Technical Expert Group -MSP Data

TEG Follow-up work

6th July 2022

Hybrid meeting, Las Palmas de Gran Canaria

All presentations given during the meeting are available on the European MSP Platform.

1. Introduction to the meeting and TEG state of play

Welcome by the host institution, the University Las Palmas de Gran Canaria and the University Institute for Research in Sustainable Aquaculture and Marine Ecosystems (IU-ECOAQUA).

Jin Taira (University Las Palmas de Gran Canaria): I'm interested to understand how my background in planning and architecture can maybe relate to your discipline, and so it is a pleasure to welcome this panel of scientists here. We live in a word full of challenges. The Canary Islands are considered an ultra-peripheral region, but we want to make our institution an ultra-central region and an academic hub. We have the best climate in the world, incredible natural features, and an incredible University, with 20 000 people working proactively in furthering the field of science. Thank you for coming.

Ricardo Haroun Tabraue (IU-ECOAQUA): It's a pleasure to host this face-to-face meeting, and it is a good opportunity to enhance our knowledge. Last month I was in Mexico, and it was clear that MSP is still in its infancy, we are frontrunners here in Europe.

Andrej Abramic (Co-Chair): Welcomed everyone in the room and on the Webex, the chair presented the agenda of the day.

2. Technical Expert Group on MSP data (TEG) meeting introduction and review of past work

TEG potential, future challenges and what is on MSP horizon (Anja Detant (CINEA)

One of the key principles of the MSP Directive is the use of best available data. The Commission has been supporting Member States (MS) since 2014, with funds to support MSP projects and cross-border projects, and how to implement the Directive in all EU sea-basins. There has been a focus on data, tools, methodology and analysis, and these projects have played an important role in raising awareness of the difficulties surrounding data from first hand experiences in MSP, also, the work involved in cross-border planning. There are evolutions in the sea basins, and also an awareness of not only national MSP plans, but also the need for cooperation and a vision for the Sea Basin, as well as the need for effective engagement with the participation of all relevant stakeholders. Approximately €25 million has been spent on cross-border MSP projects since 2010. But the support is more than only projects, we have the MSP Assistance Mechanism and associated MSP Platform, we have the MSP cross-border projects, we have the work that DG MARE and IOC UNESCO have have been doing on internal MSP and we also have this expert group. In the meantime, we have a new context set by EU Green Deal. This transition to a sustainable blue economy can contribute to the recovery of the sectors affected by the COVID crisis. MSP will increasingly support sustainable development at sea and the implementation of the Green Deal. We also see a great interest for MSP in neighbouring countries, one example of this is that the non-EU countries participating in the West Med Initiative declared their interest to work on MSP (Algeria, Morocco, Tunisia.)

MSP for the future also means that we are receiving a new generation of MSP projects that will be supported by the EMFAF. In the work programme of DG MARE, there was the ambition to set-up a blue forum and now we have an open call for a renewed contract for the MSP Assistance Mechanism and the establishment of such a blue forum. The Blue Forum aims to rally the stakeholder community, so we will need to think together on how to do this and how to link with the work of a group such as this one. Also in the pipeline is the continued partnership on International MSPs. DG MARE and IOC UNESCO intend to continue their collaboration and they plan to have a conference on International MSP in November.

A new project on MSP will be signed, which is called ReMAP - Reviewing and evaluating the monitoring and assessment of Maritime Spatial Planning. It's a kind of continuation of the initial work and discussions that have been launched in this group.

As most countries now have their plans, we are entering a new phase for national MSP where the planning is done. Now we need monitoring, implementation, and amendments by including European Green Deal objectives in the next generation of plans. We also need to reflect on what the role of the TEG can be in 2022-2023 and beyond. Whether this group has an appetite to continue its work on the EMODnet model, the outputs of the subgroups, delivery of expert services, open-up to exchange with non-EU data MSP experts and address the challenges for the future.

Q/A:

Juan Ronco Zapatero (DG MARE): Anja did a very good presentation on what is going on and going to happen. We want to underling the work done by this group, to take it further and also support MS in their efforts to provide their data in open format. In the long term, perhaps the MSP Directive will be reviewed and maybe in relation to the collection of data, so your work is really important!

Q: Amadeo Fadini (CNR ISMAR): Is there international experience on MSP outside the EU that we should focus on, or collaborate with non-EU MS?

A: Anja Detant (CINEA): The challenges are big, we implement European policy, so our focus is on Europe, but we collaborate with neighbouring countries, so it's important that we talk, and we also have the collaboration with MSP global. For the TEG, the focus should first be on the EU, but if there is interest for non-EU representatives to participate in this group it could be interesting.

Juan Ronco Zapatero (DG MARE): I don't know if other countries are doing this, maybe in the US, but what is unique for this group is that we are working together to achieve common goals, combining resources. There are non-EU countries interested in this work, we have to see how to share with them our expertise.

Chris McDougall (MSP AM): Often it comes down to the funding mechanism of individual projects whether or not the cooperation can take place, or at least the provision of support, is there a way in which we can support both EU countries and southern neighbour countries?

Anja Detant (CINEA): For the new AM Contract it is still a mechanism to support EU MS in implementing the MSP Directive. But we have other possibilities with the West-med AM and MSP MED project which has an envelope to fund events with non-EU countries. some of INTEREG funds are accessible to non-EU countries, so there are possibilities there.

Monica Campillos (IEO): One of the important things in the MSP-MED project is that under WP4 we want to involve more non-EU countries, and we want to organise several meetings with non-EU countries, it's important to implement MSP in West Med.

Anja Detant (CINEA): There is a declaration by UfM, MSP is mentioned as a priority to collaborate on.

Juan Ronco Zapatero (DG MARE): In terms of broadening the geographical scope of the work of this group, there are also sources such as the Horizon Europe Programme, I wouldn't be surprised if projects come up with Brazil, South Africa etc. and under the foreign policy instrument, perhaps there is room for a project on ocean governance and MSP.

Development of the EU MSP layer within the EMODnet Portal on Human Activities - Marta Ballesteros (CETMAR)/ Alessandro Pititto (EMODnet HA) – See Presentation.

Our moto in reference to data is "collect once & use it many times". The EMODnet covers a wide area and presents an up-to-date picture of current & anticipated uses of the marine space in the EU using simplicity, harmonization, integrity, compatibility, versatility. Our work on the data model showcased the efforts and outputs of the group, the aim being to provide advice and recommendations to MSs. There are already 6 harmonised MSP plans out of 22 on the HA Portal.

Belgium was the first plan, on the portal, you can see current activities and upcoming ones. The second plan was Denmark, the information was provided by Danish authorities using the model proposed by the TEG. The model is usable and has been used. The third plan was Finland, divided into 4 supra regional MSP, they used the HELCOM data model compatible with the EMODnet model. Germany is a working process and provides a lot of information. In the case of Latvia, they have priorities for the use of marine space, there is a data model that is

similar to HELCOM. For Poland they used a data model compatible with HELCOM, but one of the issues was that it's in polish and most activities needed to be categorised under others.

For the future, if you have doubts on your plans, EMODnet are available to help. There are still 16 plans to go, but it's hard to harmonise the data. There are a lot of lessons learned from the harmonisation process, for example to review the classification. The output is that the data can be used many times, applications for companies, searching to develop business, for researchers, for policy makers: regional/MS/RSO/EU. Finally, EMODnet are developing further advice for MS on how to use the data model.

Q/A:

Q: Joni Kaitaranta (Co-chair): It's evident that you have experience with different data models. We can already see some coherence in the choice of models. Now that you have experience, how easy was it to do in practice? What could this group do to support this process?

A: Jose L. Santiago (EMODnet HA): The plans received come from the Baltic Sea region, the similarities between them were helpful. For the Polish case, an issue was the language, and they used additional data in different layers which complicates the harmonisation. We harmonised this model, and as mentioned by Marta, we had to harmonise some sea uses, the future development of some activities for example. It could be a lesson learned for other countries.

Andrej Abramic (Co-Chair): We have an open code list register for maritime activities Extended HILUCS; that we can map various activities. No need to add new classes (codes) in the EMODnet system, as Extended HILUCS is included in the EMODnet MSP model.

Marta Ballesteros (CETMAR): The work of EMODnet is to provide harmonised data for all countries so the rules need to be clear. In a pragmatic way we would not be in that position, but we can consider it for future. We want to optimise efforts. I foresee three ways, 1) whenever we face a problem, we will approach the TEG as a group for isolated issue. 2) whenever we face language barriers, or difficulty to understand nuances between activities, we can ask the TEG. 3) maybe for the next group meeting we can have session to advice MS, with an updated set of recommendations. And for the future, using our network to let people know that we are here.

Jose L. Santiago (EMODnet HA): A quick example that allowed us to harmonise the data in EMODnet: I must thank Kamil Rybka, thanks to him we were able to understand some details and contact the relevant people in the Polish government that I'm pretty sure would have been very complicated if not for this group.

Q: Stefano Menegon (CNR): Having looked at the registry, it offers a good chance to have a harmonised plan, one can use the registry in the planning stages, to be sure you will have a harmonised plan. Question: you mention PDF and GIF images, were you able to extract information from these?

A: Jose L. Santiago (EMODnet HA): We used all available information especially those included in plans, annexes and supplementary material.

Jean-Baptiste Suzanne (SHOM): In the framework of the MSP-MED project, France started to work with the data model the TEG proposed, and we would be happy to collaborate on this.

Natali Santos (MSP-OR): One of the tasks we need to develop is to identify where and how the model can be used in the life of the project, as Marta mentioned, EMODnet can help us to identify, and I didn't know this before. And we would appreciate your support on this task.

Andrej Abramic (Co-Chair): Support can be on the level of the TEG, or countries. The AM also offers support in this development.

Adeline Souf (SHOM): France is trying to adapt the plan, and as part of the MSP-OR project, we're trying to make a plan for French Guiana. One task of the SHOM is actually to support to the local authorities regarding their plans and we will work with the model, and for this we are building on what the TEG has done.

Juan Ronco Zapatero (DG MARE): Our Italian colleague mention the need for a registry, we may have to go further than this, there should be a guide. etc for MS. It will be a way to harmonise data and help to have harmonised planning across countries. It could be an activity for the blue forum.

MSP Platform & TEG support - Chris McDougall (AM)

Firstly, congratulations to the EMODnet team and the entire TEG. Having been involved as the secretariat for TEG since its inception, it is clear to see the commitment, effort and significant achievements of the group and we are happy to have been able to support this process to date.

The AM recently organised the European MSP Stakeholder conference on behalf of DG MARE and it was a first opportunity to bring together the European MSP Community. Over 470 people participated both in person and online. The AM MSP / European MSP Platform is at the centre of this community so if the TEG would like to disseminate any information or circulate a publication, the AM would be happy to support. Another function of the AM is the helpdesk role. This was initially set-up to the support Member States; however the role could also be extended to the TEG, please contact either myself at info@msp-platform.eu or Andrej and Joni as the co-chairs of this group. The other primary function is to support DG MARE and the wider Commission with regards to understanding the status of MSP within EU and through the production of several technical studies that are available on the EU MSP Platform. Recent publications include: "How to incorporate Underwater Cultural Heritage into Maritime Spatial Planning", a guidance document on "The implications of the ocean governance framework established by the United Nations for the implementation of the EU MSP Directive". The current study under preparation is on aquaculture, looking at MSP plans to understand how they take into account marine aquaculture and how they set aside space for aquaculture in the future. A rapid screening exercise has been completed and we are undertaking interviews with the MSs that have answered. We are also undertaking case studies on third-party countries and from the industry perspective.

Q/A:

Andrej Abramic (Co-Chair): Thank you Chris, without the support of the AM we would not have been able to launch the TEG and you have provided great support to Joni and me. Your support and efforts are greatly appreciated!

Marta Ballesteros (CETMAR): From EMODnet side, thank you. You really facilitate the link with MS. You also helped us in producing and submitting a poster for a conference, which was really appreciated. As part of the Aquaculture study you mention, are you gathering any socio-economic information that our subgroup could use?

Chris McDougall (MSP AM): With regards to aquaculture, the primary source is MS, we are also talking to the industry. However, as part of those discussions, we are trying to understand from MSs if during MSP consultation, the aquaculture sector was adequately consulted and whether stakeholder engagement was undertaken on proposed areas set aside for aquaculture because as part of the EIAs and licensing process, you may find that you have obstructions and challenges when you try to physically develop the site.

3. Presentation of the results of TEG sub-groups

MSP & MSFD data link – Stefano Menegon (CNR) – See Presentation.

Background MSFD and MSP: Importance of MSFD data for incorporating the ecosystem-based approach into MSP processes (consider human pressures and environmental states) and the importance of MSFD data for supporting evaluation, monitoring and adaptive management. The objectives are to collect and analyse experiences of using of MSFD data and outcomes to support MSP processes; and to identify best practices to facilitate the connection between MSFD outputs and MSP process for EU MS (e.g., mapping registries/vocabularies, data models, spatial representation) including considerations on Land-Sea Interactions (LSI).

The main focus is on data and metadata aspects. Sub-group activities are to collect planning experiences: review on how the MSFD has supported the marine planning processes, to analyse and setup automatic analysis: explorative and comparative and to wrap-up, results and updates in the report, including examples.

Q/A:

Q: Juan Ronco Zapatero (DG MARE): What will be the outputs?

A: Stefano Menegon (CNR): The idea is to extract some best cases. We don't want to publish the results of the comparative analysis. We will extract two or three best practices and present these best practices.

A: Andrej Abramic (Co-Chair): The MSP AM can share the survey for you, two weeks ago there was an MSEG meeting it's a pity that you were not present to share it.

Q: Marta Ballesteros (CETMAR): There are benefits of working as subgroups, but also then having access to the whole group because you mentioned that from our side, which are social sciences, it is relevant to refer to policy coherence. This is something that could be critical to understand. We would be like to have a look at the answers to see how exactly you ask for that, because this is quite critical in terms of governance issues and the social dimension too. And in response to the question, if they are using the Marine Strategy Framework Directive for the monitoring and implementation of the MSPs, the answer is likely not, because the plans have not been monitored yet. Maybe future work for the group could be '*recommendations on how MSFD could be used to implement and monitor those plans*', because this is not on the agenda of the Member States but is something that they will have to face in the near future, and that could be a good way to take advantage of the work you have done.

A: Stefano Menegon (CNR): At least for one or a couple of Member States that already have a plan, it might be possible to look at how to incorporate the MSFD in the monitoring.

Q: Natali Santos (MSP-OR): You mentioned Re-MAP project, can you explain the state of play and the objectives of this project?

A: Andrej Abramic (Co-Chair): The project it still not signed, it will probably start in October and will last 3 years. The idea is to work on developments of the TEG first, starting within the MSP data models that we have, and further developing 10 or 11 models which are fairly small and simple analysis, but together will provide quite complex analysis of MSP required for the next phase of the MSP process, including the monitoring and assessment.

MSP metadata profile – Denise O'Sullivan (Marine Institute) – See Presentation.

It's very important to effectively manage our marine resources. At the moment there is a lot of talk around offshore renewable energy. We think it's a good example of a marine resource and how do we develop it now without it affecting other activities which are going on in the ocean. We need to collaborate and share information between neighbouring countries, but also maybe even further afield given ocean dynamics. In an effective way across different countries, everyone who invests in their marine data and the sharing of best practices will benefit from this and that will help us to create sustainable and easy to implement plans. And it's important when we share information across different organisations, government departments and countries that we also give a description of that data so that we can understand it and also make it easier to ingest data into our own infrastructure. Following guidance from data Best Practises is the starting point, one of the best things we can do is to make our data FAIR, which is Findable, Accessible, Interoperable and Reusable. And we can also use complementary vocabularies, which allow us to make connections with other initiatives, such as the Marine Strategy Framework Directive, or INSPIRE spatial data infrastructure, by using the standards that exist which may mean that it's consistent with other metadata profiles. When you're creating the metadata profile for marine spatial planning and by keeping it simple, it also means that we can maximise the reuse of these metadata or other legislative drivers. We can include a description or an abstract in your metadata profile. It adds more value to a data set.

Q/A:

A: Jose L. Santiago (EMODnet HA): In EMODnet we usually do not generate or produce data. We collect it from other databases. This data providers offer through the metadata sheet. We are able to assess the adoption of the standard of the metadata agreed by this group. We developed one to the first dataset but if the information content increases, we would be able to adapt it.

A: Andrej Abramic (Co-Chair): In response to what Jose mentioned that they can adapt in EMODnet. It's interesting that we developed standards for MSPs and metadata. And I think this is something that could be reused within the EMODnet which would be perfect. And I think it's great that we have both things finalised. And I want to congratulate for your work.

A: Joni Kaitaranta (Co-chair): On your last slide, there was 'the next steps' and there was the question 'how do we roll this out?' One approach could be that when all Member States are making the MSP plan data available in one of these 3 formats, then together with that they will be asked to fill in a metadata template by EMODnet, and so they get the metadata applied there as well. But of course, first we need to have the profiles agreed from the TEG side.

A: Marta Ballesteros (CETMAR): Building on your findings, maybe it would be good to produce a summary saying this is what we have found. This is what we from EMODnet are able to implement right now and these are recommendations for you to consider when building your metadata. This would be a way to provide support to the Member States and also add value to the EMODnet exercise.

Q: Pascal Dryke (Marine Analyst): My colleague Alessandro Saretta would like to know if it's possible to share your metadata profile?

A: Denise O'Sullivan (Marine Institute): Yes.

Sub-group on MSP network services – Pascal Derycke – See Presentation.

Last time the sub-group presented 4 use cases: 2 use cases as-is and 2 use cases to be. We are going to implement the use cases in the Marine Analyst digital platform. Why do we need MSP? "Manage human activities to enhance compatible uses and reduce conflicts among uses, as well as to reduce conflicts between human activities and nature, are important outcomes of MSP". What could be our role as data analysts in implementation management Step 5 is about accessing data and the INSPIRE (Infrastructure for Spatial Information in Europe) Network services. INSPIRE aims at providing access to spatial data via network services and according to a harmonized data specification to achieve interoperability of data (ref: INSPIRE Directive 2007/2/EC). The INSPIRE directive establishes the obligation: to describe the data and available services (via harmonised metadata); to set up a series of network services (discovery, view and download services) in order to facilitate the sharing of and access to spatial data; to harmonise the data format and structure following standards. It's very important that the Commission hears that you have to bring all stakeholders together around the table and they have to share experience and agree on the rules. The Marine Analyst Platform was launched two years ago. the Marine Analyst is an innovative Web service for augmented data access and reproducible data analysis based on computational notebooks. It provides easier access to a wide variety of marine data. The Marine Analyst digital twin of the ocean offers simple access to marine data, processing of comprehensive analyses and advanced use cases for your specific area of interest on climate change, marine renewable energy, MSFD, MSP, etc. Today it receives hundreds of views per day and users have generated 1000 reports. For INSPIRE roadmap, they started the process in 2007. The INSPIRE preparation, discussion and finalisation occurred at a period of time prior to the emergence of the Semantic Web, Linked Data and Big Data technologies. I've got two use cases as-is, which are based on INSPIRE implementation and I've got to-be which are not based on INSPIRE, just because it was a long process.

Step6 "Network services fit for the purpose of machine learning" is about Semantic Web: enabling machines to create new knowledge; Web of data or linked data: enabling machines to act on our behalf to find and aggregate information in more flexible, intuitive and intelligent way; and big data: new technologies enabling the implementation of digital twins (knowledge, monitoring and forecasting services). So, I come back to the tool to be use cases. There is a use case on the web of data and one about big data. As a conclusion: linked-Data vs Silos: INSPIRE network services is for Step 5 and linked & big data is for Step 6.

Q/A:

Amadeo Fadini (CNR ISMAR): But what do you think about the risk of creating noise when sharing everything with everyone?

A: Pascal Derycke (Marine Analyst): It's the reality of our world, data is everywhere. I think it's important to have a lot of data accessible. It's essential to know that the data exists. It's important when producing knowledge. For instance, in the case of Marine Analyst, we never interpret the metric indicators we produce because we can't do it. That's the role of data scientists. As a user I would like to have a good user experience. What is important is to find the way to process it correctly.

Sub-group on MSP data framework – Andrej Abramic (Co-Chair) – See Presentation.

The objective of this subgroup is to develop an MSP data framework required for: 1. Data collection within the MSP process; 2. Monitoring & assessment of the operational plans. The development of the MSP data framework started in 2017, with the project PLASMAR (2017 2020), which defined the need for a structured process of data collection.

The first practical framework includes 5 clusters, which include data about the MSFD good environmental status, Coastal Land-Use, marine protected areas, oceanography and maritime activities/uses. After this work continued with TEG including clusters on socio-economic and governance data. Current result is MSP Data framework v1.2, delivered with TEG inputs (sub-group and survey). Poland, Greece, Cyprus, Italy, Sweden and France provide inputs, as projects: MSP MED, SIMCelt , SIMNORAT, SIMWESTMED, SEAnse , SIMAtlantic , MED OSMoSIS , MSP OR, eMSP NBSR

There is in total 7 clusters for the classifications. Please see the presentation here.

Conclusion: MSP data framework essential for the assessment and monitoring of the current/operative plans; Data collection for the update planning; Delivered on the inputs of the experiences of the European MSP Projects and National MSP processes; It requires inputs for 7 clusters:

1. Marine/Coastal environment.
2. Marine/Coastal Conservation& Designated sites.
3. Oceanographic characteristics and climate.
4. Coastal Land use, Land cover & Planning.
5. Operative maritime activities and Planning.
6. Socio-economic information.
7. Governance information.

It is expected to have report available in September 2022.

Q/A:

Marta Ballesteros (CETMAR): I will save my comments on the social economic dimension for the last presentation. Just to mention that we can represent almost anything in terms of socio-economic data. We have to be smart when thinking what is relevant to represent at a particular spatial scale. Finding the way to represent coordination efforts coming from the Marine Spatial plans could be the added value that this kind of assessment framework provides. But according to the Directive, for Member States it's mandatory to provide information on the competent authorities and the mechanisms for coordination. For instance, in the Netherlands they are using compensation devices to compensate those sectors that may feel they are losing out in the MSP, or we may have coordination bodies that are competent in the area to coordinate somehow, and those are the kinds of things that we can put on a map without resulting in many layers that do not give you other value.

Victor Cordero-Penin (University Observer): I would like to highlight that within governance, there are other important things or aspects such as participation which we also talked about it, but also financing resources, education, whether we have capacity building for technical work, whether within universities we have specific courses on let's say marine special planning for example. I would like just to highlight these other dimensions within governance that at the end will result in having a better, more sustainable way of living.

Sub-group on socioeconomic data within the MSP – Marta Ballesteros (CETMAR) – See Presentation.

The objective of the subgroup is to deliver practical approaches to integrate the economic and social dimensions in MSP, to advance knowledge and methodological approaches for gathering socio-economic data linked to MSP, and to reinforce the provision of evidence-based decision-making by integrating the socioeconomic dimension**.** We undertook and have nearly complete a literature review. What we learnt is that there is not a comprehensive MSP. There have been efforts in integrated approaches, but it's still working sectorally and is dominated by the sectoral approach. When decision makers have to make a decision, they should know what the socioeconomic impacts are associated with that decision. One question is what is the social economic impact of implementing Marine Spatial Planning? We were able from a study to show that there is another value in economic terms for those countries that did implement a marine spatial plan. The challenges for socio-economic data are clear because of the blue frontier, what is an economic activity at sea and where does it end? It moves to the land area. A second challenges is the desegregation of the data. And finally, there is the availability of big data but not only at the spatial level and this is something that needs a solution. We have produced a survey that should be completed in the coming months and distributed.

Pascal Derycke (Marine Analyst): When you say that big data is not georeferenced, something I can say is that there is a data management plan, that the Commission asked for any project it would be nice to see also some technical requirements on how, I mean if you produce data, you have to make it open and it has to appear in your data management plan. In schema.org you have a vocabulary dedicated to all to Geo referenced your data.

Marta Ballesteros (CETMAR): That's a constructive comment for the future but the problem is that most of the socioeconomic analysis relies on long time series, some of which were gathered since the 50s and are available on EuroStat and other databases that give us strong and robust evidence to make the analysis do not have that component. To move forward I totally agree and that's a relevant recommendation. The problem is how to use what is there and to bring about value.

Pascal Derycke (Marine Analyst): I have seen a US website about augmented data access and this website reads information from EuroStat and produces knowledge, meaning they are able to follow network services, gets access to CSV files and produce indicators. If you publish your open data applying the fair principal in the right way as you will have your economic data accessible. The only problem is data providers, they don't necessarily have the technical knowledge on how to make the data truly fair.

Jose L. Santiago (EMODnet HA): I don't think this is a technical problem. For example, we have identified around 1000 - 5000 geographical elements of aquaculture. All these elements have their own characteristics, there are few people here and the production varies across all these elements. But when you go to the socioeconomic databases you better understand the value of the production and the people involved in this activity, but you are not able at a meaningful geographical scale to read this database with those geographical elements, and this is the tricky point. It would be nice to find a possibility to define better these geographical elements as you introduce Andrej, for instance for tourism you said you can surf or kitesurf, this can be extended for other uses, aquaculture, or different types of fisheries. Each of these uses has different characteristics in socioeconomic terms, the people involved in the activity, etc. This relationship is not so easy to standardize.

Pascal Derycke (Marine Analyst): For example, if I open my phone, I have the booking app and if I want to find a bed for tonight the booking app has the answer, meaning that they have the technology to collect all this information and that you can also have an idea about the tourism activity in Gran Canaria right now. It is semantic technology implemented by big operators and using the data to provide services. If you want to get access to economic data, it is available, you can take inspiration in our surrounding world.

Jose L. Santiago (EMODnet HA): As said it's not a technical problem, the current databases that usually collect the socioeconomic data are not easy or straight forward to connect to the geographical elements.

Amadeo Fadini, (CNR ISMAR): The meaning of such economic data also has a deeply cultural significance, just to go with the previous example - we are here in Gran Canaria, we're sleeping, but we're not tourists. We are not part of the tourism economy, but to get there tonight, we used the same tool as tourists, so the machine thinks that most travellers are here for recreation, and they don't know that we might want to shorten the time on the plane because we are coming for a conference. Hopefully we still have human agents to contextualize the statistics gathered.

4. Link of the TEG with MSP EU projects

Towards the publication of MSP plans: taking over from TEG recommendations on data model to actual use for the French plan – Jean Baptiste (SHOM) – See Presentation.

In the framework of MSP, the SHOM is one of the French reference partners in European projects with 5 finished projects, 4 in progress and 3 starting at the end of 2022.
In France, there are 4 Sea Basin Strategy documents (metropolitan France, 10/2021) and 4 Regional Sea Strategy documents (outermost territories, on-going process). Those documents are based on the National Strategy for the Sea and the Coastline (2017) taking into account local considerations. The documents are divided into two parts: the baseline and the planning (2019); and the monitoring plan and action plan (2021). The plan is developed by architects and defines locations and priority areas. In the context of the MSP-MED project, there is a WP3 on data use and sharing and a special task within this WP, the consolidation of MSP plan boundaries and data models.

In September 2021, the TEG made recommendations on the data models to use for MSP, three models were proposed. The objective for France is to use the currently available data model for interoperability of MSP data for publication on national portal.

In the Framework of MSP-MED, SHOM undertook a study on the French MSP Plans in three parts:

- Analysis of the geographical position consistency of the boundaries of the Mediterranean DSF Vocation Areas ahead of their publication.
- Use of the availability and interoperability of the vocation areas: analysis of needs, platforms already existing and development of an interoperability tool.
- The last part was evaluation of the description of the DSF vocation areas compared to the existing European data models.

This study revealed the need for France to adapt the MSP plan data making use of available model. The main goals of the data model adaptation are:

- Ensure interoperability between databases and enable the dissemination of geographical information at a European scale.
- At the national level: harmonize datasets to ease communication between authorities and sea users, and to enable their publication.

The model chosen for adaptation is the EMODNet MSP model. This was highly recommended in the TEG MSP Data model proposal. The model was used to develop an overview of MSP in the EU through the EMODnet Human Activities portal and is compatible with Member States existing operational models:

- Specifications provided and code lists (HILUCS, SeaUse) for filling in the descriptive attributes of maritime activities, their 3D classification, functionality and prioritisation
- Model identified as the most suitable for the work on the French MSP data in the MSP-MED Study realized by SHOM on the French MSP Plans.

A comparison between data models and adaptation options was undertaken, there is a need to structure the data model from a single layer to a 4-layer model. France needs to convert the original use name, planned activities to the EU classification lists, with geographical layers. SHOM has worked on the EMODNET data model for MSP to produce a ready to use data model for MSP data producers by: providing Geopackage opensource format, limiting the transfer of multiple files; pre-filling code lists from EU classifications for uses and types of regulations; automating the completion of the various attributes referring to the vocation of the area; and supplying documentation to support the work of the DIRM MED (Local MSP authority) for data production.
There will be close cooperation between the data producer (MSP Local authority) and SHOM to produce the new model. SHOM has automated the following maritime activities attributes:

- Creation of a codelist mapping table, between the HilucsLandUse, HilucsMSP (INSPIRE) and the SeaUseName (BASEMAPS) attributes.
- Simplify the completion of the different maritime activity's attributes: definition of the HilucsLandUse attribute automatically defines the corresponding SeaUseName and reduces the choice for HilucsMSP to the related possibilities.
- Minimize potential errors (different activities code in the same entity).

The aim is to create a control which detects if there is an overlap of two opposing / conflicting uses in the same area. This work gives different prospects for MSP in France, it will be an opportunity to integrate data into national portals, to adapt the planning data of the 3 other metropolitan planning areas, to Integrate data into the EMODNet Human Activities portal, and to use it as a base for the MSP in French Guiana. This work gives us the opportunity to have operational data model for future production and updates (2025), to gain interoperability of MSP data and respond to the General Secretariat of the Sea's (Prime Minister service) request for the publication of MSP data on a national portal (official, enforceable data).

Q/A:

Marta Ballesteros (CETMAR): It would be great to hear what practicalities would help you to do it better, we are designing the advice, but we would like to hear from the practical technicians that are using it.

Jean-Baptiste Suzanne (SHOM): We would be happy to exchange on this.

Ricardo Haroun Tabraue (IU-ECOAQUA): In your final slide you put that the MSP program will be updating in 2025, is that the date the government is planning to update the program?

Jean-Baptiste Suzanne (SHOM): Our national plans are in force for 6 years and must be reviewed after this.

Adeline Souf (SHOM): Plans were decided in 2019 in terms of the strategic, not regarding the action plan nor the monitoring, but for the planning, that's from 2019 + 6. There will be discussions at the central level regarding how to simplify and how to prepare for the next round from September 2022. SHOM will provide the inputs to the ministries in charge of that, we will try to promote this model to already be included in the guidelines.

MSP data for decision support in the Outermost Regions: MSP-OR project – Natali Santos (FRCT) – See Presentation.

The Outermost Regions (ORs) are an integral part of EU territory (Article 349 of the TFEU*): 9 EU ORs from 3 Member States (MS), in Atlantic, Azores, Canarias and in the Indian Ocean. The MSP-OR is for Azores, Madeira, Canary Islands and French Guiana. They have some specificities: remoteness, insularity, small size, difficult topography and climate, economic dependence on a few products, conditioning also their maritime economic development. The project started in September 2021 and will last until 2024, we are 12 partners from 3 MS.

There are 3 pillars which consist of: strong coordinated and collaborative action in the establishment and adoption of the **EU MSP Directive;** embrace common challenges and the specific needs of each OR, as well as the knowledge sharing and best practices exchange; and capitalize resources and promote sustainable development of the Blue Economy in the ORs. Goals of the project are:

- Support MSP competent authorities in Portugal (Azores and Madeira) and Spain (Canary Islands) on advancing the implementation of the next phases of their MSP processes, launched with previous MarSP Project (2018-2019);
- Support MSP competent authorities in France (French Guiana) to build the early stages of MSP process, advancing with knowledge, providing grounds to launch and adopt the principles of MSP;
- Provide an integrated ocean governance platform that allows maritime spatial planners to jointly develop approaches for MSP in the ORs;
- Fill knowledge gaps & advance the ecosystem-based approach, monitoring and evaluation in MSP in the participating Regions.

The project is divided into 6 WP, the first one is coordination and management, and last one Communications and dissemination. WP2 is the Ocean Governance Platform, it will be a common virtual area. There was a virtual workshop in February 2022, and they published a **Platform Manual** (D.2.2) April 2022 and a **Report on Needs, Barriers and Enablers for MSP and Capacity Building** (D.2.1) April 2022. WP3 is to fill Gaps linked with on-going MSP processes, it intends to develop inputs and tools that are missing in order to have effective MSP processes and implementation (data gathering and incorporating, stakeholders´ interaction systems and blue economy research). Within this WP there was: **MS10 FG sea basis strategy public debate** (October 2021); **MS11 Workshop on "ready to use" products** (March 2022); **D.3.12 Maps of socio-economic sea issues in FG** (April 2022). WP4 is on Ecosystem Approach to Regional MSP Challenges, this should answer to three main questions: *1. What is the right level of detail and mandatory rules in the national MSP?*; *2. Are the responsibilities of different authorities well defined so that the hierarchy goes well between them?*; *3. How to strengthen the EBA having to apply measures in relation to administrative borders while ensuring ecological connectivity for biodiversity and ecosystem functioning?*

Finally, WP5, which is led by MSP competent authorities, is for continuous MSP monitoring & evaluation, it will propose guidelines for monitoring MSP in the ORs considering regional specificities; Identify, select and test the monitoring indicators considering the available information, the baseline and the targets; and draw the main findings and recommendations into a concise, objective and implementation-oriented monitoring plan for public dissemination.

Q/A:

Jean-Baptiste Suzanne (SHOM): Your project is built on a previous project I would like to understand what the link is between what is going on in the official planning and the activities that you are going to develop now and how this affects the participation with stakeholders.

Andrej Abramic (Co-Chair): In MarSP project we worked with the stakeholders and most of the meeting and the most engaged process were with the fishermen community. We promise them to be visible and considered in the planning. I hope that this collaboration with fishermen community will continue, and it will be included in the MSP_OR project.

Natali Santos (MSP-OR): We have stakeholder engagement in the WP3 especially with fishermen, and the MPA, it is planned to have discussion in the 3 regions. There are geoportals for Macaronesia regions, available on our website, so I encourage you to have a look.

Ricardo Haroun Tabraue (IU-ECOAQUA): Additional comment about the previous project, I was the starting point of the participatory approach. Here in the seven islands, there are many different maritime sectors and with the meetings we have with different sectors, sometimes we're meeting only with one sector, with the fisheries, for example, and we visit all the fisheries cooperative in the islands. But less often we are meeting with different sectors at the same time, and it could be interesting to see the viewpoint for the other sectors.

TEG-MSP and the Italian MSP plan: synergies and cooperation – Amedeo Fadini (CNR-ISMAR & IUAV) – See Presentation.

The presentation is about the support to the Italian plan. The competent authority (CA) is the Ministry of Sustainable Infrastructure and Mobility (MIMS). There is a technical Committee (5 Ministries, 15 Italian regions that face the sea) that set up the Plans (3 Plans for Adriatic, Ionian-Central Mediterranean, Tyrrhenian-Western Mediterranean), and supports the CA in monitoring the Plans and CNR-ISMAR, Corila and IUAV University provide scientific support to the planning process in the framework of MSPMED project. The planning units is a zoning plan, it creates a vocational map, inside each subarea smaller planning units have been defined with a specific type (generic, priority, limited or reserved).

During the planning process the definition of the planning process resembled a table and a lot of text. Our problem was how to translate this into a good data model that will be sharable and interoperable. It was very important to have the support and exchange of information between persons that were involved in Italian MSP process and also the other partners of the MSPMED project. They prepared a data model with three layers: areas, subareas and planning units. Each planning unit has two types of uses: a set of main uses (except generic Pus) and a set of other uses that are explicitly provided by the plan (except reserved Pus). All uses compatible with main uses are allowed in Priority Pus. In our management tool they try to keep track of what use is linked to which planning unit. The tool is made with open-source GIS software. Uses are represented by a point geometry inside the PU. These points can be derived from real geometries about that use or theme. In the vocational map, each PU (Priority, Limited or Reserved) has one or more main uses: a different colour is assigned to each use, a small texture image is generated for each existing combination of uses.

CNR-ISMAR developed a quick tool to export the DB data for the Italian MSP Plan in a flat data model in ESRI shapefile format. With WebGIS one can manage a multiscale plan of which the digital map is a representation (one of the many possibilities). The user is able to compare different levels, estimate uncertainty and pick the best reference for each purpose. In terms of results from MSPMED, we have developed a few tools: EMODnet translation tool; Exploratory Analysis Tool. The participation of CNR-ISMAR, IUAV and CORILA to the TEG-MSP, the collaboration with the CA in the national MSP process and the activities of the MSPMED project have greatly contributed to shape the output of the Italian MSP plan in a format ready to be translated to EMODnet MSP data.

5. Final discussion and conclusions, wrap up the meeting

Anja Detant (CINEA): I want to underline how useful this work is for the actual plans. We have seen what has been done in France with the EMODnet model that came out of the group discussions. The Italian MSP process also benefited from this. I think we cannot have more clear examples of how useful this group is, and that all of you are engaged in exchanging knowledge and expertise. I am very confident that more good work and more useful knowledge and practises can come out of this group. I wanted to, in the name of the DG MARE and CINEA, thank you all for this great engagement and for the great results.

Juan Ronco Zapatero (DG MARE): I join CINEA in their words. The Italian example illustrates very well the benefit of the group and I encourage you all to meet in person in the future.

Andrej Abramic(Co-chair): The last session shows that there is direct link between MSP projects and the TEG . It's a full circle, and I think the hybrid meeting format has worked well.

Joni Kaitaranta (Co-chair): Do we need to plan for the next meeting, and do we have tentative schedule or some preparation?

Andrej Abramic (Co-chair): I think sub-groups need to be given the time to finalise reports / outputs, so to practically consider this for September and maybe to have this meeting at the beginning of October?

Chris McDougall (MSP AM): Traditionally it's worked very well if we have a TEG meeting shortly before the MSEG meeting, which has always allowed a very efficient and effective dissemination of the information from this group into the MSEG meeting. The next MSEG should be in October / November. But this year, those months are particularly busy with the International Conference on MSP as well as several other events. We need to look at the agendas and work out where exactly it could fit, and it will be an opportunity to hear from all of you and the progress made by the subgroups.

Anja Detant (CINEA): Just again an invitation to reflect on how this group can continue, maybe before the next meeting, we can have some exchanges by e-mail. In September, if all goes well with the MSPMED project, we will have a discussion on a continuous dialogue on MSP between EU and non-EU peers, so I think it's also an element that we would need to reflect. We do not want to duplicate efforts and we need to benefit from efforts, but I think if there is a decision to create some kind of group or platform for the West Med, then ideally would need there to be a connection with this TEG.

Juan Ronco Zapatero (DG MARE): We are working with IOC UNESCO on the continuation of the actions and updated version of what we call the MSP Road Map. One of the actions could be to share the work, expertise and knowledge that has been built at European Union level with the wider community of countries working on their maritime spatial plans. In that context, this group could play a role.

Anja Detant (CINEA): We will have a new AM for MSP and a part of the task is to continue to support the TEG.