







24 April, 2023 Split, Croatia

1. INTRODUCTION	2
2. GOVERNANCE OF MSP IN THE MEDITERRANEAN	3
2. GOVERNANCE OF WISP IN THE WILDTERNANLAN	3
3. COMMON PRINCIPLES	5
3.1 ADAPTIVE APPROACH	5
3.2 Multi-scale approach	6
3.3 Integration	6
3.4 FOUR DIMENSIONS OF MSP	7
3.5 KNOWLEDGE-BASED PROCESS	7
3.6 SUITABILITY AND SPATIAL EFFICIENCY	7
3.7 CONNECTIVITY	8
3.8 Cross-border cooperation	8
4. FUNDAMENTAL CONCEPTS	9
4.1 ECOSYSTEM APPROACH	9
4.2 CLIMATE ACTION	10
4.3 LAND-SEA INTERACTIONS	11
4.4 BLUE ECONOMY	13
MSP PROCESS	14
1. STARTING THE PROCESS AND GETTING ORGANISED	14
2. Assessing the Context and Defining a Vision	15
3. Analysing Existing Conditions	15
4. Analysis of Future Conditions	16
5. IDENTIFICATION OF KEY ISSUES	16
6. DESIGN PHASE: ELABORATING THE MSP	17
7. IMPLEMENTING, MONITORING AND EVALUATING THE MSP	18

1. INTRODUCTION

Marine Spatial Planning (MSP)¹, as an emerging requirement for the entire Mediterranean Region, has been called upon by the Contracting Parties of the Barcelona Convention in order to contribute to good environmental status (GES) of marine and coastal environment, investigate the connections between land and sea areas in more detail, as well as to propose coherent and sustainable land and sea-use planning frameworks relating with key economic sectors and activities that may affect the coastal and marine resources.

Spatial planning of the coastal zone is considered an essential instrument for the implementation of the <u>Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM Protocol)</u>. According to Art. 3, the coastal zone to which the ICZM Protocol applies is the area between:

- the seaward limit of the coastal zone, which shall be the external limit of the territorial sea of the Parties; and
- the landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.

It follows that planning should be equally applied to both components of the coastal zones. Even if MSP is not specifically mentioned, planning of the marine space, along with the terrestrial one, is a concept already taken on board by the ICZM Protocol, in particular within Art. 2, 3, 5, 6 and 18. The operational application of MSP focuses on the marine area within the territorial sea of a country, with a requirement to take land-sea interactions into account, as specified in Art. 2 and 6.

MSP is considered instrumental for the implementation of the ecosystem approach as the backbone of the entire Barcelona Convention framework. As a strategic approach for the integrated management of natural resources, it promotes conservation and sustainable use. Through the ecosystem approach, MSP benefits from a series of sustainability assessments for the preparation of integrated plans that contribute to the achievement of Good Environmental Status (GES). Thus, it ensures that the capacity of marine ecosystems to respond to human-induced changes is not compromised.

Accommodating the demand for the blue economy is central for MSP. This is clearly addressed by the ICZM Protocol in highlighting the role of sustainable economy which should be "adapted to the fragile nature of coastal zones and that the resources of the sea are protected from pollution" (Art. 9). Likewise, conducting maritime activities should ensure "preservation of coastal ecosystems in conformity with the rules, standards and procedures of the relevant international conventions" (Art. 9).

Given the definition of the coastal zones in the ICZM Protocol, almost all other Protocols of the Barcelona Convention are, in one way or the other, related to it. ICZM can and should provide support to the implementation of these Protocols and *vice versa* - their relevant objectives and provisions should be considered in all ICZM projects, plans and strategies. Given these links, the application of MSP within the framework and the geographic scope of the ICZM Protocol can contribute to the goals defined by other Protocols - as in the case of identification, planning and management of protected areas according to the SPA/BD Protocol, or the protection of the sea against pollution resulting from exploration and exploitation of the continental shelf according to the Offshore Protocol.

¹ In this document, Marine Spatial Planning and Maritime Spatial Planning are used interchangeably. In fact, there is no difference in meaning between the two concepts. Marine Spatial Planning is used all around the world, while Maritime Spatial Planning is the term mainly used within the EU and for the relevant Directive, in particular. Both concepts deal with sustainable management of marine ecosystems, maritime human activities and related socio-economic benefits.

In this perspective, and in line with the <u>Common Regional Framework for ICZM in the Mediterranean</u>², MSP can be considered as the main tool/process for the implementation of ICZM in the marine part of the coastal zone, specifically for its emphasis on sustainable planning and management.

To this aim, according to the ICZM Protocol provisions and with the support of UNEP/MAP and its Components, the CPs are encouraged to accomplish the following, as appropriate:

- i. Effectively address planning and management issues in the marine part of the coastal zone;
- ii. Support implementation of ICZM in the marine part of the coastal zone by applying MSP with a strong focus on land-sea interactions (LSI) and in line with the general framework of the Barcelona Convention and its Protocols, in particular concerning:
 - reducing marine-based source of pressure affecting the marine environment through spatial efficiency and control of temporal distribution of human activities;
 - reducing conflicts between maritime uses and protection of areas with high natural and ecological relevance;
 - identifying areas to be protected in order to preserve processes and functions that are essential in achieving the GES;
 - identifying environmental hotspot areas at sea where specific measures are necessary;
 - identifying elements ensuring connectivity among relevant habitats.

In line with the above, this document provides a general framework, facilitating CPs to verify that the main needed elements of the MSP process are considered with reference to their coastal and marine activities.

2. GOVERNANCE OF MSP IN THE MEDITERRANEAN

The key governance challenge for MSPs in the Mediterranean will be to articulate an agreed and clear vision for sustainable development in the context of:

- The relevant national considerations for the marine and wider coastal zone.
- **International and transboundary drivers**. MSP is primarily and above all a national issue, but plans may have an impact on, and be impacted by, what happens in areas beyond the country's boundaries. Regional cooperation is, therefore, an essential component of the MSP governance process.

Articulating and delivering that agreed and clear vision will imply:

- Inclusive stakeholder involvement
- Integrating and harmonizing multiple interests
- Approval at the highest political level, including high-level inter-ministerial co-ordination, and where necessary, transboundary collaboration
- The harmonisation and alignment with other relevant plans and policies, including, but not limited to, climate change adaptation and mitigation, transport, water quality and biodiversity
- An effective regulatory framework

² Adopted by the COP21, in Naples (Italy), 2-5 December 2019. Decision IG.24/5

- The integration of both land and sea through their interactions (Art. 3 of the ICZM Protocol)
- Transboundary and international co-operation (Art. 14.1 and 28 of the ICZM Protocol)
- Regular review and updating following evolving conditions (Art. 18.4 of the ICZM Protocol).

Furthermore, it should be noted that a successful MSP process can only be achieved when the following preconditions are present:

- i. A core group of well informed and supportive stakeholders and social actors actively support the process
- ii. Institutions responsible for the plan have ensured sufficient capacity to prepare *and* implement its policies
- iii. Government commitment to the plan has been expressed by both legislation and the delegation of the necessary authority, along with the allocation of financial resources required
- iv. Unambiguous high-level and operational objectives that address both societal and environmental conditions have been adopted against which the efforts of the plan can be measured
- v. Where relevant, transboundary commitment, capacity and effective cooperation mechanisms are put in place.

In short, MSP is not a one-off, short-term project. It is governance at the highest level involving ministries across government, multiple economic sectors, citizens and stakeholders, science and, in some cases, international partners.

3. COMMON PRINCIPLES

Available methodologies and scientific literature propose a wide range of MSP definitions. Ehler and Douvere (2009)³ include one of the most quoted ones, according to which MSP can be defined as "a practical way to create and establish a more rational organisation of the use of marine space and the interactions between its uses, to balance demands for development with the need to protect marine ecosystems, and to achieve social and economic objectives in an open and planned way". Another definition often used is the one given by Art. 3 of Directive 2014/89/EU establishing a framework for MSP as "a process by which the relevant Member State's authorities analyse and organise human activities in marine areas to achieve ecological, economic and social objectives".

Expected benefits of MSP are the following:

- Increased horizontal and vertical coordination between administrations and among different sectors using a single process to balance the development of a range of maritime activities;
- Reduction of conflicts and exploitation of synergies among different uses of the marine space;
- Contribution to equitable access to marine resources;
- Increased stakeholder involvement, public participation and information sharing;
- Encouragement of investment by instilling predictability, transparency and clearer rules;
- Improved protection of the environment, through early identification and reduction of impacts as well as promotion of opportunities for multiple uses of the same marine space;
- Identification of (spatial) measures that can support the achievement of the Good Environmental Status (see section 4.1);
- Improve protection of cultural heritage and preservation of intangible values of the sea.

Independently on the considered definition and the specific objectives and expected benefits, several common principles and general contents for the implementation of MSP are identified below (some of them totally or partially overlap with ICZM principles). When dealing with MSP implementation, this list should be reviewed and tailored according to the specific scope and goals of the MSP process and the characteristics of its application area.

3.1 Adaptive approach

The adaptive approach is an interactive and systematic process for continually improving policies, plans and management practices by learning from the outcome of previous steps and cycles. Through this approach policies, plans and programmes are identified based on the best available knowledge and are then implemented, monitored, periodically evaluated and improved based on evaluation results. This approach is particularly useful in dealing with complex, dynamic and uncertain issues, including planning of current and future uses of the sea. Indeed, MSP does not lead to a one-time plan; it is a continuing iterative process that adapts over time. To shape MSP according to an adaptive approach, the following guidelines can be suggested:

³ Ehler C., and F. Douvere, 2009. Marine Spatial Planning: a step-by-step approach towards ecosystem-based management. IOC Manual and Guide n. 53, ICAM Dossier n. 6, Paris, UNESCO.

- Design the MSP process, including monitoring, evaluation and revision steps since its beginning;
- Possibly, promote active adaptive management, which includes the evaluation and comparison
 of an alternative hypothesis (e.g., scenarios) about the future evolution of the considered
 marine area;
- Develop MSP indicators linked to clear objectives and targets, including governance or process, socio-economic and ecological-environmental indicators;
- Adopt a medium/long-term perspective to deal with the strategic and anticipatory nature of MSP properly and allow planning, implementation, adaptation and planning continuous action over a period long enough to get concrete results.

3.2 Multi-scale approach

The operational application of MSP within the frame of the Barcelona Convention shall focus on the marine area within the territorial sea of a country, according to the geographic scope of the Protocol on ICZM in the Mediterranean (Art. 3). This operational application can be embedded into a multi-scale approach, combining top-down and bottom-up perspectives. The multi-scale approach includes the following different scales:

- Mediterranean scale addressing the whole sea basin through cooperation among CPs in the frame of the Barcelona Convention to approach the strategic level of MSP, as for example: (i) definition of elements for a common vision and related objectives, (ii) identification of priority areas and issues to be approached at a transboundary level, (iii) identification of initiatives (e.g., projects) to address transboundary areas and issues;
- Sub-regional scale where relevant and possible approaching transboundary MSP issues (elements for a common vision, objectives, priorities and initiatives) in sub-Mediterranean regions, also linking to sub-regional strategies and plans (e.g., EUSAIR and the West Med maritime initiative) for coordinated implementation;
- National scale, fully implementing the MSP process according to common principles and coherently with the Mediterranean and sub-regional approaches in marine areas falling within national jurisdiction, with particular reference to the territorial sea according to the geographic scope of the ICZM Protocol;
- Sub-national and local scales, fostering MSP applications aiming to provide evidence of concrete and visible environmental, social and economic benefits of MSP. Pilot activities at the sub-national and/or local scale could focus on priority areas, such as highly vulnerable areas, areas with major conflicts among uses, areas with high potential for synergies among uses and multi-use opportunities. Pilot activities could also be useful to develop and test new overarching or item-specific methodologies, including through the next generation of CAMP projects better integrating marine areas through MSP.

3.3 Integration

Integration is an essential feature of MSP sinceit can assume different meanings:

- MSP is not only dealing with the blue economy. In addition to economic, environmental, social, and governance aspects have to be all taken into consideration to pursue sustainability goals;
- Integration among sectors is needed to go beyond sector policies, plans and regulations;

- Vertical and horizontal cooperation among administrations and technical agencies is required to proceed towards coordination and integration of sector policies and plans;
- Integration between land-based and marine planning is essential to harmonize and ensure coherence among parts of the same coastal system, interacting with each other in different ways.

3.4 Four dimension of MSP

MSP operates in three spatial dimensions, taking into account maritime uses and related conflicts operating on the ocean surface, water column and seabed. Time can be considered as a fourth dimension. In terms of MSP implementation, this may imply:

- Identification of the most relevant spatial dimensions for each maritime use and assessment of the compatibility with other uses that mainly occur in other dimensions (e.g. shipping and sand extraction from the sea-bed);
- Synergies and compatibilities among different uses can also be enabled through temporal zoning and regulation, such as enabling access to military restricted areas to shipping or recreational activities if there are no military operations and safety is ensured;
- Proper assessment of the 4 dynamic needs of each maritime use to evaluate whether compatibilities are really possible and conflicts minimized.

3.5 Knowledge based process

MSP must rely on high-quality data, focusing on key relevant information. In this regard, the following guidelines are suggested:

- Use the best available knowledge to promote the definition of the most appropriate geographic scale and scope for MSP strategies and/or plans, also taking the holistic UNEP/MAP's Integrated Monitoring and Assessment Programme (IMAP) into consideration (i.e., ecosystem limits) and considering LSI an essential element of MSP;
- Focus on the collection of data and information which are really essential for MSP;
- Identify the specific gaps that might hamper the MSP and that require specific actions;
- Take into consideration any form of "good quality" knowledge. This comes primarily from scientific sources and institutionalized monitoring activities and datasets, but should also capitalize on private sources of information, including knowledge generated by people living and working at the sea (the so-called citizen science);
- Improve transparent access to accurate and complete information;
- Go from data and knowledge to information useful for the planning and decision-making process required by MSP. Spatial-based tools are particularly useful in this regard.

3.6 Suitability and spatial efficiency

The suitability of maritime activities and spatial efficiency in distributing these activities are key guiding concepts for MSP - aiming at improving the sustainability of the use of marine resources (including the marine space), minimizing conflicts among uses (including nature protection) and exploiting possible synergies. In this regard, the following guidelines are suggested:

- Use the sea space for those uses which indeed depend on marine resources or that can be more efficiently operated at sea (i.e., it is worth transferring a land-based usage to the sea, if this generates higher benefits and lower impacts and conflicts);
- When dealing with the planning, start identifying immovable and not-renounceable uses and functions that normally have priority in space allocation;
- Encourage co-use or multi-use of the same marine area as much as possible, provided that this implies higher benefits, lower impacts and reduced conflicts;
- Spatial efficiency should also imply a fair distribution of MSP-related socio-economic benefits in the total planned marine area.

3.7 Connectivity

MSP does not only focus on proper and efficient spatial allocation of maritime uses, but also deals with connectivity. Improved connections aim to generate social, economic, environmental and governance benefits; the following guidelines are suggested:

- Consider in the MSP plan connections between linear elements as shipping lanes to develop an
 integrated maritime transport system, energy grid to improve energy distribution efficiency or
 blue corridors to connect natural habitats;
- Consider in the MSP plan connections of patches, areas with similar or interrelated uses or functions as in the case of networking of marine protected areas or the preservation of connected habitats which are vital for marine species;
- Beyond planning maritime uses, remember to create connections among MSP operators in terms of knowledge sharing, cooperation and coordination.

Assessment and planning of connectivity elements are particularly relevant for LSI aspects.

3.8 Cross-border cooperation

Although MSP can be seen primarily as a country-based process, cross-border cooperation is essential to ensure the MSP plans are coherent and coordinated across the coastal zones and the marine regions. This implies cooperation at the methodological (common methods, data and information sharing, tools sharing, MSP practice exchange, capacity building), strategic (common vision, shared principles and possible common objectives) and implementation (e.g., planning of marine bordering areas, etc.) levels.

Moreover, it is well-known that a number of problems and challenges (e.g., maritime transport operation and safety, fish stock conservation and sustainable management, biodiversity protection and ecosystem preservation, future development of offshore renewable energy production and distribution, etc.) have a transboundary dimension and might require the adoption of a common regional or sub-regional approach.

4. FUNDAMENTAL CONCEPTS

4.1 Ecosystem approach

Ecosystem-based management is an approach that goes beyond examining single species, habitats, ecosystems or related functions in isolation. Instead, it can be intended as an interdisciplinary and integrated approach to planning and management that recognises the richness and complexity of ecological systems and the continuous interactions among their components. Ecosystem-based management founds decision-making on ecological limits and spatial boundaries of ecosystems. It integrates social, ecological and governance principles to preserve healthy and productive ecosystems and related services and to ensure the sustainable use of natural resources. The terms **ecosystem-based management** and **ecosystem approach** are often used interchangeably and generally overlap in their fundamental meaning.

In the Mediterranean, the ecosystem approach is the guiding principle to all policy development and implementation under the auspices of the UNEP/MAP Barcelona Convention system, with the ultimate objective of achieving Good Environmental Status (GES) of the Mediterranean Sea and Coast. It is operationalized through the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast (IMAP), which shares many common elements with the EU Marine Strategy Framework Directive. According to the ICZM Protocol, the ecosystem approach applies to all related planning processes of land and sea-based marine activities, therefore underpinning the overall MSP implementation. Though not covering all Mediterranean countries, the EU MSP Directive also remarks on the relevance of the ecosystem approach to "contribute to promoting the sustainable development and growth of the maritime and coastal economies and the sustainable use of marine and coastal resources". Therefore, MSP is expected to contribute to the goals of IMAP and the EU Marine Strategy Framework Directive.

The relationship between the ecosystem approach and MSP is a two-way process. The second can contribute to the overall objective of achieving the GES, also by identifying related spatial measures. Proper planning of maritime activity can:

- Reduce marine-based sources of pressure affecting the marine environment through spatial efficiency and control of the temporal distribution of human activities;
- Reduce conflicts between maritime uses and protection of areas with high naturalistic and ecological relevance;
- Identify areas to be protected in order to preserve processes and functions that are essential in achieving the GES;
- Identify environmental hotspot areas at sea where more intense measures are necessary;
- Avoid unsustainable uses in protected areas and identify synergies that can provide win-to-win solutions for socio-economic development and environmental protection;
- Identify connecting elements among relevant habitats through blue corridors.

The ecosystem approach is well conceptualised, and its application to the marine space is increasingly gaining attention. However, its actual implementation still represents a significant challenge within the MSP process, calling for clearer guidance, sharing of good practices, studies and tools.

Specific tools, practices and guidance checklist for considering ecosystem approach within MSP have been made available on the Mediterranean MSP workspace.

https://msp.iczmplatform.org/

4.2 Climate action

The operative integration of climate action into MSP is a novel approach. It represents a major challenge for several countries due to the uncertainty inherent to climate change projections and the ecological and socio-economic responses to their impacts. However, addressing climate action challenges is necessary to make the MSP plans viable and useful in the long term and to promote actions contributing to mitigation goals and carbon neutrality.

Taking climate action into account is particularly relevant for the sustainable planning and management of the Mediterranean, being the region recognised as one of the world's climate change hotspots. Impacts of climate change on the Mediterranean coastal and marine ecosystems further add on top of pressures generated by several human activities, in particular tourism, shipping, oil and gas exploitation, fisheries and aquaculture.

Among its objectives, the Protocol on ICZM in the Mediterranean (and its Common Regional Framework for ICZM) stresses the importance of preventing and reducing the effects of natural hazards and climate change, and consequently, taking mitigation and adaptation measures. At the EU level, the MSP Directive (2014/89/EC) recommends Member States to prepare maritime spatial plans, which aim for a balanced and sustainable use of the marine space. This implies the resolution of conflicts among different economic sectors, the improvement of synergy and on top of all the "preservation, protection and improvement of the environment, including resilience to climate change impacts".

From a process perspective, an MSP plan shall be designed in a flexible way, enabling its progressive adaptation along with changing conditions (i.e., new knowledge on the sea environment, the latest climate change projections and assessment of related impacts, evolution of the policy and socioeconomic context, etc.). This implies the design and implementation of a robust monitoring, evaluation and revision mechanism of the MSP plan. Active adaptive management can also include the evaluation and comparison of alternative planning scenarios of the considered marine area.

The concept of dynamic ocean management is progressively permeating MSP. This can be defined as management that rapidly changes in space and time in response to changes in the ocean and its users, through the integration of near real-time biological, oceanographic, social and/or economic data. This approach can help address the challenges posed by the ongoing change of the climatic system and, consequently, of the oceanographic conditions.

MSP can address operational aspects of climate change adaptation and mitigation in various ways.

- Solving new conflicts that can arise between marine sectors and between the sectors and the marine environment, due to challenges posed by climate change.
- Minimizing economic losses deriving from choices that do not take into account risks associated with extreme weather and slow-onset events.
- Envisaging spatial and temporal measures aimed at increasing the adaptation capacity of major maritime sectors and marine protection aspects.
- Envisaging spatial measures directly targeted to promote the reduction of greenhouse gas emissions in several maritime sectors, in line with the <u>Sustainable Development Goals (SDGs)</u> of the UN 2030 Agenda, the <u>Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas</u>, and the <u>European Green Deal</u>.

Tools, practices and guidance checklist for considering climate change within MSP have been made available on the Mediterranean MSP workspace.

https://msp.iczmplatform.org/

4.3 Land-sea interactions

The term "Land-Sea Interactions" (LSI) is usually used in the context of planning and management of marine and coastal areas. Despite its high relevance, a unique definition and conceptualization of LSI has not yet been established or formalized.

LSI is generally interpreted as a set of processes linking terrestrial and marine areas. Such processes may include, for example, nutrients and contaminants runoff from agriculture in rivers and their consequent load in coastal waters, as well as the laying of a submarine pipe in the intertidal area to connect an offshore oil and gas platform to the terrestrial pipeline network. Almost all maritime uses need support installations on land (such as the ports for shipping, marinas for yachting or grid connections for offshore wind farms). On the other hand, there are uses mostly exerted on the ground (for example, beach tourism, water-front, ports), that extend their domain also at sea.

Some common categorizations are generally adopted related to LSI and applied within the analysis of LSI: i) LSI have double direction - from land toward sea and from sea toward land; ii) LSI can have natural or anthropogenic components.

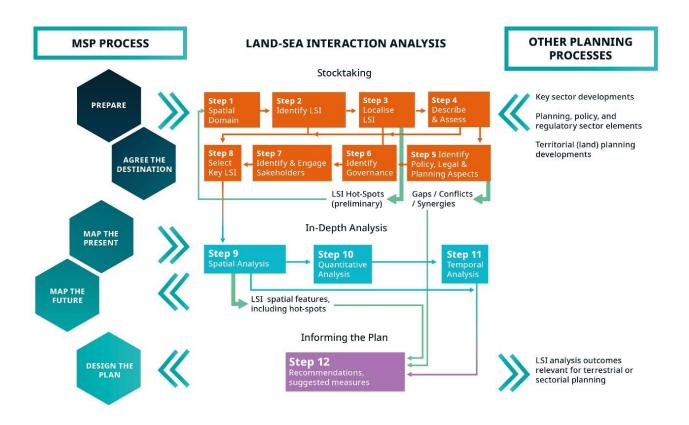
LSI analysis should also consider the interactions of planning processes and plans for land and sea domains. It is important to ensure that legal, administrative, consultation and technical processes are coordinated (and hopefully linked) to avoid unnecessary duplications, incoherence, conflicts, waste of resources and/or excessive demand of stakeholders' efforts.

LSI analysis should be understood as an important component in the preparation of a marine plan. When carrying out MSP, it is important to consider the continuity between land and sea, and to ensure that spatial planning is carried out in an integrated manner across maritime and terrestrial areas. This is of interest both to the environmental protection and the effective development of maritime and coastal economies.

The specific objectives of LSI analysis are:

- Identify and localize the most relevant LSI, at present and in the future
- Understand the spatial scope of LSIs and eventually localize hot-spot areas
- Identify measures to be included within the MSP plan, aimed at managing impacts/synergies on marine activities and ecosystems determined by land-sea interactions.

LSI analysis, within MSP, developed by the UNEP/MAP is composed of 3 main components: stocktaking, in-depth analysis of key LSI, and informing the plan/recommendations for addressing LSI (see the diagram below).



This diagram has been developed by PAPRAC UNEPMAP to support marine spatial planning activities in the Mediterranean. For more planning tools and guidance visit msp.iczmplatform.org





The tool for LSI analysis, along with some examples of its practical application, has been made available on the Mediterranean MSP workspace.

https://msp.iczmplatform.org/

4.4 Blue economy

The blue economy refers to the use of the marine environment and its resources for economic development. This concept covers a wide range of economic sectors such as fisheries, aquaculture, transportation, coastal tourism, renewable and non-renewable energy, mineral extraction, and nature conservation, as well as related environmental issues such as pollution, ocean acidification, overharvesting, and habitat loss. As a concept, the blue economy aims to promote economic growth, social inclusion, and the preservation or enhancement of livelihoods while simultaneously ensuring the environmental sustainability of the oceans and coastal areas⁴.

However, the challenge of the blue economy remains in strengthening the economic significance of various maritime uses, while sustainably managing the marine environment in the long term. Therefore, it is necessary to adopt an integrated approach that considers the interconnectedness of economic, social, and environmental factors. This involves promoting sustainable practices that balance economic development with environmental protection and social equity, while also recognizing the importance of scientific research, technological innovation, and stakeholder engagement.

MSP, with ICZM, is playing a key role in providing such a holistic framework by advancing the rational utilization of marine resources to overcome the obstacles to the blue economy's development. MSP can facilitate the development of a sustainable blue economy in a variety of ways:

- by adopting an ecosystem-based approach, it can ensure the preservation of both living organisms and the non-living marine environment;
- it may play a critical role in addressing knowledge deficiencies in key sectors and the marine environment;
- it can promote multi-uses and identify sites for new and emerging uses;
- it can serve as a means to enhance investor confidence by promoting transparency and predictability, thereby creating an environment conducive to investment in the development of innovative blue technologies;
- it can facilitate mitigating the effects of a changing climate, by prioritising marine uses and activities with zero or minimum emissions as well as allocating areas for renewable energy and blue carbon capture
- transboundary MSP can foster collaboration across borders for regional development⁵.

Therefore, MSP can be a means to confirm the sustainable use of marine resources, and to achieve the benefits of a blue economy.

⁴ GEF LME:LEARN. 2018. Environmental Economics for Marine Ecosystem Management Toolkit. Paris, France.

⁵ UNESCO-IOC. 2021. MSPglobal Policy Brief: Marine Spatial Planning and the Sustainable Blue Economy. Paris, UNESCO. (IOC Policy Brief no 2)

5. MSP PROCESS

MSP should be shaped and based on the specificities of individual marine areas that are addressed. However, there are common steps that are considered in most MSP initiatives and guiding documents, such as data collection and analysis, stakeholder consultation and the participatory development of a plan, the subsequent phases of implementation, enforcement, evaluation and revision. In line with the customized methodologies and MSP practices across the Mediterranean, seven interrelated stages of the MSP process could be distinguished. These correspond to a great extent with the ICZM process for coastal strategies and plans.

In no case these stages should be considered obligatory, as each MSP process needs to be tailored according to specific characteristics of its geographic scope, objectives and expected results. Instead, they could be considered as a checklist to select those elements which are considered relevant for the specific MSP process.

1. Starting the Process and Getting Organised

A solid foundation for the planning process is vital. It should incorporate:

- Building relationships with partners, stakeholders and individuals who can support the planmaking process:
- Addressing technical and human challenges;
- Building communication skills necessary for enabling partners and stakeholders to clearly visualise problems, potential futures, solutions, and to facilitate their inclusion.

- Agreeing on the mandate, constitution, goals and terms of reference of the MSP steering body
- Engagement of key partner ministries and authorities and ensure their support of the MSP process
- Agreeing on the boundaries of the MSP area
- Consideration of the wider spatial scale of analysis, extending beyond administrative boundaries and taking into account interactions with land-based human activities
- Setting up an interdisciplinary group of experts that include marine scientists, in order to support science-based decisions across the entire planning process thus ensuring the application of the ecosystem approach
- Identification of major stakeholders, their interests and influence
- Identification of social actors, upholding diversity and gender equity
- Mapping the relevant MSP sectors (and their representatives) that will be the most affected by climate change
- Identification, design and deployment of methods and awareness tools to ensure social actors' engagement throughout the process
- Agreeing on the MSP programme of work and the institutional framework by which it will be drafted
- If required, initiating the Strategic Environmental Assessment (SEA) process with iterative links to the following stages of the MSP process
- Securing institutional capacity and funding for MSP preparation, including mapping and other information system tools

- Ensuring the procedures and structures for international consultations and/or collaboration are in place
- Establishing an effective shared planning regime, if preparing transboundary MSP.

2. Assessing the Context and Defining a Vision

A wide discussion across the society to refine the themes of the plan will focus on, and clearly articulate the strategic vision for the future of the marine area.

The Plan shall be framed by taking into consideration the plethora of global and Mediterranean-wide agreements and conventions, national policies and programmes and existing sub-regional and local plans and policies.

The key output of this stage is the **Scoping Document** - setting out a roadmap and tools required to achieve an agreed strategic vision and high-level objectives for the plan area.

This can be accomplished by using the following scheme of potential tasks and initiatives:

- Mapping and analysis of all relevant policies and conventions at international, national and subnational level
- Engaging stakeholders and social actors in high-level objective/vision setting process
- Identifying the broad list of themes and topics the MSP could encompass. Give particular attention to the high-level MSP objectives that can be affected by **climate change**, as well as conservation goals towards achieving or maintaining the **good environmental status** (GES).
- Defining the strategic vision (high-level objectives) for the future of the plan area
- Identifying spatial and temporal measures, regulations and standards already available for achieving the high-level objectives of the plan
- Summarising the key findings in a scoping report; agree and publish.

3. Analysing Existing Conditions

Gathering and analysing information, including interactions between land and sea, identifying conflicts, coexistences, and compatibilities.

This is the data and information gathering stage. However, it is important to focus information gathering only to what is "fit for the purpose", i.e., appropriate and of a necessary standard to inform the plan development and its policies.

It is crucial to value **indigenous knowledge** appropriately. Such knowledge includes the understandings, skills, and even philosophies developed by local communities and users with long histories and experiences of interaction with their marine surroundings.

- Identification of relevant spatial information through a focused, fit-for-purpose approach
- Analysis and mapping of current and relevant oceanographic and environmental characteristics

- Analysis and mapping of current maritime activities and their interactions. Particularly important is to assess, and preferably spatially determine, impacts of **climate change** affecting different sectors
- Analysis of the most important LSIs in the planning area
- Analysis of conflicts and compatibilities, coexistence, multi-use opportunities and hot spots
- Involvement of stakeholders and social actors to reflect on the analysis of existing conditions

4. Analysis of Future Conditions

Describing potential future trends and projections, key hot spots, and future scenarios for maritime uses.

In this stage, the planning scope begins to narrow down to those main elements, themes and issues which shape the future of the plan area. **Future trends** are identified where possible. The use of **future scenarios** is strongly advocated - bringing together stakeholders and key social actors to help elaborate plausible futures for individual maritime uses, potential areas of conflict, coexistence and compatibility with other uses, along with the cumulative impacts on the environment. Hence, this qualitative stage relies heavily on the expertise and knowledge of everyone with a stake in the future of the marine special plan area.

This can be accomplished by using the following scheme of potential tasks and initiatives:

- Identification of the main elements of the vision that shape the future evolution of the planning area
- Analysis of trends and available projections and development options of maritime economic activities. Possible impacts of newly planned activities that extend beyond the MSP planning area (including the land part) must be properly evaluated
- Involvement of stakeholders and social actors in the elaboration of future scenarios informal, qualitative descriptions of plausible futures of individual maritime uses
- Identification of highly impacted or vulnerable areas with a high number of conflicting activities through assessment and spatial identification of pressures and (cumulative) impacts of human activities on the marine resources, along with expected impacts of **climate change** affecting different sectors and the marine environment.

5. Identification of Key Issues

Agreeing on the key issues the plan will focus on in the design phase.

The scope of the plan and its final form take shape at this stage by selecting the focal plan issues..

This can be accomplished by using the following scheme of potential tasks and initiatives:

- Identification of the key issues which should be addressed in the design phase based on the outcome of the analytical phase

- Involvement of stakeholders and social actors in the elaboration of key issues.

6. Design Phase: Elaborating the MSP

Defining and elaborating the planning measures, their location in space and time, verifying and publishing

The specific **measures** of the marine spatial plan will be articulated at this stage. Besides spatial measures such as zoning, they potentially include measures to manage activities in time, defining limitations and the nature of specific activities. Other measures may include economic incentives and disincentives, along with regulation and enforcement, and in particular, public education and awareness. The plan should specifically include the adaptation and mitigation objectives and related measures for the different sectors which could be implemented within the MSP framework. According to the ecosystem approach, the objectives and corresponding measures of economic development must not prevail over the objectives of biodiversity conservation. They should, as much as possible, address achieving or maintaining GES.

Future institutional arrangements for the delivery and monitoring of the plan must also be set out at this stage, ensuring that the plan becomes a living document and that the key players continue to operate in an integrated manner to deliver it.

The plan should also establish the foundations for its subsequent **monitoring and evaluation** by establishing monitoring protocols and indicators.

- Identification of planning units, taking into considerations the natural boundaries (for example, the extension of seagrass meadows)
- Identification of detailed planning objectives linked to the strategic vision and preferred scenario
- Design and elaboration of planning measures
- Design and agreement on future institutional arrangements to ensure an integrated approach to the implementation of the MSP
- Establishment of ecological and environmental monitoring and evaluation protocols for the MSP area, including indicators. Synergies with monitoring programs, already in place to assess the environmental state of coastal marine waters (indicator systems set within IMAP at Mediterranean level and the MSFD and the WFD at European level), should be maximized.
- Establishment of socio-economic monitoring and evaluation protocols for the MSP area, including indicators
- Full involvement of stakeholders and social actors in the elaboration of the MSP and its measures
- Design and publishing the draft MSP for consultation in an attractive and accessible form
- Finalisation and high-level approval.

7. Implementing, Monitoring and Evaluating the MSP

Obtaining formal approval, disseminating the plan, implementing, monitoring, evaluating

Legitimacy through the political approval of the plan according to national legal requirements can take time and resources. The engagement and support of stakeholders and the community established through the preparation process will contribute to successful capitalisation at this stage.

A **broad dissemination** of the plan and its vision long after its completion is essential to ensure that it plays a central role in the future sustainable development of the plan area.

The plan needs to be regularly assessed and revised, and include any changes in line with policies or strategies setting more ambitious international sustainability objectives. When monitoring the plan implementation, specific trade-offs and co-benefits (in terms of biodiversity conservation, social equity, preservation of underwater cultural sites and alike) should also be evaluated.

- Achieving statutory approval at a high government level for the MSP
- Designing an implementation and dissemination plan for the MSP
- Monitoring and evaluation of the MSP process.