

## TEG-MSP Data

### Subgroup 2- Harmonization of Terminology and Nomenclature for MSP Output Data

Workshop – 29<sup>th</sup> October 2020 @ 11:00-13:00

#### WEBEX Meeting

All presentations given during the meeting are available on the [Maritime Forum](#).

#### Presence or Represented:

*Please refer to the attached list of participants.*

### 1. Introduction

#### 1.1 Recap of previous meeting and outcomes

**MSP AM:** the recently formed Technical Expert Group on MSP Data was established to increase dialogue within the European MSP community and to move towards more robust and common standards in terms of MSP-related data collection and delivery. Under the TEG, a working subgroup was set to focus on harmonization issues and to identify or elaborate potential common data models (structure, format, nomenclature, etc.). The 1<sup>st</sup> meeting of this working sub-group took place on 28 May 2020, and brought together over 40 MSP experts, of whom 18 registered as active members.

**Andrej Abramic (Co-Chair):** the TEG-SG2 represents an initiative of EASME/DG MARE, supported and hosted by MSP AM. The objective of the group is to develop a standard for the MSP data, maritime spatial plans, and reporting. The group is working on finding a standard for the output data that will facilitate reporting on MSP, in order to achieve the cohesion within Europe and across borders. In previous meeting the sub-group has identified two “ready to use” options for providing harmonized MSP plans:

- the already operational (in the Baltic sea) [BASEMAPS](#) data model developed by HELCOM-Vasab ( <https://vasab.org/document/guidelines-on-transboundary-msp-output-data-structure-2-2/>)
- the MSP INSPIRE data model developed by the MarSP Project ([http://www.geoportal.ulpgc.es/atom/download/MSP\\_INSPIRE\\_data\\_model\\_guidance\\_v1.0.pdf](http://www.geoportal.ulpgc.es/atom/download/MSP_INSPIRE_data_model_guidance_v1.0.pdf))

Both solutions follow INSPIRE principles, albeit applying slightly different approaches. The group is working to find a ‘bridge’ that can include both solutions, that can subsequently be used for developing a pan-European MSP plan map layer.

#### Agreed next steps from the 1<sup>st</sup> TEG-SG2 meeting:

It was agreed that TEG-SG2 participants would prepare the following, that defined this meeting agenda:

- A mapping of existing sea use code lists and dictionaries with EMODnet classification system– Lead: EMODnet Human Activities;
- A draft data model for EMODnet - Lead: EMODnet Human Activities;
- A benchmarking of existing code lists and dictionaries - Lead Andrej Abramic
- An investigation on merging possibilities between the MSP-INSPIRE data model and MSFD data models - Lead Stefano Menegon
- An investigation of the consideration of coastal uses in proposed dictionaries and data models – Lead Alessandro Sarretta

## **1.2 Update from HELCOM-VASAB MSP Data Group meeting (Joni Kaitaranta – Co-Chair):**

There is a need to take into account regional development. HELCOM-VASAB has been working on development of the model for the Baltic Sea. The Group met for a discussion in September 2020. During the meeting, it was agreed that the Data Group should prepare a joint message for the EU MSP Technical Group on Data, in order to enhance the work that has already been done by the Data Group and to look at the data that has been harmonised.

### Main messages:

1. HELCOM-VASAB MSP WG approved the [Guidelines on transboundary MSP output data structure](#), which specify the data model that contains the required information (glossary on *sea uses* and *sea use types*) and simplified data format for data exchange. Applied in <https://basemaps.helcom.fi/> (output data section).

- To have a clear planning focus in the data model;
- Categorising data models according to the sea use types;
- Looking at data classification;
- Looking into the sea use vocabulary; and into the regional context.
- To achieve the level of coherence between different countries.

2. The Data Group looked at the Hierarchical INSPIRE Land Use Classification System (HILUCS) land use classes, which were found to be too generic and not suitable for MSP. As a result, 5 specific types of the sea use attributes were developed as well as glossary of sea use types following the MSP Directive (included in Annex 2 of the Guidelines).

## **2. Proposed EMODnet Maritime Spatial Planning Layer**

### **2.1 Presentation of proposed data model (Jose Santiago, EMODnet Human Activities Portal).** *Presentation available on the [Maritime Forum](#).*

#### EU-wide data set on MSP:

EMODnet Human Activities is mandated to make available a data set with the maritime spatial plans adopted, in accordance with the Directive 2014/89/EU. The plans shown on EMODnet Human Activities need to be: 1) Official plans adopted by the Member States in compliance with the Directive. Any other ‘non-official’ output (e.g. from a cooperation project) might be shown as well, but as a separate data set. 2) Harmonized in terms of nomenclature and symbology.

#### Guidelines - To make information freely available:

- As interoperable layers and data products;
- For all marine data users (i.e. policymakers, scientists, private industry, general public);
- To support policy development and Blue Growth.

#### Model Principles:

- Balance between the model simplicity and inclusion of relevant information (which differs according to the user profile);
- Definition of nomenclature for potential marine uses compatible with the one used in the MSP Directive, the INSPIRE *Land use* theme and the most consolidated MSP platforms and initiatives;
- Visualization that optimizes the harmonization effort for the benefit of potential users and applications.

The team has recently undertaken data model implementation tests with plans and policy documents. The results demonstrate that the data model fits very well. We hope this will create links with other initiatives across Europe. We have a deadline for uploading the information on the website.

*Comment: Andrej Abramic, Co-Chair* - Integrating attributes from the Basemaps (HELCOM-Vasab model) and the MSP INSPIRE Data Model is a good solution and a good way forward for the group. The model looks good, what you have now is at an advanced level. Inputs from the group are welcome.

*Comment: Alessandro Sarretta, Italian National Research Council* - A good input. The first impression on the EML model: probably, some elements (zoning) could be more separated as data (i.e. as codes, types, sea uses). The code list (if not yet listed) could be specified to have a model that can imply advancement in the future. All feature types listed have few attributes like 'country'. Could the zoning element parts of the plans be shared...? It could also be through 3-digit codes that the member state attribute.

*Comment: Marta Ballesteros, EMODnet* - Good to ensure the flexibility of the model. We can give you a week to contact us by email. This would be a good contribution for the model.

*Comment: Joni Kaitaranta, HELCOM Secretariat* - Zoning (attributes: restricted, forbidden) could reduce number of attributes, but for the Baltic model it is necessary to have different attributes on sea uses.

*Comment: Alessandro Saretta, Italian National Research Council* - It's the way for implementation (separate feature and data types).

*Question: Marta Ballesteros, EMODnet* - HELCOM-VASAB is testing coherence across different plans, and we would like to hear more about it. If Joni Kaitaranta could provide more information, it could be of added value for future users. Valuable to be developed for MSs users.

*Answer: Joni Kaitaranta, Co-Chair / HELCOM Secretariat* - We don't yet have data from all Baltic countries. Not all countries use all these classes. There are also differences in how the data model is applied, for example some countries apply only some sea uses (e.g. Priority use). Some countries specify detailed information for each zoning element. Countries undertake their planning differently, therefore flexibility of the data model is required. Coherence analysis of the plan is possible and will be perhaps assessed in the future.

*Comment: Marta Ballesteros, EMODnet* - Allows planning for the future and is good for policymakers.

## **2. Benchmarking of Maritime uses Code Lists (Andrei Abramic).**

A Code List represents a list of valid codes and decoded values for a variable (controlled vocabulary). A Code List aims to ensure that data values comply with controlled terminology, to avoid issues of semantics and to increase interoperability (data bases, GIS, SDI, geo-portals etc.). The idea of the maritime activities Code Lists is to allow data providers and data users to have control of terminology. While the importance of Code Lists is significant, they are usually planned with insufficient detail. Within MSP maritime activities, a Code List is important to correctly map the maritime activities (include all requested categories); make MSPs comparable (interoperable classification of the maritime uses); and define (standard) portrayal based on code list - Styled Layer Descriptor (SLD).

The presentation included identifying field code lists in maritime activities and the variations in them between different data models. *Presentation available on [Maritime Forum](#).*

## **4. Investigation of merging possibilities between the MSP INSPIRE Data model and MSFD Data Models including aspects on land-sea interactions**

***Stefano Menegon (Italian National Research Council):*** We started investigating the MSP INSPIRE data model. The new classification system was introduced to cover MSP needs for the marine part. As a second part, we investigated the marine strategy: good environmental status through 11 descriptors that can be split into 2 parts (pressures originated from human activities and those that incorporate

environmental components). Three main elements of human activities: human activities, anthropogenic pressures and ecosystem elements. Each has additional classifications.

Then we investigated the INSPIRE Model and MSFD (see also [Abramic et al. 2018](#)). Our idea is to introduce the concept; to bridge the gap between the science and decision-making. A good approach to put everything together; to summarise activities for the next months. Cumulative Effect Assessment (CEA) as a linking element between MSP and MSFD. A possible merging approaches. An additional value for MSP process.

*Presentation available on [Maritime Forum](#).*

**Alessandro Saretta (Italian National Research Council): Land-Sea Interactions in the context of Code Lists, data categories:** Usually data categories stop at the coastline. The idea was to consider pressure generated on land. These considerations are related to input data rather than output data.

- This was an attempt for comparison of MSP data categories. The activities and uses (coastal protection, biological/physical/chemical information is usually not included; usually there is other information that can be considered).
- Connection with MSFD (whether these elements are connected with coastal environment; relation with physical disturbance; cultivation of living resources; transport).
- Coastal/land data related to MSP (agriculture, urban etc)
- An attempt to look at marine-related: “INSPIRE data specification related to marine topics”.
- Summary and next steps: reach existing Code Lists. Try to incorporate MSFD considerations and Land-Sea Interactions into INSPIRE data model. Enrich these areas.

*Presentation available on [Maritime Forum](#).*

*Comment: Andrej Abramic, Co-Chair -* Using the CEA as a bridge is a very good idea. We use the CORINE Land Cover data set. We could try to investigate the Land-Sea Interactions further.

*Comment: Stefano Menegon, Italian National Research Council -* From the CEA perspective, the interaction between the marine environment and other aspects is a good way to take into consideration, when linking land/sea. Using the CORINE Land Cover is a good way, but maybe is better to use the *marine stressors* definition

*Comment: Kees Borst, Senior Advisor for Rijkswaterstaat, NL -* Good idea to bridge MSFD and MSP, it’s the right direction.

*Comment: Joni Kaitaranta, Co-Chair / HELCOM Secretariat –* In the planning process, CEA can be used when preparing the plan and running different scenarios for testing environmental effects of preliminary plan. This is related to the MSP preparation process and the kind of data needed for the MSP process.

*Question: Andrej Abramic, Co-Chair -* Was there testing of Code List classification in different countries?

*Answer: Alessandro Petitto, EMODnet –* It was tested among different countries.

*Answer: Jose Santiago, EMODnet -* The model is flexible enough to include all official plans around Europe.

## **Conclusion & wrap-up**

### **Synthesis of discussions**

*Comment: Alessandro Petitto (EMODnet)* - We have a deadline (and a contract) until March 2021. If we could set up an internal deadline for approving the data model by the end of November, this would be helpful. We could then publish the model before March 2021.

*Comment: Kees Borst (Senior Advisor, Rijkswaterstaat NL)* - Practical recommendations to the Member States on how to deal with it if not possible to reach harmonisation.

*Comment: Andrej Abramic (Co-Chair)* - One of the options would be to organise a training.

*Comment: Kees Borst (Senior Advisor, Rijkswaterstaat NL)* - It would be useful to have a “high-level document”, for people responsible for the maritime spatial plans, on how to deal with these models. This would be helpful for those who do not understand the details. Most of the people only use GIS layers and it is not certain if it will be possible to make use of all these templates and models. From the practical point of view, it might be useful to have some kind of instructions. - Providing an Executive Summary with solutions could be an option.

*Comment: Andrej Abramic (Co-Chair)* - A “high-level document” should be developed in the following months (as soon as possible and before March 2021).

*Comment: Joni Kaitaranta (Co-Chair / HELCOM Secretariat)* - This should be a document developed at the EU level for the countries to follow and to justify the work.

### **Ways forward (next steps)**

- Participants are requested to provide feedback to the EMODnet proposed data model by the 30th November
- Next meeting proposed for January / February 2021 at which we hope to accept the finalised data model.
- Thanks for the interesting explorations. There is MSEG group meeting on 19 November to pass it further to the member states. – Anja Detant, EASME.