OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, and

Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area

Meeting of the Joint HELCOM/OSPAR Task Group on Ballast Water Management Convention (BWMC) and Biofouling (TG BALLAST 11-2020)

Online: 26-27 November 2020

Update on the improvement of the online JHP decision support tool

Presented by the HELCOM Secretariat

Issue: This document presents an update of the work done by the HELCOM Secretariat in order to accomplish the improvements to the JHP decision support tool agreed by TG BALLAST 10-2019.

Action requested

1.   JTG-Ballast is invited to;

    a.   take note of the improvements done in the JHP decision support tool;

    b.   provide input on the new online user interface including the GIS functionalities, automatic report as an outcome of the new RA analyses, link to AquaNIS database and the information displayed on the on-line decision support tool web app;

    c.   take note that the new on-line decision support tool has replaced the current version since October 2020.

Background

2.   TG BALLAST 10-2019 took note of the update on the improvement of the online Joint Harmonised Procedure (JHP) decision support tool, discussed proposals for its further development, and agreed on the way forward (document 5-1 and Outcome of TG BALLAST 10-2019, para. 5.1-5.4).

Update on the improvement of the online JHP decision support tool

TG BALLAST 9-2018 agreed on the working plan proposed by the Secretariat for the desirable upgrades (Phase 2) to the online JHP decision support tool to be implemented by HELCOM in the frame of the COMPLETE project (Outcome of HELCOM/OSPAR TG BALLAST 8-2017, para. 5.6). Therefore, based on discussion at the meeting and further developments in the COMPLETE project, a beta-version of the new on-line decision support tool web app will be presented to obtain input from the Meeting including open issues to be discussed and agreed on. The new JHP decision support tool presented is a "work in progress" version that was due to be finalized by September 2020 as an output of the COMPLETE project.

Port survey data submission

TG BALLAST 10-2019 agreed on the new enhanced data submission template to the risk assessment tool presented by the Secretariat, which limited the data incorporated to the on-line decision support tool database to the essential data for the risk assessment algorithm to perform the risk assessment analyses (Outcome of TG-BALLAST 10-2019 para. 5.1). When using the agreed new template, the Secretariat identified required improvements in the data entry to the new template to avoid errors when transferring these data to the risk assessment tool database. Therefore, the Secretariat has introduced a few modifications in the risk assessment data submission template to ensure the accuracy and facilitate the management of the data (see **Att. 1.**). The Secretariat identified that although the template presented in TG BALLAST 10-2019 increased the quality control in the species taxonomy, there is a need to provide the same control when species which have not been reported before to the risk assessment tool are found in a new port survey. Thus, the Secretarial has developed a new tab in the risk assessment tool data submission to properly deal with the new species (see **Att. 1.** New species tab). This new tab allows the risk assessment tool users to report species observations that have never been reported before to the database. Descriptions on how to introduce new species using this tab are listed below:

- New species scientific names can be introduced manually in the tab, however to ensure a quality control in the taxonomy the species names must be verified by adding their Aphia ID from WoRMS database. Aphia ID is a numerical ID assigned to each species present in the WoRMS database, database that the risk assessment tool follows as accepted taxonomy. This ID allows the Secretariat to retrieve all the taxonomical information related to that species automatically, improving the updating process of the species database as well as the port survey data uploading process since the verification of the data would be enhanced. Users are asked to introduce only new species names that present an accepted or alternate representation taxonomical statuses; this can be checked in the WoRMS database when introducing the species name, which returns the taxonomical history, status (accepted, alternate representation, etc.) and basic information on the species.
- When a species name presents an unaccepted status the user is asked to use the accepted name suggested by WoRMS instead.
- The Secretariat is aware that certain species might not be present in the WoRMS database, in this case the species name should be verified by adding a ITIS TSN (Integrated Taxonomic Information System Taxonomic Serial Number). ITIS TSN acts as the Aphia ID in WoRMS. The same procedure as with WoRMS regarding taxonomic status of a species name shall be followed with ITIS TSN.
- In case that the species is not recorded either in WoRMS or ITIS an alternative database identification must be provided e.g. Algaebase (https://www.algaebase.org/).

This improved version of the risk assessment tool data submission template can be found in the new risk assessment web app and downloaded directly from the Help tab.

Target species justification

TG BALLAST 9-2018 agreed that it might be advisable to include justification for each target species included in the target species lists (Outcome of HELCOM/OSPAR TG BALLAST 9-2018, para. 3.11). Together with the OSPAR NIS EG and the HELCOM TS EG the information for the target species justification has been compiled, and is now available in the Target Species tab in the new JHP decision support tool web app as an interactive table. The table presents a search engine to filter the information of the target species using each parameter as a search filter. The table displays species name, risk assessment category (HELCOM, OSPAR or both marine areas), salinity range when known, as well as the justifications for the selection of each species divided in three groups: Impact on Human health, Impact on the environment and Impact on the economy.

New functionalities of the RA tool web app interface

A summary of the new functionalities of the RA tool web app[1] interface is presented below:

- Routes tab and risk assessment algorithm

In the tab Routes users can quickly obtain a risk assessment for a given route between two ports. Donor and recipient ports are selected from drop down menus. Risk assessment calculations for the given route are displayed on the tab. Automatically an A4 report with the risk assessment summary is generated for downloading in .pdf format. In addition, an information message is displayed when data included in the risk assessment calculations are older than 5 year. The risk assessment tool carries out the analyses even if the data available are older than 5 years, but the information message is displayed for the users and/or administration awareness. When a port has data older than 5 years but also newer data provided more recently, only the data obtained ≤ 5 years are used for the risk assessment analyses. However, all available data, disregarding their date of sampling, can be consulted, displayed and downloaded in the Data tab. Moreover, information regarding the TS present in the route is displayed in a pop-up window when the users click on the species name.

- Data search and GIS functionalities

The Data tab contains a search engine to explore the data present in the RA tool database, including a GIS function to visualize the data selected. All the data provided to the Secretariat from port surveys are now available in the new risk assessment tool. These data can be displayed and downloaded in the Data tab.

- Link to AquaNIS database

Klaipeda University and the HELCOM Secretariat have created an automatic link between the online JHP decision support tool and AquaNIS database to share information regarding species observations and new introductions. This link is now finalized and functional in the Data tab under the Search AquaNIS button. AquaNIS data are not used for the risk assessment analyses but can be displayed using the GIS functionalities and sorted for additional information using the search function of the Data tab.

- Additional Information displayed in the Help tab

A link with a brief description has been added to the risk assessment tool in the Help tab to the workspace where the complete port surveys data are archived and can be downloaded for consultation. Moreover, information on how to cite the risk assessment tool has been displayed when data and/or information contained in the risk assessment tool are used. In addition, a link to the EWS developed by Klaipeda University has been added in the Help tab to enhance the access to the most updated information available of NIS in the Baltic Sea (Outcome TG BALLAST-10 2019, para. 5.4).

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[1] *The new JHP online decision support tool can be found following this link:* https://maps.helcom.fi/website/RA_tool/