Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature Conservation

Online, 5-9 October 2020

STATE & CONSERVATION 13-2020

Document title	Considerations on a HELCOM beach litter database & initial thoughts on beach litter assessment in HOLAS III
Code	4J-5
Category	DEC
Agenda Item	4J– Progress of relevant HELCOM expert groups and projects
Submission date	14.9.2020
Submitted by	EN-Marine Litter

Background

STATE & CONSERVATION 12-2020 took note of the plans for further work on the HELCOM beach litter indicator (document 4J-11), discussed the proposed scenarios towards a harmonized Baltic Sea wide monitoring and assessment of beach litter and agreed to choose the scenario C.

The meeting discussed the issue of a common database to host HELCOM beach litter monitoring data and agreed on the use of an existing database for the purpose. The meeting invited the EN-Marine Litter to consider which database would best fit HELCOM purposes (e.g. EMODnet or ICES DOME databases), including financial resource implications and long-term continuation of the database, so that the discussion on the topic can continue at STATE & CONSERVATION 13-2020. The meeting took note that EU encourages harmonisation with the ongoing work of TG Litter, and, if needed, communication between the EN-Marine Litter and EMODnet to support hosting of beach litter data. The EU further advised that a European baseline for beach litter had been adopted for MSFD purposes and that a Joint list of litter items had been adopted to promote standardized data collection in the future. In relation to the assessment of the beach litter indicator within HOLAS III, the meeting invited the EN-Marine Litter to provide recommendations on use of assessment scale and trends in HOLAS III for State and Conservation to consider. The meeting further invited the network to consider the threshold value for this indicator once established at EU level (Outcome of STATE & CONSERVATION 12-2020, para. 4J.12- 4J.13, 4J-15-4J.16).

This document contains the output of the discussion of these issues by EN-Marine Litter (Memo of the online meeting held on 27 August) together with additional input as provided by the coordinator of EMODNET and colleagues at ICES through e-mail communication.

Action requested

The Meeting is invited to:

- select a suitable database for beach litter monitoring for further consideration;
- agree on the use of assessment scale and trends for the beach litter indicator in HOLAS III.

Considerations on a HELCOM beach litter database & initial thoughts on beach litter assessment in HOLAS III

Initial thoughts on beach litter assessment in HOLAS III

EN-Marine Litter discussed the submission of a document by the network addressing the issue of a common database to host HELCOM beach litter monitoring data as well as recommendations on the assessment scale to use in HOLAS III (Memo of the online meeting held on 27 August).

In relation to recommendations on the assessment scale, it was agreed that a final recommendation on the assessment scale is to be provided based on available data. However, the preliminary recommendation is to use scale 2 including an assessment by different types of beaches.

Further work is envisaged to reconsider the current definition of the different types of beaches, as contained in the HELCOM monitoring guidelines for beach litter:

- urban: artificially created environment in an urban setting which simulates a public beachfront, through the use of sand, beach umbrellas, and seating elements.
- rural: beaches located outside the urban environment; not readily accessible by public transport and have virtually no facilities.
- peri-urban: beaches with (many) visitors but which are not in or very close to a city.

Countries are invited to provide comments to the definitions to the Secretariat by 30 September 2020. The Secretariat will then circulate the proposals received to the network aiming at coming to a common understanding at the next meeting of the network (date tbc).

In this regard, Denmark confirmed that their “reference beaches” can be categorized as “rural beaches”, and that this has already be done in the frame of Danish data submitted to EMODnet.

Considerations on a HELCOM beach litter database

This section contains the input as provided by the coordinator of EMODNET, kindly contacted by Sweden, and colleagues at ICES, contacted by the Secretariat, through e-mail communication.

Question	EMODNET	ICES DOME
Is it possible on a geographical scale to cover the whole Baltic Sea?	Yes	Yes; ICES reference the HELCOM spatial units at the different levels depending on the type of data product i.e. eutrophication, contaminants etc.
Are there economic costs of adding HELCOM data?	Costs to load HELCOM data are covered by DG MARE under service contract no EASME/EMFF/2018/1.3.1.8/Lot4/ (EMODnet Chemistry) when data are added following EMODnet Chemistry data formats (https://www.emodnet-chemistry.eu/marinelitter/beachvalidator?0)	Yes. ICES is not wholly funded by one entity, and additional data services would need to be charged to the contracting parties/client that are requesting the service.
Is it possible to add historical data (previous to 2015)?	Yes, all new (not already collected) data are very welcome when data are added following EMODnet Chemistry data formats	In principle yes, although it is not clear in this case if the data labelled 'historical' conform to the same standards and vocabularies as post 2015 data.
How is the database structured and can this structure be changed if HELCOM has other needs to structure the Baltic Sea data?	Beach litter database is a PostgreSQL Relational database (V11) with PostGIS Spatial capabilities with regular back up. Its structure is based on the OSPAR data format. This format is based on a spreadsheet with 4 tabs collecting the following information: beaches, surveys, animals, litter . More details about the beach litter format are available in our guidelines (https://dx.doi.org/10.6092/15c0d34c-a01a-4091-91ac-7c4f561ab508). There are several tools to help in the data management(data formatting, data validation, catalogue of the already surveyed beaches provided as a map,...) of beach litter provided at the following link:https://www.emodnet-chemistry.eu/marinelitter. EMODNet Chemistry database structure cannot be changed based on HELCOM needs but we can provide a dump of the database to be handled directly by HELCOM in case big changes are needed.	The DOME database is in SQL Server. The data model already encompasses Contaminants, Biological effects and diseases, biological community data related to HELCOM assessments. The data model changes in dialogue with the clients of the database (HELCOM, OSPAR and AMAP). In most instances, the output via recognised formats, or web services is the usual route for customising to requirements from HELCOM.
How can data in the database be used?	Data will be available through EMODnet Chemistry data access (https://emodnet-chemistry.maris.nl/search).	The data are submitted under the ICES data policy

	Metadata will be publicly available and data will be available according to the data policy fixed by the originator following the three options: • **SDN_licence**: Access to the data and usage are as specified in the SeaDataNet data policy and licence agreement. • **Unrestricted**: The data are freely available to anybody and may be used for any purpose. Usage acknowledgement may be required. • **By negotiation or restricted**: The data are withheld from general circulation and disclosure, but access may be obtained on a case-by-case basis through negotiation. In any case, as done with JRC for baselines calculation, EMODNET can directly provide HELCOM with an extraction of the database to be used for further analysis and visualisations.	http://ices.dk/data/guidelines-and-policy/Pages/ICES-data-policy.aspx which is updated and aligned in consultation with data providers and clients of advice i.e. HELCOM. The ICES data policy allows open access to the data, meta data and any data products, and encourages acknowledgement. The existing DOME download disclaimers include reference to each entity that has provided data in that specific data extraction. ICES is currently beta testing a new overall data portal that brings together all the different data types, and data products across the entire dataset collections in one searchable catalogue. This allows the end user to combine different spatial products (fishing activity, fishing pressure indicators temperature and salinity, underwater noise etc.) in an easy way. ICES have developed restrictive data licencing in circumstances where it is necessary (commercial sensitivity, habitat sensitivity, identification of natural persons, where the data provider is not a public organisation)