



Memo of the fourth meeting of the HELCOM – Baltic Earth Expert Network on Climate Change (EN CLIME 4-2019)

Introduction

The fourth Meeting of the HELCOM – Baltic Earth Expert Network on Climate Change (EN CLIME 4-2019) was held as an online meeting on 5 November 2019.

The list of participants is contained in Annex 1 to this Memo.

The Meeting was chaired by Clarisse Kehler-Siebert, Sweden, co-Chair of the network.

Laura Hoikkala and Petra Kääriä (HELCOM Secretariat) acted as secretaries of the Meeting.

The aims of the meeting were the following:

- 1) To introduce the background of the group and the upcoming work regarding secondary parameters
- 2) To map the expertise for secondary parameter work and identify any possible gaps
- 3) To plan the coming work for secondary parameters

1. Adoption of the agenda

1.1. The Meeting adopted the agenda as contained in document 1-1.

2. Introduction

2.1. The Meeting took note of the background information regarding the expert network and structure and process of HELCOM climate change work, as presented by Petra Kääriä (documents 2-1 and 2-2, presentation 1).

3. Structure of the fact sheet

3.1. The Meeting took note of the structure of the climate change fact sheet, including structure of information for the secondary parameters (document 3-1, presentation 1). The Meeting noted that the fact sheet will be directed to a broad, non-scientific audience.

3.2. The Meeting took note that the key messages for primary parameters are under review. The Meeting discussed that based on the experience with primary parameters, the excel table template for the Key Messages is not a convenient way of working and should be replaced with word format with strict word count limits in order to keep track of edits in the document. The Meeting agreed to use the bullet points and structure of the current template, with the modification to change the order of points by placing the already occurring impacts before expected impacts and agreed to use the structure as included in [document 3-1-Rev.1](#).

3.3. The Meeting noted that the primary parameters are currently being reviewed by Markus Meier, Co-Chair of the network. The Meeting discussed the lessons learned from work on primary parameters and

noted that it is important to make very precise statements and provide peer reviewed references or other legitimated literature to each statement. The Meeting noted that without precise statements with references, back tracing of comments becomes challenging. The Meeting agreed that the rules for the BACC reports apply (e.g. concerning consensus and dissensus). The Meeting noted that the references will be provided in the Fact Sheet itself as background material. The Meeting recalled that the task is not to produce new knowledge but to compile existing information.

3.4. The Meeting noted that for the secondary parameters, wherever possible the key messages are to be presented as fully references statements, however in most cases, due to lack of precise scientific information secondary parameter key messages will be presented as “if”-statements and will build on information presented under the primary key messages.

3.5. The Meeting agreed that the first step in the work for each secondary parameter is to identify the relevant primary parameters influencing the parameter in question, and that this link is to be presented in the final fact sheet as well.

3.6. The Meeting took note of the example Marine Climate Change Impacts report cards by Marine Climate Change Impact Partnership (MCCIP), showing a visually attractive example for the Fact Sheet and the approach for confidence assessment (document 3-2).

3.7. The Meeting took note of the Guidance Note for Lead Authors of the IPCC Fifth Assessment Report on Consistent Treatment of Uncertainties (document 3-3) and noted that this approach is also to be used when providing confidence assessment for the key messages for secondary parameters.

3.8. The Meeting took note of the IPCC summary report Ocean and Cryosphere in a changing climate, which can be used as a basis of information for several secondary parameter key messages (document 3-4).

3.9. The Meeting took note of the list of primary and secondary parameters of the Fact Sheet (presentation 1, excel file '[Parameter and Expert overview](#)'). The Meeting noted that draft key messages already exist for the secondary parameters 'Acidification' and 'Oxygen concentration and hypoxia', as well as preliminary draft for the parameter 'Pelagic Habitats'.

3.10. The Meeting took note of the [EN CLIME workspace](#), which is used as a platform for drafting the key messages for primary and secondary parameters, and includes the time line and administrative documents for the expert network. The Meeting encouraged all new network members to [sign up](#) to the HELCOM Meeting Portal in order to get access to the workspace.

4. *Mapping of expertise*

4.1. The Meeting took note of the current expertise in EN CLIME as provided in document '[Parameter and Expert overview](#)' and the expertise of the participants of the Meeting. The Meeting updated the listed expertise, and the updated '[Parameter and Expert overview](#)', which is a living document and available via the EN CLIME workspace.

4.2. The Meeting asked the experts to check their contact details and expertise in the [excel file](#) and to provide any updates or corrections to the Secretariat (petra.kaaria@helcom.fi).

4.3. The Meeting took note of the gaps in expertise. The Meeting noted that there are currently no experts nominated to work for the parameters 'Microbial community and -processes' and 'Human health', and that more experts would be needed also for 'Ecotoxicology', 'Tourism', 'Built structures', 'Aquaculture', 'Patogens' and 'Marine Protected Areas'.

4.4. The Meeting invited the experts of the network to look for experts especially for the identified topics, and inform the Secretariat (petra.kaaria@helcom.fi), and the Co-Chairs Clarisse Kehler-Siebert (clarisse.kehrer.siebert@gmail.com) and Markus Meier (markus.meier@io-warnemuende.de) on any additional experts who could contribute to the work.

5. Planning coming work

- 5.1. The Meeting took note of the outline of coming work, provided in the work plan for the Expert Network (document 2-1, presentation 1), and noted that the work will start by first defining all the relevant primary parameters affecting each secondary parameter.
- 5.2. The Meeting considered what would be the most efficient and practical mode of working.
- 5.3. The Meeting took note that with primary parameters, dividing the work into subgroups was proven practical for optimizing the number of meetings and handling the discussion at the meetings.
- 5.4. The Meeting agreed to divide the work on secondary parameters into the following teams: 'Biota and Ecosystems', 'Health and Safety' and 'Services'. The parameters under each subgroup are provided in the updated '[Parameter and Expert overview](#)' file.
- 5.5. The Meeting took note of the tasks of leads for parameters and teams (presentation 1).
- 5.6. The Meeting discussed that the definitions for 'ecosystem services' and 'ecosystem functioning' in this context should be clarified, and their overlaps with other parameters identified. The Meeting was of the opinion that only a limited list of ecosystem services can be addressed.
- 5.7. The Meeting agreed on the following leads for parameters under team 'Biota and Ecosystems':
- Benthic habitats: Antonia Sandman (confirmed lead),
 - Fish: Jens Olsson, Lena Bergström, Noora Mustamäki, Örjan Östman (confirmed leads),
 - Waterbirds: Volker Dierschke (tentative lead),
 - Marine mammals: Anders Galatius (confirmed lead),
 - Non Indigenous Species: Örjan Östman (confirmed lead regarding fish species)
 - Marine protected areas (MPAs): Örjan Östman (provisional lead),
- 5.8. The Meeting welcomed that the confirmed leads for Fish, Örjan Östman, Jens Olsson, Lena Bergström and Noora Mustamäki, will consider taking the lead for the 'Biota and ecosystems' Team.
- 5.9. The Meeting discussed that there is overlap between parameters non-indigenous species and fish.
- 5.10. The Meeting suggested and agreed on the following leads for parameters under team 'Health and Safety':
- Nutrient concentrations and eutrophication: suggested leads Bo Gustafsson and Jacob Carstensen,
 - Harmful algal blooms (HABs): suggested lead Harri Kuosa,
 - Flooding: suggested lead Jukka Käyhkö,
 - Erosion and sedimentation: suggested lead Jukka Käyhkö (a [draft](#) already available).
- 5.11. The Meeting suggested and agreed on the following leads for parameters in team 'Services':
- Fisheries: confirmed leads Meri Kallasvuo, Sanna Kuningas, Antti Lappalainen
 - Ecosystem services: tentative lead Örjan Östman (to contact the other group members),
 - Ecosystem function: Örjan Östman (tentative lead, to contact the other group members).
- 5.12. The Meeting agreed that the Secretariat will send email invitations to the experts of EN CLIME to consider taking the lead for the remaining parameters and the teams.
- 5.13. The Meeting invited the suggested leads and other experts volunteering to take the lead of any parameter or team to inform the Secretariat as soon as possible and no later than **19 November**.
- 5.14. The Meeting invited the experts of the network to inform the Secretariat (petra.kaaria@helcom.fi) of interest to contribute to the work on parameters for which they are not already listed in the parameter and expert overview.
- 5.15. The Meeting took note of a comment from Co-Chair Markus Meier that, based on experience from primary parameters, the process of team leading went well with coordination help from the Secretariat. The Meeting further took note that Markus Meier intends to attend as many meetings for secondary parameters as possible to contribute to the linking between primary and secondary parameters and that co-Chair Clarisse

Kehler Siebert and Petra Kääriä from the Secretariat will also aim to attend all team/parameter meetings to support the work and to help connect the work between the teams.

5.16. The Meeting took note that the mode of working is to be decided by the people in each sub-group, and further took note that there is no budget to cover any travelling costs.

5.17. The Meeting was of the opinion that online meetings would probably be sufficient enough.

5.18. The Meeting agreed that the dates for follow-up meetings under each team will be agreed intersessionally via email, and that the Secretariat (petra.kaaria@helcom.fi) and the Co-Chairs Clarisse Kehler-Siebert (clarisse.kehler.siebert@naturvardsverket.se) and Markus Meier (markus.meier@io-warnemuende.de) should be kept informed of the meetings.

5.19. The Meeting agreed that the parameter leads will contact the other members of the groups, as listed in the parameter and expert overview file in order to agree on date for a meeting.

5.20. The Meeting suggested that to initiate the work the parameter leads could make the first draft to be presented at the online meeting.

5.21. The Meeting took note that due to partial maternity leave, the only possible days for Petra Kääriä to take part to the meetings are Mondays and Tuesdays.

5.22. The Meeting took note that the drafts for primary parameters are available in the [workspace](#), to be used for the secondary parameter work.

5.23. The Meeting took note that any questions regarding the process can be sent to Clarisse Kehler-Siebert, Markus Meier and Petra Kääriä.

6. Any other business

7. Outcome and next meeting of EN CLIME

7.1. The Meeting noted that the next physical meeting of EN CLIME (EN CLIME 5-2020) will be held in mid-February 2020.

7.2. The Meeting outcome will be available at the [EN CLIME 4-2019](#) meeting site, together with documents and a presentation considered by the meeting.

Annex 1 List of Participants

Name	Representing	Organization	E-mail
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