAB (next meeting in September 2021).

Agenda Item 6 Next steps for CG FOODWEB

6.1 The Meeting agreed to collate information on available methods for assessing food webs for HOLAS III, focussing on indicator-based assessment approaches.

6.2 The Meeting noted that the work done by BONUS XWEBS would facilitate this process and welcomed the offer by Mr. Henn Ojaveer to arrange a discussion with Laura Uusitalo (Finnish Environment Institute, Finland) and Stefan Neuenfeldt (Technical University of Denmark) to ask if the latest work can be made available to CG FOODWEB experts.

6.3 In addition to the review carried out in BONUS XWEBS the Meeting agreed to send to the Secretariat methods dealing with the assessment of food webs by middle of May, to facilitate the work

towards HOLAS III and beyond, as described in **Annex 3**. The Secretariat will prepare an updated table to support the methodological review process, based on the overview table of presentations in presentation 9.

6.4 The Meeting discussed and agreed on the collated list of group aims and necessary next steps to reach them as listed in [presentation 9](#), slide 12 and 13, as well as links to other HELCOM projects (HELCOM BLUES and MetDev), summarised by Owen Rowe and stated as **Annex 3**.

6.5 The Meeting highlighted that experts with other thematic knowledge, such as for birds and mammals, may not be well represented in the current meeting participants, and that filling such gaps in the future could be valuable for work under CG FOODWEB. The Meeting agreed to inform STATE&CONSERVATION 14-2021 of the identified gaps.

6.6 The Participants agreed to have the next Meeting of the CG FOODWEB in the second half of May. The date will be based on a doodle poll to be sent by Secretariat to the CG FOODWEB nominated experts.

Agenda Item 7 Outcome of the Meeting

7.1 Meeting participants were provided with the draft Outcome of the Meeting.

7.2 The final adopted Outcome of the Meeting was made available in the HELCOM Meeting Portal.

Annex 1 List of participants of CG FOODWEB 1-2021

Representing	Name	Organisation	E-mail
Contracting Parties			
Denmark	Ane-Marie Løvendahl	Ministry of Environment	anlra@mim.dk
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Sweden	Elena Gorokhova*	Stockholm University	Elena.Gorokhova@aces.su.se
Sweden	Jens Olsson*	Swedish university of agricultural science	jens.olsson@slu.se
Sweden	Lena Bergström	Swedish University of Agricultural Sciences	lena.bergstrom@slu.se
Invited guest			
HELCOM BLUES project	Iveta Jurgensone	Latvian Institute of Aquatic Ecology	iveta.jurgensone@lhei.lv
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HELCOM BLUES project	Jyri Tirroniemi	Finnish Environment Institute	jyri.tirroniemi@syke.fi
NEA PANACEA project	Ulrike Schückerl	national park authority Schleswig Holstein	Ulrike.Schueckel@lkn.landsh.de
HELCOM Secretariat			
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* Also involved in HELCOM BLUES project.

Annex 2 Next steps for an assessment/methodology for HOLAS III

Group aims (Linkages - **HELCOM BLUES (B)**, **MetDev (D)** (supported/guided by CG Foodwebs))

1. Collate available methods, focus on indicator based assessment methods (mid-May TBC)
 - check BONUS XWEB review (access if possible)
 - ICES groups, JRC, BalticAtlantis
 - Secretariat compile list and adapt review table
 - pros and cons
2. Identify key trophic guilds/functional groups (sub-regional?) - key spp. groups within - **B**
3. Identify drivers (link to MetDev – ask support to identify them) - **M**
4. Overview of structures and dynamics of above (descriptive linking of energy, dynamics, etc.) - **B**
5. Next meeting of CG Foodwebs – **second half of May (doodle poll)**
 6. Select method with potential, pros and cons + table template
 7. Identify best option for HOLAS III and long-term development
 8. What can be done for HOLAS III - test cases/overview
 9. Review policy application and ecological relevance
10. Summarise data requirements/needs/availability (possibly ask CPs on availability)
11. Document to State and Conservation 15 (7 September latest) on plans for HOLAS III
 - Review of what is available vs what would be needed (and what can be achieved with existing)
 - Review by other relevant ENs and WGs
12. Indicator/Assessment development
13. Threshold value development (input from other ENs needed)
 - Possibly longer-term, pending steps 9-11.