Report of the MED-MSP-CoP IV 2025 workshop

Thursday, 27 November 2025

1. Introduction: objective and agenda of the workshop

The fourth and final 2025 workshop of the Community of Practice on Maritime Spatial Planning in the Mediterranean (MED-MSP-CoP) was held on 27 November 2025 in Tunis, at the Hotel Royal Asbu, in a hybrid format, from 9:15 to 17:30 (local time). The event was organised in collaboration with the MEDIGREEN project and represented the concluding event of the MED-MSP-CoP 2025 workshop series.

The workshop built upon the outcomes of the three previous 2025 MED-MSP-CoP meetings:

- the first hybrid workshop, held in Madrid on 29 January 2025, which finalised a recommendation paper based on 2023-2024 work of the MED-MSP-CoP, discussed the MED-MSP-CoP Action Plan for the biennium 2025-2026, and established four thematic Working Groups (WGs):
    - MSP and Fisheries,
    - MSP and Aquaculture,
    - MSP and Offshore Renewable Energy,
    - MSP and Nature Protection;
- the second online workshop on 26 May 2025, which launched the WG activities, identified key thematic issues for each Working Group, and led to their successive prioritisation through an online survey;
- the third online workshop on 7 October 2025, which focused on the joint identification of relevant knowledge sources and on the discussion of remaining knowledge gaps related to the WG topics and their prioritised issues.

In this context, the Tunis workshop aimed to consolidate and further advance shared knowledge within the MED-MSP-CoP, with a specific focus on the transboundary dimension of Maritime Spatial Planning and on the priority issues identified by the four Working Groups.

The specific objectives of the IV 2025 workshop were to:

- identify the main challenges for MSP in supporting the sustainable transition of fisheries, aquaculture, and offshore renewable energy in the Mediterranean;
- identify the main challenges for MSP in strengthening nature protection in the Mediterranean;
- prioritise the identified challenges across the four WG themes;
- identify key action items, conceived as elements of an ideal checklist, to be considered when addressing these challenges and to inform the development of MED-MSP-CoP recommendations planned for 2026;
- provide relevant input for the MEDIGREEN technical studies on the role of MSP in the sustainable development of fisheries, aquaculture, offshore renewable energy, and enhanced nature protection.

To foster the most effective exchange of knowledge, the workshop was designed as a highly interactive event. Plenary sessions were held in hybrid mode, while participatory sessions took place in person and followed a World Café approach. Participants connected online were able to actively contribute to the discussions through a dedicated web-based tool.

The workshop was structured around the following main components:

- an opening plenary session, providing a recap of the MED-MSP-CoP 2025 process, an overview of the workshop objectives, and an introduction to the working methodology;

- World Café sessions, organised around the four Working Group topics. Participants were divided into four groups, each of which rotated across two working tables (a corresponding topics), focusing on the identification, discussion, and prioritisation of challenges and corresponding action items from a transboundary perspective;
- a closing plenary session, during which the outcomes of the participatory sessions were reported, and next steps towards the development of MED-MSP-CoP recommendations for 2026 were discussed.

The results of the Tunis workshop represent a key contribution to the next phase of MED-MSP-CoP activities and provide a structured basis for the formulation of operational recommendations, as well as for the advancement of MEDIGREEN technical studies.

This report is structured as follows. Sections 2–5 present the main outcomes of the World Café sessions for each Working Group, while the annexes include the workshop agenda (Annex A) and the detailed results of the participatory exercises, merging the results obtained through in-person and online participation (Annexes B–E). Section 6 is dedicated to presenting the WGs co-leaders.

2. World café session on MSP and Fisheries: main outcomes

Building on issues previously identified regarding fisheries management and its integration within MSP, the workshop focused on the challenges limiting effective coordination between MSP and fisheries policies, as well as on actions needed to support sustainable fisheries in a spatial planning context.

A first group of challenges concerns the co-management of fisheries, particularly within MPAs. Participants highlighted that co-management arrangements are often insufficiently embedded in legal and institutional frameworks, limiting their effectiveness. Clarifying the legal status of co-management at the national level was identified as a key challenge. Actions proposed include explicitly incorporating co-management concepts into fisheries and MSP legislation. Equally important is ensuring real and long-term participation of fishers and their associations, not only during decision-making phases but throughout the entire MSP and MPA lifecycle. Proposed actions include careful stakeholder mapping, early and continuous involvement of fisheries actors, and transparent communication mechanisms, including participatory platforms. Capacity building of fisheries stakeholders on MSP and MPA concepts was also identified as necessary, with education, training and dedicated funding highlighted as enabling actions.

A second set of challenges relates to climate change impacts on fisheries, including adaptation and mitigation. High levels of uncertainty and limited evidence-based assessments of climate change impacts on fish stocks remain a major barrier. Actions proposed include strengthening monitoring and modelling efforts, integrating agreed climate scenarios into MSP processes, and improving understanding of species shifts. Participants also highlighted challenges related to the management of Non-Indigenous Species (NIS), proposing enhanced monitoring and innovative valorisation strategies. Decarbonisation of the fishing fleet was identified as another challenge, constrained by existing regulatory frameworks. Suggested actions include revisiting concepts such as “fishing capacity” within the Common Fisheries Policy to enable greater flexibility. Pollution, particularly marine litter caught by fishers, was also highlighted, with actions focusing on awareness-raising, capacity building and the development of common strategies across EU and non-EU Mediterranean countries.

Figure 1. Participants of the MSP and Fisheries group discussing.

Improving fisheries-related data, including ecological, social and economic aspects, emerged as a major and cross-cutting challenge. Participants emphasised the uneven availability and quality of data across the Mediterranean, particularly between northern and southern countries. Actions proposed include providing financial and technical support for data collection and standardisation and developing agreed data collection plans. Unreported and underreported data—such as recreational fishing—were identified as one of the most urgent and difficult challenges. Proposed actions include

strengthening control and enforcement, improving education and awareness, and introducing incentives for proper reporting. In addition, participants stressed the need to move beyond traditional bio-economic data and strengthen social, cultural and economic datasets, through the involvement of social scientists and participatory mapping approaches.

Another challenge concerns the role of ecosystem-based MSP in supporting fisheries sustainability and fisheries management policies. Participants noted that management plans remain largely species-oriented, limiting their ability to address ecosystem interactions and bycatch. Actions proposed include supporting research and knowledge-driven projects, encouraging exchanges between fishers and scientists, reorienting subsidies towards long-term sustainability rather than short-term sectoral survival and supporting the shift from species-oriented to ecosystem management plans. MSP was also seen as a potential framework to support technical and social modernisation of the sector, including the promotion of high-quality and value-added products.

Finally, improving dialogue between MSP practitioners and fisheries stakeholders across scales was identified as a critical governance challenge. Key difficulties include unclear leadership of dialogue processes, fragmented responsibilities and inappropriate communication approaches. Actions proposed include developing engagement plans with clearly defined roles, strengthening internal coordination among authorities, and adopting tailored communication strategies using local language and accessible formats. Education programmes, including those targeting schools, were also highlighted as a long-term action to strengthen MSP literacy within fisheries communities.

3. World café session on MSP and Nature Protection: main outcomes

Building on the priority issues on nature protection already identified in previous workshops, the discussions of this session focused on clarifying the main challenges that still hinder effective integration of biodiversity conservation into MSP and identifying concrete actions to address them.

A first set of challenges relates to the integration of MPAs, MPA networks and ecological connectivity within MSP frameworks. Participants highlighted that assessing MPA connectivity remains particularly complex, due to its three-dimensional nature and the need to account for multiple species and ecological processes. This challenge was considered among the most difficult to address. To respond to it, participants identified several action items, including the use of connectivity modelling, species tracking data and high-resolution satellite observations to identify ecological corridors, provided that sufficient funding is mobilised. Another key challenge is the limited consideration of ecologically important areas outside MPAs, which are essential for the functioning of MPA networks. Actions proposed include the application of green infrastructure concept and mapping, as well as the development of Mediterranean-specific standards for Other Effective area-based Conservation Measures (OECMs). At a more operational level, the lack of systematic monitoring of activities and pressures both inside and outside MPAs was identified as a barrier, with the inclusion of monitoring measures directly in MSP plans proposed as a concrete response.

A second group of challenges concerns the assessment of cumulative impacts of multiple sectoral activities on ecosystems. Participants underlined persistent knowledge gaps regarding interactions between human uses and marine ecosystems, both within and beyond protected areas, as well as the insufficient integration of land-based pressures in MSP processes. Proposed actions include the identification and mapping of pressured areas using new technologies, the integration of ecological corridors into MSP plans, and the strengthening of marine and port observing programmes to support cumulative impact assessments.

Figure 2. Participants of the MSP and Nature Protection group discussing.

Regarding the role of MSP in achieving biodiversity policy objectives, including MPA coverage targets and nature restoration, several governance-related challenges were identified. One of the most urgent issues is the lack of integration between MSP and MPA designation processes, which are often developed in parallel rather than in a coordinated manner. Actions proposed include reinforcing this integration through the revision of the MSP Directive, clarifying governance and legislative frameworks, and increasing the role of MSP in supporting future MPA designations across scales. In

addition, participants stressed that the management effectiveness of protected areas remains uneven and difficult to assess. Suggested actions include strengthening assessment standards beyond the mere existence of management plans and providing managers with appropriate tools and resources for monitoring and evaluation, supported by MSP's multi-level governance mechanisms.

Climate change was identified as a transversal challenge affecting all nature protection objectives. Key difficulties include anticipating species shifts, identifying vulnerable habitats, and increasing ecosystem resilience under uncertain future conditions. Participants emphasised the need for climate change scenarios and impact modelling that are directly usable in MSP and decision-making processes. Concrete actions include enhanced species monitoring to detect trends, the development of "ready-to-use" climate scenarios for planners, the identification of marine climate refugia, and the promotion of nature-based solutions and ecosystem services approaches to support adaptation.

Finally, cross-border and basin-scale cooperation emerged as a critical area where significant challenges remain. The lack of harmonised MSP language, culture and datasets across Mediterranean countries was identified as one of the most urgent but also more feasible challenges to address. Proposed actions include education and capacity-building initiatives, harmonisation of data standards, building on existing initiatives such as EMODnet, and increased use of cooperation programmes to assess transboundary ecological corridors. Participants also noted the difficulty of ensuring coherence among existing regional and international regulatory frameworks (e.g. Barcelona Convention, IMO, GFCM). Strengthening the role of the UNEP-MAP MSP Working Group was identified as a key action to improve coordination and support integrated implementation at the Mediterranean scale.

4. World café session on MSP and Offshore Renewable Energy: main outcomes

Building on previously identified issues related to offshore renewable energy development in the Mediterranean, workshop discussions focused on the challenges related to knowledge gaps, governance, spatial suitability and coexistence, as well as on concrete actions to address them through MSP.

A first major group of challenges concerns the knowledge required for sustainable ORE development and its spatial allocation. Participants highlighted limited availability, accessibility and transparency of data on ongoing ORE authorisation processes, and related implications for other sectors and the environment. Actions proposed include strengthening early and continuous interaction between MSP planners and ORE developers, ensuring regular data exchange, and improving data standardisation. Significant gaps remain in knowledge on habitats, species and seabed characteristics, as well as on the impacts of different ORE technologies, including floating installations and cumulative impacts. Proposed actions include mobilising funds for habitat and species mapping, developing spatial and temporal impact models, and implementing pilot projects in the Mediterranean combining public and private funding to test technologies, environmental effects and mitigation measures.

Figure 3. Participants of the MSP and ORE group discussing.

A second set of challenges relates to suitability mapping for ORE. Participants stressed that current suitability maps often focus primarily on resource availability, neglecting environmental, social, cultural and land–sea interaction aspects. Actions proposed include developing integrated suitability maps that incorporate all these dimensions and defining Mediterranean-wide criteria, standards and guidelines that could be embedded in national licensing processes. The difficulty of anticipating future suitability under climate change was also highlighted, with actions focusing on the use of climate change models, adaptive approaches and consideration of moving ORE installations over time.

Regulatory and governance challenges were identified as another critical area. These include the lack of a shared definition of what “offshore” means across Mediterranean countries, weak integration of Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) into early planning stages, and complex and lengthy authorisation procedures. Proposed actions include sharing national approaches to offshore definitions to move towards a common Mediterranean understanding, reinforcing the role of SEA and EIA from the earliest stages of MSP and ORE planning, and developing simplified frameworks for pilot projects that still fully address environmental and social aspects. Unplanned ORE development in some countries was identified as a source of legal uncertainty, with the development of dedicated ORE plans integrated into MSP proposed as a key response.

Finally, challenges related to coexistence, multi-use and social acceptance were discussed. Participants highlighted limited operational tools for conflict analysis and insufficient engagement of other sectors, such as fisheries and nature conservation actors, in ORE planning. Actions proposed include developing guidelines to strengthen stakeholder engagement, increasing awareness of both economic and non-economic benefits of ORE for local communities, and supporting research to operationalise conflict analysis tools. Additional challenges include the lack of clear rules on decommissioning and the insufficient consideration of land-based impacts associated with ORE infrastructure. Actions proposed include developing binding criteria and guidelines for decommissioning and ensuring that land–sea interactions and onshore impacts are systematically addressed within MSP frameworks.

5. World café session on MSP and aquaculture: main outcomes

Building on previously identified issues related to the sustainable development of aquaculture and its spatial integration within MSP, the workshop discussions focused on identifying operational, governance and knowledge-related challenges, as well as concrete actions to address them.

A first group of challenges concerns the interaction between aquaculture and nature conservation. Participants highlighted that increasing the sustainability of aquaculture, particularly through Integrated Multi-Trophic Aquaculture (IMTA), low-trophic and non-fed aquaculture, and regenerative approaches, still faces regulatory, technical and spatial barriers. MSP was identified as a key instrument to support improved site selection for these practices, ensuring compatibility with environmental characteristics, managing conflicts and improving co-existence other uses. Actions proposed include improving coordination among aquaculture stakeholders across the value chain, enhancing links with other maritime users (notably fisheries), adapting legal frameworks to facilitate innovative production models, and exploring the use of digital and AI-based tools to support site selection and management ("precision aquaculture"). At the same time, carefully managing the interactions between aquaculture farms and marine conservation areas remains a significant challenge. The main action identified to address this issue is the better integration of biodiversity spatial data into aquaculture zoning processes, either directly through Allocated Zones for Aquaculture (AZAs) or via MSP frameworks.

Figure 4. Participants of the MSP and Aquaculture group discussing.

A second set of challenges relates to multi-use and coexistence, including aquaculture. Participants noted persistent knowledge gaps on how to effectively combine aquaculture with other activities and highlighted limitations in current Environmental Impact Assessment practices, which often lack sufficient multidisciplinary approach. Actions proposed include explicitly referencing multi-use in the revision of the MSP Directive, introducing Environmental Monitoring Programmes (EMPs) within AZAs planning, and integrating the concept of Allowable Zone of Effects (AZE) into EIAs for aquaculture. Strengthening socio-economic data was also identified as a prerequisite to better assess synergies and conflicts with other uses, with a specific need for Mediterranean-focused studies and case analyses reflecting local contexts. In addition, participants highlighted the often-overlooked issue of the end-of-life of aquaculture sites, proposing that MSP and AZA processes explicitly consider reuse or remediation of former aquaculture sites.

Another major challenge discussed was the proper allocation of space for aquaculture through MSP, particularly the coordination between AZAs and MSP plans across national and local levels. Differences

in governance frameworks and planning timelines were identified as main barriers. A key action proposed was the development of a comparative study on AZA and MSP governance frameworks across the Mediterranean, to identify critical gaps and leverage points. Access to environmental data and information on existing aquaculture sites was also highlighted as uneven. Concrete actions include integrating multiple data sources within MSP plans, promoting open data, and regularly updating aquaculture farm location data in national geoportals developed for MSP purposes. Participants further stressed the need to better integrate climate change considerations into aquaculture zoning (AZA planning), including the use of climate scenarios in suitability mapping, as well as to account more systematically for land–sea interactions, through the development of a framework identifying key elements to be considered in Land–Sea Interface (LSI) analyses for aquaculture.

Finally, strengthening the engagement of aquaculture stakeholders in MSP emerged as a cross-cutting challenge. Participants emphasized the importance of multi-level governance and early, meaningful involvement of stakeholders. Actions proposed include benchmarking stakeholder engagement practices across Mediterranean countries, improving transparency and data sharing throughout MSP processes, and enhancing communication targeted at aquaculture stakeholders. Engagement with local communities was also identified as critical, with the promotion of social licence for aquaculture activities highlighted as a key action. In this context, the inclusion of local and practitioners' knowledge alongside scientific data was seen as essential to improve decision-making and ensure the legitimacy and effectiveness of MSP outcomes.

6. Introducing the WGs co-leaders

The MED-MSP-CoP working groups are coordinated by two co-leaders each, who are responsible for steering the group's activities and ensuring continuity of work overtime. Their role includes facilitating discussions and guiding the work during workshops, including the World Café sessions held in Tunis.

Working Group: MSP and Fisheries
Co-Lead: Maria Bas

Maria Bas is a postdoctoral researcher in the Integrated Marine Ecosystems Assessment group (iMARES) from the Institut de Ciències del Mar (ICM-CSIC), specialized in marine ecology with a focus on trophic and historical ecology. She applies a wide range of analytical techniques, including spatial modelling, stable isotope analysis, and genetic tools, to study marine food webs and assess how human pressures impact marine ecosystems.

"*MSP is a key tool for achieving sustainable fisheries management. By enabling the integration of ecological knowledge and spatial data, it supports decision-making to protect fish stocks, preserve ecosystem functions and promote long-term socio-economic benefits for coastal communities*".

Co-Lead: Lobna Boudaya

Lobna Boudaya is a marine ecologist and researcher at the Laboratory of Marine Biodiversity and Environment (BIOME Lab) of the University of Sfax, Tunisia. she works on coastal and marine biodiversity, sustainable fisheries, and ecosystem-based management. With over 15 years of experience, she has developed strong expertise in seagrass ecology, benthic biodiversity, and nature-based solutions (NbS) for coastal protection and climate change adaptation. As a consultant for UNEP/MAP's PAP/RAC, she supports Integrated Coastal Zone Management (ICZM) and MSP initiatives in North Africa, bridging science and policy.

"*From my perspective, MSP provides an effective framework to reconcile fisheries sustainability with marine conservation. It allows for the integration of ecological knowledge, fishing activities, and socio-economic priorities in a coherent way, ultimately reducing conflicts and promoting ecosystem-based management that supports both livelihoods and biodiversity in the Mediterranean context*".

Working Group: MSP and Nature Protection
Co-Lead: Neil Alloncle

Neil Alloncle is a maritime and coastal planning specialist with more than 15 years of experience working with French public bodies such as the French Biodiversity Office (OFB) and the Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning (Cerema). His work focuses on conservation planning, the French MSP process, and cross-border cooperation within EU projects and expert groups, including the Med-MSP-CoP.

"*Nature protection is central to MSP's ecosystem-based approach. By embedding conservation objectives into planning frameworks, MSP strengthens Marine Protected Area networks, enhances ecological connectivity, and supports international biodiversity goals such as the 30x30 target, potentially promoting a coherent approach at the Mediterranean scale*".

Co-Lead: Aomar Bourhim

Aomar Bourhim is an expert in Sustainable Blue Economy, Maritime Spatial Planning, and Ocean Literacy. He has represented Morocco in several international MSP and blue economy initiatives, including the WestMED initiative, IOC-UNESCO projects and BBNJ negotiations. He co-founded Morocco Blue Consulting Bureau and pioneered projects immersing artificial reef in North Africa to enhance marine biodiversity and coastal livelihoods.

"*MSP is a key tool for Mediterranean countries to ensure sustainable and equitable use of marine and coastal resources. It reduces conflicts among users, promotes participatory governance, supports marine biodiversity protection, and integrates climate change adaptation strategies within the blue economy framework*".

Working Group: MSP and Offshore Renewable Energy
Co-Lead: Yves Henocque

Yves Henocque is a maritime policy and integrated coastal and ocean management specialist with over 30 years of experience working with the French Ocean Research Institute (IFREMER), regional seas organisations, and EU-funded initiatives across the Mediterranean, Indian, and Pacific Oceans. His work focuses on linking coastal development with maritime activities such as offshore wind energy through ecosystem-based and participatory approaches.

"*Offshore renewable energy offers an opportunity to foster a "regenerative blue economy". Through the combined use of ICZM and MSP, it is possible to balance energy development with environmental protection, ensuring that offshore activities contribute to sustainable and inclusive growth*".

Co-Lead: Maria del Mar Otero

Maria del Mar Otero is a coastal and marine expert with long experience in the Mediterranean, Europe and Asia. She holds a PhD in Marine Science, an MSc in Shellfish Resource Management and a BSc in Marine Science. Over the last years, she has worked on numerous international and national projects and initiatives generating and facilitating knowledge transfer, developing capacity building, networking and delivering policy outreach on topics such as adaptation and mitigation to climate change, marine biodiversity assessments and conservation, marine protected areas, restoration, fishing-biodiversity interactions, blue carbon ecosystems and nature-based solutions.

Working Group: MSP and Aquaculture
Co-Lead: Inal Ahmed

Ahmed Inal is an experienced marine researcher with over 13 years of expertise at the National Center for Research and Development of Fisheries and Aquaculture (CNRDPA) in Algeria. He leads the "Quality and Monitoring of Marine Ecosystems" research team and coordinates projects on sustainable aquaculture, environmental monitoring, and spatial management of marine resources. His work supports the classification and sanitary monitoring of shellfish production areas and contributes to national aquaculture planning.

"*Marine Spatial Planning (MSP) is essential for guiding the sustainable development of aquaculture. It supports the identification of Allocated Zones for Aquaculture (AZAs), promotes ecosystem-based management, helps address user conflicts, and contributes to climate change adaptation while ensuring environmental protection*".

Co-Lead: Céline Jacob

Céline Jacob is a researcher at the French Research Institute for the Exploitation of the Sea (IFREMER), where she studies the transition of aquaculture toward more resilient and sustainable production systems. Her work focuses on governance frameworks and spatial management tools that foster innovation and sustainability in the blue economy. With over a decade of experience, she has been involved in several multidisciplinary European projects supporting sustainable aquaculture and policy implementation.

"*MSP can serve as a key transitional mechanism for the aquaculture sector, encouraging institutional and social change towards more sustainable practices*".

ANNEX A - WORKSHOP AGENDA

MED-MSP-CoP - IV 2025 workshop

Thursday, 27 November 2025

9:15 – 17:30 Local Time

Meeting venue: Hotel Royal Asbu, Tunis

This is the fourth and final workshop of the 2025 MED-MSP-CoP series, organised in collaboration with the MEDIGREEN project[1]. The first hybrid workshop, held in Madrid on 29 January 2025, finalised a recommendation paper based on the previous two years of activities, discussed the contents of the current MED-MSP-CoP Action Plan, and established the MED-MSP-CoP Working Groups (WGs): MSP and Fisheries, MSP and Aquaculture, MSP and Offshore Renewable Energy, and MSP and Nature Protection.

The second workshop, held online on 26 May 2025, launched the activities of the four WGs and engaged experts in identifying and discussing key issues relevant to each group. These issues were subsequently prioritised through an online survey.

The third workshop, held online on 7 October 2025, focused on the joint identification of knowledge sources—such as case studies, pilot projects, manuscripts, reports, information from formal MSP and other planning processes, handbooks, and guidelines—related to the WG topics and their prioritised issues.

This workshop aims to build on the previous ones and further advance shared knowledge on the transboundary dimension of MSP, with a focus on the priority issues identified by the four WGs. Specific objectives include:

- Identify the main challenges for MSP in supporting the sustainable transition of fisheries, aquaculture, and offshore renewable energy in the Mediterranean.
- Identify the main challenges for MSP in strengthening nature protection in the Mediterranean.
- Prioritise identified challenges.
- Identify key action items – part of an ideal checklist - to be considered when tackling these challenges. These action items will inform the work on recommendations planned for 2026.
- Provide input useful for the MEDIGREEN technical studies on the role of MSP for the sustainable development of aquaculture, fisheries, and offshore renewable energy,

[1] Documents of the MED-MSP-CoP can be access at https://maritime-spatial-planning.ec.europa.eu/msp-resources/med-msp-cop

as well as for enhanced nature protection.

To foster the best possible shared knowledge, the workshop will be highly interactive, featuring extensive discussion sessions in a *World Café* format. Plenary sessions will be held in hybrid mode, while the participatory sessions will be held in person. People connected online will be able to contribute through an online web tool.

AGENDA	
09:15 – 09:45	**Registration**
09:45 – 11:25	**Setting the scene** *Chair: Samir Bachouce (CNRDPA)* Recap of the MED-MSP-CoP activities in 2025 and introduction to the workshop – *Emiliano Ramieri (CNR ISMAR), 15'* MSP and aquaculture in the Mediterranean: status, trends, interactions, and impacts – *Daniele Brigolin (IUAV), 15' plus 5' for* Q/A MSP and fisheries in the Mediterranean: status, trends, interactions, and impacts – *Ivan Sekovski (PAP-RAC), 15' plus 5' for* Q/A MSP and nature protection in the Mediterranean: status, trends, interactions, and impacts – *Monica Campillos (IEO CSIC), 15' plus 5' for* Q/A MSP and offshore renewable energy in the Mediterranean: status, trends, interactions, and impacts – *Emiliano Ramieri (CNR ISMAR), 15' plus 5' for* Q/A Introduction to the workshop dynamic – *Ginevra Capurso (CNR ISMAR), 5'*
11:25 – 11:45	**Coffee break**
11:45 – 13:00	**World Café – Round 1** Four tables, one for each MED-MSP-CoP WG (about 10 participants each), focusing on structured identification and discussion of challenges and action items. Facilitator: WG co-leads Rapporteur: MEDIGREEN study representative
13:00 – 14:15	**Lunch**
14:15 – 15:30	**World Café – Round 2** Four tables, one for each MED-MSP-CoP WG (about 10 participants each), focusing on structured identification and discussion of challenges and action items. Facilitator: WG co-leads Rapporteur: MEDIGREEN study representative

15:30 – 16:10	**Reporting from the World Café tables** Report for the World Café tables, *10' each*
16:10 – 16:40	**Prioritisation exercise** Stretching and selection of the two most relevant challenges for each topic
16:40 – 17:30	**Plenary discussion on** • Workshop results • Next MED-MSP-CoP activities • The future of the MED-MSP-CoP in the frame of the Pact for the Mediterranean

ANNEX B – OUTCOME OF TABLE EXERCISE: WORLD CAFE SESSION ON MSP AND FISHERIES

In the exercise, participants were invited to:

- Describe challenges related to each prioritised issue identified, including barriers to remove, opportunities to seize, and needs that must be addressed. Challenges shall be clearly related and relevant to MSP.
- Identify key action items – part of an ideal checklist - to be considered when tackling these challenges. Action items should be clearly related and relevant to MSP.
- Specify the scale at which each challenge applies: regional (entire Mediterranean Sea), sub-regional (sub-Mediterranean level), national, local.
- Identify, if relevant, specific areas where these challenges apply to, e.g. the Levantine Sea, the Aegean Sea, the Adriatic Sea, southern countries of the Mediterranean, etc.
- Select two challenges they view as the most urgent and two they find the most difficult to address. This will be done using coloured stickers, with two stickers allocated for urgency and two for difficulty for each topic.

Issues	Challenges	Scale	Specific Area	Actions	Urgency	Difficulty
Co-management of fisheries, in particular within MPAs	"Legal" status of co-management? Often not envisaged by and embedded in legislation			The co-management concept could be included in the legal framework (more within national ones, since it is an issue of national competencies)	1	5
	Real participation, long-term engagement of end-users (fishers and their associations) in MPA designation is needed, not only administrative/decision-making departments.			Careful mapping of users – always include fishers and their associations since the very beginnings of the MPA/MSP process, but also in post-plan discussions (keep them in the loop, inform them and be fully transparent)	5	1
	Capacity building of fisheries stakeholders on MSP/MPA concepts			Education, trainings and related funding	1	
	Monitoring of fishing and recreational fleets (ships' position and observing programs). Mobility of migratory or non-migratory species trespassing MPA limits.					
Climate change and fisheries: impacts, adaptation and mitigation	High level of uncertainty – still no sufficient evidence-based impacts of CC			Monitoring, modelling, and more dedicated studies		3
	CC scenarios are often not included in MSP.			Include the agreed scenario (consensus)	4	
	How to deal with Non-Indigenous Species?			NIS monitoring, valorisation (not only gastronomic, but e.g. blue crab for the cosmetic industry)		
	Decarbonisation of the fishing fleet (CFP is not flexible for it)			Review the "fishing capacity" term in CFP to be more flexible	2	3
	Pollution: problem of litter caught by fishers			Raising awareness, capacity building, and a need for a common strategy for non-EU Mediterranean countries	1	
	Introduce new species in the market. Fleet modernisation and adaptation to climate change consequences in species fluctuations			Helping consumers' perception evolve about new species		
Improving fisheries and ecological data (including stock assessment and socioeconomic aspects) collection and availability, in particular in the southern Mediterranean	Uneven balance of data availability (not only between North Med and the South, but also between different countries of the North Med, and different countries of the South (e.g. somewhat better situation regarding data in Algeria, Morocco, Tunisia than in Libya, Egypt, Lebanon)			Financial and technical support for data obtaining and data standardisation. An agreed data collection plan is needed	2	2

Issues	Challenges	Scale	Specific Area	Actions	Urgency	Difficulty
	Unreported data (e.g. collecting recreational fishing data)			- Control, enforcement, education (raising awareness) and incentives for "proper" reporting - Enhance onboard observing programs departing from artisanal fisheries, strengthening ties between sectors through economic profits	5	5
	Insufficient social (also cultural) and economic data. Get over the overreliance on classical bio-economic data.	From the local to the regional scale		Involve scientists from social and economic sciences. Disaggregation of social and economic data. Participatory mapping with all the stakeholders	1	2
Supporting the sustainability of fisheries and facilitating the implementation of fisheries management policies through ecosystem-based MSP	Management plans are often species-oriented instead of being ecosystem-oriented			More knowledge-driven projects and funds for research. Also, encourage exchange between fishers and scientists to reduce bycatch.		5
	Subsidies are often oriented towards the "survival" of the fisheries sector instead towards its sustainability.			Cooperation among various actors (from the governmental bodies to fisheries representatives)	1	
	Support in the technical and social modernization of the sector, resulting in high-quality and value-added products and works					
Improving the dialogue between MSP practitioners and fisheries stakeholders at regional, sub-regional and local scales	Who is driving this dialogue-process?			Engagement Plan with clearly defined roles.		
	How will the responsibilities of different actors in the dialogue process be shared?			Engagement Plan with clearly defined roles. Internal coordination between governing bodies is also needed.	1	
	Type of language/communication used			Communication Plan needed, even a communication platform/hub (example: Venice lagoon). Local language should be used. Traditional education (schools) should not be disregarded	2	

ANNEX C – OUTCOME OF TABLE EXERCISE: WORLD CAFE SESSION ON MSP AND NATURE PROTECTION

In the exercise, participants were invited to:

- Describe challenges related to each prioritised issue identified, including barriers to remove, opportunities to seize, and needs that must be addressed. Challenges shall be clearly related and relevant to MSP.
- Identify key action items – part of an ideal checklist - to be considered when tackling these challenges. Action items should be clearly related and relevant to MSP.
- Specify the scale at which each challenge applies: regional (entire Mediterranean Sea), sub-regional (sub-Mediterranean level), national, local.
- Identify, if relevant, specific areas where these challenges apply to, e.g. the Levantine Sea, the Aegean Sea, the Adriatic Sea, southern countries of the Mediterranean, etc.
- Select two challenges they view as the most urgent and two they find the most difficult to address. This will be done using coloured stickers, with two stickers allocated for urgency and two for difficulty for each topic.

Issue	Challenges	Scale	Specific area	Action items	Urgency	Difficulty
Strengthening the integration of MPAs, MPA connectivity and ecological corridors in MSP	Assess the MPA network connectivity in its complexity (3D, multiple connections, etc.)	National to regional		Modelling connectivity Tracking data (species) > corridors identification (need funds) High resolution satellite observation > corridors identification (need funds)	2	6
	Consider non-protected areas of high importance for biodiversity	National to regional		Concept of green infrastructure (mapping)	2	2
	Monitoring activities to prevent and assess impacts	Local to national		Put monitoring measures in the MSP plans	1	
	Use OECMs as a commentary and efficient tool for protection	Local to national to regional		Elaborate standards (criteria) for OECMs, comparable to those for MPAs (need at Med scale), look at the SPA-RAC work.		
	Control the pressures outside the MPAs (meet Good Environmental Status)	National		Identify pressures on each area (See CEA)		2
	Science to policy > increase in awareness of competent authorities	Local to national		Workshops, training Language explanation + translate to “policy language”	1	
	Improve stakeholders’ perception of long-term benefits.					
Assessing cumulative impacts of multiple sectoral activities in shared marine spaces	Increase knowledge about interactions with uses/ecosystems both in and outside of the MPAs.	Regional		Identify pressured areas = including new technology. Mapping ecological corridors in MSP plans (for mobile species and other species for connectivity)	4	
	Assess land-based pressures	Local to national				
	Marine and ports observing programs					
The role of MSP in meeting the EU objectives on biodiversity protection	Put biodiversity protection as an overarching principle	National to regional		Advocacy/communication (e.g., IOC-UNESCO guide on biodiversity inclusive in MSP)		2

Issue	Challenges	Scale	Specific area	Action items	Urgency	Difficulty
(including 10% of strict protection) and nature restoration	Enhance the integration of biodiversity into MSP frameworks	EU and national		Reinforce the use of biodiversity objectives as indicators for MSP plans and MSP ecosystem-based management (EBM)	1	
	Integration of MSP and MPA designation processes	National		Imposed by the EU for the MSPD revision Define governance and legislative framework	8	
	Use MSP to bridge global (international/Regional) and local effects in MPA designations.	Regional to local		Increase the role of MSP in designating MPAs in the future version of the MSP directive. Regional/national assessment of progress in MPA designation (e.g., MEDPAN assessment)		1
	Management effectiveness assessment for protected areas			Increase the assessment standards (beyond the existence of a management plan) Provide means for managers to monitor		
	Multi-level/scale governance (cooperation between national and local management)	Local to national		Make use of MSP multi-level governance to support this aspect in MPA management Working groups involving multi-scale and multi-sector		
	Economic and technical difficulties in fishing fleet monitoring					
Integrate climate change into nature protection in terms of expected impact (on habitats and species) and protection needs. Using climate change impact modelling in MSP	Species shift due to climate change	Regional		Monitor species to (i) detect trends in shifts and (ii) identify other areas to protect in the future.		
	MSP support: Preventive protection according to climate change scenarios			Engage researchers to be able to build scenarios (“ready to use” scenarios for decision making)	1	2
	To increase resilience			Nature-based solutions		
	Link climate change scenarios on environmental effects to socio-economic effects.			Use ecosystem services projects/works.		
	Anticipate the multiple effects of climate change (LSI, species shift…)					
	To identify marine climate refugia					
Cross-border and transboundary MSP for nature protection	Harmonise MSP languages (and MSP culture) among countries	Regional		Education programmes with schools (e.g., blue schools)	7	1
	Harmonise the dataset across basins.	Regional		Common standards (extend initiatives as EMODnet) Use the Barcelona Convection framework (lessons learnt from other sea basins)		
	Transboundary cooperation in assessing locations of ecological stakes and corridors	From national to regional		Use cooperation programmes like Interreg (e.g, Poseidone project between Italy and Slovenia)		
	Common regulations at the regional level (beyond EU boundaries)	Regional			2	1
	Coherence of regional regulations (IMO, Barcelona Convention, GFCM…)			Role of UNEP-MAP MSP WG	1	11

Issue	Challenges	Scale	Specific area	Action items	Urgency	Difficulty
	Engage stakeholders from both sides of the border to push for environmental regulations (that could materialize in MPA, OECM or any other type of regulation). “Flexible governance”					
	Fragmented MSP implementation	EU and national		Harmonisation of standards, cooperation tools for cross-border collaboration, e.g. European coordination platform for MSP		1
	Mobility of migratory or sporadic species and expansion of restored ecosystems					

ANNEX D – OUTCOME OF TABLE EXERCISE: WORLD CAFE SESSION ON MSP AND OFFSHORE RENEWABLE ENERGY

In the exercise, participants were invited to:

- Describe challenges related to each prioritised issue identified, including barriers to remove, opportunities to seize, and needs that must be addressed. Challenges shall be clearly related and relevant to MSP.
- Identify key action items – part of an ideal checklist - to be considered when tackling these challenges. Action items should be clearly related and relevant to MSP.
- Specify the scale at which each challenge applies: regional (entire Mediterranean Sea), sub-regional (sub-Mediterranean level), national, local.
- Identify, if relevant, specific areas where these challenges apply to, e.g. the Levantine Sea, the Aegean Sea, the Adriatic Sea, southern countries of the Mediterranean, etc.
- Select two challenges they view as the most urgent and two they find the most difficult to address. This will be done using coloured stickers, with two stickers allocated for urgency and two for difficulty for each topic.

Issues	Challenges	Scale	Specific Area	Actions items	Urgency	Difficulty
Knowledge needed for ORE sustainable development and its spatial allocation (i.e. on impacts to the marine environment, conflicts with other uses, etc.)	Transparent/open data access on sea uses at the needed level of detail (to be noted that details are different in different MSP phases)	Local for allocation and national for planning		Stronger and more effective interactions between MSP planners and ORE sectors, since the beginning and frequently Ensure continuous exchange of data Data standardisation	7	1
	Availability of data and information on ongoing ORE authorisation processes, i.e. where operators intend to work				3	4
	Knowledge on environment/biodiversity/seabed			Funds for mapping habitat and species Analyse/model impacts in space and over time Pilot projects on the Mediterranean with mixed funding (private and public)	2	
	Knowledge on the impacts on the Mediterranean environment of the different technologies (e.g. floating), including cumulative impacts				6	2
	Lack of knowledge on possible future habitat distributions and implications for biodiversity (e.g., non-indigenous species) – relevant also for the issue below			Identify climate "hot spots" and "bright spots" for conservation.		1
Co-location, co-existence and multi-use, in particular regarding nature protection	Clear understanding/evaluation of social acceptance (can be negative or positive)			Increase awareness of benefits (including non-economic values of ORE for different communities/stakeholders and listening to their needs). Supported by quantitative studies on benefits	3	2
	Lack of operational tools for conflict analysis			Research and funds for tools	1	
	Poor engagement of other sector stakeholders in ORE planning/development (e.g. fisheries, nature actors)	Local for design/decision and national for planning		Guidelines on how to reinforce stakeholder engagement in ORE development		2
	Unclear rules on decommissioning of ORE (relevant for the regulatory aspects)	Local level		Guidelines and binding criteria for decommissioning	1	
	Taking care of the effects of ORE development on land, e.g. is there enough space at land for ORE construction/maintenance, and what are the impacts on the land?					

Issues	Challenges	Scale	Specific Area	Actions items	Urgency	Difficulty
Suitability maps for ORE	Understand where the pressure will be in the future, also considering climate change, limits in the current predictability of extreme events, particularly in climate change scenarios.	National/local level		Climate change models and an adaptive approach, considering also moving ORE areas and moving back to land		4
	Availability of the future projections/scenarios for future ORE developments to be more available to MSP		It depends on the country and the role of MSP			
	Suitability maps should also include social, cultural, land-sea, and environmental aspects.			Move to suitability maps, considering all aspects in an integrated way Define criteria/standards/guidelines to identify suitability for the Mediterranean Region (Reg. on data resolution) to be then enforced legally at the national level within the licensing process	1	2
	As far as priority could be given to sites that do not interfere with important environmental processes (e.g. feeding or migration routes), we should consider how these could change in the future (--> see also challenge under first issue on lack of knowledge on possible future habitat distributions and implications for biodiversity in a broader context of ecological predictions in climate change conditions)					
Regulatory and governance challenges	Common definition of what “offshore” means. How far are we from the coast? Depends on the countries	From national to regional		Share different approaches/definitions among countries and try to reach a “common” Mediterranean definition. They can be different depending on the ORE source	2	
	Reinforce the role of SEA and EIA in ORE planning/designing (starting in parallel)			EIA and SEA should start in parallel to MSP and not after the plan is finalised, including the cumulative analysis/impact assessment	1	
	Complex authorisation process and strong bureaucracy, also for pilot projects			Create “easier” frameworks for pilot: easier procedures to be tested in pilots. Important to include environment: the pilot should test all aspects, e.g. technologies, environmental aspects and authorisation framework (easier than existing ones)		2
	Agreement not only on targeted production (GW) but also on the space we can allocate to ORE, so as not sacrifice other uses					
	Unplanned ORE development in some countries (legal uncertainty)			Develop an ORE plan in countries and integrate it in MSP (no “open door” approach)	4	1
	Incompatible timelines between MSP processes and OW leasing				1	
	Quantification of non-economic criteria in the trade-offs					
	Weak definition of legal concepts such as "Significant effect" or "acceptable risk"					

ANNEX E – OUTCOME OF TABLE EXERCISE: WORLD CAFE SESSION ON MSP AND AQUACULTURE

In the exercise, participants were invited to:

- Describe challenges related to each prioritised issue identified, including barriers to remove, opportunities to seize, and needs that must be addressed. Challenges shall be clearly related and relevant to MSP.
- Identify key action items – part of an ideal checklist - to be considered when tackling these challenges. Action items should be clearly related and relevant to MSP.
- Specify the scale at which each challenge applies: regional (entire Mediterranean Sea), sub-regional (sub-Mediterranean level), national, local.
- Identify, if relevant, specific areas where these challenges apply to, e.g. the Levantine Sea, the Aegean Sea, the Adriatic Sea, southern countries of the Mediterranean, etc.
- Select two challenges they view as the most urgent and two they find the most difficult to address. This will be done using coloured stickers, with two stickers allocated for urgency and two for difficulty for each topic.

Issues	Challenges	Scale	Specific Area	Actions items	Urgency	Difficulty
Interactions between aquaculture and nature conservation	Increase the sustainability of aquaculture, calling upon IMTA, Low-Trophic Aquaculture, and non-fed aquaculture.			Improve site selection for these species and techniques (no conflict with other uses) Better linking/coordinating with other aquaculture stakeholders (producers and value chain actors) and with other users (e.g. fishermen) Improve the legal framework to facilitate the production of these species and technologies Use of an AI tool	2	1
	Reduce interactions between aquaculture and marine conservation areas.			Improved integration of biodiversity spatial data in aquaculture zoning	6	
Multi-use including aquaculture	Knowledge of how to combine different types of activities			Multi-use should be explicitly cited in the revision of the MSP Directive	2	
	Evolution of Environmental Impact Assessment (EIA) to be more multi-disciplinary			Introduction of Environmental Monitoring Program (EMP) in Allocated Zone for Aquaculture (AZA) Allowable Zone of Effects (AZE) included in EIA	1	1
	Strengthening socio-economic data on aquaculture					
	Identify synergies and conflicts between aquaculture and other activities.	Local level		Undertake a study specific to the Mediterranean basin context (Mediterranean case studies, including local contexts)	2	2
	Reuse or rehabilitation of former aquaculture sites			Considering the end of life of aquaculture sites in AZA	1	1
Proper allocation of space for aquaculture through MSP	Coordination between AZAs and MSP plans (national/local)	National/local level		Release of comparative study on the governance frameworks of AZA and MSP plans in the Mediterranean basin	5	2
	Access to environmental data			Integration of different sources of data in MSP plans and promoting the use of open data	1	
	Knowledge of existing aquaculture sites			Update data related to farm location in existing geoportals (visualisation)	1	1
	Consideration of climate change in zoning (national)			Include climate change scenarios in suitability maps	3	6

Issues	Challenges	Scale	Specific Area	Actions items	Urgency	Difficulty
	Consideration of the land-sea interface in zoning			Develop a framework to better account for land-sea interface in aquaculture zoning in MSP (including a study on how LSI is included in MSP in different countries of the Mediterranean Sea)		
Strengthening the engagement of aquaculture stakeholders in MSP	Ensure multi-level governance			Benchmark analysis of aquaculture stakeholders' engagement processes in MSP in the different countries of the Mediterranean Sea	3	7
	Informing aquaculture stakeholders on the MSP process			Better data sharing and transparency, and early involvement of aquaculture stakeholders in MSP processes		5
	Interactions with local communities and other sectors			Promote social license	2	1
	Inclusion of other sectors practitioners' knowledge			Enhance participatory processes Complete science-based data for decision-makers with practitioners' knowledge		