



## Baltic Marine Environment Protection Commission

HELCOM Platform for sufficiency of measures

SOM Platform 2-2019

Helsinki, Finland, 16-17 September 2019

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<b>Document title</b>	Updated work plan for SOM analysis for non-indigenous species
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This document has been revised to include a link to the now completed MARITIME submission mentioned in the text.

### Background

HOD 55-2018 agreed to establish an *ad hoc* platform for analyzing sufficiency of measures (SOM Platform) to support the update of the Baltic Sea Action Plan ([Outcome HOD 55-2018](#)). To implement the framework and contribute with the required data and information for the analyses, topic teams were established for each of the topics addressed by the SOM Platform. The topic teams work intersessionally and report back to SOM Platform meetings and relevant Working Groups during the course of their work. An [initial work plan](#) on non-indigenous species was submitted to GEAR 20-2019 describing the work before and how it was to progress.

This document is an update of that work plan, outlining the progress, proposals and ongoing work on non-indigenous species. The plan will also be submitted for consideration by MARITIME 19-2019.

As noted in section 3, the analysis of activities contributing to the introduction of non-indigenous species has now been submitted to MARITIME 19-2019. The [document](#) includes a complete description of methods and an [attachment](#) containing the raw and analyzed data.

### Action requested

The Meeting is invited to consider the document and guide the topic team's ongoing work.

## Update on the SOM analysis for NIS

### Organization of work

The SOM analyses for non-indigenous species (NIS) lacks lead country, thus the Secretariat has taken this role. Ms Kristine Pakalniete (Latvia) is nominated as an ESA representative. Since there is no HELCOM expert network on the topic, existing data will be used and the Maritime Working Group, and other HELCOM groups or projects, will be consulted as appropriate. It is proposed to carry out the work mainly by correspondence and holding on-line meetings if the need arises.

### Timetable

The timetable of work follows the preliminary timetable for action by the topic teams as below. Activities for 2020 are still to be outlined.

Task	Outcome/contribution	Timeline 2019
Identify relevant measures frameworks (step 1 SOM approach)	Very short information document	Complete
Identify presence of time-lags between measures and pressures (step 2 SOM approach)	Very short information document	Complete
Propose geographic scale of analysis	Proposal	Complete, see point 1
Expert evaluation: identifying main pathways for pressures (step 3 SOM approach)	Participate in survey	On-going, see point 3
Pressure-state time-lags	Data (models, project outcomes, literature)	Not applicable to NIS
Measure-pressure time-lag verification	Verify time-lag effected measures from list provided by Secretariat	September
Measure list verification	Verify no missing relevant measures from list provided by Secretariat	September
Effect of measures data	Data (models, project outcomes, literature, national reports)	September-November
Expert evaluation: effectiveness of measures (step 4 SOM approach)	Participate in survey/workshop	October
Expert evaluation: pressure-state linkage (step 6 SOM approach)	Participate in survey/workshop	Not applicable to NIS
Projected development of human activities/pressures (step 5 SOM approach)	Data (models, project outcomes, literature, national reports)	Late fall
Synopses on potential new measures	Information document	End of year

### Updated plan for work

#### 1. Analysis structure

The topic is directed along the same lines as the [HELCOM indicator on trends in arrival of new non-indigenous species](#). This focuses the topic on control of pathways to introduction where both data and measures are more developed. This approach also suggests the use of a Baltic wide approach to the geographic scale to match the scale of many of the measures aimed at controlling NIS introductions.

#### 2. Measures

An inventory of measures has been developed by the Secretariat and distributed to the national contact points of the SOM Platform on 12 July. Responses were requested by 15 September. The initial measures lists include national EU MSFD reporting, HELCOM measures reporting, and online searches of global and regional measures frameworks.

The Topic Team will be involved in the final preparation of the measures lists once responses are received from the Contracting Parties. Contributions will primarily include issues of data completeness and measure-pressure time lags.

### 3. Activities introducing aquatic NIS

Existing sources allow for a data driven approach for determining the links between activities and the introduction of NIS. The proposal is to use the approach from Ojaveer et al. 2017 to generate activity contributions to NIS introductions for 25 years ending in 2016 based on data from the [AquaNIS database](#). The dataset from Ojaveer et al. 2017 was updated with new entries and extended to 2016. The 25-year units of analysis is proposed to be used for the SOM analysis as NIS introductions are relatively rare and therefore require a larger time range to capture the variability in introduction pathways. For each year, 1992-2016, pathway data was retrieved for each primary introduction. Where multiple potential pathways were indicated, the introduction will be divided equally between each activity. Additionally, some entries list a range of years that correspond to the introduction and, in this case, the introduction will be equally divided across each year.

In updating the dataset, 18 new entries out of a total 69 entries were lacking data on introduction pathways. These 18 entries were assumed to have the same proportion of contributions from activities as the remaining entries and their contributions were also equally divided between pathways. This generated a dataset of annual introductions by contributing pathway. From this data probability distributions will be generated reflecting annual introductions per pathway. The analysis is on-going and will be submitted to MARITIME 19-2019 for validation.

### 4. Effectiveness of Measures

The lack of a consolidated HELCOM forum for discussions of NIS complicates the process of gathering expert opinion on the topic. Discussions are ongoing concerning the best way to gather the required data on effectiveness of measures. A proposal for the nomination of national experts for the purpose of providing input to this step of the SOM analysis will be presented to MARITIME 19-2019.

### 5. Comparison to targets

The ultimate goal is to minimize anthropogenic introductions of NIS to zero. The threshold value between good status and not good status is 'no new introductions of NIS per assessment unit through human activities during a six year assessment period'. For SOM analyses it is proposed to use this pressure target value to evaluate the sufficiency of existing measures.

### 6. Overview

The gathered information will, where possible, represent synthesised collations of information linking sources-pathways-trends-measures. Many uncertainties remain with regard to the introduction pathways of NIS as well as the associated pressures. The SOM analysis for NIS is therefore based on the best available existing information combined with expert judgement. This information will directly support the SOM analysis and the overall update of the Baltic Sea Action Plan.

References

Ojaveer, H., Olenin, S., Narščius, A. et al. Dynamics of biological invasions and pathways over time: a case study of a temperate coastal sea. *Biol Invasions* (2017) 19: 799. Available at : [https://www.researchgate.net/publication/309722815\\_Dynamics\\_of\\_biological\\_invasions\\_and\\_pathways\\_over\\_time\\_a\\_case\\_study\\_of\\_a\\_temperate\\_coastal\\_sea](https://www.researchgate.net/publication/309722815_Dynamics_of_biological_invasions_and_pathways_over_time_a_case_study_of_a_temperate_coastal_sea)