

D25 (D2.22)
Report of Technical
Workshops
IV workshop

ACKNOWLEDGEMENT

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MSP-MED | 4th Technical Workshop

9th of July 2021

Introduction

From data to knowledge. Supporting adaptive management in MSP

Data availability and data sharing are key enabling factors with very practical outcomes that influence the whole planning process: from the initial phases to the monitoring and reviewing of the plans. Since the 2016-2017 *MSP Data study* undertaken on behalf of DG MARE, national plans in the EU have come a long way, the problem of retrieving, implement and share data

has become very relevant during the plan advancements of 2021, to meet the European deadline, and more so because of the need for future plan monitoring and reviewing.

Many events have already tackled the topic in a general way; this workshop aims, therefore, at a more concrete approach, by supporting *WP 3 Data Use and Sharing* and by helping in the identification of current data weaknesses and lacks of information, in producing guidelines and paving the way to a coordinated use of data among the partners and, in a future perspective, in the Mediterranean basin.

Why is it important to tackle this topic?

It is a requirement of the ‘MSP Directive’ to take “best available data” into account when preparing maritime spatial plans. In fact, the EU Directive 2014/89/EU makes several references to this use of data:

- Art. 6, as part of minimum requirements for Member States that must “organise the use of the best available data in accordance with Article 10”
- Art. 10, “Data use and sharing” is dedicated to the type of data to be included (section 2) and specify a number of tools to be used to organize the use and sharing of data, including the tools available under INSPIRE Directive (sections 1 and 3).

The INSPIRE Directive (2007/2/EC) was conceived for the establishment of a common Infrastructure for Spatial Information in the EU and has also several references to the sharing of data:

- Art. 17, states that “each Member State shall adopt measures for the sharing of spatial data sets [...] Those measures shall enable those public authorities to gain access to spatial data sets and services, and to exchange and use those for the purposes of public tasks that may have an impact on the environment.”
- Art.18, dealing with national coordination: “Member States shall ensure that appropriate structures and mechanisms are designated for coordinating, across the different levels of government, the contributions of all those with an interest in their infrastructures for spatial information.”

Another recent European document, *The Communication from the commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions on a new approach for a sustainable blue economy in the EU transforming the EU’s Blue Economy for a Sustainable Future* (COM(2021) 240), presented a short overview of European data collection and sharing enablers (EMODnet, Copernicus, EUMOFA, Blueindicators) while drafting a roadmap in the field (the 2022 Ocean Observation,

the 2021 Blue Economic Observatory, expansion of Copernicus marine services, creation of methodology for integration of natural capital in economic decision, investment in modelling for monitoring) and stating once more that:

“Reliable, high-quality and harmonised ocean data are the prerequisite for a sustainable transformation of the blue economy. Better knowledge of the ocean and its ecosystems, together with free access to data, will enable industry, public authorities and civil society to make informed decisions.” (p.12)

“Socio-economic data are important inputs for policy makers and for businesses, who have to make snap decisions in a rapidly evolving environment, especially in times of crisis.” (p.11)

Furthermore, an efficient way of retrieving, sharing and presenting data is not only an institutional requirement: in MSP, these are key activities that directly influence the quality of the planning actions and processes, determining the effects of the plans.

Data availability and sharing, in an adaptive management perspective, can lead to data use benefiting the entire planning process, as well as enhancing transboundary planning coordination.

What are the objectives of this fourth MSP-MED technical workshop?

This workshop will build on European and international experiences (SIMWESTMED, SUPREME, BalticSea Basemap) and will be an opportunity to share among the partners the national approaches to data identification and classification.

This is also the occasion to present and discuss with project partners and planning authorities the work carried out by the internal WP3 Data Working Group: in June, July and September 2020 three meetings took place to set a common road to the accomplishment of WP3.1. A survey was issued in the following months to assess data use approaches across national processes.

The main goal of this workshop is to exchange information on the different approaches undertaken for increasing availability and sharing of data used and generated within the national maritime planning processes of Mediterranean countries. This would help to harmonize data uses towards an adaptive management of MSP that cannot be achieved without the usage of updated data. Furthermore, data harmonization has proven to be

greatly useful in the management of other basins and is therefore a desirable outcome for the Mediterranean Sea.

What should be addressed during this fourth technical workshop?

Giving the multiple aspects of data use that could be addressed, the event will be subdivided as follow: (1) greetings, (2) a round-table aimed at sharing best practices issued from past projects and national plans; (3) three sessions, aimed at sharing and discussing more in detail the national approaches to data uses, divided in three main topics: a) Acquisition of relevant data for MSP-Data Input, b) Use of data in MSP-Data Output, c) Beyond data-Towards an adaptive management; (4) Conclusions.

1) Guest institutional overview

Guest institutions can give an overview of current European tools and approaches (EMODnet, TEG on MSP data, the INSPIRE Directive and the relative achieved general compliance) and present processes where data has already been employed in the full planning process, hence happening in countries where plans have already entered the monitoring and reviewing phase. The main experiences would be the Baltic one (HELCOM) which resulted in the Basemap tool, and the Scottish, national one.

The HELCOM Basemap tool (<https://basemaps.helcom.fi/>) is an interesting example of interactive tool presenting both input and output data in an entire basin, involving transboundary cooperation. This might also be of inspiration for an international Mediterranean platform.

Scotland has fully implemented a national maritime plan and reviewed it in 2018. The Scottish online tool (<https://marinescotland.atkinsgeospatial.com/nmpi/>) is therefore a rather complete example of a technical tool that can support planners and stakeholders, having both input and output data layers. The sharing of the Scottish experience can represent a best practice for countries at earlier stages of plan development.

Questions for guest institutions:

EMODnet:

- Overview and brief description of all the services provided by EMODnet, supporting MSP processes.
- How can EMODnet support adaptive management and continuous monitoring of maritime plans?
- How does EMODnet work for the harmonization of data in a uniform way between different bodies and national approaches?
- How is EMODnet's work reflected in the planning and management of the marine and coastal areas? (How is the data being transferred into knowledge?)

HELCOM:

- How were data input and output dealt with, in planning the Baltic (taking into account national but especially transnational levels, e.g. sharing data among EU and Non-EU countries) and resulting in the Basemap tool?
- How was data shared with and presented to stakeholders and the public, with which results/feedback?
- How do data and Basemap enable monitoring and adaptive management in the Baltic?

Scottish National Authority:

- How data was collected, gathered and processed to inform plan making (decision, consultation...) : environmental data, socio-economic data, administrative data (which are not the easiest to collect actually).
 - How was data shared with and presented to stakeholders and the public?
What were/are the feedbacks
 - How were data input and output dealt with in creating the online tool?
 - How does this national approach enable monitoring and adaptive management?
- How was data collected from other institutions? (i.e., data flows) which were the main challenges while doing that?

2) Three round tables on key topics

This matter can be tackled from three main sub-issues.

Each sub-topic will be introduced by the MSPMED Data Group presenting the project's efforts in that regard.

The objective of the sessions is to enable national authorities and partners to share on national approaches:

- a. *Acquisition of relevant data for MSP-Data Input*
- b. *Use of data in MSP-Data Output* (sharing, exchange, interoperability)
- c. *Beyond data-Towards an adaptive management: Translating data into information and knowledge through monitoring evaluation, as well as in public awareness building*

Question for national authorities/partners on national approaches:

- a. Acquisition of data for MSP-Data Input:
 - Have national programmes of data collection and standards for data harmonization been established specifically to support MSP?
 - Where does the data come from in each MSP national plan?
 - Are sources of data pre-existing (secondary) or are they derived from direct MSP-based research?
 - What are the prospects for a transboundary dimension?
 - How to deal with data coming from economic stakeholders (produced by professional organisations)?
 - Are programmes collecting data from the public or involving the public, in place (e.g., citizen science)?
- b. Use of data in MSP-Output Data (sharing, exchange, interoperability)
 - What is the stage of national initiatives and tools for sharing and using the data (e.g. national portals)? What is the final objective of the tool? What is the degree of sharing (i.e., visualization, download, processing)?
 - How did they take into consideration international standards and European directives? Will the data portal be translated into other languages?
 - How can data be translated or presented in a way that can be useful to stakeholders and the public? Is the information addressed in order to be easy to understand? Will feedback be collected to foster a bottom-up approach?

c. Beyond data-Towards an adaptive management: Translating data into information and knowledge through monitoring and public awareness

- Is there a specific strategy to inform the public, beyond spatial data and technical reports?
- How will data be implemented into monitoring and review of plans at national level?
- How will the plans' data be presented to the public? Will feedback be collected to foster a bottom-up approach?

Programme

Programme	
09:30	<p>Introduction and greetings (5 min each):</p> <p>MSPMED: <i>Pierpaolo Campostrini</i> (CORILA)</p> <p>DG MARE: <i>Céline Frank</i></p> <p>MSP Platform and TEG on MSP data: <i>Andrej Abramic, Clement Dupont</i></p>
09:50	<p>Presentations by guest institutions (15 min each)</p> <ul style="list-style-type: none"> - EMODnet (<i>Jose Santiago</i>) - HELCOM (<i>Joni Kaitaranta</i>) - A national example: Scotland (<i>Drew Milne & Bruce Buchanan</i>)
10:35	Virtual Coffee Break
11:00	<p>Introduction by the MSPMED Data Working Group (<i>Alessandro Sarretta-CNR</i>) 15min</p> <p>3 Sessions on separate sub-topics (Plenary, average 45 min each):</p> <ul style="list-style-type: none"> - <i>Acquisition of data for MSP-Data Input</i> 5min (max) presentation of each national approach (30min total) Discussion (15 min) Proposed facilitator: Alessandro Saretta (CNR) Proposed rapporteurs: Federico Fabbri, Folco Soffietti (IUAV) - <i>Use of data in MSP-Data Output</i> (sharing, exchange, interoperability) 6 min (max) presentation of each national approach (36 min total) Discussion (15 min) Proposed facilitator: Cristina Cervera (IEO) Proposed rapporteurs: Federico Fabbri, Camille Assali (IUAV-OFB) - <i>Beyond data-Towards an adaptive management: Translating data into information and knowledge through monitoring and public awareness</i> 5 min (max) presentation of each national approach (30min total) Discussion (15 min) Proposed facilitator: Armelle Sommier (Shom) Proposed rapporteurs: Camille Assali, Federico Fabbri (OFB-IUAV)

13:00	Debriefing and conclusions

Order of presentation per country in part 2

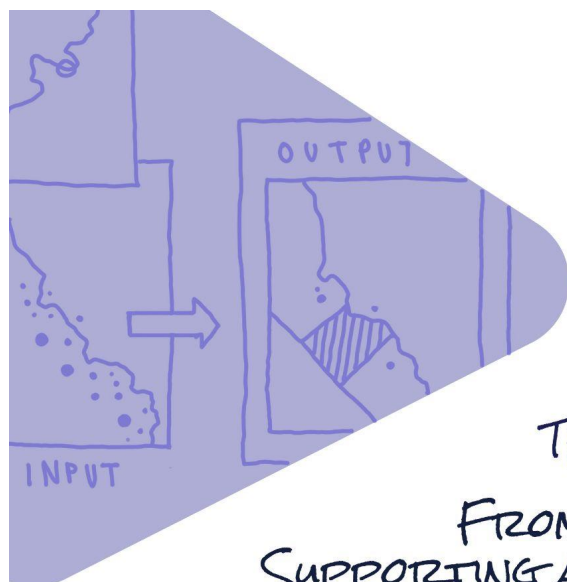
Italy, Spain, France, Greece, Malta and Slovenia

Participants

MSP-MED Partners	
CORILA -IUAV-CNR	<i>Pierpaolo Campostrini, Daniele Brigolin, Federico Fabbri, Fabio Carella, Folco Soffietti, Hadi El Hage, Alessandro Sarretta, Amedeo Fadini</i>
PA	<i>Michelle Borg, Alexia Vella, Elaine Camilleri, Elaine Sciberras</i>
Shom	<i>Armelle Sommier, Dominique Carval, Clara Zimmer, Alan Quentric, François Virevialle</i>
OFB	<i>Neil Alloncle, Camille Assali</i>
RRC Koper	<i>Slavko Mezek</i>
UTH	<i>Evangelos Asprogerakas, Panos Manetos, Harry Coccossis</i>
YPEN	<i>Efi Stefani</i>
IEO	<i>Cristina Cervera Núñez</i>
MSP Competent Authorities	
Ministry of Transports and Infrastructures (Italy)	<i>TBD</i>
Ministry for the Sea (France)	<i>Maïté Verdol</i>
MSP Technical Committee (Malta)	<i>Ivan Fava</i>
Ministry of Environment and Energy (Greece)	<i>Foteini Stefani, Elena Lalou, Evgenia Lagiou</i>
Ministry for the Ecological Transition and the Demographic Challenge (MITERD) – DG for the coasts and the sea (Spain)	<i>Aurora Mesa Fraile</i>
Other Institutions	
European Commission – DG MARE	<i>Céline Frank</i>

MSP Platform	Andrej Abramic
TEG on MSP data	Clement Dupont
Emodnet	Jose Santiago
HELCOM	Joni Kaitaranta
Scottish Government, Marine Planning Unit	Drew Milne, Bruce Buchanan
Ifremer	Antoine Huguet
CEDEX	Carla Murciano Virto

The Workshop



Co-funded by the European
Maritime and Fisheries Fund

#4

TECHNICAL WORKSHOP
FROM DATA TO KNOWLEDGE.
SUPPORTING ADAPTIVE MANAGEMENT IN MSP
GRAPHIC MINUTES BY FOLCO SOFFIETTI

ONLINE MEETING
09:30 - 13:30 (CET)

09-07-2021



Introduction and Greetings

GREETINGS

PIERPAOLO CAMPOSTRINI
(CORILA-MSPMED COORDINATOR)

MSPMED WISHES TO SUPPORT DATA HARMONIZATION AMONG EU AND NON-EU MEMBER STATES. IT IS CRUCIAL TO SHARE DATA AT THE MEDITERRANEAN LEVEL.

IN ORDER TO ACHIEVE THAT JOINT ACTION WITH EMODNET, WESTMED AND MSPGLOBAL IS FORESEEN.

WESTMED

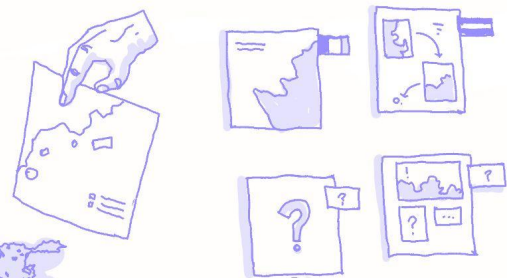
msp
global

EMODnet

GENERAL FACILITATOR
HADI EL HAGE

● CLEMENT DUPONT FOR MSP PLATFORM

DATA COLLECTION AND SHARING ARE KEY ASPECTS. THERE IS A HETEROGENEOUS SITUATION AMONG MEMBER STATES: SOME MEMBER STATES DON'T HAVE COMPREHENSIVE BACKGROUND DATA.



ANDRÉS ABRAMIC (ULPGC) – EU TECHNICAL GROUP ON ANALYSIS DATA

● DR CÉLINE FRANK FOR DG-MARE
DATA AND KNOWLEDGE WAS SHARED IN THE EU THROUGH DIFFERENT INITIATIVES (E.G. EMODNET) AND LEGISLATIVE ASSETS (INSPIRE), AND IT IS A MAIN ASPECT OF THE EU BLUE ECONOMY INITIATIVE.

AT EUROPEAN LEVEL THERE ARE THREE MAIN FRAMEWORKS CONSIDERED FUNDAMENTAL TO FOSTER KNOWLEDGE AND DATA SHARING ON MARINE MANAGEMENT: THE MSP FRAMEWORK, THE SEA BASIN STRATEGIES AND THE OCEAN LITERACY RELATED INITIATIVES.

HOW TO DEVELOP COMMON EU MSP LAYERS IN VIEW OF MARCH 2021 DEADLINE?

BUILD ON PAST EXPERIENCES: THE MSP INSPIRE DATA MODEL FROM MARSP PROJECT AND THE EMODNET MSP

MODEL DATABASES WERE DEVELOPED. RECOMMENDATIONS FOR DATA SHARING WERE ALSO PROVIDED

The meeting was attended by an average of 40 people, and started with **Hadi El Hage (IUAV)** introducing the meeting schedule.

Official greetings were started with **Dr. Pierpaolo Campostri (CORILA)**, Project Coordinator of MSPMED, where he reminded the importance of data as a Key Enabling Factor and expressed the intention of MSP-MED to help the coordination among Mediterranean countries. He also emphasized the support of data harmonization in the basin, considering both EU and non-EU Member States.

Initiatives such as EMODnet, WESTMED and MSP Global play a key role to enhance knowledge and data harmonization and MSPMED is willing to join and support them since data sharing at Mediterranean level is crucial.

Celine Frank (DG MARE) highlighted the importance of data and knowledge sharing in the EU framework through different initiatives (e.g. EMODNET) and legislative assets (INSPIRE) since data sharing is also crucial to support sustainable blue economy and, as such, it is a main aspect of the EU blue economy initiative.

She recalled that an EU Blue forum is being put in place to discuss with different sectors on information sharing in the framework of MSP and that at European level there are three main frameworks that are considered fundamental to foster knowledge and data sharing on marine management: The MSP framework, The SEA BASIN STRATEGIES and The OCEAN LITERACY related initiatives.

Clement Dupont (MSP Platform) recalled the work and role of the TEG and its effort in supporting the European Commission and the member states to implement MSP since data collection and sharing are key aspects. He also acknowledged that there is a heterogeneous situation among member states: some member states still have many challenges to have comprehensive background data.

Andrej Abramic (ULPGC) from the EU Technical Expert Group on MSP Data explained that the group kicked off in April 2020, from previous initiatives a proposal was created for making MSP plan data harmonized available across Europe. Especially it focused on the input data needs; and how to develop common EU MSP layers in view of the March 2021 deadline (MSP Directive).

Andrej explained the main past initiatives to support this work were the Basemaps information system developed by HELCOM-VASAB, and the MSP INSPIRE data model from MarSP project. EMODNET MSP Model databases were developed bridging two operative data models by EMODnet HA team, with support of Technical Expert Group on MSP data. This was to develop and discuss a proposal for making the MSP Plan data harmonized and available across Europe. Recommendations for data sharing were also provided.

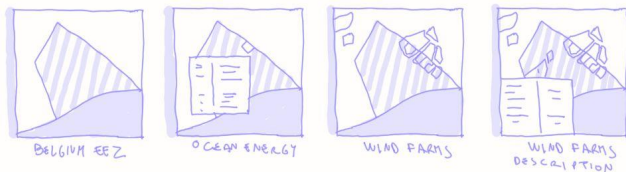
Also, he mentioned that TEG should discuss and deal with still pending topics related to the MSP data management. 5 main topics were identified for MSP data management: a) effective data management of the data in the framework of the Marine Strategy Framework Directive (MSFD) and the MSP Directive b) metadata standard for MSP plans (EU data catalogues); c) Network services for MSP; d) MSP data framework for monitoring of the plans efficiency; e) assessment of the socio-economic impacts.

Presentations by Guest Institutions

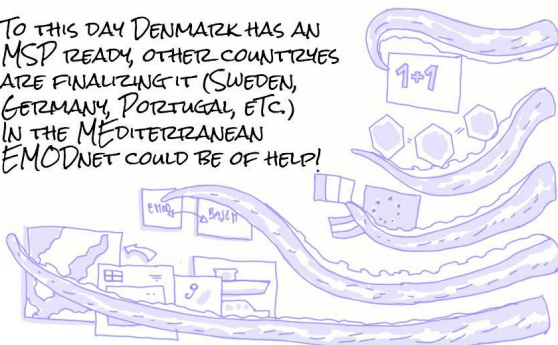
JOSE SANTIAGO-EMODNET

SEVEN PORTALS ARE AVAILABLE ON THE PLATFORM, FOR INSTANCE ONE IS DEDICATED TO HUMAN ACTIVITIES WITHIN THE MSP DATASETS WHERE MORE THAN 60 LAYERS OF DIFFERENT TYPES OF HUMAN ACTIVITIES CAN BE FOUND.

MSP DATA MODEL TO HARMONIZE DATASETS, THERE ARE DIFFERENT TYPES OF FORMS : SPATIAL ELEMENT (LIMITS OF THE PLANS AND TWO COMPLEMENTARY TOOLS : REGULATION AND DOCUMENTATION, GIVING MORE DETAILS TO THE PLANS) AN EXAMPLE ARE THE MAPS OF MARITIME TRANSPORT IN BELGIUM.



TO THIS DAY DENMARK HAS AN MSP READY, OTHER COUNTRIES ARE FINALIZING IT (SWEDEN, GERMANY, PORTUGAL, ETC.) IN THE MEDITERRANEAN EMODNET COULD BE OF HELP!



EMODNET THEMES WERE HARMONIZED WITH MSP DIRECTIVE CLASSIFICATION. CURRENT ACTIVITIES AT SEA CAN BE REPRESENTED WITH MSP LAYERS (E.G. CULTURAL HERITAGE)

ADVANTAGES OF EMODNET:

- SIMPLICITY: USABILITY WITHOUT GIVING UP RELEVANT INFORMATION.
- HARMONIZATION: A NOMENCLATURE COMPATIBLE WITH THE MSP AND INSPIRE DIRECTIVES.
- INTEGRITY: THE ORIGINAL MSP OF EACH MEMBER STATE AND THE HARMONIZED MSP ARE VISUALIZED AT THE PLATFORM.
- COMPATIBILITY: CAPABILITY TO INTERLINK WITH OTHER MSP MODELS.
- VERSATILITY: TO VISUALIZE AND COMPARE ACROSS COUNTRIES, USES AND ACTIVITIES.

Jose Santiago (CETMAR) presented the European Marine Observation and Data Network (**EMODnet**). Among the seven portals available on the platform, the presenter gave an insight on the one dedicated to human activities within the MSP datasets where more than 60 layers of different types of human activities can be found.

A MSP data model is used to harmonize datasets. There are three types of information : MSP Spatial Planning (main spatial element: limits of the plans) and two complementary tools, the MSP Supplementary regulation and the MSP Official documentation (giving more details to the plans).

MSP Spatial Planning: the main spatial element. It establishes the policies, priorities, programs and land allocations that implement the strategic direction of a given geographic area and influences the distribution of people and activities in spaces of various scales. It is a spatial feature.

MSP Supplementary Regulation: documentation, defined mainly in regulations, reporting on existing limitations in the use of land in a given area. Consequently, it is a non-mandatory spatial feature.

MSP Official Documentation: all the documentation, included in the regulation or other official sources, that defines the 3 previous feature types. This is a non-spatial feature, and therefore will not be represented graphically in the EMODnet geoportal.

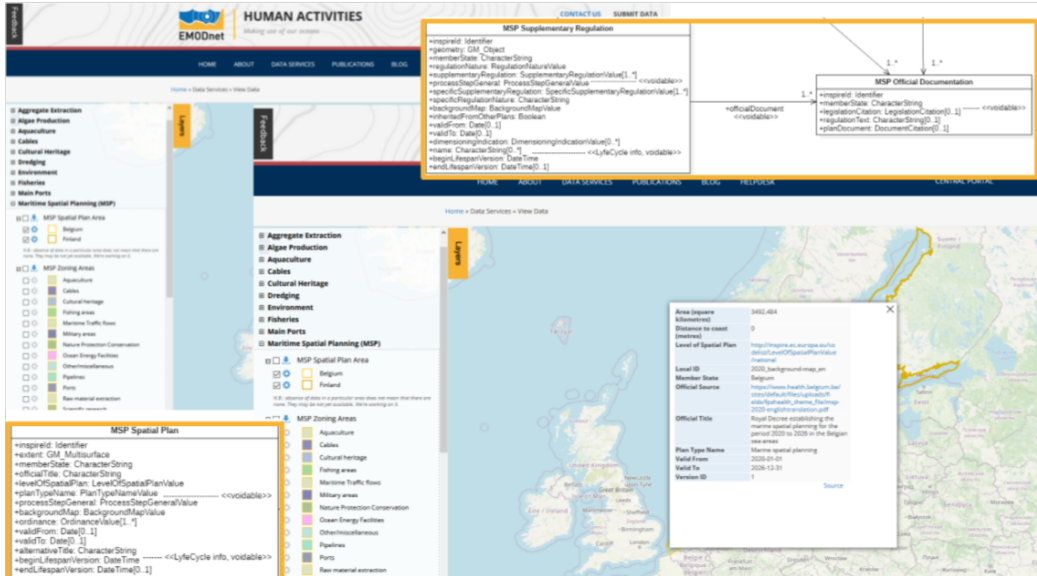
Examples of maps were provided by the presenter, for instance maps of maritime transport in Belgium. The presenter highlighted the harmonization effort that has been conducted, e.g. through classification of marine uses, where EMODNet themes were harmonized with MSP directive classification.

Furthermore, in EMODnet, current activities at sea can be represented with MSPlans, as illustrated by several examples (cultural heritage in Finland - combination of planning activities and current activities; natural heritage- no spatial conflict between nature protected areas and activities in the Channel; etc.)

Advantages of EMODnet consists in simplicity, harmonization, integrity (original and harmonized MSP are visualized in the platform), compatibility (capability to interlink with other MSP models) and versatility (e.g. to visualize and compare activities and uses across countries).

Plans for Finland and Denmark (almost uploaded) have already been received. The presenter concluded by encouraging the sharing of plans and their inclusion in the EMODNet portal.

Below are some screenshots taken from the current EMODnet Portal, demonstrating how the data is accessible and visualized on the portal.



The screenshot displays the EMODnet portal interface. On the left, a sidebar lists various data categories under 'HUMAN ACTIVITIES', including Aggregate Extraction, Algae Production, Aquaculture, Cables, Cultural Heritage, Dredging, Environment, Fisheries, Main Ports, and Maritime Spatial Planning (MSP). The main area shows a map of the North Sea with various spatial planning areas highlighted. A pop-up window titled 'MSP Spatial Plan' displays detailed metadata for a specific plan, including its identifier, member state, official title, and various dates. Another pop-up window titled 'MSP Supplementary Regulation' shows similar metadata for a regulation. A third pop-up window titled 'MSP Official Documentation' displays the official documentation for a specific plan, including its identifier, member state, official title, and various dates.

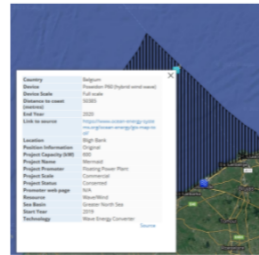
- Visualize current activities



Belgium EEZ



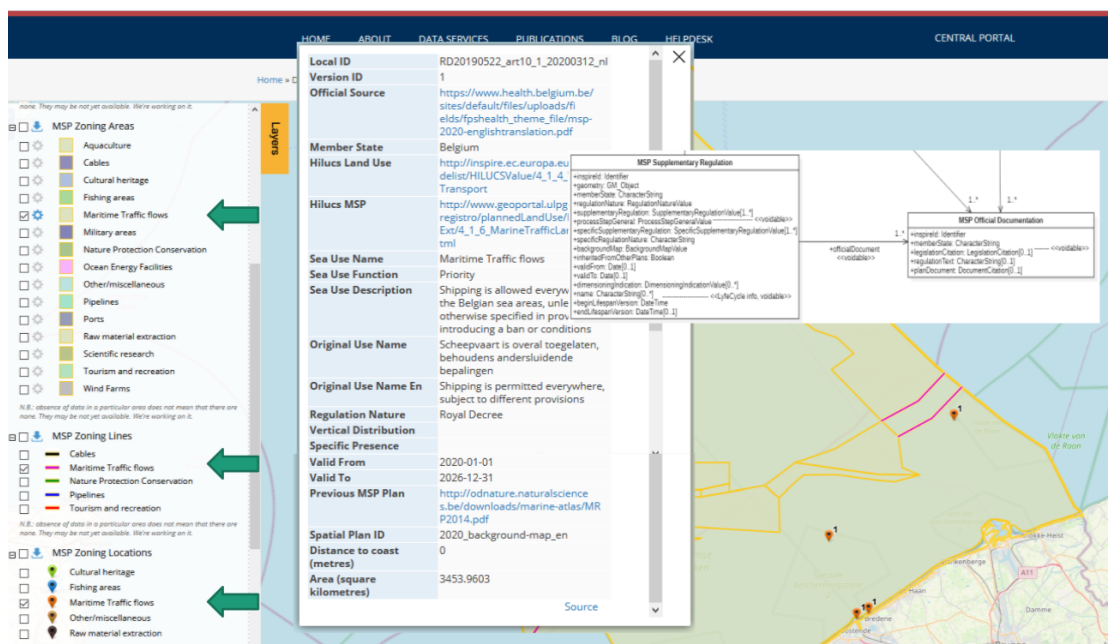
Ocean energy



Ocean energy (with description)



Wind-farms



The screenshot displays the MSP Med web application interface. On the left, there is a sidebar with a 'Layers' panel containing various MSP Zoning Areas and Lines. The main map area shows a coastal region with various zoning boundaries. A data table is overlaid on the map, displaying details for a specific regulation. The table includes fields such as Local ID, Version ID, Official Source, Member State, Hilus Land Use, Hilus MSP, Sea Use Name, Sea Use Function, Sea Use Description, Original Use Name, Original Use Name En, Regulation Nature, Vertical Distribution, Specific Presence, Valid From, Valid To, Previous MSP Plan, and Spatial Plan ID. A detailed view of the 'MSP Supplementary Regulation' is also shown, including its identifier, member state, and various regulatory details.

Field	Value
Local ID	RD20190522_art10_1_20200312_nl
Version ID	1
Official Source	https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/msp-2020-englishtranslation.pdf
Member State	Belgium
Hilus Land Use	http://inspire.ec.europa.eu/delists/HILUCSValue/4_1_4_Transport
Hilus MSP	http://www.geoportal.ulbpijregisro/plannedLandUse/Ext/4_1_6_MarineTrafficL.html
Sea Use Name	Maritime Traffic flows
Sea Use Function	Priority
Sea Use Description	Shipping is allowed everywhere in the Belgian sea areas, unless otherwise specified in provisions introducing a ban or conditions
Original Use Name	Scheepvaart is overal toegelaten, behoudens andersluidende bepalingen
Original Use Name En	Shipping is permitted everywhere, subject to different provisions
Regulation Nature	Royal Decree
Vertical Distribution	
Specific Presence	
Valid From	2020-01-01
Valid To	2026-12-31
Previous MSP Plan	http://odnature.naturalsciences.be/downloads/marine-atlas/MR-P2014.pdf
Spatial Plan ID	2020_background-map_en
Distance to coast (metres)	0
Area (square kilometres)	3453.9603

The second presentation, by **Joni Kaitaranta (HELCOM)**, focused on BASEMAPS - “A map and data portal for relevant MSP data in the Baltic Sea Region”.

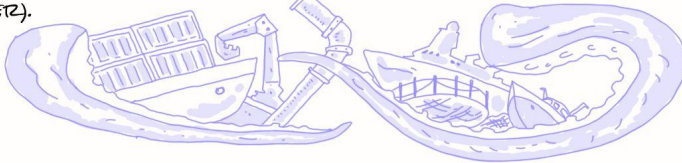
JONI KAITARANTA-HELCOM

BASEMAPS - A MAP AND DATA PORTAL FOR RELEVANT MSP DATA

HELCOM-VASAB MSP WORKING GROUP (2010) - MAKE SURE THAT MSP PRODUCTS WILL BE COHERENT IN THE BALTIC SEA

BALTIC LINES PROJECT: MSP DATA SHARING PLATFORM - MAKE USE OF EXISTING DATA SERVICES

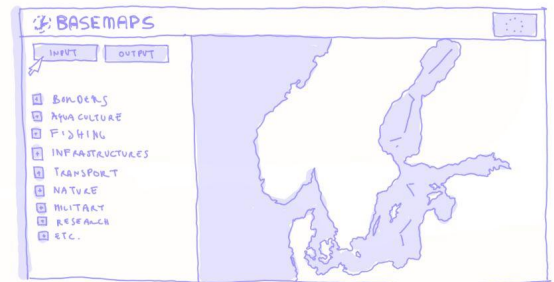
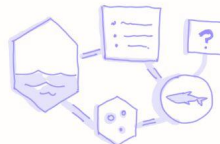
HELPED GATHER ALL THE RELEVANT MSP RELATED DATA IN THE BALTIC AND PRESENT THEM (INPUT DATA ONLY, INITIALLY, OUTPUT DATA ADDED LATER).



SOME LESSONS LEARNED: FOR ALL THE TOPICS LISTS IN MSP DIRECTIVE, THERE IS NO SERVICES AVAILABLE FOR ALL THEMES AND ALL COUNTRIES -> SUPPLEMENT WITH STATIC DATASETS THAT HELCOM CAN OFFER

CATEGORIZATION AND CLASSIFICATION OF DATA HAS SEMANTIC PROBLEMATICS -> DATA IS PUBLISHED AS IT IS WITH NO COMMON AGREEMENT ON DATA HARMONIZATION (ATTRIBUTES, ETC.)

WHAT IS MSP RELEVANT?
UPDATE DATA AND DATA SOURCES IS A CONSTANT EFFORT (WHILE THE DATA IS NOT STORED DIRECTLY BUT LINKED TO SOURCES)



IT SUMMARIZED THE INPUT DATA THAT IS AVAILABLE, BUT DOES NOT CONTAINS ALL DATA USED IN PLANNING (ONLY PART OF THEM, E.G. ECOLOGICAL DATA) IT COULD ENHANCE/FACILITATE TRANSBOUNDARY REPRESENTATION AND COHERENCE

FOR USERS, THE TOOL REPRESENTS A FIRST WAY TO CONSIDER EXISTING DATA, BEFORE GETTING MORE IN DETAILS WITH A DIRECT ACCESS TO THE DATA PROVIDER

THE VALUE IS THAT ALL PLANS ARE NOW GATHERED AND CAN BE REPRESENTED IN A SINGLE MAP.

Since 2010, the HELCOM-VASAB MSP Working Group was established to ensure cooperation among the Baltic Sea Region countries for a coherent regional MSP.

Since 2015, the MSP Data Expert Sub-group, under HELCOM-VASAB MSP WG, supports data, information and evidence exchange (e.g. harmonization) for MSP processes with regard to cross-border/transboundary planning issues.

In the BalticLines project (2016-2019) existing national MSP related data services (map services, feature services, downloadable resources) were gathered and shared in BASEMAPS map and data portal.

BASEMAPS stores references to the data (but not data copies), and allows the overlay of different datasets, this way it is ensured that the data in BASEMAPS is as up-to-date as on the national data

providers serves. However, there are no services available for all themes listed in the MSP directive and for all countries. HELCOM thus offers supplementary data services based on the static HELCOM data for some of those gaps.

From experience, categorization and classification of data faces semantic difficulties. Consequently, data is published as it is, with no common agreement on data harmonization (data model, semantics, attributes, etc.). Nonetheless, BASEMAPS seeks to have harmonized INSPIRE data, but does not prohibit other types of data.

Regarding the consideration of MSP relevant information, and because the topic is very broad, selecting what to accept or to leave out remains a real challenge. Updating data and data sources is a constant effort (while the data is not stored directly but linked to sources).

The presenter showed an example of output data from PanBalticScope (priority areas for offshore wind farms). Within the output data section, one can overlay all the plans and sea uses (classified into categories).

The different types of MSP implementation (even at the regional scale) represent a challenge of harmonization, often with different restrictions of uses among MS, etc. In relation to this, multi-use representation is difficult to obtain. A common data model would allow harmonization to a certain extent.

The presenter concluded by answering directly the three questions proposed above, thus adding complementary information :

Input data is summarizing what is available, it does not contain all input data used in actual planning, but part of it. Many transnational datasets were used (e.g.: Shipping traffic (AIS density), ecosystem components, fisheries data) and could facilitate transboundary representation and coherence.

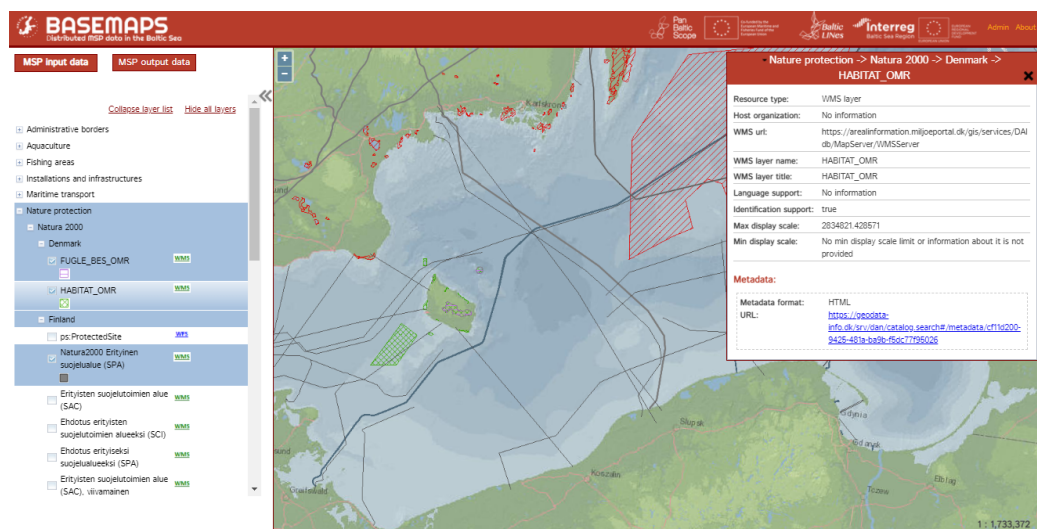
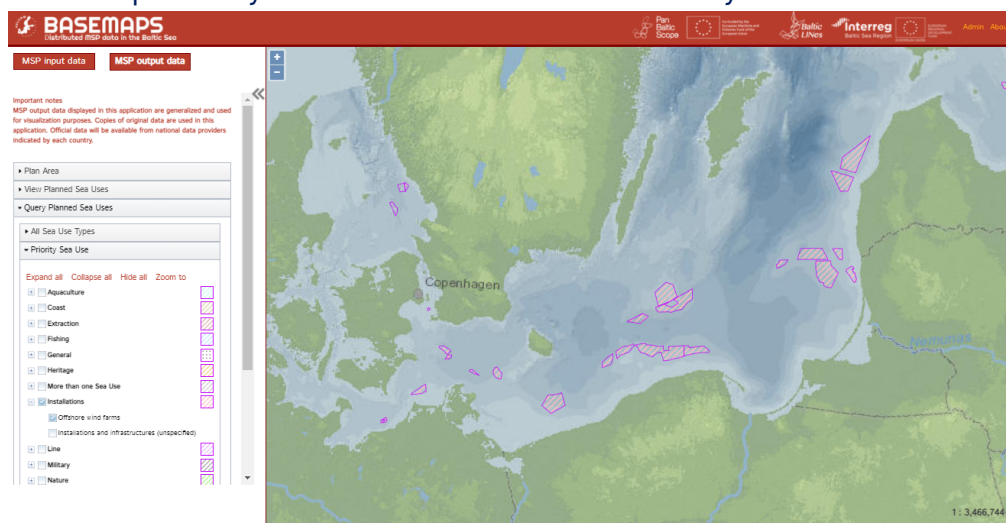


Image of the base maps of the BalticLines project 2016-2019 - Data categories defined by

HELCOM-VASAB MSP Data ESG

- Value of Basemaps is that it catalogues available information on input data and MSP plans. It was shared by promoting it in stakeholder events, workshops, organizing training events etc. For users, the tool represents a first way to consider existing data, before getting more in detail with a direct access to the data provider.
- All plans are gathered and can be represented on one single map, thus giving overview of coherence and possibility to look into national data availability.

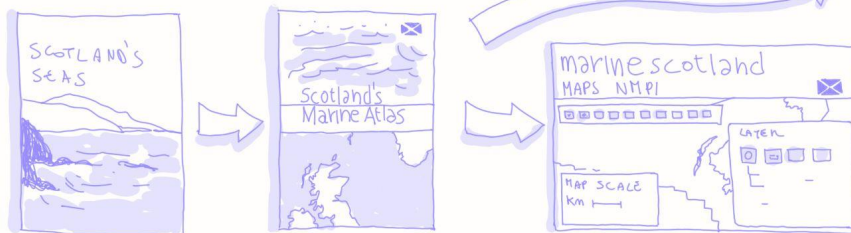


Output data: PanBalticScope project 2018-2019: HELCOM-VASAB Guidelines on transboundary MSP output data structure in the Baltic Sea.

Finally, **Drew Milne and Bruce Buchanan (Marine Scotland)** presented the national example of Scotland. Marine Scotland is part of the Scottish Government and is the planning authority for Scottish waters (management of marine environment - policy e.g. fisheries, licensing activities (except oil and gas), science e.g. research to inform policy). The discussion focused on the two main pieces of legislation, i.e. the Marine and Coastal Access Act (2009) and the Marine Act (2010).

DREW MILNE AND BRUCE BUCHANAN – MARINE SCOTLAND

THREE STEPS CONDUCTED, THE FIRST ONE BEING THE ASSESSMENT WORK BEFORE DRAWING THE MARITIME PLAN, AIMED AT DESCRIBING THE STATE OF SCOTLAND'S SEAS ("SCOTLAND'S SEAS – TOWARDS UNDERSTANDING THEIR STATE"). THE ASSESSMENT REPORT WAS THEN EDITED IN A PUBLISHED SCOTLAND'S MARINE ATLAS, WHICH BECAME THE BASIS OF SCOTLAND'S NATIONAL MARINE PLAN.



THE NATIONAL MARINE PLAN INTERACTIVE (NMPI) IS AN INTERACTIVE MAPPING TOOL TO VISUALISE THE AVAILABLE DATA (POSTGIS SERVER) FOR PLANNING, FOLLOWS DIRECTLY FROM THE MARINE ATLAS, GATHERING MORE THAN 1000 DATASETS.

USERS CAN ALSO FIND A METADATA CATALOGUE.

SCOTLAND'S SEAS, DATA AND ASSESSMENT GROUP MANAGES THE COLLECTION AND COORDINATION OF DATA ACROSS NUMEROUS ORGANISATIONS. ALL DATA USED TO BE MANAGED INDIVIDUALLY, AS SHAPEFILES BUT NOW RELIES MORE ON SERVICES SUCH AS WMS AND WFS.

DATA IS PROCESSED INTO A CONTINUOUS REVIEW AND UPDATE.

MARINE SCOTLAND'S OPEN DATA NETWORK, WHICH IS AN INTEGRATED SYSTEM OF THREE TOOLS LINKED TOGETHER: (1) AN ACCESS TO NON SPATIAL DATA, (2) A LINK TO MAPS, (3) A LINK TO RAW DATA.

THE NATIONAL PLAN IS REVIEWED EVERY 3 YEARS

SCOTLAND'S MARINE ASSESSMENT 2020 PORTAL: OPENDATA NETWORK; ASSESSMENTS FOR EACH OF THE CATEGORIES (MARINE USES) + SUMMARY OF EACH OF THE SECTIONS



Drew Milne mentioned the three steps conducted: the first one being the assessment work, aimed at describing the state of Scotland's seas ("Scotland's Seas - Towards understanding their State"). The assessment report was then edited and published Scotland's Marine Atlas in 2011, the information in the Atlas then became the basis of the National Marine Plan Interactive mapping tool.

National Marine Plan Interactive (NMPI), which is an interactive tool to visualize the available data (PostGIS server) for planning, follows directly from the Marine Atlas, gathering more than 1000 datasets. Among the provided services, users can also find a metadata catalogue.

Scotland's Seas, Data and Assessment Group manages the collection and coordination of data across numerous organisations. all data used to be managed individually, as shapefiles but now relies more on services such as WMS and WFS. Data is processed into a continuous review and update, while effort is made to allow interactions between content and functionalities to a wide audience.

Bruce Buchanan focused on the Marine Scotland's Open Data Network, which is an integrated system four components (1) an access to non spatial data, (2) a link to maps (NMPI) and, (3) a link to raw data and (4) Scotland's Marine Assessment 2020 (SMA2020) portal.

The example of offshore wind farm planning is mentioned, highlighting that for MSP, having all available spatialized information in one place/tool/map represents an obvious benefit.

Scotland's National Marine Plan is reviewed every 3 years and the latest review was undertaken earlier in 2021. This review will allow Scottish Minister to decide, later this year if a new National Marine Plan is required. The preparation of an assessment (SMA2020) of the Scottish marine area was required by legislation to inform that review. The Scotland's Marine Assessment 2020, published in December 2020, summarizes the pressures the marine environment faces and informs policies and planning decisions, such as priority areas. In relation to this process, the SMA2020 portal offers an open data network, providing assessments under a number of categories (Helpful summaries of the assessments are also provided).



marinescotland ASSESSMENT

Scottish Government
Riaghaltas na h-Alba
gov.scot

part of Scotland's environment

Home Literature Marine Scotland Websites - Scotland's Marine Assessment 2020 - Search

Scotland's Marine Assessment 2020

- The SMA2020 has been published on a Scottish Government web portal – The SMA2020 portal is structured around the vision for the seas, with sections on, for example, clean and safe.
- A Headlines and Next Steps summary booklet was published in 2021 with the purpose of summarising all the findings from the SMA2020. The full booklet is available on the [SMA2020 portal](http://marine.gov.scot/sma/).
- <http://marine.gov.scot/sma/>

Scotland's Marine Assessment 2020
Headlines and Next Steps

MSPMED Data Working Group presentation

ALESSANDRO SARRETTA

MSPMED DATA GROUP PRESENTATION

WITHIN MSPMED A GROUP WAS CREATED TO ADDRESS WP 3 (DATA USE AND SHARING).

3 MEETINGS TOOK PLACE AND A LOT OF EMAIL EXCHANGES.

A QUESTIONNAIRE WAS CREATED AND SUBMITTED TO THE PARTNERS TO ASSESS COUNTRIES' POLICIES:

4 MAIN SECTIONS: NATIONAL DATA PORTAL, INPUT DATA, OUTPUT DATA, MONITORING DATA.

THE RESULTS OF THE SURVEY ARE THE FOLLOWING:

THE PORTALS ARE DEVELOPED MULTIPURPOSES, NOT ONLY FOR MSP.

DIFFERENT LEVELS OF ACCESS TO CONTENT BUT ALWAYS PUBLIC ACCESS TO MAIN ELEMENTS

CONTENT IS AVAILABLE IN NATIONAL LANGUAGE ONLY, IT IS CONCEIVED FOR MULTI-USERS

METADATA CATALOGUES ARE AVAILABLE ONLY IN A FEW CASES, REGARDING INPUT DATA, MOST ELEMENTS ARE COMMON TO ALL

ON THE OUTPUT DATA SIDE: AREAS/PLANNING UNITS WERE (AT THE TIME OF SURVEY, BEFORE 2021 DEADLINES) SOMETIMES DEFINED, SOMETIMES UNDER-DEFINITION.

THERE ARE DIFFERENT APPROACHES TO THE TYPE OF ACCESS/USE OF THE AREAS/UNITS, INDICATORS MAPS NOT CLEARLY DEFINED/CONSIDERED AND ALSO MONITORING DATA ARE NOT CLEARLY DEFINED.



The presentation given by **Alessandro Sarretta (CNR)** reported that within MSPMED a group was created to address Work Package 3 - WP3: Data use and Sharing. The goal of this WP is to share and use the best available data in MSP, where each of the MSPMED partners had a representative in the group. 3 meetings took place and a lot of email exchanges occurred between the representatives.

A questionnaire was created and submitted to the partners to assess countries' policies: it focused on 4 main sections: National Data Portal, Input Data, Output Data, Monitoring Data.

The results of the survey are the following: the portals developed are for multipurpose uses, not only for MSP. There are different levels of access to the content but there is always public access to main elements. The content is available in the national language only, and it is conceived for Multi-users. Metadata catalogues are available only in a few cases, they usually don't have advanced functionalities (analysis, integration, ...).

Regarding Input data, most elements are common to all member states, but there are no clear publication/accessibility policies.

On the Output data side: At the time of survey (before 2021 deadlines), areas and planning units were in some cases defined and in others still under definition. There are different approaches to the type of access/use of the areas/units, indicators maps not clearly defined/considered and also monitoring data are not clearly defined.

Next steps that will be undertaken by the working group: update implementation, content and accessibility. Understand which input data were used in the plans? For the countries that issued plans, it will be interesting to access them and see if harmonization will be carried out.

Acquisition of data for MSP-Data Input

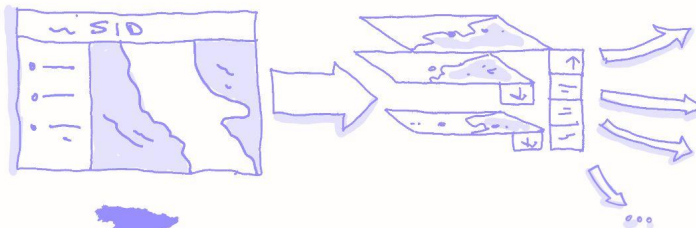
NATIONAL PRESENTATION ON INPUT DATA

ITALY

ALESSANDRO SARRETTA (CNR-ISMAR)

15 PRIORITY MAPS WERE IDENTIFIED AND GUIDED COLLECTION OF DATA. THE COLLABORATION BETWEEN NATIONAL AND REGIONAL AUTHORITIES WAS A CORE ELEMENT FOR PLAN CREATION. DATA WAS UPLOADED ON THE NATIONAL DATA PORTAL "SID-PORTALE DEL MARE": [HTTPS://WWW.SID.MIT.GOV.IT](https://www.sid.mit.gov.it). ALREADY EXISTING PORTAL.

THE ROAD AHEAD WILL SEE THE IMPROVEMENT OF METADATA, THE REALIGNMENT OF DATA IN THE PORTAL, ADOPTION OF WIDER OPEN LICENCES, THE WIDER SHARING WITH OTHER STAKEHOLDERS AND THE ENRICHMENT OF THE PORTAL.



SPAIN

CRISTINA CERVETRA NUÑEZ (IEO)

THERE IS NOT YET A DATA HARMONIZATION STANDARD APPROACH ONGOING

DATA MAIN SOURCES WERE THE 2ND CYCLE OF MARINE STRATEGY (PRESSURES AND IMPACTS, AND OF THE ECONOMIC AND SOCIAL ANALYSIS). DATA COMES FROM EACH MINISTERIAL DEPARTMENT IN COORDINATION WITH THE COASTAL AUTONOMOUS COMMUNITIES.

STAKEHOLDERS DATA IS NOT YET ADDRESSED, HOWEVER A STRATEGY IS UNDER DESIGN.

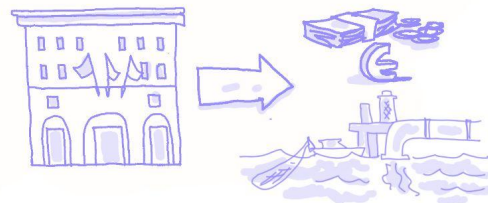


FRANCE
ANTOINE HUGUET - (IFREMER) +
NEIL ALLONCLE - (OFB)

FRANCE HAS MANY DATA CALLS: SCIENTIFIC TEAMS, BUT ALSO INTERNATIONAL ORGANIZATIONS. A DEDICATED TEAM LEAD BY IFREMER TO GATHER THE DATA (HISTORICAL DATA) WAS CREATED. A SINGLE SPATIAL INFRASTRUCTURE TO SHARE THE DATA WHERE MOST OF THE DATA ARE FREELY AVAILABLE HAS BEEN IMPLEMENTED.

DATASET INCLUDE GES, ESA, MSDP TARGETS. MORE THAN 20 INTERVIEWS TO COLLECT DATASETS. ALL DATASETS WITH METADATA ARE CENTRALIZED.

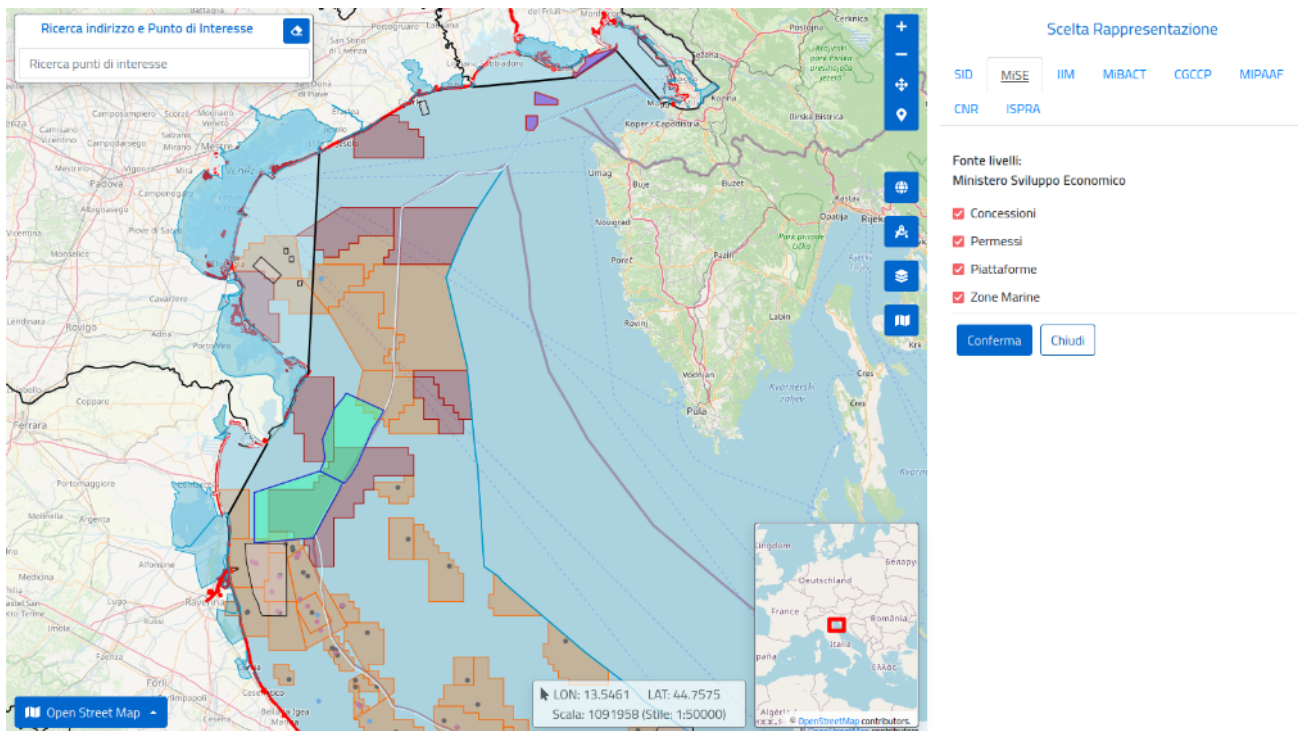
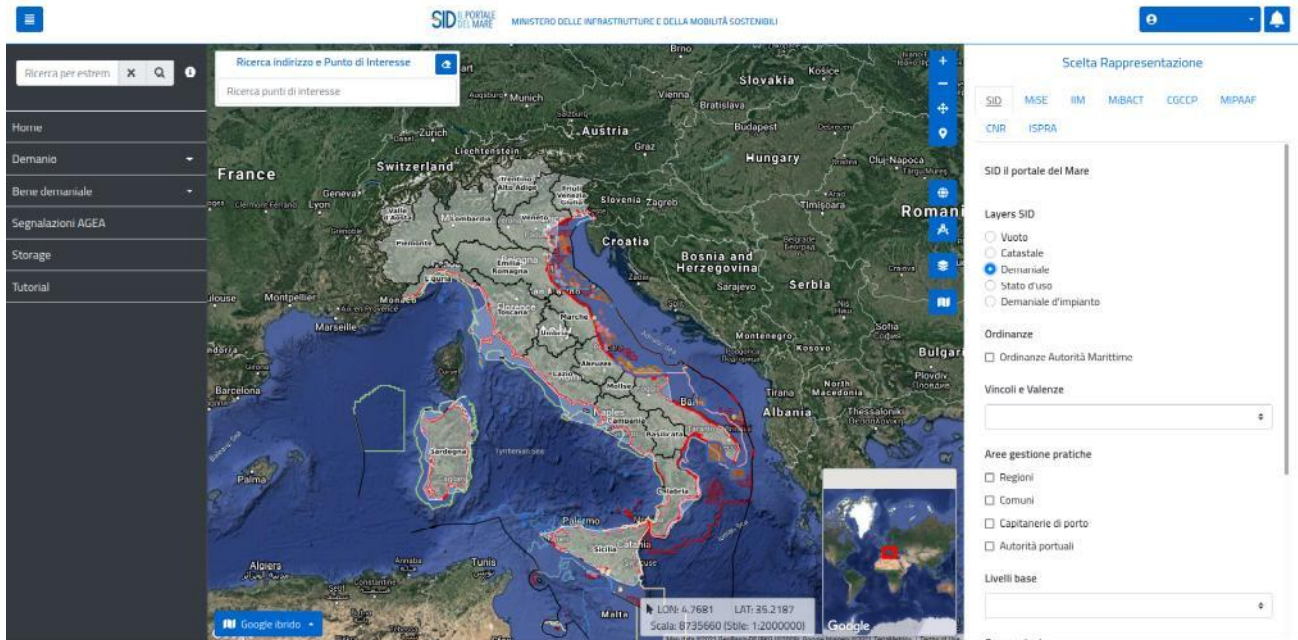
THERE IS AN APPROACH TOWARDS DATA HARMONIZATION BUT THIS TAKES TIME. (SOME OF THE DATA WILL NOT BE USED, WHEREAS OTHERS WON'T BE AVAILABLE OR PRODUCED OR FINALIZED)



Italy

Alessandro Sarretta (CNR-ISMAR) showed that 15 priority maps were identified and guided collection of data. The collaboration between national and regional authorities was a core element for plan creation. Data was uploaded on the National Data Portal "SID-portale del mare":

<https://www.sid.mit.gov.it>. An already existing portal, developed and managed by the National Operational Center. During the maritime planning process, the access to MSP data was restricted to institutions directly involved. Maps later became annexes to the plan. The road ahead will see the improvement of metadata, the realignment of data in the portal, adoption of wider open licences, the wider sharing with other stakeholders, and the enrichment of the portal.



Spain

Cristina Cervera Nuñez (IEO) points out that there is not yet a data harmonization standard approach ongoing in Spain. However, besides participating in the MSP-MED data group, Spain participates also

in the EU Technical Expert Group (TEG) on "Data for MSP" through representatives from MITERD, IEO and CEDEX and will follow the recommendations and guidelines that from this group will emanate

The main data sources were the 2nd cycle of marine strategies (specifically the updating of the initial assessment of the state of the marine environment, its pressures and impacts, and of the economic and social analysis). Data comes from each Ministerial Department in coordination with the coastal Autonomous Communities.

The stakeholders data is not yet addressed, however a strategy for stakeholder engagement is under design, in which one of the points would be how to implement stakeholder data. Finally, the presenter mentioned that part of the marine strategies (and therefore indirectly, the MSP process) employs citizen science.

France

Antoine Huguet (IFREMER) and **Neil Alloncle (OFB)** showed that France not only has many data calls: scientific teams, but also international organizations.

A dedicated team led by IFREMER was assigned to gather the data (historical data) and a single spatial infrastructure to share the data, where most of the data is freely available and has been implemented.

Dataset includes GES, ESA, MSDf targets. More than 20 interviews were required to collect datasets (410 were asked, with about 180 indicators to be evaluated) and all datasets with metadata are centralized.

There are 50 data producers, and even if an approach towards data harmonization is in place, this is time consuming: some of the data will not be used, whereas others won't be available or produced or finalized because they are too expensive. Issues are related to availability: private data is not easily accessible but also open data may need negotiation or not be sufficiently accurate.

Concerning the transboundary level data is being collected but it faces challenges (Covid, Brexit, etc.) and datasets produced by stakeholder organizations are being taken into account but officiality is not usually easy to reach.

Greece

Eli Stefani (YPEN) described how coordination of data collection is in charge of YPEN, and that a dataset will be available on a GEOportal (already included on government cloud for institutions).

9 main categories were selected: Administrative boundaries, Social / Economic / demographic data, Geomorphological characteristics, Physical / Chemical / Biological characteristics, Energy / Mineral resources, Activities / Uses, Infrastructure / Facilities, Dangers / Protection, Spatial Planning.

138 parameters were identified and classified, topics for transboundary issues were also identified: Physical/Chemical/Biological information, Nature and species protection and conservation, Underwater cultural heritage, oil and gas, Renewable energies, Maritime transport routes and traffic flows, Fishing, Aquaculture, Tourism and recreation.

In Greece, data comes from secondary data, provided from ministerial bodies and regional authorities. The aim is presenting data in a clear and accessible way.

Malta

Michelle Borg (Planning Authority) shared that the Maltese plan is integrated with terrestrial plan (SPED 2015), coastal strategy, MSFD, WDF and national policies need to be taken into account. The information was collected for the national sectoral plans to support the msp plan.

A new spatial strategy is being designed: informed by the previous work done in MSP (first cycle of implementation) and also in previous EU projects (e.g. Simwestmed) and through the eu technical committee that supports the sharing of data on socio-economic aspects.

Data comes from secondary sources, provided by authorities. Government has asked for a review of the plan. LSI analysis, MSFD and WFD reporting cycles are part of the sources. Any transboundary issues will be considered. The challenge ahead is how to manage multisource data and ensure data data is valid and with metadata.

An initiative for the new plan is to assess public perception and readiness to be involved in msp plans. A telephone survey (in Maltese and English) was carried out to obtain public insight on the areas frequented for recreation, local knowledge on marine related issues, and level of awareness of the role of the marine environment in their work.

Slovenia

Tina Primožič (RRC Koper) explained that the competent authority prepared an overview of best available data: 68 data layers were identified in which the most important categories are: Boundaries (terrestrial, marine) and Activities/uses (Raw material extraction, Dumping materials, Aquaculture, Cables and pipelines, Nature and species protection and conservation).

Institutions providing data are ministerial bodies. Transboundary cooperation and data harmonization is taken into account with Italy and Croatia through several european projects.

Use of data in MSP-Data Output (sharing, exchange, interoperability)

NATIONAL PRESENTATION ON OUTPUT DATA

ITALY

AMEDEO FADINI (IUNAV - CNR - ISMAR)

THE NATIONAL PORTAL IS THE SID; MSP PLANS AND OTHER INFORMATION EXPECTED TO BECOME AVAILABLE.

3 PLANS WERE DESIGNED FOR EACH MARITIME AREA. AN INCLUSIVE REPORT WAS CREATED INCLUDING BACKGROUND INFORMATION ON THE DATA COLLECTED.

EACH PLAN HAS 2 NESTED SUBLEVELS: SUBAREAS AND PLANNING UNITS.

CONCERNING DATA HARMONIZATION: AN ISSUE TO BE STILL ADDRESSED IS THE INTEGRATION WITH TERRESTRIAL PLANS



MALTA

MICHELLE BORG (PLANNING AUTHORITY)

NOT SPECIFIC PORTAL FOR MSP.

IT EXISTS FOR TERRESTRIAL AREAS AND THERE IS AN INTERNAL (NON-PUBLIC) PORTAL.

A MARINE DATABASE IS IN PROGRESS (MARINE ENVIRONMENT).

CONSIDERING IN WHICH PORTAL TO COLLECT AND SHARE THE DATA

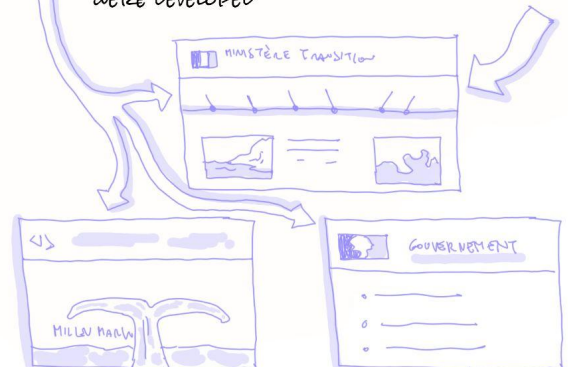
FRANCE

DOMINIQUE CARVAL (SHOM), NEIL ALLONCLE (OFB), ALAN QUENTZIC (CEREMA)

THERE ARE THREE PORTALS: MILIEU MARIN AND THE FRENCH NATIONAL PORTAL ON MARITIME LIMITS AND THE GEOTUTORIAL PORTAL.

VOCATION ZONES DEFINED AND MAPPED IN THE DSF FOR THE MEDITERRANEAN; LOCAL PLANNING SCHEMES AND STRATEGIC OBJECTIVES INCLUDED; A GEOSPATIAL DATASET TO BE UPDATED TO GATHER THE MSP PLANS. MSP ZONES ARE BEING DEFINED.

GEOTUTORIAL PORTAL SO FAR IS WHERE THE WORK IN MSP IS SPATIALLY INTEGRATED: MOST ASPECTS (I.E. ENVIRONMENT, HUMAN ACTIVITIES) ARE INCLUDED; INFORMATION PROVIDED FOR EACH VOCATION AREA. 3 EXISTING INSPIRE-COMPLIANT MSP MODELS WERE DEVELOPED.



NATIONAL PRESENTATION ON OUTPUT DATA

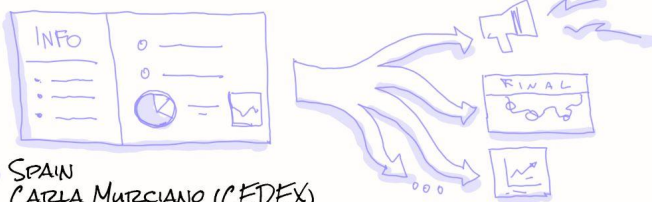
SLOVENIA

SLAVKO MEZEK (RRC KOPER)

THE FIRST CYCLE OF THE SLOVENIAN MSP PROCESS FINISHED OFFICIALLY THE 09/07/2021.

NOT A SPECIFIC MSP GEOPORTAL BUT THERE IS A SPATIAL INFORMATION SYSTEM THAT SUPPORTS THE GATHERING OF DATA FOR MSP, OPERATIVE SINCE 2018.

THIS PORTAL IS CRUCIAL TO: INFORM ABOUT MSP CONCEPTS, PROCESS, OUTPUTS; TO SHARE FINAL PLANS; TO SHARE INPUT DATA, TO FOLLOW THE IMPLEMENTATION STAGES OF THE MSP PLAN IN REAL-TIME.



SPAIN

CARLA MURCIANO (CEDEX)

INFORMAR: THE SPANISH INFORMATION SYSTEM FOR MARINE SPATIAL DATA

OBJECTIVE: FACILITATE GENERATION AND ANALYSIS OF MARINE DATA FOR MSP DIRECTIVE AND CONVENTIONS AND REPORTING OF THE DATA TO THE REGIONAL AUTHORITIES.

DATA RELATED TO THE MARINE ENVIRONMENT (MSPD, MSFD, WFD), CONCERNING MSP: MARINE ENVIRONMENT AND HUMAN ACTIVITIES INFOS COLLECTED AND SPATIALIZED.

MAIN CHALLENGE: HOW TO PRESENT DATA IN THE MSP PLANS?

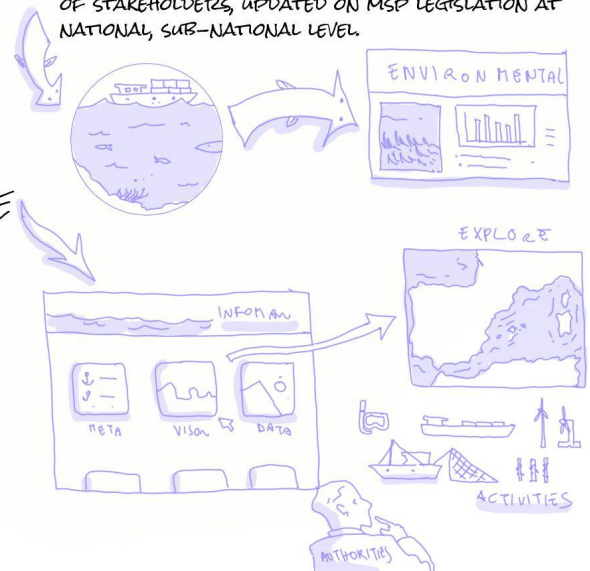
NEXT STEPS: IT BEING REGULARLY UPDATED (MONTHLY), NORMATIVE CARTOGRAPHY (BASED ON THE MSP PLAN), FEEDBACKS FROM USERS TO IMPROVE THE PORTAL AND DATA VIEWER.

GREECE

EVANGELOS ASPROGETAKAS (UNIVERSITY OF THESSALY);

OPEN SDI GEOPORTAL (HOSTED BY THE MIN OF THE ENVIRONMENT): A NATIONAL PORTAL CONSTANTLY COLLECTING, SHARING UPDATED ENVIRONMENTAL DATA FOR GREECE. SO FAR ONLY FOR TERRESTRIAL ENVIRONMENT; IT IS EXPECTED TO BE UPDATED WITH MARINE DATA, SINCE IT IS COMPLIANT WITH INSPIRE PRINCIPLE.

IN PROGRESS, IT WILL BE: INTERACTIVE, USER-FRIENDLY, BUILT TO FACILITATE ACTIVE INTERACTION OF STAKEHOLDERS, UPDATED ON MSP LEGISLATION AT NATIONAL, SUB-NATIONAL LEVEL.



Italy

Amedeo Fadini (IUAV & CNR-ISMAR) discussed the national geodata portal, that goes under the acronym SID, has been created to support the MSP process in Italy; the portal is now available for the responsible authorities and organizations involved in the national MSP process and it is expected to become open to public access in the future.

An inclusive report was created including background information on the data collected and on how to operate within the portal. The information related to the planning of the Italian sea is being integrated in the system. Italy has 3 MSP plans for the maritime areas: Adriatic Sea, Ionian Sea and Central Mediterranean Sea, Tyrrhenian Sea and Western Mediterranean Sea. The output is mainly composed of a text document with annexed maps and tables. Indeed the Italian marine space is being planned between 3 large marine areas each divided at two nested sublevels: subareas and planning units, for which vocational uses are defined. The boundaries defining such subdivisions are available in the portal.

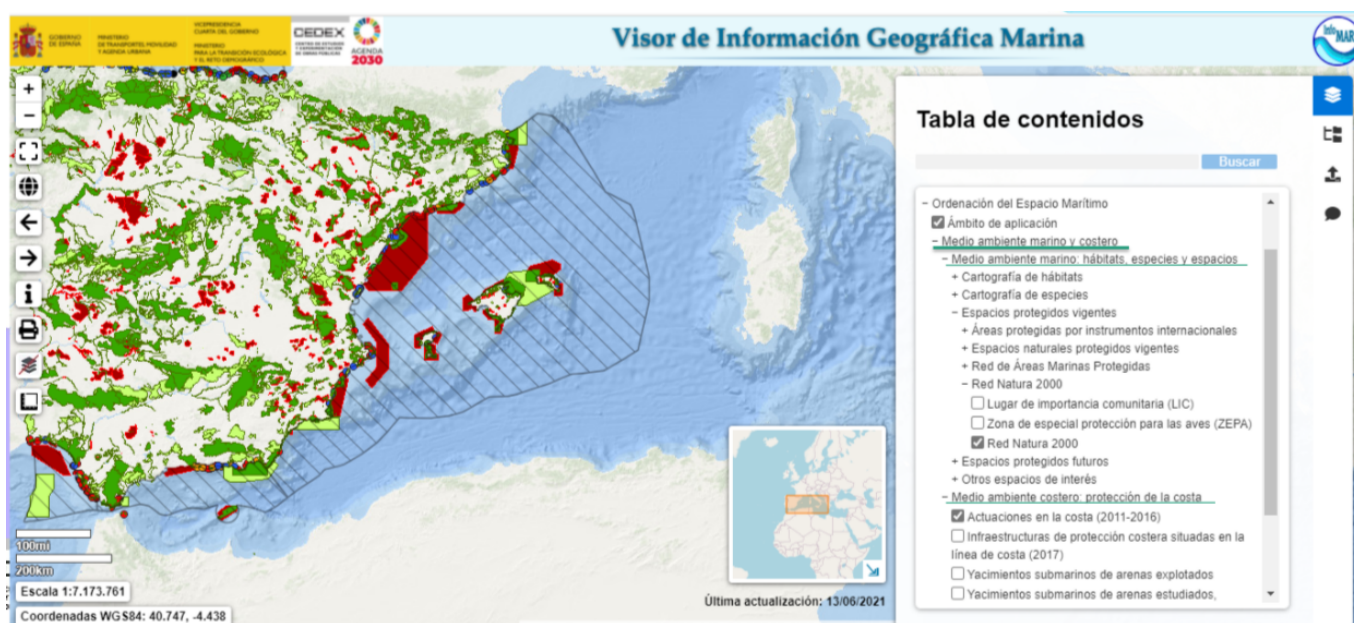
Concerning data harmonization, the integration of the marine boundaries and features in terrestrial plans is an issue to be still addressed. A next step will be the harmonization of the spatial data collected for MSP in Italy to allow their integration into the European data portal EMODNET.

Spain

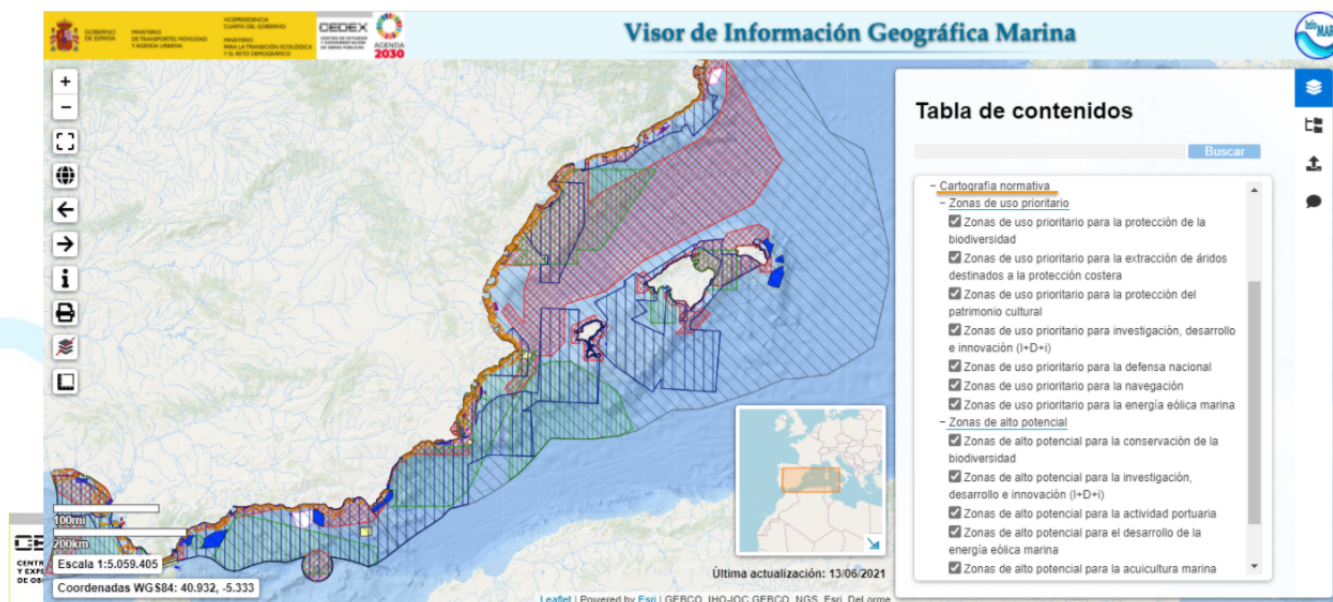
Carla Murciano (CEDEX) explained that the Spanish information system for marine spatial data known as infoMAR was introduced: it has been created to facilitate the integration and analysis of marine data to support the MSP directive and as a repository of the data collected by the regional authorities.

Through the geoviewer interface it is possible to visualize online the data related to the marine environment, collected in the framework of the main European directives related to the marine environment: the MSPD, the MSFD and the WFD among the others. It provides an interactive user-friendly interface to manipulate the data online. The data portal includes several relevant spatial information that supports the MSP process concerning marine environment and human activities.

To support the use of the geoviewer a comprehensive written reference is available with all the details on the data found in the dataportal. It is being regularly updated on a monthly basis and it is expected to integrate cartographic outputs of the MSP plans. Further a service of exchange with the users has been put in place to receive feedback and to improve and adapt the system and data viewer based on it.



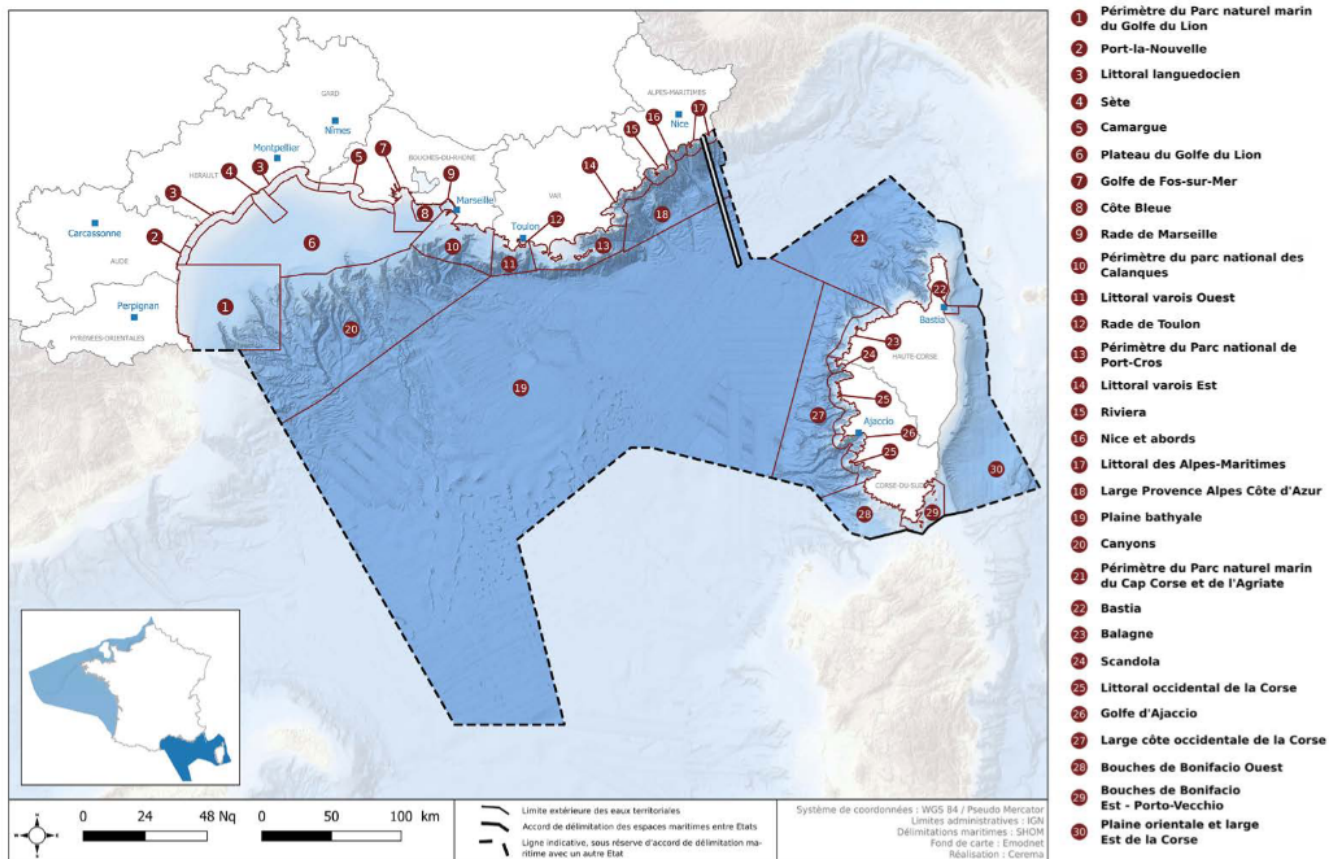
▶ Example 6. Normative cartography: «Priority use areas» and «High potential areas» for marine uses

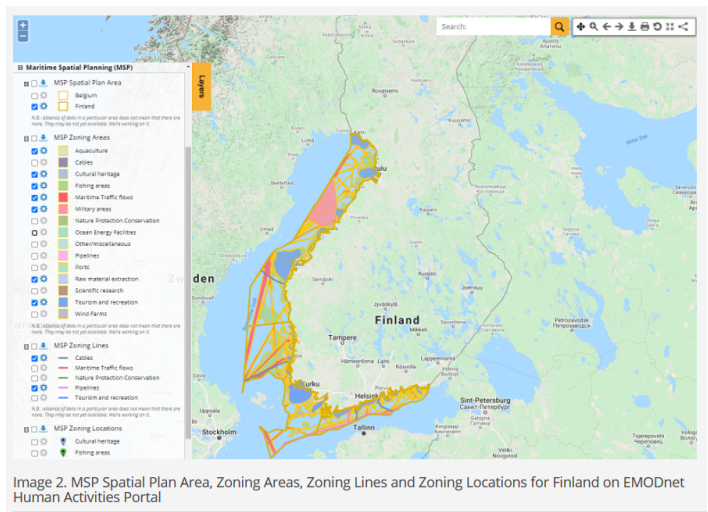
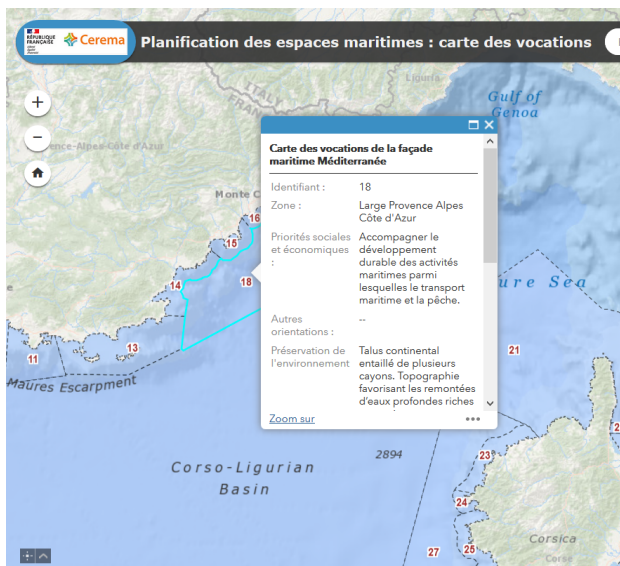
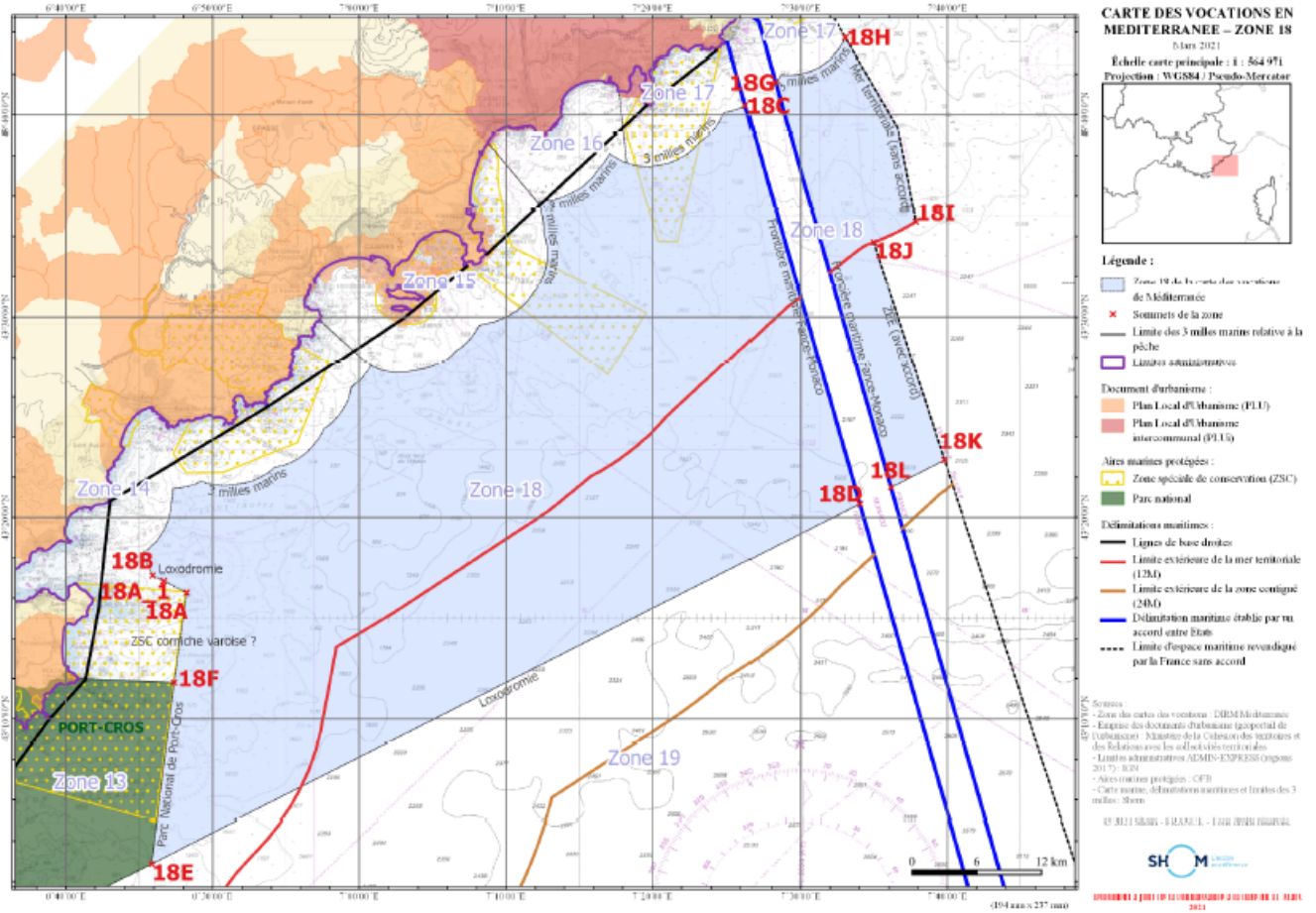


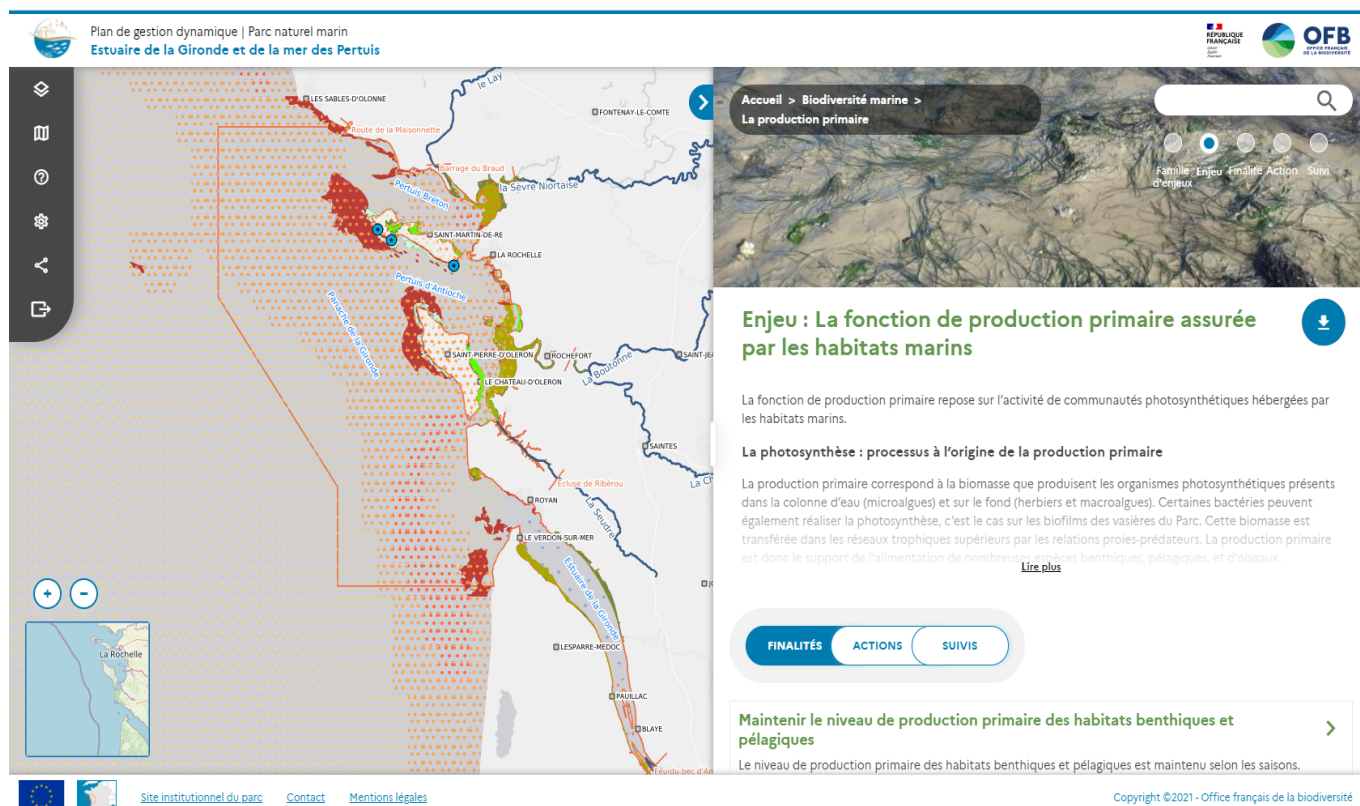
Dominique Carval (Shom) shared that there are three main data portals to support MSP in France. The work done to implement the MSPD in French Mediterranean was summarized in the so-called Document Stratégique de Façade Méditerranéenne (DSF) where the cartographic output was included and vocational zones were mapped. DSF vocation zones correspond to homogeneous zones regarding environmental and socio-economic stakes and vocations. They are associated to the main orientations: strategic objectives, priority activities and use prescriptions, points of attention, local planning schemes to be articulated..

One main issue within the national process is the publication of the vocation zones' delimitations of reference - among other main French regulations - on the National Portal of Maritime Limits to support the enforcement of the plan.

Another is the enhancement of stakeholders' acquaintance with the DSF to visualize data and support the decision-making process. To this goal, a specific interactive portal is being developed to facilitate stakeholders' involvement and to foster their appropriation.

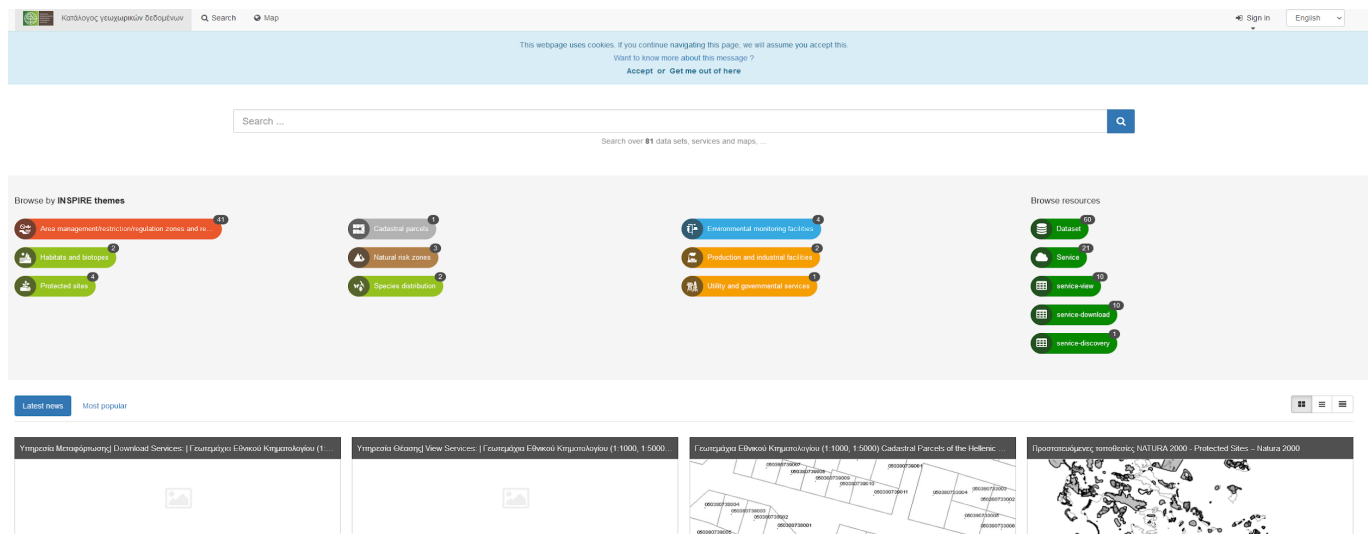






Greece

Evangelos Asprogerakas (University of Thessaly) explained that a new national platform is being developed to integrate data relevant for MSP. This should be created following the structure of the YPEN SDI Geoportal (hosted by the ministry of the environment): a national portal constantly collecting and sharing updated data on the terrestrial environment compliantly with the INSPIRE Directive. The objective is to make it interactive and user friendly, to facilitate active interaction of stakeholders, and update it constantly with MSP plans outputs.



Malta

Michelle Borg (Planning Authority) explained that a specific portal to support MSP has not been created yet for Malta. However a portal exists for planning in the terrestrial domain and there is an internal (non-public) portal which integrates marine spatial information relevant for MSP. A previous EU funded project has created a platform for data sharing amongst different government entities. Effort will be done to pilot marine data sharing on this platform to determine what issues are likely to be encountered e.g. accessibility, comparability etc.

A marine database focused on environmental aspects has been developed through another EMFF project by the responsible authority. As each individual entity works on its own database, this could lead to a positive outcome where online platforms can serve as key medium for data and knowledge sharing.

Slovenia

Slavko Mezek (RRC Koper) explained in his presentation that the first cycle of the slovenian msp process, which officially finished 09/07/2021. So far it has not implemented a specific geoportal to support MSP however, a non specific spatial information system was created to support the gathering of data for MSP, which is operative since 2018.

This portal played a crucial role to inform about MSP concepts, process and outputs; to share input data and final plans and to provide updated information on the implementation stages of the national

MSP plan. The portal is thought to inform professionals that are already acquainted with the MSP topic, however initiatives to inform the general public on it are expected to be developed at national level.


PROSTORSKI INFORMACIJSKI SISTEM
 javno spletno mesto

Informativni vpogled

Informativni vpogled je javna storitev, ki je namenjena vpogledu v prostorske podatke o državnih in občinskih prostorskih aktih, upravnih aktih s področja graditve objektov, omejitvah v prostoru in v nepremičninski evidenci.

Preko storitve so uporabnikom na voljo podatki o veljavnih državnih prostorskih aktih in tistih v pripravi, razpoložljivi podatki o podrobnih namenski rabi prostora iz občinskih prostorskih načrtov in prostorskih redov, informativni podatki o podrobnih izvedbenih aktih, podatki o upravnih aktih s področja graditve objektov (gradbena in uporabna dovoljenja, s pravomočnostjo od 1.5.2015), podatki o omejitvah v prostoru (natura 2000, zavarovana območja, ekološko pomembna območja, vodovarstvena območja, gozdni rezervati, varovalni gozdovi, varstvo kulturne dediščine) in nepremičninski podatki (državna meja, občinske meje, meje naselij, zemljiški kataster in kataster stavb).

[Skok na storitev](#)



Podatki o prostorskih aktih




Naložbo sofinancirata Republika Slovenija in Evropska unija iz Evropskega sklada za regionalni razvoj.

S prostorskimi akti države, regije in občin se opredeljuje prostorski razvoj, načrtuje prostorske ureditve in določa izvedbeno regulacijo prostora.

V tem delu je preko storitev omogočen:


- dostop do podatkov o prostorskih aktih, kjer so na voljo podrobne vsebine o veljavnih prostorskih aktih in omogočen preizem prostora

Podatki o postopku priprave

Priprava Pomorskega prostorskega plana Slovenije


Izhodišča


Podrobni podatki:


 izhodišca.pdf


Javna razgrnitev


Podrobni podatki:


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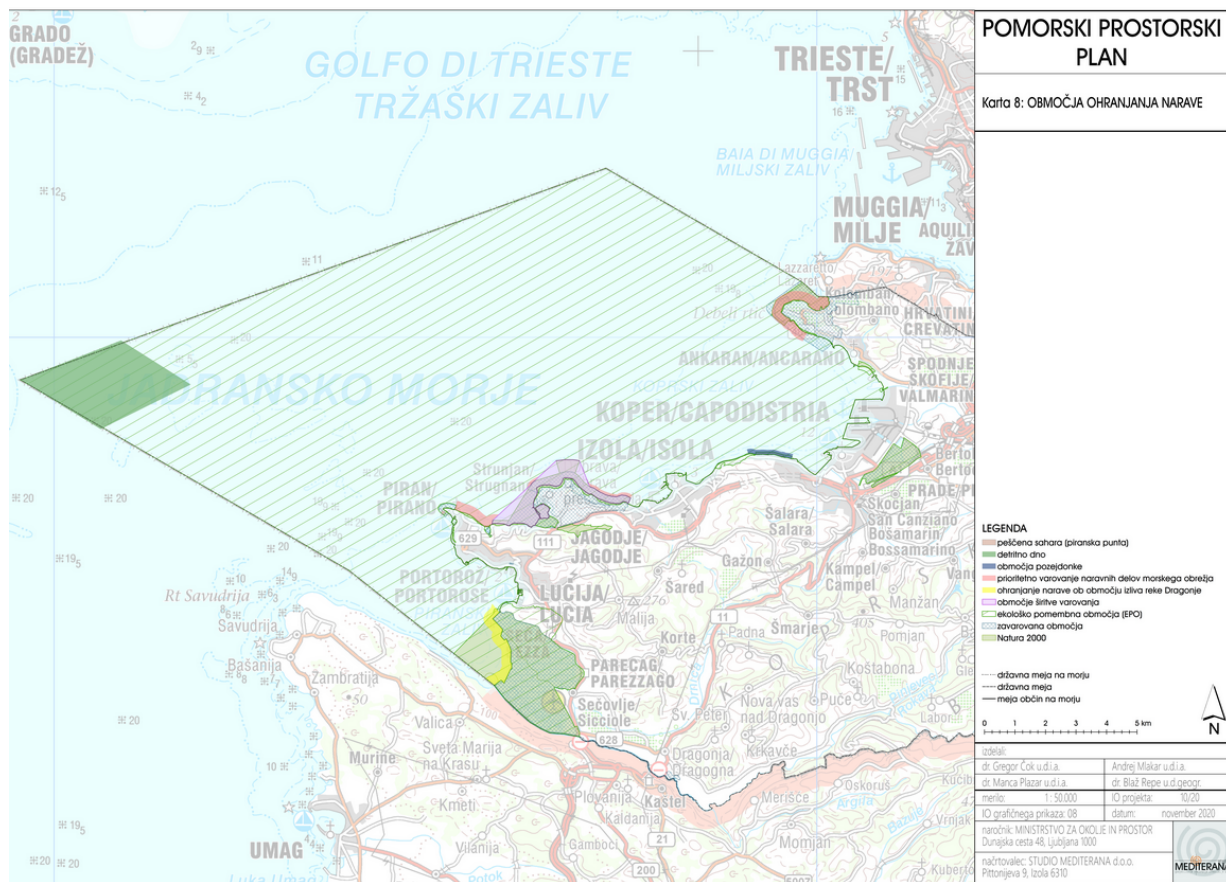
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Beyond data-Towards an adaptive management: Translating data into information and knowledge through monitoring and public awareness

NATIONAL PRESENTATION ON ADAPTIVE MANAGEMENT

ITALY

DANIELE BRIGOLIN (IUAV)

THE IMPLEMENTATION OF DATA INTO MONITORING AND REVIEW OF PLANS WILL BE TAKEN INTO ACCOUNT IN THE NEXT PHASES OF ITALIAN PLAN.

PUBLIC ENGAGEMENT PROCESS CURRENTLY STARTING WILL BRING NEW ELEMENTS TO DEVELOP IDEAS RECEPTIVE TO THE REPRESENTATION OF MONITORING RESULTS TO THE PUBLIC

OBJECTIVES EXPECTED FROM MONITORING PLANS:

- SHOULD FOCUS ON THE OBJECTIVES OF THE PLAN AND REINFORCE ADAPTIVE MSP
- SHOULD HAVE A FLEXIBLE APPROACH THROUGH THE SPATIAL AND TEMPORAL DIMENSIONS



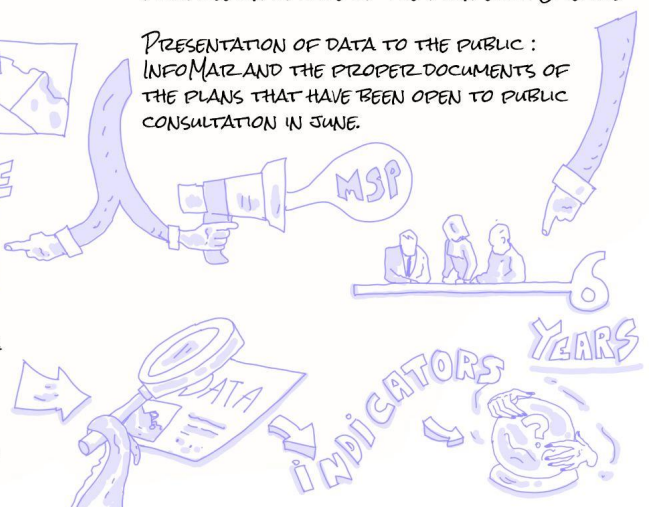
MALTA

MICHELLE BORG (PLANNING AUTHORITY)

FOLLOWING THE ADOPTION OF THE PLAN (2015), THE MONITORING PROGRAM WAS CONDUCTED WITH EVALUATION OF THE PRODUCED DATA. MONITORING INDICATORS ARE BEING FINALIZED.

TOO EARLY TO SAY WHAT THE OUTCOME WILL BE.

GIVEN THAT THE PLAN WAS FORMULATED WITH SPECIFIC POLICIES (SEA, LAND & SEA, ETC.): THE MONITORING EXERCISE IS DIFFICULT



SPAIN

CRISTINA CERVETRA (IEO)

INFORMING THE PUBLIC: WORKSHOPS AND EVENTS ARE ORGANIZED WITH THE MAIN STAKEHOLDERS BUT EVERYTHING BECAME COMPLICATED WITH THE COVID.

WEB APPLICATION FOR COLLECTING THE DATA AND PROVIDE INFORMATION TO THE GENERAL PUBLIC

DATA AND MONITORING: SPECIFIC COMMITTEE FOR EACH MARITIME ADMINISTRATION. THE DIRECTORATE WILL ANALYSE DATA AND PROPOSE AN UPDATE OF THE PLAN EACH 6 YEARS

PRESENTATION OF DATA TO THE PUBLIC: INFO MARZ AND THE PROPER DOCUMENTS OF THE PLANS THAT HAVE BEEN OPEN TO PUBLIC CONSULTATION IN JUNE.

NATIONAL PRESENTATION ON ADAPTIVE MANAGEMENT

FRANCE

MAÏTE VETZOL (MINISTRY OF THE SEA)

MONITORING FRAMEWORK: INDICATORS LINKED TO OBJECTIVES ARE PRODUCED.

FRANCE IS NOW LOOKING FOR A WAY TO OPERATIONALIZE THE MONITORING OF THE PLANS.

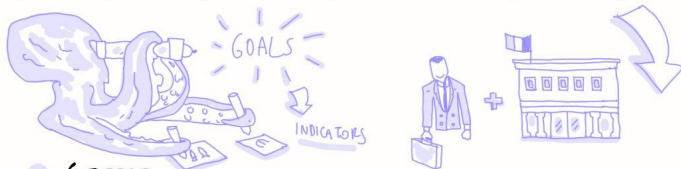
DOCUMENT SUBMITTED TO THE PUBLIC IS ORGANIZED IN TWO MAIN CHAPTERS, PROMOTING AN INTEGRATIVE APPROACH:

ACTIVITIES, USES AND PUBLIC POLICIES

COASTAL ECOSYSTEMS: STATE AND PRESSURE (CF. MSPD)

→ TWO SETS OF INDICATORS GATHERED TOGETHER IN THE MONITORING FRAMEWORK.

BUT MORE CONCERNED ABOUT THE SET OF SOCIO-ECONOMIC DATA, RELYING ON PRIVATE PRODUCERS → GATHER BOTH PUBLIC AND PRIVATE DATA.



GREECE

HATIRY COCCOSSIS (UNIVERSITY OF THESSALY)

KEY TOPIC: THE NECESSITY TO HAVE A STRATEGIC ASSESSMENT OF PLANS
KEY ELEMENTS OF PLANS ARE MONITORING AND EVALUATION: WHAT ARE THE RELEVANT ELEMENTS THAT NEED TO BE INCLUDED? HOW CAN WE ASSESS? ⇒ STRATEGIC ASSESSMENT THROUGH MONITORING
NEED FOR KEY INDICATORS TO BE RELATED TO MSP

BEYOND DATA: WHO HAS DATA, RELEVANT SCALES, COMPATIBILITY OF DATASETS (WHAT ABOUT CONDITIONS, IMPACTS OF PRESSURES, ... CAN WE AGREE ON SOME METHODOLOGY?)
HOW CAN WE TAKE ADVANTAGE OF ALL ON-GOING PROJECTS?

SLOVENIA

SLAVKO MEZEK (RRC KOPERZ)

STRATEGY TO INFORM THE PUBLIC: THERE IS NO SPECIFIC STRATEGY BUT THERE WAS A COMMUNICATION PLAN RELATIVE TO MSP PROCESS, PREPARATION AND RESULTS
THE PORTAL ALSO AN IMPORTANT TOOL TO INFORM THE PUBLIC ABOUT THE PROCESS ITSELF.

MONITORING PLAN: MSP DOCUMENT INCLUDE A GENERAL PARAGRAPH ABOUT MONITORING THAT WILL FOCUS ON THE DESCRIPTORS OF THE MARINE ENVIRONMENT STATE, AND ON OBJECTIVES OF THE PLAN.
PERIODIC REVIEWS (VERY FOUR YEARS) ON THE IMPLEMENTATION OF MSP.



Italy

Daniele Brugolin (IUAV)'s presentation focused on the question related to the implementation of data into monitoring and review of plans. The monitoring process should focus on the objectives of the plan and reinforce an adaptive MSP. In addition, the monitoring program should be conducted within a flexible approach through the spatial (resolution adapted to the level of detail needed to meet the plan objectives) and temporal (appropriate resolution depending on sectors/themes) dimensions.

The monitoring program follows a conceptual framework divided in 6 steps: (1) definition of the strategic objectives of the plan; (2) identification of monitoring supervisors (sub-division by sector); (3) identification of indicators (into categories: environmental, pressure, socio-economic, governance); (4) identification of the existing sectors and their monitoring programs, and identification of developing sectors and design of respective monitoring programs; (5) verification of the coherence of indicators adopted in sectoral monitoring programs with those selected for MSP; (6) setting-up the integrated monitoring program. Examples of two indicators of pressures generated by tourism were given. Each indicator has been attributed a spatial and temporal scale, source, and objectives to be tackled.

Furthermore, the cycle of implementation and reviewing of the monitoring program follows a double loop (annual/seasonal, with a mid-term evaluation).

Finally, it was mentioned that the public engagement process is currently starting. This will bring new elements to develop the representation of monitoring results to the public.

Spain

Cristina Cervera-Nuñez (IEO) presented measures contributing to the Spanish strategy to inform the public, from workshops and events organized with the main stakeholders (limited by COVID-19) to the creation of a web application for collecting data and providing the general public with information about uses at sea, restrictions and management provisions established in the plan.

Considering the reviewing of the plan, data and indicators are provided by specific committees (one for each maritime administration) and the CIEM. The Directorate General for the Coast and the Sea will analyse data and propose an update of the plan every 6 years.

Finally, the presentation of data to the public is possible via InfoMar and the documents of the plans that have been opened to public consultation in June. The bottom-up approach (besides the feedback from the formal public consultation) is not yet considered but could be in the future.

France

Maïte Verdol (French Sea and Coast delegation, Ministry of the Sea) presented the monitoring framework (6 years), divided in four steps. After (1) the initial assessment and (2) the definition of strategic objectives and related indicators, France is now working at (3) operationalizing the monitoring of the plans (“assessing the implementation of the strategy document”). The monitoring framework as well as the (4) action plan of the strategy document are submitted to the public.

The document submitted to the public is organized in two main chapters, promoting an integrative approach:

- (1) Activities, uses and public policies
- (2) Coastal Ecosystems : state and pressures (cf. MSFD monitoring programs)

Once collected, data gathered through the monitoring mechanism is integrated to the information systems related to the relevant directives (especially metadata for MSFD) and available (subject to broadcasting rights) via the Marine Environment Information System (SIMM)

The public is consulted on different components of the operational phase via a dedicated platform (MerLittoral2030) where anyone can access and give feedback on the monitoring strategy.

Regarding data and information collection, France is benefitting from the MSFD experience/tasks for the environmental part. However, concerns remain about gathering both public and private data, especially for socio-economic activities. The way to present the complexity of the collected information to the public is still under debate.

Another issue relies on the way to integrate the feedback from the public (MerLittoral2030 platform and participatory sciences).

Greece

Harry Coccossis (University of Thessaly) stressed the necessity to have a strategic assessment of plans. The key elements of plans were defined as monitoring and periodic evaluation, including an effort to be made on selecting the pertinent elements to be considered, and on designing the methodology used to conduct a strategic assessment (e.g. cumulative effects) through monitoring. Key indicators to be related to MSP are still needed.

Some issues were highlighted, referring to (1) the definition of key conditions, key uses and key priorities, and (2) the way to communicate on these.

When looking beyond data, main questions remain on identifying data owners, data accessibility and relevant scales, evaluating the compatibility of datasets, the homogeneity and standardization of methodologies, etc. Indeed, one challenge relies on taking advantage of all on-going projects and studies, by incorporating them, implying efforts about update, maintenance, collection, support (financial and human resources).

Malta

Michelle Borg (Planning Authority) indicated that following the adoption of the plan in Malta (2015), the monitoring program was conducted focused on location and rate of development, however effort has been done to formulate additional monitoring indicators to assess the achievement of the plan objectives and policies. Given that the plan was formulated with specific policies (sea, land & sea, etc..) and the policy framework mainstreams environment, climate change and sustainability, the monitoring exercise has proven to be a challenge particularly to articulate indicators.

The usefulness of the 2015 plan is reflected in its application which in itself is an indicator of the level of understanding of MSP by different entities, developers and the public particularly when submitting applications for coastal and marine projects that are in line with the approved policy. In 2018 a specific project (3 months duration) was conducted with the assistance of the EU SRSP funds to develop a communication toolkit for the Competent Authority to use with different stakeholders (and the public) so

as to encourage their understanding and engagement. Recommendations from this project are still used, i.e. to communicate the outcome of the plan. In parallel, the efforts to develop an MSP geoportal will also seek to provide the same services that the current geoportal on land uses and terrestrial spatial planning delivers.

Slovenia

Slavko Mezek (RRC Koper) mentioned that Slovenia has no specific strategy to inform the public but follows a communication plan relative to MSP process, preparation and results.

While there is no specific geoportal for MSP, the Spatial Information System (PIS) provides informative insight into spatial information and thus represents an important tool to inform the public about the process itself.

The MSP document includes a general paragraph about monitoring the plan, but the monitoring system has not yet been defined yet. A study is being prepared and will propose a methodology and monitoring indicators. The monitoring will focus on the descriptors of the marine environment state, and on the monitoring of objectives of the plan. Periodic reviews (very four years) on the implementation of MSP will be conducted.

Wrap up and Greetings

MESSAGES TO TAKE HOME

FROM NON MED EXPERIENCES: BASIN-LEVEL DATA HARMONIZATION IS POSSIBLE. CONTINUOUS REVIEW AND UPDATING/UPGRADING OF PORTALS WITH TOOLS THAT HELPS FACING NEW CHALLENGES IS A DESIRABLE APPROACH.

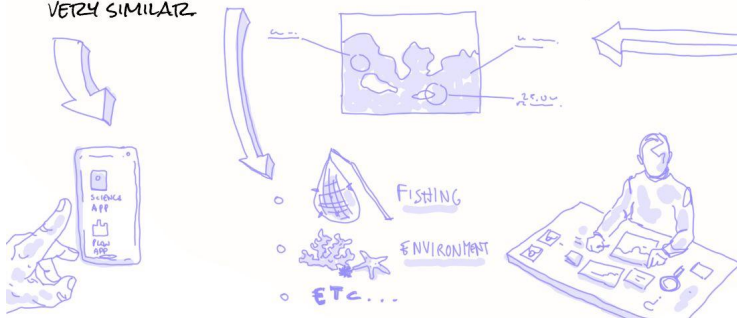


INPUT: THERE ARE STILL A VARIETY OF SOURCES, MAINLY INSTITUTIONAL. PRIVATE AND OPEN SOURCE MATERIALS MAY FACE QUALITY ISSUES, DIFFICULTY IN ACCESSIBILITY AND LEGAL LEGITIMACY PROBLEMS.

DATA ARE OFTEN SECONDARY ONES AND HARMONIZATION MAY BE COMPLEX.

ENSURING METADATA ARE PRESENT IS IMPORTANT.

STAKEHOLDER APPOINT, E.G. VIA CITIZEN SCIENCE IS NOT YET FULLY IMPLEMENTED. TRANSBOUNDARY SHARING HAS HAPPENED BUT IT IS NOT ALWAYS EASY. CLASSIFICATION AND CATEGORIES ARE, IF NOT COMMON, VERY SIMILAR.



OUTPUT: EU MED MEMBER COUNTRIES HAVE ALREADY IN PLACE A SERIES OF PORTALS (GEOLITORAL, INFOMAR, SID, PIS) BUT THEY ARE NOT ENTIRELY DEDICATED TO MSP, THEY ARE MULTI-PURPOSES.

VISUAL OUTPUTS OF MAPS ARE DIFFERENT.

HARMONIZATION TOWARDS EMODNET STANDARDS ARE DESIRED BUT NOT ALWAYS SOUGHT-AFTER.

LANGUAGE BARRIERS ARE CONSIDERED ONLY IN SOME COUNTRIES.

ADAPTIVE MANAGEMENT. MONITORING AND PLAN ADAPTATION IS MAINLY UNDER-DESIGN, BUT IN SOME CASES INDICATORS HAVE BEEN IDENTIFIED AND THE CONCEPTUAL FRAMEWORKS EXISTS. THERE ARE A SERIES OF CHALLENGES THAT WILL NEED TO BE FACED.

STAKEHOLDERS INVOLVEMENT WILL BE TAKEN INTO ACCOUNT.

Folco Soffietti (IUAV) concluded the 4th Technical workshop with a final wrap up and mentioned the below points as key learnings:

- Non Med experiences: Basin-level data harmonization is possible. Continuous review and updating/upgrading of portals with tools that help facing new challenges is a desirable approach.
- Input: there are still a variety of sources, mainly institutional. Private and open source materials may face quality issues, difficulty in accessibility and legal legitimacy problems. Data are often secondary ones and harmonization may be complex. Also ensuring metadata are present is important. Stakeholder appointment, e.g. via citizen science is not yet fully implemented. Transboundary sharing has happened but it is not always easy. Classification and categories are, if not common, very similar.
- Output: EU Med Member countries have already in place a series of portals (Geolitoral, InfoMAR, SID, PIS) but they are not entirely dedicated to MSP, they are multi-purposes. Visual outputs of maps are

different. Harmonization towards EMODnet standards is desired but not always sought-after. Language barriers are considered only in some countries.

- Adaptive Management: Monitoring and plan adaptation is mainly under design, but in some cases indicators have been identified and conceptual frameworks exist. There are a series of challenges that will need to be faced. Stakeholders involvement will be taken into account.

Essential references

[MSP Data Study: Evaluation of data and knowledge gaps to implement MSP, 2017](#)

[A Guide to evaluating marine spatial plans, IOC-UNESCO, 2014](#)

[Directive 2014/89/EU establishing a framework for maritime spatial planning](#)

[Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the EC \(INSPIRE\)](#)

[SUPREME, Analysis of Data, Portal, Tools and Methods supporting MSP process](#)

[The Communication from the commission to the European Parliament \[...\] for a sustainable blue economy in the EU, COM/2021/240 final](#)

<https://basemaps.helcom.fi/>

<https://blueindicators.ec.europa.eu/>

<https://www.eumofa.eu/>