



Baltic Marine Environment Protection Commission

Making the HELCOM eutrophication assessment
operational (EUTRO-OPER)
Helsinki, Finland, 7 May 2014

EUTRO-OPER 2-2014

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Outcome of the second meeting of the project making the HELCOM eutrophication assessment operational (HELCOM EUTRO-OPER 2-2014)

Introduction

- 0.1 In accordance with the minutes of the first meeting of making the HELCOM eutrophication assessment operational (HELCOM EUTRO-OPER 1-2014), the second meeting of the EUTRO-OPER project (HELCOM EUTRO-OPER 2-2014) was held on 7 May 2014 as a video conference hosted by the Secretariat.
- 0.2 The Meeting was welcomed by the Project Manager, Ms. Vivi Fleming-Lehtinen, who reminded of the main objectives of the Meeting.
- 0.3 Mr. Hermanni Kaartokallio acted as Chair of the Meeting.
- 0.4 Ms. Vivi Fleming-Lehtinen, Project Manager of EUTRO-OPER, acted as Secretary of the Meeting.

Agenda Item 1 Adoption of the Agenda

Documents: 1-1

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

Agenda Item 2 Information by the Secretariat, Project Manager and Contracting Parties

Document: 2-1

- 2.1 The Meeting took note of the outcome of relevant HELCOM Meetings (document 2-1) and agreed to make use of the information when discussing the relevant issues during the Meeting.
- 2.2 The Meeting took note of information provided by Poland and Finland on the MSFD WG DIKE Technical Group Data meeting organized by the EEA in Copenhagen on 29-30 April, concentrating on eutrophication and contaminant data flows through Regional Seas Conventions (RSC). The workshop was of the opinion that the RSC data flows, especially those of HELCOM and OSPAR covering most of the MSFD descriptors, should be taken use of in EU reporting in a way that data may be reported by a Member State only once, yet it serves the purposes of multiple requirements. The data flow model of EUTRO-OPER was presented to the workshop by ICES and HELCOM Secretariat, and will be made use of when developing the overall European data flow model by the EU-RSC data project for DG ENV and the EEA.

Agenda Item 3 Project roadmap and tasks to be finalized during work phase 1

Documents: 3-1, 3-2, 3-3

- 3.1 The Meeting accepted the present version of the road map, as presented by the Project Manager, Ms. Vivi Fleming-Lehtinen (Annex 1), and noted that the following activities are yet to be finalized during work phase 1 (1 April – 31 August 2014):
- Subtask 1a.ii: Provide input on eutrophication monitoring to the monitoring topic sheets produced in the MORE project
 - Subtask 1a.i: Define datasets to be included into data flow at 1st stage (during 2014)
 - Subtask 1a.i: Define form of remote-sensing and ship-of-opportunity data (for chlorophyll-*a* indicator)
 - Subtask 1b.iii: Preparing outline for data aggregation manual
 - Subtask 1b.ii: Identify the data aggregation approach to be used in updating each core indicator (e.g. determine spatial and temporal aspects)

- Subtask 1b.ii: Specification of procedures for including EO- and SOO-data for updating chlorophyll *a* indicator
- Subtask 1c.ii: Preparing outline for HEAT 3.0 manual
- Subtask 1c.i: Developing specifications of HEAT 3.0 tool
- Subtask 1a.ii: Agreeing on sub-class boundaries or distance-to-target approach for eutrophication criteria
- Subtask 1d.iii: Updating content in core indicator reports and assessment web page
- Subtask 2a.i: Updating the 2007-2011 assessment dataset for project purposes
- Subtask 2b.i: Defining roles of institutions in providing additional data (EOP, SOO)
- Subtask 2c.iii: Identifying relevant institutes within contracting parties to participate in work flow

3.2 The Meeting noted that the monitoring sub-programme files on eutrophication with contribution from EUTRO-OPER were presented and acknowledged in MORE, and recalled that EUTRO-OPER experts will have an opportunity to comment on the draft monitoring manual eutrophication summary during **12-23 May 2014**. The meeting agreed that **commenting may be done through the Project Manager**, who will circulate the draft text as soon as it is provided by MORE.

3.3 The Meeting discussed the datasets to be included into the data flow during 2014 (document 3-2), and agreed that the data streams should include, to the extent possible, all data sources used in the 2007-2011 eutrophication assessment, added with remote sensing and Ferrybox data as well as national coastal datasets.

3.4 The Meeting noted, that although coastal data has been reported to ICES database (document 3-2, annex 2), in many cases not all stations from coastal areas are included. In order to include the coastal datasets into the data flow, the Meeting agreed to send a questionnaire to the Contracting Parties on information on coastal datasets not presently included into COMBINE monitoring. The questionnaire will be **prepared and distributed by the Project Manager** to the Contracting Parties via EUTRO-OPER and MONAS.

3.5 The Meeting requested **ICES, with support from the Project Manager, to provide** a spatially and temporally detailed overview on data from the test period (2007-2011), with the aim of helping the Contracting Parties to identify gaps in data reporting.

3.6 The Meeting agreed an attempt to include data from SeaDataNet and the BED distributed databases to the assessment data stream to be made, in order to include datasets not reported directly to ICES. However, reporting through ICES is recommended to ensure the application of common data quality control procedures and to avoid duplication of data sets.

3.7 The Meeting agreed that water sample observations from Ferrybox platforms should be reported to the ICES database similarly as other *in-situ* data. The Meeting welcomed the information provided by Finland on having reported Ferrybox water sample data from the Helsinki-Travemünde -line this spring, and the indication of Poland to report water sample data from the Gdynia-Karlskrona -line.

3.8 The Meeting discussed the options for including the update of the oxygen debt indicator into the data flow (document 3-3), and welcomed the offer of **ICES to contribute** to the work. The Meeting agreed to make an attempt to produce oxygen debt algorithms in the ICES database from the SAS-programs developed under the lead of Mr. Jacob Carstensen in the TARGREV project. The Meeting further agreed that the 4 k€ budgeted in EUTRO-OPER for outside services will be offered to Mr. Jacob Carstensen, with the request to provide 35 hours of consultancy services in transferring the procedures into the ICES database. Due to the limited extent of service / resources available, the responsibility of the outcome will remain within HELCOM EUTRO-OPER.

3.9 The Meeting noted the concern of Germany and Sweden in the possibilities of automating reliably the complicated oxygen debt indicator procedure, and their worry in that the indicator is not transparent.

3.10 The Meeting took note of the information provided by SYKE on the plans for defining the form and procedure of including EO- and SoO data into the data flow to update the chlorophyll *a* indicator. The meeting noted, that JRC has shown interest to contribute to the work. The Meeting welcomed the offer of **SYKE to call in a video meeting in May** between SYKE, JRC, representatives of EU-RSC data project and the Secretariat, in order to plan the work together.

- 3.11 The Meeting requested the **Project Manager to provide** draft outlines of the data aggregation and HEAT 3.0 manuals for the next meeting.
- 3.12 The Meeting requested the **Secretariat to update** the HELCOM eutrophication assessment and indicator web page according to the web structure agreed upon in CORESET II and EUTRO-OPER 1-2014, using the assessment period 2007-2011, by the end of work phase 1 (30 August 2014).
- 3.13 The Meeting agreed that in order to identify roles of institutes within contracting parties in the eutrophication assessment work flow (eg. review of draft data, indicator and assessment products), the roles when producing past eutrophication assessments will be used as a starting point. The Meeting requested the **Project Manager to produce** a draft for scrutiny during the next meeting.

Agenda Item 4 Testing of the HEAT assessment tool on coastal areas

Documents: 4-1

- 4.1 The Meeting discussed the preliminary results of the German project on testing HEAT 3.0 against WFD results in the coastal areas (document 4-1), and noted that in most areas HEAT 3.0 provided a lower status than the WFD approach when using the present “preliminary” HEAT 3.0 sub-class boundaries. While this might be partly caused by differences in setting class boundaries between WFD and HEAT 3.0 it is also related to an insufficient consideration of cause-effect relationships when deriving reference and target values, in particular regarding nutrient concentrations and direct effect parameters (e.g. chlorophyll, macrophytes) as well as regarding nutrient and oxygen concentrations and their effect on indirect effect parameters (e.g. macrozoobenthos). Another cause is the application of the one out – all out approach in which the module “nutrient levels” (which is no WFD assessment criterion) overrules the biological assessment results which are often one or even two classes better than the HEAT 3.0 assessment results for nutrient levels. Germany further pointed out that DIP should not be used as assessment criterion in inner coastal waters (like the German coastal lagoons) as it leads to unplausibly good results (see Table 1 in Doc 4-1). TP is to be preferred as it yields more reliable results.
- 4.2 The Meeting agreed that the next steps for testing HELCOM assessment methodology in coastal areas (sub-task 3c.i) will be to continue testing at selected sites around the Baltic Sea. The Meeting agreed to invite Contracting Parties to suggest testing areas in their coastal zone, with the commitment of providing the necessary information on indicator status, reference conditions and acceptable deviation as well as class boundaries to allow testing. The Meeting welcomed the offer of **Sweden to lead** the testing work, and requested the **Project Manager to support**, and contact the Contracting Parties to enquire on their interest on naming testing sites. In addition, the meeting invited **Germany to deliver** the final report of the project before the next meeting of EUTRO-OPER.

Agenda Item 5 Developing new core eutrophication indicators

Documents: 5-1

- 5.1 The Meeting took note of the information provided by Germany (document 5-1) on the progress and plans of the total nutrient indicator development. The Meeting noted, that the state of monitoring and data provides a good basis for relatively quick indicator development, but that setting GES-boundaries requires further work. As the next step, the Meeting requested **Germany with the support of the Project Manager to send** a questionnaire to the Contracting Parties via EUTRO-OPER and MONAS, in order to receive information on possible nationally set GES-boundaries.
- 5.2 The Meeting welcomed the offer of **Germany to provide** a rationale document with first thoughts on indicator development on nutrient ratios for the next meeting.
- 5.3 The Meeting took note of the information provided by Sweden on the progress and plans of the oxygen consumption indicator development, and noted that the indicator can be produced to deep basins

Annex 1 List of Participants

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Annex 2 List of Documents

Doc No.	Date submitted	Title	Submitted by
1-1	23.04.2014	Provisional Annotated Agenda	Secretariat
2-1	06.05.2014	Extracts from relevant HELCOM meetings	Secretariat
3-1	23.04.2014	Road map for implementing the activities of EUTRO-OPER	Secretariat
3-2	02.05.2014	Defining datasets to be included into data flow at 1st stage (subtasks 1a.i and 2b.i)	Secretariat, with input from ICES and EU-RSC data - project
3-3	02.05.2014	EUTRO-OPER 2-2014_3-3 Defining data aggregation approach for oxygen debt indicator	Secretariat
4-1	06.05.2014	Preliminary findings of testing HEAT 3.0 in German coastal waters	Germany
5-1	06.05.2014	Next steps for new eutrophication indicator total nutrients	Germany
6-1	23.04.2014	List of nominated project members	Secretariat