



Document title	Project proposal for the development of a workspace for the evaluation of HELCOM hazardous substances indicators and integrated assessment.
Code	3-19
Category	DEC
Agenda Item	3 - Matters arising from the HELCOM Groups
Submission date	7.12.2017
Submitted by	Executive Secretary
Reference	

Action requested

The Meeting is invited to take note of the attached proposal for a HELCOM project to develop a workspace for the evaluation of HELCOM hazardous substances indicators and integrated assessment, and Contracting Parties are invited to provide possible comments to the project proposal **by 21 December 2017**.

The Meeting is invited to agree on a tacit approval procedure for the project proposal.

PROJECT DESCRIPTION:**1. Title of project**

Proposal for the development of a workspace for the evaluation of HELCOM hazardous substances indicators and integrated assessment.

2. Project Manager(s)**3. Proposing Party**

Contracting Party _____

Commission _____

Subsidiary body _____

Heads of Delegation _____

Executive Secretary X

4. The body supervising the project

HELCOM Secretariat (ICES Secretariat doing the practical side).

5. Targets and activities**Background**

State & Conservation 5-2016 endorsed the use the OSPAR assessment approach ('MIME script') as the assessment protocol for the hazardous substances indicators (para 4J-24) and remaining study reservation to the use of the script were lifted at HOD 51-2016 (para 6.15). HOD 51-2016 agreed to use the integration tool (CHASE) for the purposes of assessing contamination status in the HOLAS II project (para 6.33). The latter tool and the arrangements for both of these systems was developed under the EU co-funded BalticBOOST project ("BalticBOOST - Baltic Sea project to boost regional coherence of marine strategies through improved data flow, assessments, and knowledge base for development of measures"). This project was established to address important issues related to perceived needs in preparing for reporting on the state of the Baltic Sea, for example the HELCOM HOLAS II process and other priority areas. The hazardous substances work package within this project was charged with developing key components for the adequate assessment of hazardous substances, to agree on matrices for indicators and to develop access to quality assured data. What remains to be carried out as the next step is to bring together these two systems into a workspace that is automated and combines both the indicator evaluation/calculation and the integration of the hazardous substances to enable a holistic view.

HELCOM currently has ten operational hazardous substances core indicators. The underlying evaluation of the indicators is carried out (with the exception of the white-tailed eagle) using a script called MIME, developed within OSPAR. The MIME script itself utilises the data submitted to the HELCOM COMBINE database (hosted by ICES) to calculate the HELCOM indicator evaluations. In the first stage of this process raw data are collated at single stations, calculation of results is carried out (calculation and statistical analyses), and time series trends are defined at each station. These data and results are visualised (i.e. trend graphs) and can be displayed on the ICES server (i.e. for checking and use by experts). In the second stage of the process the initial output (i.e. the per station trends) is set against HELCOM-defined threshold values for each indicator to define the status value. These results are aggregated into an indicator result and status per assessment unit (in the case of the hazardous substances at HELCOM level 4 assessment units). This second result is also visualised and can be displayed on the ICES server.

The HELCOM hazardous substances indicator evaluations are currently updated using the MIME script, with support from an OSPAR member that is the developer of the MIME script (in kind contribution). However, currently this is only a semi-automated process and relies on support from the relevant OSPAR expert to receive HELCOM data and to feed it into the MIME script (pipeline), including making needed adjustments

from the process operationalised for OSPAR. HELCOM has not developed a parallel script of its own since it was decided that the OSPAR script is suitable for the purposes of HELCOM indicator assessment, thus creating synergies and avoiding duplication of work. Lessons learnt from the first HOLAS II process were the fact that the HELCOM and OSPAR needs for the MIME script are strongly aligned but not identical, and that some adjustment to the assessment tools had to be made to meet specific HELCOM needs (e.g. thresholds or aggregation), including the need to re-run the system (pipeline) in response to the national checking process of indicator results carried out by Contracting Parties. Currently, HELCOM continues to rely on the MIME script developer, due in part to the level of development of the MIME script itself (i.e. it is not currently deposited in an open software storage facility) and the technical requirements of implementing changes to the script in its current status. These issues will be overcome by the operationalisation of a HELCOM workspace for hazardous substances, based in overall structure on the equivalent system used for HELCOM eutrophication indicators (EUTRO-OPER).

Currently OSPAR has established a contract with ICES for the development of a platform/workspace for OSPAR hazardous substances. This project is ongoing and will create a workspace/platform, based in structure on the HELCOM EUTRO-OPER, through which evaluation of OSPAR hazardous substances indicators can be carried out in a smooth and automated process. As part of this project the MIME script should become accessible (i.e. be deposited in an accessible storage facility) as well as be incorporated into the automated workspace hosted by ICES. This will enable future adaptations to the workspace/platform and underlying script to be carried out as and when needed to suit the specific needs of HELCOM. This project is currently underway and is anticipated to be completed by the end of June 2018.

One aspect that will differ markedly between the HELCOM and OSPAR workspaces/platforms will be the need for an additional section to be added to encompass the HELCOM script/tool for making the integrated assessments (the CHASE tool). This will not be implemented by OSPAR currently and would be an add-on to the HELCOM workspace. The CHASE tool would be incorporated into the automated workspace process and enable the calculation of the integrated assessments (i.e. all hazardous substances) to be carried out directly with each indicator evaluation process, as needed.

Project plan

It is proposed that HELCOM takes advantage of the ongoing developments from both earlier HELCOM projects and the ongoing OSPAR work. Since much of the work is common between the two institutions, joining forces to work with OSPAR on this process (i.e. taking a contract simultaneously with ICES) will enable the parallel development of hazardous substances platforms/workspaces for both OSPAR and HELCOM and sharing the costs.

The specific plan will be to join the development of a workspace initiated by OSPAR and create a replicate workspace for HELCOM that automates the evaluation of the HELCOM hazardous substances indicators (i.e. MIME script) and adds on the HELCOM specific integration function (i.e. CHASE script). The creation of the main HELCOM workspace for hazardous substances will require some variations in the underlying MIME code and some optimisation of the process to meet HELCOM specific requirements, as compared to the OSPAR setup. The CHASE integration part will be specific only to the HELCOM workspace. The work to develop and implement this will be carried out by ICES.

6. Expected results

The expected results are a fully operational workspace for the evaluation of HELCOM hazardous substances indicators, inclusive of the integration process. The resulting workspace should be flexible and allow for a greatly simplified process for any necessary changes to be made in the future, such as the inclusion of new substances, thresholds or assessment units.

7. Consistency with HELCOM priorities yes no

This is consistent with the earlier work of HELCOM and with priorities to develop effective and efficient processes for indicator evaluations, for example when carrying out regional and integrated assessments.

8. Timetable (including number of Project Team meetings)

The process will be initiated now in the form of discussion and contact with ICES and OSPAR, to ensure smooth integration of HELCOM needs into the started development process. The specific work on HELCOM related issues, including the development of the HELCOM-specific integration tool section (CHASE) will be initiated in July 2018 and an operationalised system will be in place by the end of 2018.

9. Budget (taking into account financial year from 1 July to 30 June)

The budget for this work is to support the cooperative work on parallel workspaces (for OSPAR and HELCOM) to be carried out by ICES and to enable the development of the HELCOM specific add on (CHASE tool).

Total budget: 11,000 – 13,000 EUR to be covered from the HELCOM budget (the exact sum depends on the specific requirements for adaptation of the workspace that can only be identified at a later stage)

Budget 2017-2018: 3,000 EUR

Budget year 2018-2019: 8,000 – 10,000 EUR

10. Additional requests (manpower, equipment, facilities, etc.)

N/A

11. Procedure of nomination of the Project team members

N/A

12. Signature of the Project Manager(s)

The work will be supervised by the Secretariat. The responsible person is Owen Rowe, Project Manager for indicators.

13. Opinion of the Chairs of the relevant body

14. Opinion of the Executive Secretary

This is the initiative by the Executive Secretary.

15. Decision of the Heads of Delegation (Reference is to be given to the relevant Minutes of the Heads of Delegation's Meeting)

_____ to establish _____ not to establish