MSP-OR
Advancing Maritime Spatial Planning in Outermost Regions

D.5.1 GENERAL GUIDELINES FOR MONITORING AND EVALUATING MARITIME SPATIAL PLANNING IN THE OUTERMOST REGIONS

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SUMMARY

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ABBREVIATIONS AND ACRONYMS

ADRIPLAN	Adriatic Ionian Maritime Spatial Planning
Baltic SCOPE	Towards Coherence and Cross-Border Solutions in Baltic Maritime Spatial Plans
BaltSeaPlan	Planning the Future of the Baltic Sea
BONUS BALTSPACE	Towards Sustainable Governance of Baltic Marine Space
Capacity4MSP	Strengthening the Capacity of MSP Stakeholders and Decision Makers
CINEA	European Climate Infrastructure and Environment Executive Agency
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COEXIST	Interaction in European Coastal Waters: A Roadmap to Sustainable Integration of Aquaculture and Fisheries
D	Deliverable
DG MARE	Directorate-General for Maritime Affairs and Fisheries
DGPM	Direção-Geral de Política do Mar
DPSIR	Driving Forces–Pressures-State-Impacts- Responses
EBA	Ecosystem-Based Approach
EEZ	Exclusive Economic Zone
EMFF	European Maritime and Fisheries Fund
ESPOO	Convention on Environmental Impact Assessment in a Transboundary Context
EU	European Union
FRCT	Fundo Regional para a Ciência e Tecnologia
GA	Grant Agreement
GES	Good Environmental Status
HELCOM	Convention on the Protection of the Marine Environment of the Baltic Sea Area
ICES	International Council for the Exploration of the Sea
ICZM	Integrated Coastal Zone Management
IMP	Integrated Maritime Policy
IOC-UNESCO	Intergovernmental Oceanographic Commission - United Nations Educational, Scientific and Cultural Organization
LFA	Logic Framework Analysis
M	Meeting
M&E	Monitoring and Evaluation
MARPOL	International Convention for the Prevention of Pollution from Ships
MarSP	Macaronesian Maritime Spatial Planning Project
MASPNOSE	Preparatory Action on Marine Spatial Planning in the North Sea
MESMA	Monitoring and Evaluation of Spatially Managed Areas
MPA	Marine Protected Area
MS	Member State
MSFD	Marine Strategy Framework Directive
MSP	Maritime/Marine Spatial Planning
MSPD	Maritime Spatial Planning Directive

MSPMED	Towards the Operational Implementation of MSP in our Common Mediterranean Sea
MSP-OR	Advancing Maritime Spatial Planning in Outermost Regions
NM	Nautical Miles
OR	Outermost Region
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
PlanBothnia	Preparatory Action on Maritime Spatial Planning in the Baltic Sea
SAR	International Convention on Maritime Search and Rescue
SEA	Strategic Environmental Assessment
SIMCelt	Supporting Implementation of Maritime Spatial Planning in the Celtic Seas
SMART	Specific, Measurable, Attainable, Realistic and Time-bound
SOLAS	International Convention for the Safety of Life at Sea
SRMar-DRM	Secretaria Regional de Mar e Pescas- Direção Regional do Mar
SRMP-DRPM	Secretaria Regional do Mar e das Pescas – Direção Regional de Políticas Marítimas
SUPREME	Supporting Maritime Spatial Planning in the Eastern Mediterranean
T	Task
TPEA	Transboundary Planning in the European Atlantic
UNEP	United Nations Environment Programme
VASAB	Visions and Strategies Around the Baltic Sea
WFD	Water Framework Directive
WP	Work Package
WWF	World Wildlife Fund

INTRODUCTION

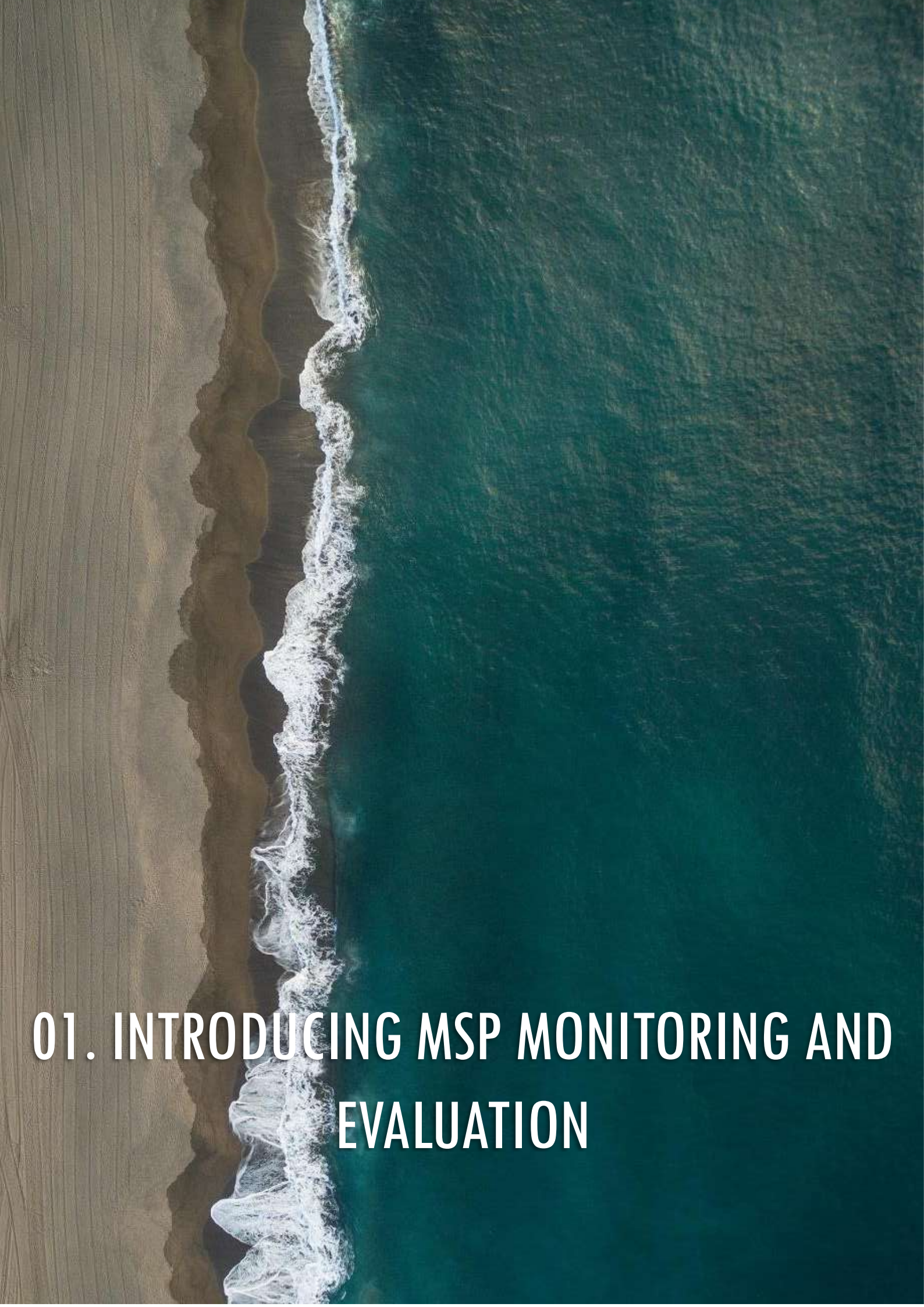
The MSP-OR project – Advancing Maritime Spatial Planning in Outermost Regions (GA n° 101035822 — MSP-OR — EMFF-MSP-2020) intends to support Portuguese (Azores and Madeira) and Spanish (Canary Islands) competent authorities to advance the implementation of their Maritime/Marine Spatial Planning (MSP) processes, in line with previous MarSP project (Macaronesian Maritime Spatial Planning) and French authorities (French Guiana) on advancing with knowledge, providing grounds to launching and adopting the principles of MSP.

This document corresponds to Deliverable D5.1 "General Guidelines for Monitoring and Evaluating Maritime Spatial Planning in the Outermost Regions (ORs)", developed under Work Package (WP) 5 and Task T5.1 "Setting common guidelines and recommendations for monitoring MSP in ORs". This WP is jointly led by Secretaria Regional do Mar e das Pescas – Direção Regional de Políticas Marítimas (SRMP-DRPM), Secretaria Regional de Mar e Pescas – Direção Regional do Mar (SRMar-DRM) and Direção-Geral de Política do Mar (DGPM), counting with the participation of the remaining partners and competent authorities from each OR.

The main objective of this document is to present different approaches and methodologies and provide a concise proposal of overarching guidelines for Monitoring and Evaluating, hereinafter referred to as M&E, considered as key elements of the MSP cycle and cornerstones of adaptive planning and management.

Even though complete harmonization for the ORs is not feasible, there are a number of overarching and common themes that can be addressed. Thus, the guide takes into consideration the regional specificities, the different legal contexts and development stages of MSP in EU ORs. These can provide an opportunity to explore common approaches in order to help reducing asymmetries in the MSP processes and tackling shared responsibilities in a more concerted and coherent way, while also contributing to the implementation of key macro-policies at international and European level.

Ultimately, the guide lays out a set of recommendations to M&E of MSP in the ORs, which set the basis for the work developed in the subsequent tasks of WP5. The results from those tasks called for the updating of some sections; hence, D.5.1. was a dynamic document, open to the necessary updates by the partners.



01. INTRODUCING MSP MONITORING AND EVALUATION

ABOUT THE GUIDE

What is the purpose of this guide and who is it for?

The guide was developed with the aim of supporting practitioners and competent authorities in the implementation of the MSP Directive (MSPD) in the ORs by providing conceptual background and showcasing different approaches, mechanisms and practical examples for MSP monitoring, evaluation and review, all the while working from the shared features and challenges between the ORs. This report was developed considering that these regions are currently in the process of developing, approving or actively implementing their 1st generation of plans, where each distinct phase constitutes a learning process in itself.

Instead of a one-size-fits-all approach - considering no single generic evaluation framework addresses all purposes - the guide showcases different methodologies that can be applied depending on the stage and framework of MSP, touching upon some of the main features and steps of any effective and comprehensive M&E process. It aims to be a general introduction to evaluation of maritime spatial plans, to set the basis for the work to be developed by each OR in tailoring their own monitoring model. Thus, the guide contains research-based analysis and should be complemented by additional reading of sources on MSP and specific M&E techniques and experiences.

What methodology was applied to develop the guide?

The document was carried out firstly based on desk research and literature review, as well as on pre-emptive consultation to the partners of the MSP-OR project on main expectations (see Box 1) and discussions during the WP5 Accompaniment Meeting (M15), to be complemented at a later stage according to further outputs from the project, including interactive discussions via the ORs' Ocean Governance Hub.

Box 1. Main expectations from the MSP-OR consortium partners relative to MSP monitoring and evaluation according to the WP2 survey.

MSP-OR CONSORTIUM SURVEY

WHICH TYPE OF INFORMATION WILL BE USEFUL IN THE FRAMEWORK OF MSP M&E?

- Examples of guidelines, recommendations and best practices.
- Common methodologies, indicators, information & data.
- Practical case studies from other MSP processes.
- Topics on performance indicators, targets and baselines.
- Ways to effectively and realistically implement M&E.
- Implementation of the MSP Directive by the participating Member States, in particular the OR.
- Monitoring tools to assess the proper implementation of MSP Plans in the OR.
- Examples of efficient monitoring indicators.
- Tools and good practices for effective stakeholder engagement.
- Database of Macaronesia's main stakeholders.
- Relevant information on the marine environment and maritime activities.
- Synthesis map, ecological zoning, summary of main issues, indicators.
- Cumulative impacts of activities (e.g., emerging sectors) on the environment and other uses.
- Good practices on reducing conflicts and achieving synergies between traditional/emerging uses.

Kicking off the development of the guide was the creation of a non-exhaustive database (see Box 2) of relevant literature (e.g., published studies, project reports, scientific articles) focusing on the thematic areas of MSP and M&E.

The database was the foundation to reviewing the existing knowledge, identifying relevant methodologies, finding potential knowledge gaps in terms of MSP M&E and learning from other MSP processes to pinpoint interesting examples and survey best practices.

The study also took into consideration the main policy instruments and reference strategies at international and European level to identify links to MSP M&E, as well as the minimum requirements of Directive 2014/89/EU and the report from the European Commission outlining the progress made in implementing the Directive[1].

The baseline to implement tailored MSP M&E frameworks must be aligned with the ORs' specific needs and features, consistent with national processes. Thus, a contextualization of the progress in MSP for each OR is needed to shed light on different development stages and legal contexts, the shared challenges and regional specificities.

Based on the above-mentioned approach, a compilation of key aspects of MSP M&E was drawn to guide the ORs in identifying relevant topics to be developed in their own M&E models, including pertinent examples and a set of good practices and general guidelines that establish the basis for the development of monitoring criteria and indicators.

Box 2. General methodology for developing a non-exhaustive database of relevant literature on MSP and monitoring, evaluation and review aspects.

LITERATURE DATABASE

WHAT WAS THE METHODOLOGY FOR CREATING THE DATABASE OF MAIN REFERENCE DOCUMENTS ON MSP M&E?

The database was built through **literature search** applied to the search engine Google, and specifically Google Scholar, as well as two major scientific journal databases (Science Direct and SpringerLink), between January – August 2022, using **keywords and phrases** selected to return MSP M&E related themes, predominantly in the English language.

The variation in terminology in the context of MSP was accounted for ("Marine spatial plan" or "Maritime spatial plan" or "MSP" or "Ocean planning" or "Ocean zoning"), allowing different combinations of keywords paired with the terms "Monitoring" or "Evaluation" or "Effectiveness" or "Outcome" or "Objective" or "Goal" or "Stakeholder" or "Public participation". This search yielded an initial set of 165 resources, which were subsequently screened with respect to their contents and relevance to the topics at hand.

Bearing in mind the purposes of this guide, it was only considered as relevant the literature on general approaches and application of monitoring, evaluation and review in MSP, adaptive management, ecosystem-based management, cross-border considerations, trends and progress in MSP, existing systems and tools (e.g., decision support tools), practical examples and case studies and literature focused on particular aspects inherent to M&E (e.g., economic, social, environmental aspects, goals, objectives, indicators, data collection, coherence, effectiveness and success in MSP, participatory approach, stakeholder engagement, links to international and EU policies).

Resources that focused on ocean governance or conservation planning, but did not specifically discuss MSP or M&E aspects were excluded. Throughout the process, citations within the documents were screened to identify any additional relevant literature that had been missed. This analysis narrowed down the final database to a total of 109 resources, which are listed in **Annex I.**

[1] COM(2022) 185 final, 03/05/2022.

How was the guide structured?

The guide opens with an introductory chapter focusing on the background context, the MSPD framework and links to other policies and key aspects to MSP M&E, which touch on the importance of the process, the different types and approaches possible, the relevance of stakeholder engagement, as well as challenges to address.

The following chapter is dedicated to specific stages in the M&E process, going more in depth about adaptive management in MSP based on the general approach and sequential steps of the Intergovernmental Oceanographic Commission (IOC-UNESCO) Guide to Evaluating Marine Spatial Plans (Ehler, 2014).

The second chapter focuses on the development of the M&E framework, namely addressing MSP objectives, indicators, baselines and targets. It also broaches the subject of collecting data, conducting monitoring actions and evaluating results, including reporting and communicating findings, while also touching upon using results for adaptive management, encompassing considerations on reviewing the plans, identifying gaps and needs, and preparing the next MSP cycle.

The third chapter is dedicated to providing context to the MSP processes in the ORs targeted by the MSP-OR project, namely the Azores, Madeira, Canary Islands and French Guiana, via a template MSP data fiche to be filled out by all partners on their respective OR, encompassing themes such as the state of play and current phase of MSP, as well as the general approach and framework to M&E.

The guide closes with a number of final remarks enclosing a few key recommendations for MSP M&E. The database of selected literature on MSP M&E and stakeholder engagement can be found in Annex I. Throughout the guide, several text boxes appear featuring suggestions on additional reading, examples from other projects and MSP initiatives, key concepts and definitions, and guiding questions.

THE EVOLUTION OF MSP

From scattered and pioneering examples of the implementation of MSP in the early 2000's, to the publication of EU's MSPD in 2014, and to today's situation of over 75 countries experimenting with MSP as a practical approach toward ecosystem-based marine management, MSP has grown globally to be acknowledged as the best available process to comprehensively manage marine resources in space and time (Ehler, 2021).

Over the last three decades, MSP has quickly become one of the most commonly endorsed integrated and place-based management approaches applied to the marine environment, aiming to tackle sectoral and fragmented management issues (Frazão Santos et al., 2019; McAteer et al., 2022). It has been perceived as a major driver for sustainable economic development, with initiatives being implemented across multiple regions of the globe and with predictions pointing to a third of the world's Exclusive Economic Zones (EEZ) covered by government-approved spatial plans by 2030 (Ehler et al., 2019; Frazão Santos et al., 2019; Stelzenmüller et al., 2021; Zuercher et al., 2022).

MSP was initially stirred by international and national initiatives for improving the effectiveness of Marine Protected Areas (MPAs) (e.g., the Great Barrier Reef Marine Park), bearing a strong association with marine nature conservation. It has since expanded more broadly to focus on strengthening the legal foundations for maritime investments and to include ecosystem-based and area-based principles, integrated and adaptive management, and strategic and participatory processes (Day, 2008; Ehler & Douvere, 2009; Gissi et al., 2019). However, as MSP spread worldwide, its conservation foundation has, in some instances, become diluted in favour of more development-focused goals (Merrie & Olsson, 2014).

MSP has not only been developing partly in conjunction with the establishment of MPAs, but also in connection to integrated coastal zone management initiatives and other zoning frameworks, besides from many of MSP's principles being based on terrestrial spatial planning practices (Jay, 2017; Gazzola & Onyango, 2018). In addition, MSP

ADDITIONAL READING

Chalastani et al. (2021) performed a bibliometric assessment of progress in MSP, finding strong interactions with stakeholder involvement and elements of ecosystems and ecosystem services, underpinning an ecosystem-based approach. The study also identified a predominance of EU MSP applications and the MSP Directive as the main landmark in accelerating the evolution of MSP as a research field. Additionally, policy and governance dimensions were found to be inherent to the MSP process and results pointed to a dominance of qualitative MSP assessments, reflecting the early stages of MSP implementation and calling for progress in the development of quantitative tools in support of MSP.

uptake is also being driven by specific spatial needs and sectoral objectives at national level, such as marine renewable energies or the protection of vulnerable ecosystems (Jones et al., 2016).

The multifaceted nature of MSP – related to simultaneously supporting the conservation of the marine environment and the realization of its economic potential, paired with fostering compatibilities among human uses – has resulted in it being championed as an advancement upon traditional marine management systems, which were guided by predominantly *ad hoc* and sectoral approaches (Pomeroy & Douvere, 2008; Jay et al., 2013). As the number of countries with MSP initiatives increased, so did the amount of MSP-related scientific literature and expertise (Merrie & Olsson, 2014; Frazão Santos et al., 2019; Chalastani at al., 2021).

With the sustained increase of MSP, driven by national and regional policies, it has become an important policy tool for the sustainable development of marine and coastal regions, considering that the high and rapidly increasing demand for maritime space for different purposes (e.g., fisheries, aquaculture, marine renewable energy, oil and gas exploration and exploitation, extraction of mineral resources, shipping, tourism, underwater cultural heritage, biodiversity conservation), as well as the multiple pressures on resources, require integrated planning and management approaches (European Commission, CINEA, 2022a).

Nowadays, MSP is viewed as a cyclical planning process (Figure 1), that is often conducted in a step-wise and participatory manner by analysing and allocating the spatial and temporal distribution of maritime uses and activities in the planning area, with a view to achieve ecological, social and/or economic objectives established by a political process (Ehler & Douvere, 2009). MSP is often operationalized through the drafting and implementation of plans that guide marine management, as well as the utilization of specific instruments and regulations, including licensing schemes (Schaefer & Barale, 2011).

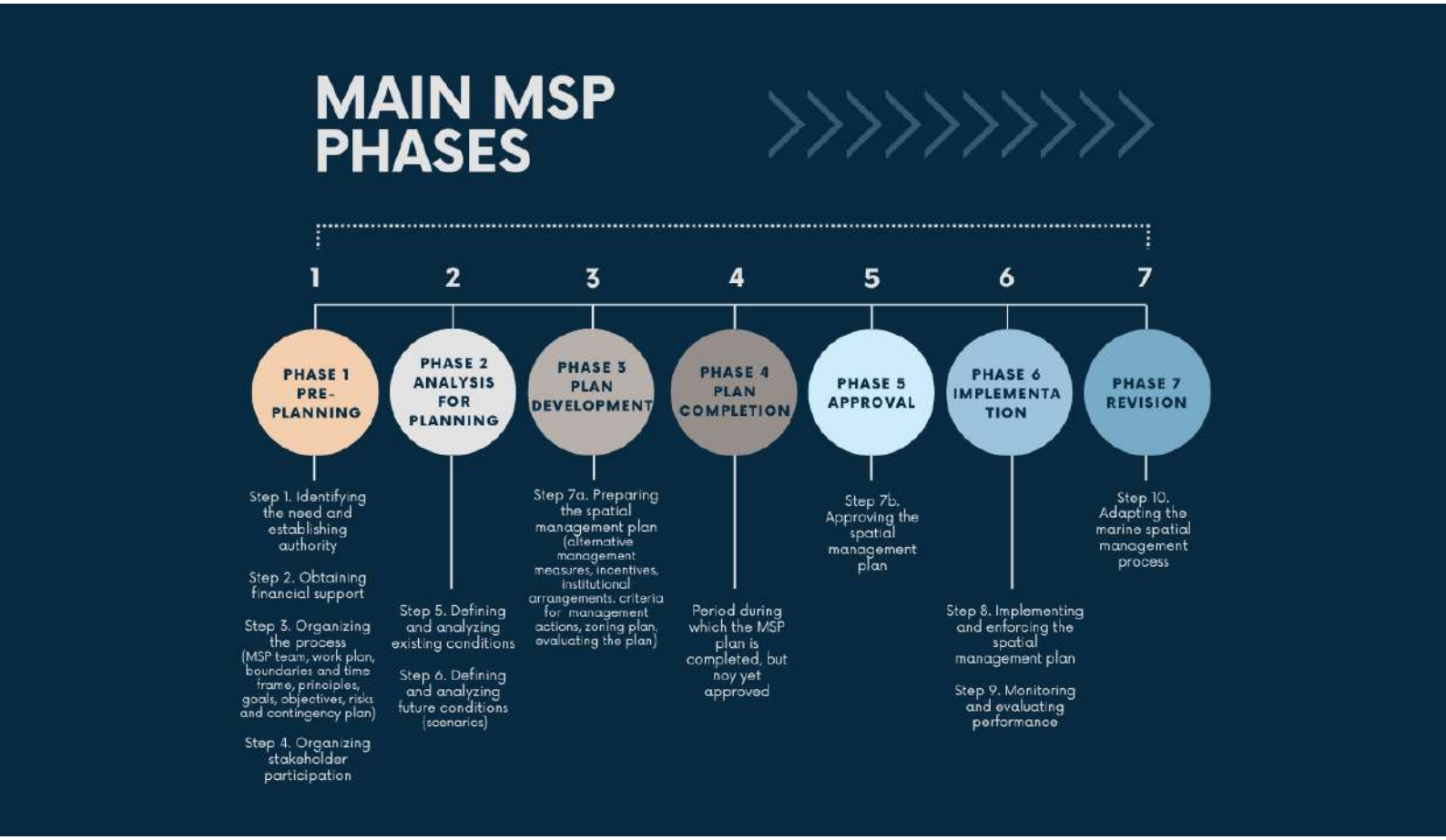


Figure 1. Main phases of MSP (Adapted from Frazão Santos et al., 2019; Ehler & Douvere, 2009).

Not only is MSP a continuous and interactive process that requires regular funding and adaptation, planning cycle after planning cycle (Olsen et al., 2014), but also a future-oriented process. It allows decision makers to plan beforehand and select management actions that are expected to lead to a desired vision for the maritime space, instead of simply reacting to events.

For this reason, MSP has often been labelled as a way to reduce conflicts and inequities between sectors, promote synergies and efficient use of space, promote blue economy, support nature conservation, improve government coordination, and support human well-being and climate change action (Douvere, 2008; Ehler & Douvere, 2009; Ntona & Morgera, 2018; Frazão Santos et al., 2020; Zuercher et al., 2022). Despite its broad and growing acceptance, there are several shortcomings and challenges that remain (see Box 3), both conceptual and practical - from political and institutional to social, economic, environmental and scientific in nature - that may draw back the realization of MSP's potential and that need to be looked at critically in future rounds of planning (Frazão Santos et al., 2019; McAteer et al., 2022).

According to Ehler & Douvere (2009), MSP includes a number of sequential phases, from initial institutional framing and scoping, to pre-planning, data collection on existing and future conditions, drafting and plan-making, followed by the ensuing stages of plan approval and implementation, monitoring, evaluation and revision, including stakeholder involvement in all or some of these stages. However, the practical development of MSP processes worldwide shows deviations from this theoretical approach, often being applied in a variety of ways in order to reflect national and local settings.

Box 3. Key challenges emerging from worldwide MSP uptake (Frazão Santos et al.,2021; Schultz-Zehden, 2021; von Thenen et al., 2021; McAteer et al., 2022).

When overviewing the current spread and uptake of MSP, a number of emerging issues can be identified, hinting at the current evolution of MSP. Factors revealed as being challenges common to MSP initiatives worldwide include:

- The **lack of evaluative assessments on the material consequences of MSP**, reflecting the need for consistent evaluative feedback loops that critically assess MSP initiatives by improving the knowledge about its impacts, the extent of achievement of its objectives and the contribution to wider marine policy goals. This is prevalent with issues associated with conflict management and accounting for the social dimensions within MSP;
- The **need for legal backing and statutory basis** for effective implementation of MSP, including statutory approval, alignment with existing legislation or establishment of new legislative acts. MSP will only be as effective as its ability to enforce the approved plans, rules and regulations. Thus, enforcement is a fundamental requirement of the MSP process, comprising a set of government actions to achieve compliance with regulations of human activities, which is best supported by stakeholders if these rules are consistently applied under transparent policies and adequate communication ;
- The **diverging rationales for the implementation of MSP**, often shaped by regionally specific needs and economic interests, and deferred by shortcomings in political and institutional frameworks;
- The **increasingly apparent impact of power and politics** in MSP initiatives, such as instances where public debate is sanitized and drawn to support pre-determined objectives;
- The **limitations to knowledge production and incorporation** in MSP policy and decision-making, related to the difficulty in encompassing human and social dimensions in MSP and in balancing economic development and marine conservation, to the marginalization of some types of knowledge, to insufficient inclusion of stakeholders and poor science-policy dialogue and to growing inequalities among stakeholders created by the overvaluation of MSP technical data;
- The **lack of innovative approaches within MSP practice** to tackle emerging challenges, such as the integration of ecosystem-based approaches, addressing transboundary issues, socio-ecological issues (e.g., social blue justice, consideration of the four-dimensional marine environment) and adaptation to global environmental change.

The nature of planning processes and MSP operationalization varies across countries and regions in function of their respective political contexts, specific administrative and legal frameworks, distinct policy priorities, applicable legislation and institutional arrangements, stakeholder concerns and environmental conditions (Jay, 2017; Buhl-Mortensen et al., 2017; Collie et al., 2013; Lin et al., 2016; Trouillet, 2020). Considerable differences within regions have been registered in the extent of MSP adoption, the legal framework that underpins its incorporation into wider governance systems, the way existing knowledge is being used to inform decision-making and the planning practices being applied (McAteer et al., 2022).

THE MSP DIRECTIVE AND LINKAGES WITH OTHER POLICIES

Path towards the MSP Directive and beyond

The EU has been fostering debate since the early 2000s on developing policies in a coordinated way across sea basins and on sustainable development in the maritime economy. The Commission adopted in 2006 a Green Paper[2] regarding future maritime policy and a Blue Paper[3] promoting Integrated Maritime Policy (IMP) in 2007, designed to develop coordinated, coherent and transparent decision-making in relation to the EU's sectoral policies affecting the oceans, seas, islands, coastal and outermost regions and maritime sectors. The IMP introduced MSP as one of the cross-sectoral tools fundamental to supporting its implementation, as a means to balance sectoral interests and ensure continued sustainable development of marine areas and coastal regions (Li & Jay, 2020; Friess & Grémaud-Colombier, 2021).

The environmental pillar of the IMP, the Marine Strategy Framework Directive (MSFD)[4] was established in the following year, in 2008, setting a policy framework to address environmental challenges and achieve good environmental status. That same year, key principles of MSP were highlighted in the Roadmap for Maritime Spatial Planning[5], emphasizing the responsibility of Member States (MS) to implement MSP and enhance regional cooperation (Li & Jay, 2020).

The Europe 2020 Strategy[6] was adopted in 2010 and, in 2012, the European Commission formulated its Blue Growth Strategy[7] promoting smart, sustainable and inclusive growth in Europe's maritime economy, framing MSP as a policy tool to advance blue growth and as one of the essential components to efficient and sustainable management of maritime activities across borders. To implement the Blue Growth Strategy, the EU focused on key economic sectors and established a number of sea basin strategies, while also working on key enablers such as MSP, data and information, capacity building, environmental protection and maritime surveillance (Friess & Grémaud-Colombier, 2021).

An ensuing series of workshops and discussions at EU and international level revealed different stages of implementation of MSP across the globe, including cases where MSP was taking its first steps and where joint learning and improved cooperation was needed, and situations where no significant progress was made. Some of these national initiatives were developed individually, following different paths and time scales, while a number of cross-border cooperation initiatives were encouraged through Regional Seas conventions such as the Helsinki Commission (HELCOM) and the OSPAR Convention, intergovernmental organizations such as VASAB – Visions and Strategies Around the Baltic Sea, or joint initiatives such as the HELCOM-VASAB in MSP Joint Working Group on MSP (Friess & Grémaud-Colombier, 2021).

USEFUL RESOURCES

The MASPNOSE project developed a M&E framework by operationalizing the ten key principles from the 2008 Roadmap for MSP (de Vos *et al.*, 2012b):

1. Using MSP according to area and type of activity;
2. Defining objectives to guide MSP;
3. Developing MSP in a transparent manner;
4. Stakeholder participation;
5. Coordination within MS, simplifying decision processes;
6. Ensuring the legal effect of national MSP;
7. Cross-border cooperation and consultation;
8. Incorporating M&E in the planning process;
9. Achieving coherence with terrestrial planning;
10. Strong data and knowledge base.

[2] COM(2006) 0275 final, 07/06/2006.
[3] COM(2007) 0575 final, 10/10/2007.
[4] Directive 2008/56/EC of the European Parliament and the Council of 17 June 2008 establishing a framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Framework Directive).
[5] COM(2008) 791 final, 25/11/2008.
[6] COM(2010) 2020 final, 03/03/2010.
[7] COM(2012) 494 final, 13/09/2012.

EU-level action on MSP focused on cross-border aspects and establishing a common process-oriented framework, by financing several pilot projects in the Baltic Sea (e.g., BaltCoast, PlanCoast, BaltSeaPlan, PlanBothnia and PartiSEApate), in the North Sea (e.g., Maspnose Plan), in the Atlantic (e.g., TPEA, SIMNORAT, SIMAtlantic), in the Mediterranean (e.g., SIMWESTMED, MSPMED)) and in the Adriatic-Ionian Sea (e.g., Adriplan). Nonetheless, overtime it became apparent that planning should be done within a wider transboundary perspective, which, adding to the intensification and diversification of human activities at sea, led the European Commission to launch a legislative initiative to establish a common approach to MSP, resulting in the adoption of the MSPD in 2014 (Friess & Grémaud-Colombier, 2021).

Looking beyond the MSPD, it is also relevant to emphasize EU's leading role on MSP worldwide, together with IOC-UNESCO, in consonance with the implementation of the 2030 Agenda and as a contribution to the United Nations Decade of Ocean Science for Sustainable Development. In 2017, both organizations adopted a Joint Roadmap to accelerate MSP processes worldwide (2017-2021), setting out a clear forward looking and global perspective towards 2030 (Friess & Grémaud-Colombier, 2021). As a result, the MSPglobal Initiative was established one year later and a flagship guide on MSP has been launched since.

An updated version of the Joint Roadmap to accelerate Marine/Maritime Spatial Planning processes worldwide was recently published for the period of 2022-2027, aiming to support the achievement of covering at least 1/3 of the global maritime areas under national jurisdictions with marine spatial plans by 2030. The MSProadmap (2022-2027) covers a set of six priority areas divided into cross-cutting (1. Knowledge support; 2. Capacity development and awareness; 3. Transboundary cooperation) and thematic (4. Climate-smart MSP; 5. Marine protection and restoration; 6. Sustainable blue economy) pillars (MSPglobal2030, 2022a).

The MSP Directive

The Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, known simply as the MSPD, was adopted in 2014 as part of the IMP. The MSPD is binding for EU's MS and its provisions transposed into national legislation must be implemented accordingly.

The MSPD creates a framework for consistent, transparent, sustainable and evidence-based decisions, laying down certain obligations, including the requirement for the implementation of MSP in the marine waters of the MS and the establishment of maritime spatial plans by 31 March 2021, according to article 15. This means the initial designing phase of the EU MSP cycle spanned over more than six years, from mid-2014 to April 2021 (WWF-European Policy Office, 2021).

Acknowledging the need for an integrated planning and management approach, given the increasing demand for maritime space for different purposes, as well as the multiple and cumulative pressures on marine resources, MSP is viewed as an important cross-cutting policy tool enabling public authorities and stakeholders to apply a coordinated, integrated and transboundary approach towards the sustainable development of marine and coastal areas, as related to Blue Growth and, more recently, Sustainable Blue Economy (European Commission, CINEA, 2022c).

By applying an ecosystem-based approach (EBA), the MSPD aims to promote the sustainable development of the maritime and coastal economies and the sustainable use of marine and coastal resources. As a guiding framework, the MSPD focuses on the process of developing the plans, rather than their implementation (Schultz-Zehden, 2021), while establishing that MS must comply with a set of minimum requirements - in terms of goals, process, and contents - when drafting their maritime spatial plans.

USEFUL RESOURCES

The study on systems and tools for monitoring, evaluation and revision of maritime spatial plans, published by the European Commission, CINEA (2022a), provided a step-by-step guide to support MS in developing an approach to MSP M&E. The guide starts with a decision matrix for objectives outlined in the MSP Directive relevant to national processes, followed by mapping out the minimum requirements identified in Directive 2014/89/EU for each objective selected and matching them to existing commitments under other relevant EU Directives and policy instruments at international and European level.

The broad goals introduced, according to article 5, are to:

- Consider economic, social and environmental aspects to support sustainable development and growth in the maritime sector;
- Apply EBA;
- Promote the coexistence of relevant activities and uses;
- Contribute to the sustainable development of energy sectors at sea, of maritime transport, and of the fisheries and aquaculture sectors and pursue other objectives such as the promotion of sustainable tourism and the sustainable extraction of raw materials;

» Contribute to the preservation, protection and improvement of the environment, including resilience to climate change impacts.

The overall requirements set by the MSPD are to:

» Regard the particularities of the marine regions, relevant existing and future activities and uses and their impacts on the environment, as well as natural resources (article 4);

» Take into account land-sea interactions (articles 4, 6 and 7);

» Take into account environmental, economic and social aspects, as well as safety aspects (article 6);

» Promote coherence between MSP and the resulting plans and other processes, such as integrated coastal management or equivalent formal or informal practices (articles 6 and 7);

» Ensure the involvement of stakeholders, through the establishment of means of public participation and ensure access to the plans once they are finalized for the relevant stakeholders, authorities and the public concerned (articles 6 and 9);

» Organize the use and sharing of the best available data, such as environmental, social and economic data and physical data about marine waters (articles 6 and 10);

» Ensure trans-boundary cooperation between MS with bordering marine waters to ensure that plans are coherent and coordinated across the marine region, considering transnational issues and using existing regional cooperation structures (e.g., Regional Seas Conventions), networks of competent authorities; and/or any other method (e.g., sea-basin strategies) (articles 6 and 11);

» Promote cooperation with third countries, such as by using existing international forums or regional institutional cooperation (articles 6 and 12);

» Review the plans as decided by the MS, but at least every ten years (article 6).

In addition, provisions related to implementation are to:

» Designate the authorities competent for the implementation of the MSPD and inform the Commission (article 13);

» Share the plans with the Commission and concerned MS for monitoring and reporting purposes (article 14).

The provisions related to the contents of the maritime spatial plans are to:

» Identify the spatial and temporal distribution of relevant existing and future activities and uses in their marine waters (article 8);

» Take into consideration relevant interactions of activities and uses (article 8).

Even though the MSPD provides a framework for MSP, general goals and a policy timeline, it focuses mainly on processes, leaving content largely in the hands of the MS, in line with the subsidiarity principle. Thus, the MS remain responsible and competent for designing and implementing their own plans, including determining their format and contents, establishing institutional arrangements and deciding on the allocation of maritime space to different uses and activities (ICES/CIEM, 2015; Schultz-Zehden, 2021). The MSPD does not delve into the practical way its goals and requirements need to be translated into the maritime spatial plans, providing that they must somehow be reflected therein. Especially, it does not impose any specific or measurable objectives, management measures, or indicators to the planning authorities (WWF-European Policy Office, 2021). Nonetheless, the requirements of the MSPD can be a guiding framework for evaluating MSP, as has been proposed in recent years (see Box 4 and Box 5).

M&E within the MSP Directive

According to the MSPD, the need to monitor and evaluate the MSP plans is a part of the process of developing the plans that is to be determined by each MS. MSP, as defined in paragraph (18) of the Directive's preamble, should cover the full cycle of problem and opportunity identification, information collection, planning, decision-making, implementation, revision or updating, and the monitoring of implementation. Thus, M&E are part of a structured planning process of full cycle approach (Hopkins & Jay, 2017) and the MSPD highlights the need for an in-built process that will evaluate spatial and temporal management measures within a decision-making process leading to implementation, accompanied by monitoring and periodic review (ICES/CIEM, 2015).

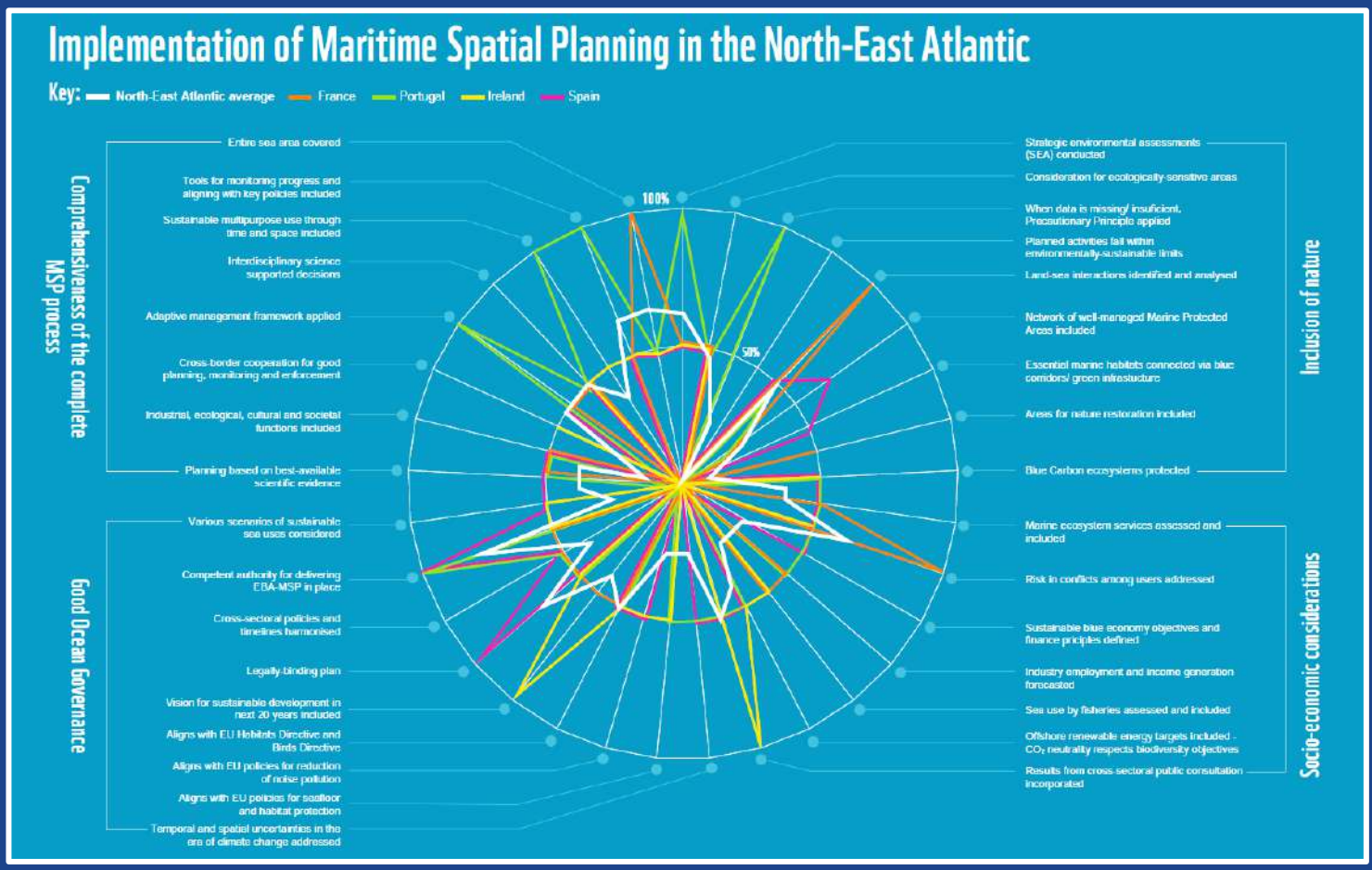
The requirements for monitoring and reporting implementation of the MSPD are detailed in articles 6 (3) and 14 (1), stipulating that plans are to be reviewed as decided by the MS, but at least every ten years and that MS shall send copies of the plans, including relevant existing explanatory material on the implementation of the MSPD, and all subsequent updates, to the European Commission and to any other MS concerned within three months of their publication. Furthermore, Article 14 (2) establishes that the Commission shall submit, at the latest one year after the deadline for establishment of the maritime spatial plans, and every four years thereafter, a report outlining the progress made in implementing the MSPD, which further stresses the need for M&E (see next section "Status of implementation of the MSP Directive").

Box 4. Example of translating the requirements of the MSP Directive into indicators for ecosystem-based approach in MSP.

The guidance paper of the WWF-European Policy Office (2021) translates the MSPD's requirements into 33 indicators that, when achieved, would successfully deliver an EBA to MSP. These indicators fall under four main categories:

- Inclusion of nature;
- Socio-economic considerations;
- Good ocean governance;
- Comprehensiveness of the complete MSP process.

This methodology was applied to assess MSP in the North-East Atlantic Member States, including Portugal, Spain and France (WWF-European Policy Office et al., 2022).



Source: WWF-European Policy Office *et al.* (2022).

The MSPD links the monitoring of implementation with the revision or updating of maritime spatial plans; in turn the updates should be linked to the reviews carried out at least every ten years. The MSPD refers to revision or updating of maritime spatial planning in its preamble and to the review of plans in Article 6, implying the regular amendment of plans as part of a cycle, to improve them and better adapt them to changing circumstances (European Commission et al., 2021a). This is needed to deal with uncertainty and incorporate various types of change and requires a cost-effective and comprehensive M&E approach (European Commission, CINEA, 2022a).

The MSPD also refers to the MSFD, highlighting the need for an ecosystem-based adaptive management to be applied to achieve Good Environmental Status (GES) and that the objectives of MSP initiatives should be set in the context of environmental, economic and social factors, thus acknowledging the importance of adaptive management to MSP. In some countries the MSPD and MSFD processes have been linked, including the monitoring component (e.g., France, Spain).

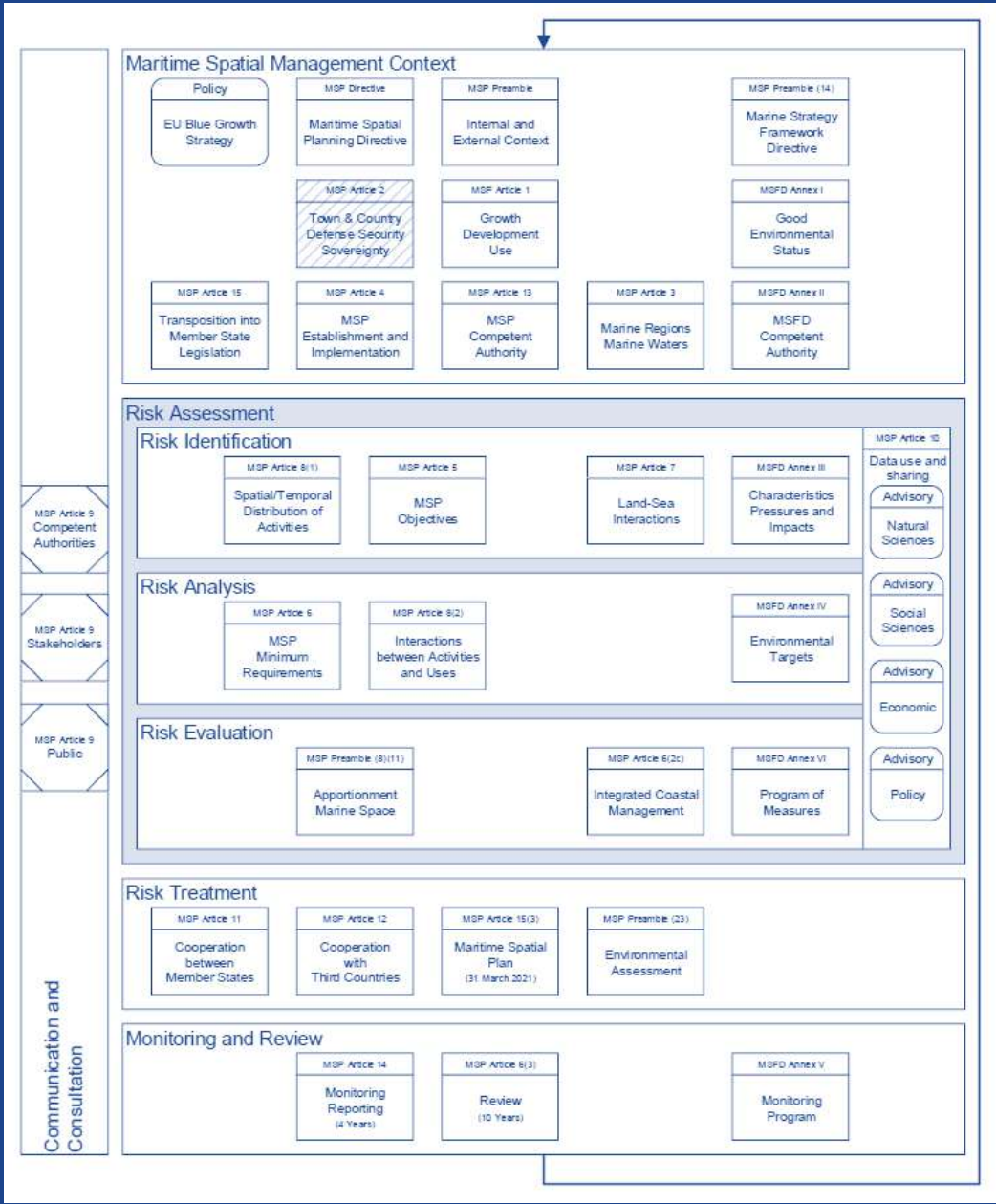
According to paragraph (14) of the preamble of the MSPD, the application of an EBA - pursuant to the MSFD and in a way that is adapted to the ecosystems and other specificities of each marine region - should allow for an adaptive management. Additionally, under paragraph (19) of the preamble, it is stated that MSP needs to take into consideration long-term changes due to climate change. This approach would ultimately ensure refinement and further improvements as experience and knowledge increase, considering the availability of data, while also considering the application of the precautionary principle.

While uncertainty or the implications of climate change also receive some attention in other components of the EU regulatory framework, such as the MSFD or the Water Framework Directive (WFD), these remain limited and the monitoring of marine ecosystems and the six-year planning cycle offered by these two Directives is often considered adaptive management, lacking in methods to develop truly adaptive plans or monitoring systems that can understand the tipping points anticipating management changes (European Commission et al., 2021b).

Monitoring, review and evaluation are thus part of a dynamic process which aims to improve the implementation and impacts of MSP and are consequently linked to adaptive management (see section “The adaptive nature of MSP”), which involves both continuous learning and improvement, as well as the acknowledgement that the planning cycle is circular, comprising regular reviews and revisions. While the MSPD suggests that review occurs at a defined stage at the end of the planning cycle, monitoring and evaluation can happen at other stages of the MSP process. Effectively, adaptive management is not limited to changes from one cycle to another, as there may be a need for MSP to adapt to change during the cycle, due to significant changes, for example, to socioecological systems, such as the construction of large infrastructures, the introduction of an invasive species, or new policy goals at international, EU or national levels (European Commission et al., 2021a).

Box 5. Example of applying the requirements of the MSP Directive as policy context for a MSP quality management system.

During the organization of the planning stage in the MSP cycle, it is necessary to acknowledge and assess risks relating to what could go wrong during the process, as well as respective contingency measures. The MSP Quality Management System proposed by ICES/CIEM (2015) takes into consideration the quality management elements for the planning process within legislative instruments such as the MSPD and the MSFD. The above-mentioned system includes a discussion of technical approaches that can be taken to risk management in MSP and can also be used to implement MSP along the frame provided by the MSPD.



Source: ICES/CIEM (2015).

Status of implementation of the MSP Directive

Pursuant to Article 14 (2) of the MSPD, the Commission has issued a report outlining the progress made on the implementation of the Directive[8], which assesses transposition and conformity, reflects upon the compliance with its requirements, gives examples of good practices, and emphasizes challenges and opportunities, while also looking at developments that impacted the implementation of the Directive, notably the European Green Deal.

The main findings of the report are:

1. **Transposition into national law**: All 22 coastal MS have now transposed the MSPD into national law, taking various approaches to the transposition, which was deemed as complete and mostly compliant with the MSPD's requirements. France is identified as one of the MS which amended legislation on spatial planning or environmental protection, while Portugal and Spain have adopted new specific MSP legislation. In the case of France and Spain, the legislation also refers to transposing other Directives, and more specifically to the MSFD. In the case of Spain, it is a legislative extension (with the rank of a royal decree) of the Marine Environment Protection Law and the link between both MSPD and MSFD cycles is included in the main document of the Spanish MSP plans.
2. **Designation of competent authorities**: All 22 coastal MS have now designated competent authorities, choosing either ministries or government agencies.
3. **Implementation support**: The Commission set up a number of initiatives to support MSP in the EU, notably the MS expert group on MSP, the MSP Assistance Mechanism and the "European MSP Platform", besides from funding a number of MSP projects in all sea basins, including outermost regions. The EU-funded projects ranged from research and innovation, higher education and regional cooperation, to capacity development and cross-border cooperation. These initiatives have enabled MS to make significant progress in areas such as cross-border collaboration, stakeholder consultation, capacity building, MSP support tools, information and data sharing on maritime spatial plans, as well as increased coherence at sea basin level.
4. Overview of progress in establishing maritime spatial plans in relation to the deadline of 31 March 2021:
    a. 5 MS met the deadline building on an MSP tradition existing before the MSPD or starting very soon after it entered into force;
    b. 9 MS (France and Portugal included, except the Azores) complied with the deadline or established their plans within 1 year after the deadline;
    c. 3 MS (Spain included, and Portugal with respect to the Azores) were not able to comply with the deadline, but are at an advanced stage in producing draft plans and proceeding to final adoption;
    d. 5 MS did not make sufficient progress towards establishing their plans as required by the Directive.
5. Implementation of the MSPD's requirements for maritime spatial plans:
    a. **Take into account the EBA**: All MS with adopted plans have referred to an EBA, within the maritime spatial plan itself and/or in its strategic environmental assessment, albeit applying varying approaches to its analysis and impact on the plan, using tools such as scenario planning.
    b. **Consider environmental, economic, social and safety aspects**: All MS with adopted plans have considered these aspects in their plans, the majority of which have been analysed in detail, using strategic environmental assessment or additional assessments of socio-economic and environmental impacts.
    c. **Promote coherence**: All MS with adopted plans have sought to promote coherence between other rules, policies and plans relevant to MSP, most giving an extensive overview of those applicable at various levels by the EU, regional sea conventions, and national and local authorities. In some cases, maritime and territorial plans were combined, or MSP was aligned with the cycles of other relevant policies to facilitate implementation and synergies (e.g., France aligns MSP and MSFD cycles).

[8] COM/2022/185 final, 03/05/2022.

d. **Consider land-sea interactions**: Most MS with adopted plans mentioned land-sea interactions, the majority providing a detailed analysis and some promoting coherence with the MSFD, WFD, Nitrates Directive and other relevant legislation.

e. **Identify the spatial and temporal distribution of activities and uses**: All MS with adopted plans had identified and zoned existing and future activities and users, including temporally, where most considered the interactions among these activities and most took a prescriptive zoning approach. A multi-sectoral approach and the potential for multi-use should still be stimulated.

f. **Ensure stakeholder involvement and public participation**: All MS with adopted plans met the requirements for the public participation processes, which were clearly described, and for stakeholder engagement, which were involved in the entire process and their feedback integrated in the plans to a varying degree. The scope, extent and methods of stakeholder engagement varied, often reflecting the applicable political or legal requirements.

g. **Use the best available data and foster data sharing**: Most MS were transparent and explicit on the data sources used, providing varying degrees of detail, and the majority used the INSPIRE Directive. Some used central data points and other data sharing systems or tools, while others applied public participation geographic information systems. Particular emphasis was placed on using interoperable data models and integrating data in the EMODnet portal.

h. **Cooperate among MS and at sea basin level**: All MS with adopted plans or in the process of adoption had coordinated their plans with other MS and involved regional governance bodies. Most plans took into account transboundary impacts and developments, albeit to varying degrees. Some of the mechanisms to fostered cooperation among MS and non-EU countries at sea basin level were nationally or EU-funded projects, multilateral contacts and informal meetings among competent authorities, consultations in the context of the Strategic Environmental Assessment (SEA) Directive, regional sea conventions and EU macro-regional strategies, and participation in the MSP Experts Group, the MSPglobal Initiative, the MSP platform and the EU Maritime Forum.

6. **Challenges faced by MS when drawing up maritime spatial plans**: Dealing with the complexity and demanding nature of the process, the cross-cutting character of MSP and lack of clear targets, data collection and compilation, difficulty in involving all stakeholders from the beginning, or access to them, transboundary challenges, implementing an EBA, balancing protecting the environment and allocating maritime space for economic activities, and the impact of the Covid-19 Pandemic.

7. **Next steps**: MSP is identified as an enabler of the European Green Deal and its role in sustainable development is predicted to change, accelerated by the implementation of the Green Deal and related legislation and strategies, especially in the areas of energy and climate, the environment (e.g., MSFD, Biodiversity Strategy, MPAs), maritime transport and fisheries. Future predictions point to more cooperation at sea basin level, setting up a Blue Forum for sea users, continued funding of projects, and uploading data on the EMODnet portal, as well as continued stakeholders' involvement, and effective implementation and monitoring of maritime spatial plans.

According to the report of the European Commission, CINEA (2022c) on the relevance and effect of MSPD in the context of the European Green Deal, MSP is credited for bringing clarity and predictability to the maritime sectors by allocating space to various activities. Zoning plays a key role in all maritime spatial plans that are in place, or in the draft versions assessed, as most tend to prescribe where activities are allowed or not. It is noticeable that some objectives and minimum requirements of the MSPD are discussed in more detail than others, like different sectors and interactions.

The planning process of the maritime spatial plans illustrates how the MSPD's goals and requirements have been interpreted and applied, showing significant heterogeneity and highlighting the need for building a common understanding of the Directive's provisions to ensure its implementation remains consistent across all sea basins (WWF-European Policy Office, 2021).

Some aspects of the thematic distribution of EU-funded projects underpinning the development of MSP plans are closely related to the orientation of EU policy, in particular the focus on an EBA, providing common blocks for successful blue economy, emphasizing conservation and land-sea interactions, promoting cross-border cooperation between MS and neighbouring third countries, and prioritizing regional development linked to all sea basins (Li & Jay, 2020).

In practice, MS are either in the phase of planning, preparing, establishing or evaluating national maritime spatial plans, where some may need to update or revise their plans, while others are only initiating the processes (Figure 2). This makes up for a very diversified MSP experience, adding to different administrative frameworks and political priorities at national level, and a challenging implementation of transboundary MSP (Friess & Grémaud-Colombier, 2021).

The critical assessment of how MSP is progressing may shed light on the opportunities and barriers that current initiatives are facing, which can help revealing valuable lessons to inform the next MSP cycle. As maritime spatial plans are setting out long-term goals for marine management, there is a need to understand if current initiatives are fit for purpose and analyse if they are responding to the challenges they were set up to tackle (McAteer et al., 2022).

Country	Authorities	Maritime Spatial Plans
Belgium	N	N
Bulgaria	N	N
Croatia	N S x7	N S x 7
Cyprus	N	-
Denmark	N	N
Estonia	N	N S S
Finland	N S x 8 + 1	S S S S
France	N S x 4	S S S S
Germany	N S S S	N N S S S
Greece	N	-
Ireland	N	N
Italy	N	N
Latvia	N	N
Lithuania	N	N
Malta	N	N
Netherlands	N	N
Poland	N	N x 5
Portugal	N S x 2	N
Romania	N	N S S S S
Slovenia	N	N
Spain	N S x17+2	N
Sweden	N S >80	N N N
Total	N x22 S >124	N x18 N x7 S x12 S x12

MSP in preparation
N = National MSP
S = Sub-national MSP

MSP adopted
N = National MSP
S = Sub-national MSP

Authorities
N = National Authority
S = Sub-national Authority

Figure 2. Overview of MSP authorities and plans per EU Member State (Source: European MSP Platform, 2022a).

Links to other relevant international and EU legislation and policies

The interaction between the MSPD and other EU legislation was foreseen from its inception, as is evidenced by paragraph (15) of its preamble, which specifically mentions that MSP will contribute to achieving the aims of the Renewable Energy Directive, the Common Fisheries Policy, Birds and Habitats Directives, the MSFD, the WFD and various decisions and Commission communications.

Considering that the MSPD is a framework directive, some of the underlying EU directives and policies also address specific questions about M&E that will affect the planning and evaluation of maritime spatial plans (Py et al., 2021). For example, monitoring under the MSFD and WFD may help to identify the ecological impacts of MSP, whereas monitoring under Integrated Coastal Zone Management (ICZM) initiatives can find land-based changes relevant to MSP (European Commission et al., 2021b). In addition, structures or groups established for the implementation of the MSFD and the WFD can also be applied in the framework of the MSPD. For instance, in Spain, the interministerial committee for the marine strategy is the same for MSP process.

Thus, the interlinkage of the MSPD with other policies is particularly important to acknowledge considering that MSP interacts with a wide range of international, EU and national legislation and agreements already in place (see Box 6), providing that they are consistently articulated through a legally binding maritime spatial plan (WWF-European Policy Office, 2021). On the other hand, from an evaluation perspective, it is challenging to attribute specific achievements to, or effects of, to one particular directive, and not to another (European Commission, CINEA, 2022c).

Box 6. A schematic representation of the links between the MSP Directive and other international, EU and national policies, legislation and instruments.

Various authors argue that the MSPD can contribute to sectoral development, offering an opportunity for enhancing blue economy, specifically aquaculture, offshore renewable energy and tourism sectors (O'Hagan & Lewis, 2011; Papageorgiou, 2016; Kyvelou & Ierapetritis, 2019; García et al., 2019; Schütz & Slater, 2019). Other authors underline the need for a cross-border approach and for best practices on overcoming barriers to transboundary cooperation, with an emphasis on the contribution of EU-funded projects for territorial cooperation (de Grunt et al., 2018; Gomez-Ballesteros et al., 2021; Čok et al., 2021). The iterative nature of MSP may also facilitate adjustments needed to address change, especially within the social dimension, bridging existing gaps found in the WFD and MSFD (Langlet & Westholm, 2021).

The close relationship between the MSPD and the MSFD is given more attention in the scientific literature than linkages with other EU legislation and policies (e.g., Douvere, 2008; Flannery et al., 2010; Brennan et al., 2014; Abramic et al., 2018; Paramana et al., 2021; European Commission, CINEA, 2022c), as MSP is often identified as a key tool to achieve Good Environmental Status and to help preserve biodiversity and for applying ecosystem-based spatial measures. For example, Varjopuro et al. (2019) argue that MSP monitoring should be coordinated with the environmental monitoring done under the MSFD.

Another example is the analysis conducted by Abramic et al. (2020) concerning the relationship between the MSFD and the MSP processes in the Macaronesia region (Azores, Madeira and the Canary Islands), arguing that the two European policies are significantly interconnected and must be mutually supported. This is illustrated by how the MSFD can be useful in several steps of the MSP cycle, namely pre-planning, defining and analysing existing and future conditions, implementation and monitoring of the spatial plan. In addition, MSFD reports identify relevant actions and data that can provide the groundwork to ensure the application of an EBA and robust consideration of the marine environment in the MSP processes, although MSFD implementation is particularly challenging. This is due to the extensive marine waters surrounding the archipelagos, combined with a lack of resources and significant spatial data gaps, as well as the different scales that have been applied in each country for the elaboration of the plans.

When considering the MSFD and the MSPD, even though both are part of EU's IMP, difficulties in aligning the evolution and practical implementation of the two directives are also remarked upon, mostly attributed to different timetables and competent authorities and a need to better match the requirements of each directive and ensure coherence and meaningful cooperation, as well as concerns in balancing GES and the further development of maritime sectors (Jones et al., 2016; WWF-European Policy Office, 2021). In most existing MSP plans, the most common approach is to refer to the MSFD to justify action and for descriptions of the environmental status and the integration of conservation objectives, management measures and monitoring activities, considering that assessments under the MSFD were conducted before drawing up maritime spatial plans. This will change in subsequent cycles, considering that, once maritime spatial plans are in place, their contribution and alignment with the environmental provisions and objectives of the MSFD may also be assessed (European Commission, CINEA, 2022c).

When comparing the MSPD with the WFD and the MSFD, in terms of implementation, monitoring and evaluation, the last two are more detailed in many aspects, which makes comparisons between MS easier. A programme of measures is adopted in cycles every sixth year, so the need for M&E is obvious if the measures are to enable environmental standards to be achieved. The MSPD, on the other hand, is less detailed and contains no specific instructions or criteria on how to achieve its objectives. Hence, if its goals are to be achieved, there is a greater need to define - early on in the planning process - what to monitor and evaluate, how should it be carried out and by whom (Py & Stoll (Eds.), 2021).

USEFUL RESOURCES

The report of the European Commission, CINEA (2022a) proposes a step-by-step guide which includes reflecting on other commitments made at the international and EU level for each objective selected, with respect to minimum requirements set under Art. 6 of the MSP Directive.

The implementation of the MSPD may run in parallel to the implementation of programmes of measures under the MSFD and the WFD, the implementation of management plans for Natura 2000 sites in the framework of the Birds and Habitats Directives, as well as other plans and programmes developed under EU legislation. A practical example is that the choice of indicators to monitor EBA in MSP can draw on the EU regulatory framework (e.g., MSFD descriptors, WFD state and pressures data, Natura 2000 sites data, SEA indicators (European Commission, CINEA, 2021a)).

Another important link is found between the SEA Directive and the MSPD, as the emerging practice of applying environmental assessment in MSP plans can contribute to the implementation of an EBA even though there is a need to previously refine and operationalize vague concepts and principles, and advance in knowledge and methodologies to meet the requirements of EBA (Pinkau & Schiele, 2021).

It is also important to emphasize the links with the European Green Deal[9], adopted as an integral part of the strategy to implement the United Nations 2030 Agenda and Sustainable Development Goals, as it contains explicit references to sustainable blue economy development and ways to manage maritime space more sustainably and consider climate change. The achievement of the objectives formulated under the Green Deal, and associated actions[10], have an impact on how the maritime space is used, thus interacting

[9] COM(2019) 640 final, 11/12/2019.

[10] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system"

with the implementation of the MSPD. Considering the role of MSP in promoting and bringing clarity to maritime sectors by allocating space to various maritime uses and activities, such as offshore renewable energy and nature conservation, its part in realizing the Green Deal objectives is most clear in relation to the new approach for Sustainable Blue Economy, the EU Strategy on Offshore Renewable Energy and the 2030 Biodiversity Strategy (European Commission, CINEA, 2022c).

A study conducted by the European Commission, CINEA (2022c) found literature referring to both conflicting and synergetic interactions between the MSPD and other EU legislation. It also assessed linkages between the objectives of all EU level policies and the implementation of the MSPD, finding 349 linkages between the objectives, minimum requirements and activities of the MSPD and 293 policy objectives from other EU policies that have a link with MSP, where a total of 45 relevant policies were identified, eight of which related to the European Green Deal. Almost one-third of these objectives link with the second objective of the MSPD, i.e., contribute to the sustainable development of various identified sectors at sea, and most connections with the minimum requirements have been observed between the requirement to "take into account environmental, economic and social aspects, as well as safety aspects", followed by "ensure transboundary cooperation between Member States". The themes most explicitly linked to EU policy objectives are nature conservation and protected areas, maritime transport routes, and fishing areas, while less linkages exist between military training areas and raw material extraction areas.

According to the same study, a survey showed that the predominant viewpoint is that, to date, the MSPD contributed only to a moderate extent to the achievement of other EU policy objectives. Results point to the MSPD mostly having supported EU maritime policies so far (e.g., MSFD, WFD, Habitats and Birds Directives Regional Sea basins strategies, Common Fisheries Policy), with an emphasis on environmental, climate and energy transition-related policies. Results point to a general belief that, in the future, the MSPD will support the achievement of policy objectives defined by the European Green Deal. When referring to contradictions between the objectives of different EU legislative acts, the general outlook is that, on a practical level, tensions related to space demands are identified (e.g., offshore energy vs shipping, nature conservation, or fisheries), as well as implementation challenges (e.g., prioritizing certain activities; incorporating national policies and articulation with sectoral policies; data gaps; integration of other processes such as MPAs and fisheries regulations; syncing calendars between the MSFD and MSPD; and integrating an EBA).

ADDITIONAL READING

Pınarbaşı et al. (2017) analysed the use of decision support tools in MSP processes worldwide, in relation to the different stages of the MSP cycle. The study revealed that tools are mainly used for the early stages of MSP and that only 10% of analysed tools were applied in the M&E phase. In addition, it was remarked that few tools offer future projection, socio-economic analysis, and stakeholder engagement, which are all aspects intrinsic to plan monitoring, evaluation and adaptation. The study emphasized the need for filling gaps in the provision of tools that help monitor plans and gather stakeholder input.

THE ADAPTIVE NATURE OF MSP

There are increasing demands worldwide for the evaluation of marine management initiatives - MSP included - which are necessary to provide evidenced-based feedback to learn from, and improve upon, past management options (Day, 2008). Considering the specificities of the maritime space, the current lack of knowledge on marine ecosystems and of ever-changing environmental, social and governance settings, MSP and management processes require constant updating to deal with uncertainty and change (Day, 2008; Ehler & Douvere, 2009; Ferreira, 2016). Learning from experience and integrating lessons learned in a continuing and adaptive way is paramount to ensure that MSP is effectively a sustainable, operational and integrated process (Frazão Santos et al., 2019).

Adaptive MSP is based on a cyclical and iterative planning process, which periodically feeds back valuable M&E information from the past to enhance the next planning cycle and to allow for well-informed adaptations whenever necessary (IOC-UNESCO/European Commission, 2021). In other words, it consists in 'learning by doing', testing assumptions and providing timely information for management decisions and adapting what is done based on what is learned. It recognizes that our actions in the future will change and

(COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

new policies will emerge as new knowledge is obtained, thus enabling managers to be flexible and to expect – and deal with - unforeseen situations (Day, 2008).

MSP should not be viewed as a once-off exercise, but instead should be designed as an adaptive process, to improve the understanding of decision makers' and stakeholders' about current and future issues and their ability to manage them, where planning actions should be revised and updated in the face of changing conditions. Indeed, this entails exploring alternative ways to meet MSP objectives and predicting their outcomes (e.g., using scenario analysis), monitoring to gather information and learn about the effects of management, and using results to update knowledge and adjust planning decisions accordingly (Agardy et al., 2011; Douvere & Ehler, 2011; Ehler, 2014; Gissi et al., 2019). It is also important to recognise that some planning decisions need to be in place for a reasonable period of time to be effective or to enable a reasonable assessment of their effectiveness (Day, 2008).

Regardless of the importance of an adaptive approach to MSP, there are still few examples of what such an approach actually entails and little research has been conducted to determine how M&E can lead to meaningful results or whether current MSP initiatives have the essential features to convey this aspect (Ehler, 2018). Even though the theoretical principles for an adaptive MSP have been extensively discussed, tangible examples of MSP embracing change are rare and have different application for each region (e.g., most cases come from North of Europe, which have different oceanographic conditions, maritime sectors, etc., to the Mediterranean or the European South Atlantic). Additionally, the inclusion of system dynamics, environmental variability and socio-economic shifts remains challenging, partly due to the high costs of dynamic decision-support tools (Pınarbaşı et al., 2017).

MSP operates in an environment subject to constant change, being based on data that is likely to vary considerably over time. Planning must be flexible enough to allow reacting to such changes and revising the plan in due course, which is why transparent and regular M&E mechanisms should be in place. An adaptive approach to MSP is indispensable to deal with uncertainty about the future and to incorporate various types of change; otherwise, plans may quickly become ineffective, impracticable and eventually, irrelevant (Ehler, 2018). When it comes to change, MSP needs to address it at two different levels: i) at the content level, as MSP operates in a changing system, with both internal (e.g., social, ecological, technological, economic and political dynamics) and external (e.g., climate change) drivers; ii) at the process level, as MSP should acknowledge and learn from change, to adapt with changing conditions. In any case, uncertainty must be carefully assessed and acknowledged in decision-making (Agardy et al., 2011; Gissi et al., 2019).

Reviews of applications to date generally report a substantial heterogeneity in the MSP implementation process on a global scale (Collie et al., 2013; Domínguez-Tejo et al., 2016; Ansong et al., 2017; Pınarbaşı et al., 2017; Buhl-Mortensen et al., 2017). Nonetheless, a common element of all MSP processes - independent of the country, region, approach or standards - is M&E, recognised as a fundamental component of the planning cycle (Carneiro, 2013; Soma et al., 2014; Stelzenmüller et al., 2021).

Seeing the overall effort and resources put into MSP, it should not be understated the importance of M&E to assess if the MSP processes are working and how to improve them. Besides from increased information and knowledge, these elements can ultimately contribute to promote greater transparency and accountability, an improved understanding and support of public action, and even a more participated democracy (Ehler, 2014; UNEP, 2014; Ferreira, 2016). They provide ways to assess the effectiveness of planning processes in drafting a plan, to draw conclusions on MSP's ability to deliver its objectives, and to gather critical perspectives on the outcomes of the plan, which may ultimately improve future planning and ensure responding to varying environmental, social and economic conditions (Douvere & Ehler, 2011; Ehler, 2014; Varjopuro, 2019).

While the existing literature reveals a significant diversity of evaluation approaches - going from formal and structured processes built on MSP goals, to informal processes based on stakeholder interviews, varying considerably on the type of evaluation, terminology and level of detail - it also shows the diversity of contexts in which MSP is practiced (Stelzenmüller et al., 2021). This diversity makes it difficult for any ready-made procedures to be applied universally, calling for M&E frameworks tailored to each context and for careful fine-tuning of the scope of M&E in MSP (Day, 2008; TPEA, 2014). Standardised frameworks cannot be easily transferred across different planning settings, as the procedures must reflect the respective context, scope and objectives of the evaluation processes (Buhl-Mortensen et al., 2017). The use of decision support tools may help curtail the challenges in appropriately planning and conducting M&E in each specific MSP context (Pınarbaşı et al., 2017).

Notwithstanding the acknowledged difficulty in designing transparent and meaningful evaluation in MSP, a number of key elements are recommended for any M&E process, regardless of the policy and scope applicable, comprising aspects such as the importance of appropriately defining objectives, engaging stakeholders and selecting evaluation criteria and indicators (Varjopuro, 2019; Stelzenmüller et al., 2021). Nonetheless, very few MSP processes have a systematic M&E framework in place, which typically not only require setting objectives, but also its translation into indicators with verifiable targets against defined baselines (European Commission, EASME, 2018).

On the other hand, the increasing adoption of formalised evaluation approaches linked to MSP objectives and indicators may not necessarily result in a more straightforward reporting of outcomes, calling for stronger linkages between defined MSP goals, indicators and available monitoring data (Stelzenmüller et al., 2021). An example of this is the predominant use of high-level objectives in maritime spatial plans, which tend to be ambiguous and vague long-term goals, making it difficult to clearly specify desired outcomes and related indicators. Another factor is the application of data that is not fit-for-purpose, such as baseline monitoring of ecological and socio-economic data and targeted surveys, which are often used as data sources but may not be useful for the actual evaluation of plan outcomes and may provide ambiguous conclusions where extensive interpretation of the data is needed (Stelzenmüller et al., 2021).

This trend shows the need for customised, regular and concurrent M&E strategies to enable effective MSP review, based on realistic definitions of expected outcomes reflecting the plan's scope and formulated with the best available information and stakeholder input. Stelzenmüller et al. (2021) also argue that evaluation processes would benefit from a better understanding of the general environmental, socio-economic and socio-cultural effects of MSP, in particular through the adoption of targeted cumulative effects assessments (e.g., linked to the MSFD) to weigh in the cause-effect pathways between human activities, their pressures and effects on the marine environment, as well as the effects between different activities and on society.

THE CONCEPTS OF M&E

The intertwined roles of M&E

Monitoring, evaluation and adaptation are all interlinked: monitoring of the plan and its outcomes is a continuous process that generates information needed for the evaluation, which, in turn, provides necessary information for adapting the plan when it is reviewed, thus fostering adaptive management (IOC-UNESCO/European Commission, 2021). Evaluation cannot be viewed as a substitute for monitoring, nor monitoring as a substitute for evaluation; they have complementary roles (Table 1) (Ehler, 2014). Other key concepts in the context of MSP are listed in Box 7.

Table 1. Main features and roles of MSP M&E (adapted from Ehler, 2014).

	KEY FEATURES	
	Monitoring	**Evaluation**
Timing	Continuing	Periodic
Baseline	Assumes the adequacy of MSP	Assesses and questions the adequacy of MSP
Scope	Routine data collection	In-depth analysis on planned and actual effects
Main focus	Inputs, activities and outputs	Outputs and outcomes in relation to inputs
Questions answered	What strategies were implemented	How and why results were achieved
Results	Reports progress and detects problems	Lessons learned and recommendations for improvement

What is MSP monitoring?

Monitoring can be viewed as the continuing collection of data and information (OECD, 2022), which can be done for the purpose of observing and recording changes to assess the progress and success of a plan, to inform an evaluation (e.g., during the drafting process, throughout the plan's lifespan). More specifically, MSP monitoring can be a continuous management activity that uses the systematic collection of data on

selected indicators for the purpose of assessing the performance of plans or compliance schemes and of conducting their revision, or simply to gather experience for future plans.

KEY CONCEPT

Review:
The process of analysing whether the current version of the plan is still appropriate and what changes need to be made in order to improve its outcomes.

A distinction should be made regarding compliance monitoring (i.e., assessing if performance is following the limits and conditions specified in permits, licenses and/or regulations), performance monitoring (i.e., assessing progress toward pre-established goals and objectives) and state-of-the-system monitoring (i.e., assessing the state of the environment) (see section "Types of M&E approaches").

According to Day (2008), monitoring is a fundamental management tool to document environmental impacts, both of natural and human origin, and assess the effectiveness of management actions, in order to know if what is being done is efficient, effective and equitable. However, most monitoring actions have generally been conducted as standalone efforts or research tasks and have mostly been focused on biological or social aspects, with few examples of integrated assessments of the marine managed area or monitorization against the objectives for which the area was originally created.

What is MSP evaluation?

Evaluation constitutes a periodic management activity that assesses achievement against some predetermined criteria, usually a set of standards or management goals and objectives. For instance, it can assess whether the objectives of a plan or planning process have been attained. Specifically, it concerns how MSP plans improve the understanding of decision makers and stakeholders about present and future problems they face and the opportunities that planning presents to deal with problems in the present to avoid them in the future (Ehler, 2014). The literature differentiates between common types of evaluation, such as conformance evaluation, process evaluation and performance evaluation, all of which play a role in MSP evaluation (see section "Types of M&E approaches").

The object of evaluation: conformance vs performance

In order to determine what should be evaluated in planning or in a plan in the context of MSP, it is necessary to first clarify their functions and objectives. There are two main distinct perspectives about the function of planning that are especially relevant for MSP M&E, relating to conformance evaluation and performance evaluation (Carneiro, 2013). The distinctions between the two have been extensively discussed in the literature, pertaining to different planning philosophies; however, it should be noted that the terminology is not settled and the same terms can be used for different purposes (Varjopuro et al., 2019).

When concerning **conformance evaluation**, it refers to assessing whether a plan's objectives have been met, namely the degree of conformance between stated objectives and observed results. It measures the results of the plan and the planning process, considering outcomes as the anticipated result of implementing planning decisions, which should be clearly stated in terms of tangible results or discrete impacts that would be expected if objectives were fully accomplished (Day 2008). Some features of conformance evaluation include (Carneiro, 2013; Varjopuro et al., 2019; Schultz-Zehden, 2021):

- Best suited to evaluate discrete outcomes of plan elements or of clearly targeted plans;
- Generally assumes that plans translate into concrete measures conducive to measurable changes to the system;
- Views the MSP plan as a blueprint for how things can evolve in future;
- Compares the actual, observable development of the objectives of the plan and tries to establish a clear relationship between them;
- Success can be defined as conformity to the plan;
- The possibilities of MSP are limited by liability challenges.

KEY CONCEPT

Conformance evaluation should not be mistaken with **compliance evaluation**, which results from the collection and evaluation of monitoring data, including self-monitoring reports, and verification to show whether an activity is following the limits and conditions specified in permits, licenses and/or regulations. As such, the success of the plan is evaluated against how permits and licences are issued by relevant bodies.

When concerning **performance evaluation**, it means an assessment that examines the extent to which a maritime spatial plan is working as intended by gauging ongoing program implementation and operationalization. A performance evaluation helps managers identify what changes are needed in planning, as well as strategies and

operations to improve the performance of the plan and its management actions. Some features of performance evaluation include (Varjopuro et al., 2019; Schultz-Zehden, 2021):

- Sets MSP in a broader context and assesses the usefulness of MSP through its broader effects and side-effects;
- Measures MSP against less clearly defined targets, possibly relating to other deliberative processes, such as how well MSP communicates views about the future, and how it is used by - and provides guidance to - other policy initiatives;
- Considers how the plan affected decision-making in the maritime sectors or permitting procedures;
- Views MSP as a decision framework/ policy process that gives guidance, being best suited to evaluate strategic plans;
- Views MSP plans as providing spatial expressions of societal preferences and needs, not a blueprint for the future, looking at planning as an ever-changing process which faces significant uncertainties;
- It is considered successful if deviations can be justified in relation to the plan and the plan is frequently used or consulted in the decision-making process;
- Circumvents challenges of attribution (see section "Challenges and limitations in M&E").

Conformance evaluation has had prominence over performance evaluation, likely as a result of expectations being placed in the ability to measure and provide information about the tangible achievements and impacts of the process (Carneiro, 2013). However, a shift has become apparent towards replacing the idea of simply measuring the results of MSP, calling for a different way of thinking about planning and evaluating spatial plans, which can be translated into making distinctions on how success can be defined in MSP, depending on whether the evaluation focuses on conformance or performance (Carneiro, 2013; Ehler, 2014; Varjopuro et al., 2019; Schultz-Zehden, 2021).

Reasons for MSP M&E

The main purposes behind M&E are to learn from and improve MSP processes, as they provide opportunities to become more critically aware of the questions to ask, the goals to set and how to frame the design or implement the plan. To improve the policies and the plan, or the processes of producing them, it is important to understand why certain elements of the policy or plan work and others do not. Another important aspect of M&E is gathering information that can be applied to foster broader societal transparency and for holding the competent authorities accountable (Varjopuro, 2019; IOC-UNESCO/European Commission, 2021). Some of the many reasons for conducting M&E are (Day, 2008; TPEA, 2014; Ehler, 2014; Varjopuro, 2019):

- Assessing and improving MSP plans, its processes (e.g., plan making and implementation) and its outcomes via adaptive management;
- Ensuring quality, effectiveness and appropriateness of MSP;
- Fostering continuous learning about MSP to steer reviewing, updating and informed decision-making;
- Asking critical questions of the MSP process and its outcomes, such as the plan (e.g., Are we getting better at MSP? Have the desired objectives been achieved, and if not, why? What needs to be changed in order to improve outcomes?);
- Measuring overall progress in MSP and demonstrating the extent to which set objectives have been achieved;
- Establishing more systematic linkages between management objectives and actions, including mitigating identified gaps;
- Identifying corrective measures when flaws in processes and unachieved goals are discovered;
- Appraising the quality of the plan making process (e.g., in terms of equity and representativeness) to improve it in future planning rounds;
- Assessing the merit and value of maritime spatial plans;
- Increasing trust and the legitimacy of public processes, as they improve public knowledge and understanding of policies and plans;
- Promoting greater transparency and accountability within authorities and governments, including by demonstrating that public resources are used wisely and towards achieving set goals;

- Legitimising planning and building political and public support based on the ability to demonstrate positive results;
- Adjusting the course of resource allocation and encouraging appropriately distributing resources (e.g., in response to knowledge gaps);
- Assessing the satisfaction level of stakeholders concerning the process and determining who is likely to be affected by the planning decisions and how are they impacted;
- Creating a broader societal discussion on the process and impacts of MSP;
- Providing a clearer sense of the status of plans and management actions to stakeholders;
- Fostering social learning and improving citizens' understanding of the impacts of plans;
- Providing evidence-based feedback about what works, what doesn't and why (e.g., developing a knowledge base of the most successful planning decisions);
- Improving data and knowledge about present conditions and foreseeable issues;
- Identifying unanticipated impacts and side-effects;
- Supporting decision-making to tackle complex problems.

M&E and enabling conditions for effective MSP

Zuercher et al. (2022) have identified a set of enabling or disabling conditions of MSP, concerning factors related to planning and implementation processes and other relevant contextual factors that may enhance or undermine a plan's effectiveness. These conditions may influence - positively or negatively - the ability of MSP to succeed and were grouped within four major categories: plan attributes, legal context, plan development and social context, and integration (Table 2).

Evaluating MSP in the explicit context of the identified enabling or disabling conditions can foster discussion around what works in MSP, shed light on questions of outcome attribution and provide a path forward for assessing the benefits and costs of MSP. By identifying conditions instrumental to effective MSP, and alternatively, conditions hindering a plan, the framework can be used to guide plan development and adaptation and promote learning across the wider MSP community.

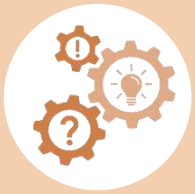
The authors argue that evaluating MSP outcomes can be more comprehensive when these conditions are considered, and propose a semi-quantitative scoring of each condition, supplemented by the development of descriptive narratives in order to operationalize the framework as part of the methodology for MSP outcome evaluation. The framework may also be used as a tool to guide conversations with stakeholders and to support reflection before and during a planning process and throughout implementation.

Table 2. A framework for understanding the enabling and disabling conditions of effective MSP (adapted from Zuercher et al., 2022).

ENABLING AND DISABLING CONDITIONS		
Category	**Conditions**	**Description**
Plan attributes	Institutional capacity	Entity's ability in developing the plan and capacity for plan implementation, enforcement, M&E and adaptation.
	Clear objectives	Plan with clear statement and with measurable objectives early in the planning process.
	Data and evidence	Type, quality, temporal and spatial scale, resolution and relevance of the data in plan development.
	Future-oriented	Plan with forward-looking approach, accounting for future conditions and ocean uses.
	Trade-offs	Data and tools to assess trade-offs, participatory discussion of trade-offs, and consideration of marginalized communities.
	Cumulative impacts	Integration of information on cumulative effects of existing and potential human activities and uses.
	Monitoring, evaluation and learning	Approach to M&E and alignment with the objectives of the plan.

	Adaptability	Plan outlining an adaptive process to facilitate updates, incorporate new information, and reflect changing conditions.
Legal context	Legal authority	Scope of a plan's legal authority, authority establishment prior to planning, changes in legal status, limitations to MSP from lack of authority.
	Inclusion of rightsholders	Inclusion of local or indigenous communities in decision-making.
	Enforcement mechanisms and incentives for plan compliance	Methods of enforcement for plan rules and policies, information about enforcement effectiveness.
Plan development and social context	Stakeholder engagement and participation	Stakeholder engagement, participation and empowerment in plan development and implementation.
	Power in MSP	Consideration of power asymmetries in planning and of the influence of power dynamics in the plan process and outcomes.
	Equity and justice	MSP process inclusive of diverse stakeholders and perspectives, attribution of genuine decision-making power and influence in plan development to stakeholders, consideration of inequities from the distribution of MSP benefits and impacts.
Integration	Cross-boundary integration	Acknowledgement of transboundary issues and involvement in transboundary collaboration.
	Integration across levels of government	Scope and scale of coordination between levels of government and respective communication channels, detection of incompatible policies, unclear jurisdiction or conflicting priorities.
	Policy and sectoral integration	Plan appropriately addressing interests and concerns across different sectors.
	Knowledge integration	Integration of diverse perspectives and knowledge in the planning process, the plan and plan outputs.
	Integration of EBA	Complying with principles of ecosystem-based management.

Box 7. Key concepts and definitions in the context of MSP. Adapted from Ehler (2014), MSPglobal2030 (2022b), European MSP Platform (2022b), Ehler & Douvere (2009).



KEY CONCEPTS & DEFINITIONS

MARINE/ MARITIME SPATIAL PLANNING

There are various definitions of MSP, such as the one provided by Ehler & Douvere (2009): "a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process". The European Commission defines MSP as "a process by which the relevant Member State's authorities analyze and organize human activities in marine areas to achieve ecological, economic and social objectives" as outlined in the MSP Directive.

BLUE ECONOMY

There is no specific definition of the term; some characterizations identify blue economy as the sum of economic activities of ocean-based industries and the assets, goods and services of marine ecosystems; others as the use of ocean resources for sustainable economic development, improved livelihood and jobs, and ocean ecosystem health. Alternatively, blue economy can refer to any economic activity in the maritime sector, whether sustainable or not.

SUSTAINABLE DEVELOPMENT

Development that meets the needs of the present generation in a way and at a rate that does not compromise the ability of future generations to meet their own needs. It comprises management and conservation of the natural resource base, and the orientation of technological and institutional change to ensure the continued attainment of human needs for present and future generations; in a way that is environmentally non-degrading, technologically appropriate, economically viable and socially acceptable.

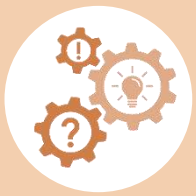
GOVERNANCE

The traditions, institutions, and processes that determine how power and authority are exercised, how citizens are given a voice, and how diverse elements of society influence and enact decisions and policies on issues of public concern (e.g., economic and social development). Governance is a broader concept than government; not only governments carry out governance, but also the private sector and civil society, and governance involves interaction between these institutions.

ECOSYSTEM BASED APPROACH

An integrated approach to resources management that promotes conservation and sustainable use in an equitable way, while considering the entire ecosystem, humans included. It considers the available knowledge and uncertainties, while taking into account multiple factors instead of focusing on a single species, sector, activity or concern. This approach emphasizes the protection of ecosystem structure, functioning, and key processes, while accounting for the interconnectedness within and among systems. It integrates ecological, social, economic and institutional perspectives, recognizing their interdependences. It is also place-based when focusing on a specific ecosystem and the range of human activities affecting it, providing for spatial solutions compatible with the maintenance or achievement of good environmental status and the capacity of ecosystems to respond to human-induced changes.

Box 7. (cont.) Key concepts and definitions in the context of MSP. Adapted from Ehler (2014), MSPglobal2030 (2022), European MSP Platform (2022b), Ehler & Douvere (2009).



KEY CONCEPTS & DEFINITIONS

PLANNING
STRATEGIC PLANNING

A management activity that generates information for decision-making at various points in time. It includes the process of answering the questions of who gets what, when and where, how, at what costs and who pays the costs. A continuous planning activity should take place in order to generate information for management that responds to changing conditions, i.e., adaptive management.
When related specifically to **strategic planning**, it concerns planning by organizations or sectors aimed at improving the long-term effectiveness of operations. It is commonly based on macro-analysis of technological, environmental, social, economic and political trends, or scenarios that narrate internal and external drivers for future development.

MANAGEMENT
INTEGRATED MANAGEMENT

Directing and controlling resources (e.g., human, financial, technological) for the purpose of accomplishing specified goals and objectives. It is made up of a set of activities, including research, planning, implementation, monitoring, evaluation.
When concerning **integrated management**, it means an approach that brings decision-makers together to ensure integration among existing policies and plans to ultimately maintain, restore, and improve the quality of the ecosystems and the communities they support. Competing environmental and socioeconomic issues are considered together, with the aim of achieving optimal solutions for the community and the ecosystem as a whole.

GOAL

A statement of general direction or intent. Goals are high-level statements of the desired outcomes to be achieved, that is generally broad and longer term, while an objective is shorter term and defines measurable actions to achieve an overall goal.

OBJECTIVE
MANAGEMENT OBJECTIVE

A statement of a specific desired outcome (e.g., behavioral change) that represents the achievement of a goal. Characteristics of good objectives include: Specific, Measurable, Achievable, Relevant or Realistic, and Time-bound, i.e., SMART objectives.
When concerning a **management objective**, it means a formally established, usually quantitative target, that provides a direction for a management action.

INDICATOR

Information based on measured data used to represent a particular attribute, characteristic, or property of a system; an indicator is a measure, quantitative or qualitative, of how close one is to achieving what one was set out to achieve, i.e., objectives or outcomes

REFERENCE LEVEL

A particular level of an indicator used as a benchmark for assessment.

BASELINE DATA

Basic information gathered before a program or activity begins, to be used later to provide a comparison for assessing impacts. In the context of MSP, it can relate to the situation before a maritime spatial plan is implemented, as the starting point for M&E.

THRESHOLD

A point or level at which new properties emerge in an ecological, economic, social or other system, invalidating predictions based on mathematical relationships that apply at lower levels. For example, species diversity may decline steadily with increasing habitat degradation to a certain point, then fall sharply after a critical threshold of degradation is reached, where irreversible changes can occur. Human behavior, especially at group levels, can sometimes exhibit threshold effects.

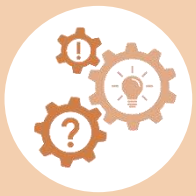
TARGET

An interim point on the way to an outcome and, eventually, to a long-term goal. Targets are based on known resources plus a reasonable projection of the resource base over a fixed period of time.

MANAGEMENT ACTION

A specific action or measure taken to achieve a management objective. The incentives (e.g., regulatory, economic, educational) necessary to apply management actions and the institutions which have the authority to implement them should also be specified.

Box 7. (cont.) Key concepts and definitions in the context of MSP. Adapted from Ehler (2014), MSPglobal2030 (2022), European MSP Platform (2022b), Ehler & Douvere (2009).



KEY CONCEPTS & DEFINITIONS

OUTCOME An anticipated result of the implementation of planning decisions in the maritime spatial plan.

A product or service delivered from a process or set of activities (e.g., report, plan, surveys, permits, or workshops). **OUTPUT**

EFFECTIVENESS An evaluation criterion of technical nature relating to the extent to desired goals, objectives, and outcomes of a plan are achieved.

An evaluation criterion of economic nature that assesses if goals, objectives, and outcomes been achieved at the possible least cost. **EFFICIENCY**

EQUITY An evaluation criterion of social and political nature that assesses the social allocation and distribution of the costs and benefits of planning decisions, i.e., asking who pays and who benefits from them.

Data in non-numerical form, dealing with descriptions; they can be observed, or self-reported, but not necessarily precisely measured (e.g., relationships, behavior). **QUALITATIVE DATA**

QUANTITATIVE DATA Data in numerical form, concerning data that can be measured (e.g., data on cost, length, area, volume, weight, speed, time, temperature, employment, income).

A wide range of computer-based tools, e.g., simulation models, and/or techniques and methods, developed to support decision analysis and participatory processes. **DECISION SUPPORT TOOLS**

SCENARIO A description, often simplified, of how the future may plausibly unfold based on a coherent and internally consistent set of assumptions about key driving forces (e.g., rate of technology advancement, economic changes, shifts in policy, climate change). Scenarios are neither predictions, nor plans; they may be derived from projections but are often based on additional information from other sources and can sometimes be grounded on a narrative storyline.

Individuals, groups, or organizations that are - or will be - affected, involved or interested, positively or negatively, by maritime spatial planning in various ways. **STAKEHOLDERS**

KEY REFERENCE FRAMEWORK

In recent years, leading organizations as UNEP, UNESCO and the European Commission have published guidelines for MSP around the world (Ehler & Douvere, 2009; Agardy et al., 2011; Ehler, 2014; European Commission, 2018; IOC-UNESCO/European Commission, 2021) and several M&E approaches and frameworks for MSP have been proposed and compared (e.g., Day, 2008; Douvere & Ehler 2011; de Vos et al., 2012b; Carneiro, 2013; Fletcher et al., 2013; Stelzenmüller et al., 2013; Ehler, 2014; TPEA 2014; Kelly et al., 2014; Soma et al., 2014; Varjopuro, 2017; Ferreira et al., 2018; Varjopuro, 2019). This is also reflected by numerous EU-funded projects that address MSP M&E in one form or another (e.g., MESMA, ADRIPLAN, SIMCelt, Coexist, MASPNOSE, TPEA, BaltSeaPlan, PlanBothnia, Baltic SCOPE, Pan Baltic Scope, Capacity4MSP) (Stelzenmüller et al., 2021; Avgerinou-Kolonias et al., 2018).

The literature review shows that there is a good set of practices available which can be used as a starting point to guide the development of the M&E frameworks in the ORs. A growing body of academic and technical literature has become available dealing with aspects of M&E in MSP, mostly developed to support communities and authorities to self-assess their progress, focusing on general evaluation requirements and specific challenges, potential evaluation tools, criteria and indicators, structured questions and checklists (TPEA, 2014; Avgerinou-Kolonias et al., 2018).

The MSP M&E approaches present generalised evaluation typologies or cover processes, outputs and most frequently outcomes, while the quality of outputs and social sustainability aspects are among the least covered themes (Varjopuro et al., 2019). These frameworks vary in complexity and focus, as the reasons for evaluation or the components of plans may differ, and have been developed from a range of different perspectives, including more ecological or planning-based perspectives and including more process or outcome-oriented systems. Nonetheless, most M&E frameworks have been drawn up in the context of research projects, needing to be adapted to actual MSP processes to better reflect operational and practical constraints for public authorities, especially when it comes to cost effectiveness and flexibility (TPEA, 2014; Hopkins & Jay, 2017).

Even though there are currently an increasing number of initial guidelines and tools referring to M&E, there is relatively little guidance relating to the actual implementation and few reported examples of how MSP has been evaluated, thus mostly remaining theoretical (Schultz-Zehden, 2021). Elements still missing in existing evaluation models include land-sea interactions and measuring outcomes against sustainable development objectives (TPEA, 2014). On the other hand, MS are currently implementing the MSPD and many are going through their first cycle of MSP. As the first generation of plans come to completion, attention is turning to review and evaluation of those MSP processes; hence, more data is expected to be available on how countries monitor and evaluate MSP in the near future (Jay, 2017; Varjopuro et al., 2019).

The first MSP cycle will, for many countries, serve as a cycle to gain experience that can be incorporated and improve maritime spatial plans in the future. It is expected that methodical issues may need to be addressed to ensure that M&E of the processes and the plans focus on the relevant indicators and objectives. The first cycle will also serve as a basis for further discussion on whether or not any responsibility should be taken for the coordination of M&E within the framework of MSP at EU-level, within sectors or at a sea basin level (Py et al., 2021).

This guide is built upon some of the existing frameworks and approaches for M&E, many stemming from outputs of previous projects, considering as main references and sources those described in Box 8. These were used to examine approaches taken to the evaluation of MSP, identifying common practices, essential principles and possible evaluation models. This listing is not intended to bring forth all of the considerations made in the selected literature, but rather to serve as an opening point for developing the specific case of MSP M&E in the ORs, by shedding light on unifying criteria that can inform the methodology used within the MSP-OR project.

Box 8. Key references and sources for the development of the guide of M&E for the OR.

Marine spatial planning: a step-by-step approach toward ecosystem-based management (Ehler & Douvere, 2009)

The IOC-UNESCO guidance document published in 2009 (Ehler & Douvere, 2009) is one of the best known and applied documents on MSP (Frazão Santos et al., 2019), providing the most extensive explanation on MSP implementation to date (Schultz-Zehden, 2021).

It presents a clear and straightforward ten-step approach to demonstrate how MSP can be established and applied through a logical sequence of comprehensive steps and related tasks and actions to enable desired goals and objectives for marine areas (Ehler & Douvere, 2009). Specific steps include establishing a planning authority, obtaining financial support, organizing preplanning and stakeholder participation, as well as the need to monitor and evaluating plan performance post-implementation (McAteer et al., 2022).

Ehler and Douvere (2009) devote an entire section to monitoring and performance evaluation (**step 9**), noting that practitioners should re-confirm the planning objectives, agree on outcomes to measure, identify performance indicators, determine baseline data, select outcome targets, evaluate monitoring data, and report the results of the performance evaluation.

The guide recognizes that MSP processes need to implement an adaptive management approach in order to be sustainable (Frazão Santos et al., 2019), adapting the spatial management plan as the last step (**step 10**), which includes reconsidering and redesigning MSP and identifying research needs previous to initiating the next cycle. This stage should yield proposals for adapting management goals, outcomes and strategies for the next round of planning and the identification of knowledge gaps (Ehler & Douvere, 2009).

A guide to evaluating marine spatial plans (Ehler, 2014)

The IOC-UNESCO guide published in 2014 (Ehler, 2014) was the first comprehensive guideline document developed regarding performance M&E to assist practitioners assessing the success of their marine plans (Schultz-Zehden, 2021). Therefore, the main sections of D5.1 largely build on this source. On the other hand, the IOC-UNESCO guide is a useful basis for prescriptive and detailed MSP approaches, but not as adequate when the MSP system is strategic and guiding, which needs to be designed differently (IOC-UNESCO/European Commission, 2021).

It emphasizes the importance of early integration of M&E in the MSP process, establishing Specific, Measurable, Attainable, Realistic and Time-bound (i.e., SMART) objectives and defining clear management actions, relevant indicators and targets, while also highlighting the involvement of stakeholders throughout the process. The guide outlines key principles for MSP evaluation and proposes eight steps – and corresponding tasks – for monitoring and evaluating the performance of the plans (Ehler, 2014):

- STEP 1: Identify the need for M&E and prepare an Evaluation Plan;
- STEP 2: Identifying measurable Objectives of the Marine Spatial Management Plan;
- STEP 3: Identifying Marine Spatial Management Actions for each Objective;
- STEP 4: Identifying Indicators and Targets of performance for Marine Spatial Management Actions;
- STEP 5: Establishing a Baseline for Selected Indicators;
- STEP 6: Monitoring the selected indicators of Management Performance;
- STEP 7: Evaluating the Results of Monitoring;
- STEP 8: Communicating the Results of Evaluation to Decision Makers and Stakeholders;

The final stage is to use the results of the evaluation procedure in order to revise and adapt the plan as part of the continuing management cycle. The guide also stresses the importance of performance over compliance evaluation, stating that plans should be evaluated, not only by their outcomes, but for how they improve the understanding of decision makers and stakeholders about present and future problems (Ehler, 2014).

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

MSPglobal International Guide on Marine/Maritime Spatial Planning (IOC-UNESCO/European Commission, 2021)

The MSPglobal guide (IOC-UNESCO/European Commission, 2021) is the result of a joint initiative by the European Commission's Directorate-General for Maritime Affairs and Fisheries (DG MARE) and IOC-UNESCO in order to support the development and implementation of MSP processes worldwide, while acknowledging the range and diversity of MSP approaches.

It covers key concepts on MSP and lays out approaches on how to set the scene, designing the planning process, making the necessary assessments for planning, developing the plan itself, enabling implementation of the plan and monitoring, evaluating and adapting MSP.

The themes of M&E are prevalent not only after implementation, but also throughout the planning process, hence some initial thought needs to be given to M&E when designing the MSP process. During the planning stage, this includes pondering on the objectives, scope and purpose of the monitoring program, on the identification of key indicators to monitor MSP, as well as on the importance of risk assessment and contingency plans.

The guide dedicates a whole chapter on M&E after implementation, describing approaches to evaluation that target different phases of the planning cycle or diverse aspects of MSP, namely the MSP process and stakeholder engagement, the plan and its relevance, the implementation of the plan, and the outcomes of the plan. It is also emphasized the importance of reporting and using the results of M&E, regardless of the approach adopted, in order to steer the adaptation, review and revision of the plan.

Systems and tools for monitoring, evaluation and revision of maritime spatial plans, including in the context of the implementation of Directive 2014/89/EU (European Commission, CINEA, 2022a; 2022b)

The European Commission has published a guidance document and a toolbox (European Commission, CINEA, 2022a; 2022b) aiming to provide guidance to MS in monitoring, evaluating and revising their maritime spatial plans, in particular in the context of the implementation of the MSPD.

The guide is designed as an interactive tool that allows users to follow through a series of steps in the process of MSP monitoring, evaluating and revising, with a summary of suggested methods and tools expanded upon on in each step:

- STEP 1: Review MSP objectives relevant to national interest (decision matrix for objectives in the MSPD);
- STEP 2: Reflect on minimum requirements with respect to other EU Directives and policy instruments;
- STEP 3: Identify targets and performance indicators for evaluation (including baseline information);
- STEP 4: Assess progress and revise existing maritime spatial plan.

Users can select the most relevant options at each step to come to a tailored summary of key factors, targets and indicators to consider in monitoring, assessment and revision.

The toolbox compiles a comprehensive catalogue of methods and tools that administers can draw upon when monitoring, evaluating and revising their plans, including integrated methods, methodologies taking a spatial approach and methods on social, environmental or economic impact. The toolbox works as a decision support matrix in which each of the identified methods/ tools is mapped across their purpose and stage of use (monitor; evaluation; revision), so practitioners can select the ones that best suits their needs. Each tool is described in terms of the purpose, outcome, applicability, operationalization and resource needs, as well as pros/ cons, additional considerations and further information.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

Assessment of the relevance and effect of the MSP Directive in the context of the European Green Deal (European Commission, CINEA, 2022c)

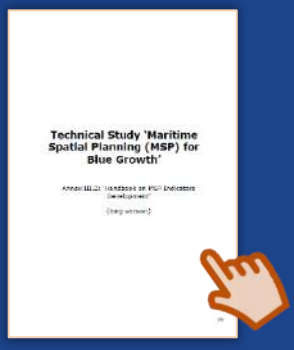
The European Commission has published a study (European Commission, CINEA, 2022c) dedicated to assessing the relevance and effect of the MSPD in the context of the European Green Deal and other relevant EU-level legislation.

The study analyses the suitability of the MSPD and its implementation to address current and future challenges regarding the sustainable development of blue economy and the protection of the marine environment.

The study draws upon an analysis of the maritime spatial plans developed by the MS, supplemented with a review of scientific publications and the development of a survey, focus groups and interviews. Even though no specific mentions to MSP M&E are included, the study complements information on this guide's section of the MSPD and other relevant policies.

One of the conclusions of the study is that most of the work done so far on the relation between MSP and other policies takes an environmental perspective, as reflected by the close relationship between the objectives of the MSPD and the MSFD and by concerns of the tension between the further development of blue economy, achieving Good Environmental Status and attaining the goals of the European Green on clean energy. In addition, the close interaction, if only implicit, between the European Green Deal and MSP becomes clear when assessing their respective objectives, as they have similar objectives.

Handbook on MSP Indicator Development - MSP for blue growth: final technical study (European Commission, EASME, 2018)



The European Commission has published in 2018 a comprehensive technical study exploring the connections between MSP and blue growth (European Commission, EASME, 2018), aiming to provide information on how MSP can help MS to deliver sustainable growth for their maritime economies.

The study includes a handbook for developing MSP indicators, in both a short, hands-on, version and a long, more in-depth, version. The handbook is a guidance document developed to assist policy makers and stakeholders in their decision-making processes regarding indicators linking blue growth, maritime sectors and MSP processes. It provides an overview of the indicator development process, detailed descriptions of the role of indicators in the MSP cycle and a process description for the development of indicators using a systematic 3-step approach, while also providing examples and checklists that MSP authorities may apply:

- STEP 1: Defining SMART objectives. These must be scale and context specific, both for the planning process and for its outcomes;
- STEP 2: Defining indicators to measure the progress towards meeting objectives and desired outcomes. This stage includes the identification of sources of information, the analysis of data coverage and gaps, the definition of baselines and related target values, as well as the identification of external factors and assumptions that may influence output, culminating with the development of a complete indicator system to assess whether expected results are delivered.
- STEP 3: Monitoring and reporting of indicators. The progress in reaching the objectives can be monitored with the help of the indicators, both during the preparation of the plans, and once these are in place. As a result, objectives may have to be redefined, triggering a revision of the indicators.

The indicators are objectively project-based, but also allow for flexibility of use and can help develop efficient and concise MSP projects. However, this approach faces limitations, as indicators can only be interpreted for country and context specific cases (GEF LME:LEARN, 2018).

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

The need and practice of monitoring, evaluating and adapting marine planning and management - lessons from the Great Barrier Reef (Day, 2008)

As one of the early examples of marine spatial management and its monitoring and evaluation, Day (2008) draws on the long-term experience in Australia's Great Barrier Reef Marine Park, which has successfully established a multiuse spatial management approach, to discuss key aspects of effective M&E and summarize lessons learned from more than two decades of adaptive management.

The paper distinguishes monitoring, evaluation and adaptive management in the context of MSP, while highlighting its importance to improve planning, promote accountability and encourage appropriate resource allocation. It is argued that, irrespective of the evaluation framework, a fundamental requirement is setting clear and measurable objectives and specifying management strategies to achieve them. Some of the key lessons learned from monitoring in the Great Barrier Reef is starting with a modest monitoring programme and contemplating innovative monitoring approaches that may be more affordable or acceptable.

Day (2008) proposes that, given limited resources, evaluations should focus on providing information useful to management and that monitoring systems should be designed to account for the unexpected. It is also recommended that opportunities for participatory M&E should be considered whenever possible, by encouraging stakeholders' participation or local input in the overall evaluation process; and establishing cooperative monitoring arrangements with regular users, providing that adequate training is ensured.

Evaluation of Marine Spatial Planning (Carneiro, 2013)

Carneiro (2013) addressed a set of issues relevant for evaluation design and performance, namely discussing the object of evaluation in relation to the functions of planning, the choice of objectives and the timing of evaluation, as well as factors affecting causality attribution and requirements on stakeholder involvement.

The paper identified several possible *foci* of evaluations in relation to the planning cycle, specifically: 1) context evaluation, relating to the step of defining and assessing the area; 2) process evaluation, concerning the step of engaging stakeholders; 3) input evaluation, regarding the step of plan development; 4) product evaluation, referring to the step of plan endorsement; and 5) outcome evaluation, relating to the plan implementation and M&E.

It is also proposed a specific step-wise framework for MSP evaluation based on four essential steps: (1) evaluation of the plan-making process; (2) analysis of the plan contents; (3) evaluation of plan implementation; and (4) evaluation of plan outcomes and impacts. A fifth aspect considered by this author is the importance of actually communicating results and promoting their use. The general criteria of this model are not prescriptive, so they would need to be elaborated further depending on the specific MSP case.

The importance of monitoring and evaluation in adaptive maritime spatial planning (Douvere & Ehler, 2011)

Douvere and Ehler (2011) highlight the importance of an adaptive approach to MSP, arguing that it requires M&E of the performance of management measures taken through a marine spatial plan. Examples from maritime spatial planning practices in Norway, Germany, and the United States of America were analyzed regarding existing approaches to M&E.

Findings point to M&E as serving both as a corrective function during the MSP process, enabling timely adjustments, and as a guide to structuring future planning activities and allowing the identification of new research and information needs that can improve the next round of MSP.

However, analysis done for this article indicates a weak basis for evaluation and illustrates that many MSP initiatives may be ill-equipped to measure the successes or failures of their efforts systematically, given a lack of translation of general goals into clear, measurable objectives and outcomes.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

Evaluation of marine spatial planning requires fit for purpose monitoring strategies (Stelzenmüller et al., 2021)

Stelzenmüller et al. (2021) have analysed present day trends in evaluation approaches and identified the adoption of evaluation essentials for three categories for M&E: plan making, plan outcomes, and policy implementation. The study has found that, at a global scale, the focus of MSP evaluation has shifted over the past decade from evaluating predominantly plan outcomes towards the evaluation of plan making. Another finding is that, regardless of the scope of the evaluation, the chosen approaches have varied greatly from formal and structured processes, building on MSP goals and objectives, to informal processes based on stakeholder interviews.

The increasing use of MSP objectives and indicators reported in the study has not resulted in more straightforward assessment of outcomes and weak linkages were found in relation to available monitoring data, which highlights the need for customized monitoring strategies to enable effective evaluation of those objectives. It is also argued that evaluation processes would benefit from a better understanding of socio-economic, socio-cultural and environmental effects of MSP, the latter needing improved knowledge on the pathways between human activities and ecosystem changes via cumulative effects assessments.

Evaluation of MSP: Valuing the Process, Knowing the Impacts (Varjopuro, 2019)

Varjopuro (2019) published a chapter on the book "Maritime Spatial Planning: Past, Present, Future" (Zaucha & Gee(Eds.), 2019) dedicated to the theme of M&E in MSP based on the work conducted in the Baltic SCOPE and Pan Baltic Scope projects. The chapter presents approaches and concepts of evaluation of policies and spatial plans, touching upon the purposes of evaluation, and how evaluation can target impacts and processes and be tailored to different timings, while also reflecting on the progress gained in evaluation of MSP.

Varjopuro (2019) introduces a theory-based evaluation approach for evaluating MSP and discusses practical considerations of organizing evaluations of MSP, focusing on the scope and purposes of evaluation, the necessary resources, and stakeholder engagement.

Baltic SCOPE project: Evaluation and Monitoring of Transboundary Aspects of MSP - a methodological guidance (Varjopuro, 2017)

The Baltic SCOPE project delivered a report on M&E transboundary collaboration in MSP (Varjopuro, 2017), presenting a theory-based evaluation approach, focused on transboundary contexts, logical frameworks and templates for designing M&E frameworks towards coherent cross-border MSP. For the purpose of preparing an M&E framework, literature review and interviews were conducted to identify factors that influence the success of transboundary collaboration and to shed light on national MSP processes and practices. A key conclusion was that presenting a standard evaluation protocol would not be useful, as results showed that MSP is practiced in very different ways and with very different objectives. Instead, it has to be flexible and adaptable for different contexts and cases.

The report expands upon the purposes of evaluation of policies and spatial planning and typical evaluation approaches and briefly presents how the evaluation of MSP has been understood and approached in previous works. It also discusses governance of the evaluation processes and proposes a framework for MSP M&E, including the preparation, overall philosophy and detailed methods, as well as a set of criteria and indicators, guidelines for constructing theories of change, suggestions for suitable evidence as a basis for monitoring, and indicative steps for an evaluation process.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

Pan Baltic Scope project: Monitoring and Evaluation of MSP. Cases of Latvia and Poland as examples (Varjopuro et al., 2019)

The Pan Baltic Scope project delivered a report on MSP M&E that develops a conceptual basis for M&E (Varjopuro et al., 2019), taking from previous work under the Baltic SCOPE project, based on literature relating to spatial planning on land and to the evaluation of broad-scale policies. It also explores two MSP M&E case studies, namely the Latvian and Polish examples.

The report expands upon the challenge of causality, which has implications on the methods of M&E, the way the process is organized and the indicators selected. When addressing the problem of uncertainty, the project underlines the importance of looking at goal achievement and having an evaluation approach that views MSP from different perspectives and in a broader context.

The report equally highlights the important distinctions on how success of an MSP can be defined, depending on whether the evaluation focuses on conformance or performance. The report also explored the process and methods of evaluation, emphasizing the relevance of integrating the perspectives from experts and stakeholders, when assessed in a systematic and structured way. On the other hand, the project also concludes that methodological choices for evaluation and measuring the impacts or use of indicators should serve to foster learning and help improve MSP.

By reviewing the examples from Latvia and Poland, as well as Belgium and Germany, the report shows that there are several ways of approaching M&E. Another key message of the study is that M&E should be kept rather simple and pragmatic, instead of aiming for complex frameworks and numerous indicators. Even though broad objectives are needed to provide overall direction and purpose for MSP, sub-objectives that are clear, realistic and verifiable also need to be developed for successful monitoring, as well as linked to qualitative and quantitative indicators and to broader developments in maritime sectors, the marine environment and society.

Capacity4MSP project: Report on Implementation, Monitoring and Evaluation Mechanisms for MSPs in the Baltic Sea region (Schultz-Zehden, 2021)

The Capacity4MSP project delivered a report (Schultz-Zehden, 2021) synthesizing the results of projects and processes implemented so far on MSP to identify key elements related to the implementation and monitoring of existing plans in the Baltic Sea region.

Regarding M&E provisions, the report aimed at identifying what kind of check is done in terms of conformance and performance, who are the entities responsible and involved in M&E and what are the timelines for the existing M&E systems. It also focused on the different approaches to the use of indicators and on the way data is collected.

The report highlights that the currently adopted plans on the region show remarkable variations in the mechanisms to support their implementation and that, in general, the M&E frameworks for the given MSP processes are still rather unclear in most countries.

The study highlights good practices and lessons to be learned, as well as challenges and obstacles in the practice of MSP implementation. It includes recommendations for M&E on gathering yearly or biannual feedback from national MSP groups and relevant stakeholders that could be comparable between countries, and establishing a clearer joint framework for following on the relevance and impacts of changes in the external environment.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

SUPREME project: Evaluation of the maritime spatial planning process (Avgerinou-Kolonias et al., 2018)

The SUPREME project delivered a report on MSP M&E (Avgerinou-Kolonias et al., 2018) that proposes a customized framework for evaluation criteria and indicators, developed to evaluate the MSP process at different phases and scales. The work is based on a review of literature targeting mostly previous projects to gather best practices on MSP M&E processes, taking into consideration existing approaches to the evaluation of MSP in the planning process, and concludes with a set of recommendations for a suitable M&E processes. The report proposed a set of steps for the M&E process, which relate to the main stages of the MSP cycle, and for each step, a set of indicators was proposed:

- During the pre-planning stage of MSP:
  - » STEP 1: Preparation and baseline. Lead by the question of "Where are we now?" and associated to state indicators;
- During the planning stage of MSP, throughout the development of the plan:
  - » STEP 2: Diagnosis, planning, defining objectives. Lead by the question of "Where does MSP want to be and how do we get there?" and associated to process indicators;
  - » STEP 3: Inputs - Data and information. Lead by the question of "What is needed to achieve the desired results?" and associated to process indicators;
  - » STEP 4: Process. Lead by the question of "How do we go about management?" and associated to process indicators;
  - » STEP 5: Output. Lead by the question of "What products or services were produced?" and associated to process indicators;
- During the implementation of the plan:
  - » STEP 6: Outcomes, plan implementation, impact evaluation. Lead by the question of "What is achieved?" and associated to performance indicators.

An aspect highlighted by the report is that a comprehensive evaluation encompasses all the different stages of the MSP process and that evaluation design must be matched to the type of plan and the actual outcomes to be achieved. Another important aspect mentioned is the need to recognize that the transboundary element is part of wider MSP evaluation and not a separate process. The report also emphasizes the availability of resources at an acceptable quality, data and knowledge gaps for evaluation and the need to integrate stakeholder involvement.

MASPNOSE project: Inventory and analysis of monitoring and evaluation tools (de Vos et al., 2012b)

The MASPNOSE project delivered reports dedicated to developing a concept for M&E in cross-border MSP following a case study approach (de Vos et al., 2012b; de Vos et al., 2012a). The project focused on three key characteristics of M&E, namely that it should be performed in the various stages of the management cycle to steer adaptive management, as well as use clear indicators and be based on SMART objectives.

A modified version of the management cycle of Hockings et al. (2000) was used, dividing the MSP cycle into the following phases: 1) Baseline, 2) Design and planning, 3) Inputs, 4) Process, 5) Output, and 6) Outcomes. This version allows a general classification of the management processes in the MASPNOSE case studies, which included the EU MSP key principles operationalized with questions that need to be addressed for each phase according to the project's evaluation methodology (de Vos et al., 2012b). The approach presented is mostly descriptive; suitable indicators would need to be added to translate each evaluation question into a measurable component, and the specific evaluation questions adapted to each transboundary context (TPEA, 2014).

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

MESMA project: Monitoring and evaluation of spatially managed areas - A generic framework for implementation of ecosystem based marine management and its application (Stelzenmüller et al., 2013)

The MESMA project delivered a generic evaluation framework for spatially managed areas, flexible enough to apply to established MSP plans or projects still in development phase, which was tested across nine case study areas in Europe. The MESMA model is based on an ecosystem perspective and the framework provides guidance on the selection, mapping, and assessment of ecosystem components and human pressures, the evaluation of management effectiveness and potential adaptations to management. Moreover, it delivers a structured approach with advice on spatially explicit tools for practical tasks, like the assessment of cumulative impacts of human pressures or pressure-state relationships. The framework comprises seven steps and represents an iterative process made of the key elements of scoping, performance measures, assessment, evaluation and adjustment (Stelzenmüller et al., 2013):

- STEP 1: Context setting. It involves setting the spatial and temporal context for the evaluation (Step 1a) and defining the goals and operational objectives (Step 1b), carried out in conjunction.
- STEP 2: Existing information, collation and mapping. It involves gathering and mapping information in order to assess potential spatial overlaps and impacts. Step 2a corresponds to the identification and mapping of distinct ecosystems components, such as the occurrence and distribution of species. Step 2b relates to pressures and impacts and requires analysis of the spatial and temporal overlap of ecosystem components and human activities. Step 2c refers to management measures to achieve the objectives defined, which may be derived from international and EU policies or national institutional frameworks, adjusted to each sector.
- STEP 3: Indicators. The selection of sets of indicators should follow a structured process where a viability analysis is carried out using criteria from both scientific and management perspectives. It must also involve the definition of thresholds against which the status of the indicators can be assessed.
- STEP 4: State assessment or risk analysis. Whether a state assessment or risk analysis is carried out depends on the spatial management plan being implemented or in the planning phase, respectively. State assessment evaluates the performance of a current management plan through monitoring and auditing (i.e., if the management goals and operational objectives have been met). In contrast, risk analysis evaluates the predicted effectiveness of proposed management scenarios (i.e., estimates the probability of meeting defined objectives, based on predicted results of management measures for a not yet implemented management plan).
- STEP 5: Assessment of findings against operational objectives. This step reflects a technical summary and interpretation of results from step 4 in terms of the extent to which the operational objectives have been achieved or failed. Thus, it should draw out lessons learned and gaps identified in relation to the operational objectives and associated indicators selected.
- STEP 6: Evaluation of management effectiveness. The effectiveness in achieving the operational objectives of an area should be evaluated, accounting for the key pressures from particular human activities, which requires the active participation and contribution of stakeholders.
- STEP 7: Adaptations to current management. The results of the assessments made in previous steps will dictate if changes and adjustments to the spatial management of the area are needed; in which case, recommendations should comprise alternative sets of operational objectives, management measures or even an evaluation of the geographical boundaries, as well as a cost-benefit analysis.

The MESMA model is comprehensive, although complex, and specifically integrates EBA, which can be useful background for recommending an evaluation process covering the process and outcome of transboundary planning exercises in the longer term (TPEA, 2014).

Buhl-Mortensen et al. (2017) have tested the MESMA framework in nine marine areas of 13 European countries and concluded that it allowed for a flexible and creative application and provided important gap analysis, also working as a valuable tool to assess the relationships between goals, objectives and indicators, and a quick starting point to develop an ecosystem-based management plan. However, difficulties rose due to the diversity and different development stages in the case study areas, as well as limited knowledge and data on ecosystem functioning and the impact of different human activities.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

TPEA project: Evaluation Process Report (TPEA, 2014)

The TPEA project developed an evaluation framework of transboundary MSP in the TPEA pilot areas, under the Evaluation Process Report (TPEA, 2014), which includes a brief review of selected literature from academia and other EU-funded projects, setting out general concepts and challenges, selecting practical approaches to evaluation and drawing general conclusions for transboundary MSP. The review showcased various evaluation models from a range of perspectives, including: an ecological perspective; a monitoring focused evaluation; an outcome-orientated evaluation; and a planning-led approach.

The report acknowledges that a comprehensive evaluation framework should ideally cover the following aspects: the organization responsible for planning; the evaluation of the plan-making process; the evaluation of plan contents; the evaluation of plan implementation; the evaluation of plan outcomes and impact; and the process for communicating results. However, the report focuses mostly on the evaluation of the plan-making process.

Checklists for transboundary MSP processes, implementation, outcomes and impacts were proposed, containing a series of evaluation criteria - and respective indicators - which were tested in two pilot areas of the TPEA project, but considered flexible enough for potential adaptation to other transboundary and national MSP contexts. The criteria cover the following aspects:

- Process evaluation, during the preparation stage:
  - CRITERIA: Legal and administrative framework; institutional capacity and cooperation; transboundary MSP area; and formulation of strategic objectives;
- Process evaluation, during the diagnosis stage:
  - CRITERIA: Area characteristics; uses & activities and cross-border relevance of coastal and maritime issues; governance framework; and area of common interest;
- Process evaluation, during the planning stage:
  - CRITERIA: Specific objectives; planning alternatives (options and scenarios); planning documents;
- Data and information:
  - CRITERIA: Data availability and quality (data needs, metadata requirements, sharing systems, data consistency, cross-border cooperation, stakeholder input);
- Stakeholder Engagement:
  - CRITERIA: Stakeholder engagement (representative interests; participation throughout the process; stakeholder satisfaction, equitable engagement, input incorporation);
- Communication:
  - CRITERIA: Communication (transparency, accessibility, non-technical information, dissemination events, links to academia, recommendations for policy makers);
- Implementation:
  - CRITERIA: Roles, responsibilities and decision-making; resources; implementation;
- Outcomes and impact evaluation:
  - CRITERIA: Achievement of objectives; wider benefits.

Although the TPEA project focused on the transboundary nature of MSP processes, the general principles of transboundary evaluation can also be applied in a plan-level context.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

ADRIPLAN project: Developing a Maritime Spatial Plan for the Adriatic-Ionian region (Barbanti et al., 2015)

The ADRIPLAN project developed a Maritime Spatial Plan for the Adriatic Ionian region (Barbanti et al., 2015), which includes a M&E framework organized in three phases:

» Phase 1 "*ex ante* Assessment", related to assessing the planning process within the decision-making process while it is ongoing, by evaluating the effects and benefits of the planning process. It concerns the phases of the construction and elaboration of the planning process (preplanning, identifying goals and priorities for planning, elaborating planning options, finalizing the planning proposals);

» Phase 2 "*in itinere* Assessment", related to the assessment of the implementation of the plan proposal elaborated in the previous planning phase, and it concerns M&E of the advancements of the plan's implementation, and the plan against its objectives and achievements. This includes several steps: identification of the M&E team, identification of established objectives and actions, establishment and monitoring of appropriate indicators (state, process and performance indicators), evaluation of the results, timing and recommendations for the next evaluation phase. Indicators can be organized according to six main sets: integration, objectives, governance, actions, adaptation, and data;

» Phase 3 "*ex post* Assessment", related to the final assessment of the plan before its revision, concerning the evaluation of the plan implementation at the established date at which it should be completed, to orient the process of revision of the planning proposal and to give place to the subsequent planning cycle. This phase is related to monitoring the state of the environment, as well the effectiveness and efficiency of the plan with respect to its objectives.

SIMCelt project: Evaluation of the Maritime Spatial Planning Process (Hopkins & Jay, 2017)

The SIMCelt project delivered a report aiming to examine approaches and areas of common interest on the evaluation of MSP in the Celtic Seas, using two case studies (Northern Ireland and Wales) (Hopkins & Jay, 2017).

The report reviews various evaluation models and frameworks that have been proposed from a range of perspectives and can be applied and adapted to different MSP contexts, even though practical evaluation of MSP is still in early stages and outcome evaluation has rarely been carried out.

SIMCelt identifies as key principles of MSP evaluation: comprehensive evaluation encompassing all the different stages of MSP; clear objectives which evaluation can review and assess progress towards; and evaluation tailored to specific contexts, including elements of transboundary MSP, land-sea interactions and EBA. MSP evaluation should also recognize the availability of resources and include stakeholder involvement to be successful.

The evaluation processes of the two SIMCelt case studies were differentiated due to the diverse maturity levels of the MSP plans. Within the Northern Ireland case study, a tailored evaluation framework covering the entire chain of the MSP process was developed, as well as an evaluation questionnaire tool for decision makers. Within the Wales case study, a questionnaire to key stakeholders was created, designed to evaluating a specific chapter with the MSP plan.

The tailored evaluation framework was built upon the TPEA project approach and accommodates questions about several criteria concerning each of the following aspects: process evaluation, plan evaluation, plan implementation, outcome and impact evaluation, and cross-cutting themes (stakeholder engagement, data and information, communication, transboundary issues, EBA).

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

The SIMCelt criteria covers the following aspects:

- Process evaluation, during the preparation stage:
  - CRITERIA: Legal and administrative framework; institutional capacity and cooperation; MSP area; and formulation of strategic objectives;
- Process evaluation, during the diagnosis stage:
  - CRITERIA: Governance framework; area characteristics; uses/activities and relevance of coastal and maritime issues;
- Process evaluation, during the planning stage:
  - CRITERIA: Specific objectives; planning alternatives (options and scenarios); efficiency;
- Plan evaluation:
  - CRITERIA: Coherence, relevance, scope/integration, conflict analysis, conformance, guidance for implementation; approach, data and methodology; quality of communication;
- Plan implementation:
  - CRITERIA: Roles and responsibilities; resources; implementation/utilization;
- Outcomes and impact evaluation:
  - CRITERIA: Achievement of objectives; monitoring and performance measures;
- Crosscutting themes:
  - CRITERIA: Stakeholder engagement;
  - CRITERIA: Data availability and quality;
  - CRITERIA: Communication;
  - CRITERIA: Transboundary (regulatory framework, governance framework);
  - CRITERIA: EBA (plan, management objectives);
  - CRITERIA: Ecosystem approach (Biological/cultural values given equal value; managers consider effects of their activities on adjacent and other ecosystems; need to understand and manage the environment in an economic context; conservation of ecosystem structure and functioning in order to maintain ecosystem services; ecosystem managed within the limits of functioning; ecosystem approach undertaken at the appropriate scale; appropriate balance between and integration of conservation and use of biological diversity).

The evaluation questionnaire for decision makers may help assess the effectiveness of the MSP plan once adopted and the effectiveness of the policies contained within the plan. It aims to identify which policies are being used in decision making and to what extent, whether changes may be attributed to any of the policies in the plan.

BONUS BALTSPACE project: A Catalogue of Approaches and Tools for MSP (Kannen et al., 2016)

The BONUS BALTSPACE project has proposed an indicator system to assessing cumulative impacts of maritime space use (Kannen et al., 2016). It aims to be a practical tool for planners, assisting them in better understanding and evaluating MSP impacts *ex ante* in terms of spatial efficiency and functionality of ecosystems, navigation, economic cost reduction and contribution to social welfare.

The proposed methodology analyses the socioeconomic driving forces, helping to identify and assess the trends of socioeconomic development and natural processes, as well as to evaluate the environmental impacts and economic effects of implemented MSP solutions.

The indicator system works as a monitoring tool developed to trace the effects and linkages of maritime economic development to environmental as well as socio-economic status. The data required relates to two sets of already established indicators: ICZM sustainable development indicators developed by the EU working group on indicators and data specifically aiming to trace the socio-economic and environmental quality changes in the coastal zone, and MSFD Good Environmental Status descriptors focusing on monitoring of changes of the marine environment.

Box 8 (cont). Key references and sources for the development of the guide of M&E for the OR.

MarSP project: Implementing monitoring and evaluation in Maritime Spatial Plans of Macaronesia (Fernandez et al., 2019)

The MarSP project has proposed a common methodology to monitor and evaluate MSP plans in the Macaronesia regions (Fernandez et al., 2019). The implementation of the methodology in the Azores, Madeira and the Canary Islands, with the respective adaptations to the regional context and needs is done in three regional reports, which include recommendations to improve future monitoring and evaluation of MSP plans.

The general methodology, adapted from Ehler (2014), is comprised of five fundamental steps, starting with the identification of MSP objectives, followed by the selection of potential indicators through expert consultation, and establishing the baselines for indicators. The remaining stages are monitoring progress, according to the available data on indicators, and assessing performance, related to the accomplishment of MSP objectives and to the effects of the plan on governance, environmental, social and economic dimensions, with prior expert consultation.

Key recommendations include defining SMART objectives, designing a system of indicators that allows an adequate monitoring and evaluation against MSP objectives, and using interim targets to make adjustments easier. Other important aspects are establishing priorities as resources are limited, increasing efforts for the collection and availability of statistical data, setting partnerships to monitor the plan. Further highlights are optimizing synergies with the MSFD in monitoring good environmental status, identifying priority data collection needs, and using MSP monitoring to control maritime activities and their effects on the environment, in particular to detect and allow action against unsustainable and unwanted situations.

KEYSTONES FOR M&E

M&E constitute fundamental elements in every MSP cycle and should be conceived as critical components of MSP itself, to assess the effectiveness of adopted measures, to adapt to changes in environmental conditions and in the uses and activities taking place in the planning area or even to curtail any shortcomings, such as insufficient representation of certain interests (Jay, 2017; Avgerinou-Kolonias et al., 2018).

GUIDING QUESTIONS

Regardless of the methodological approach used - whether it be predominantly science-based, dialogue-based or a combination of both - the M&E process should ultimately explain what works, for whom and why (IOC-UNESCO/European Commission, 2021).

M&E should ideally be conducted as an integrated part of the MSP process, being sensitive to how the evaluated process unfolds, as this would allow adjusting the methods to better fit the context of evaluation. This reflects the importance of M&E to be close to the evaluated process and to co-evolve with it, meaning that M&E itself would be able to adapt, for instance, when new criteria were added (Varjopuro, 2019).

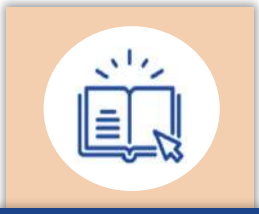
It can be argued that M&E lie at the heart of good practice to any MSP process and that they comprise the stages of MSP where the greatest amount of learning takes place, as they can produce timely, reliable, and relevant information underpinning any plan revisions (GEF LME:LEARN, 2018; IOC-UNESCO/European Commission, 2021). It usually translates as a formal approach linking MSP objectives to evaluation criteria, indicators and stakeholder engagement (Day, 2008; Varjopuro, 2019).

The inherent complexity of the MSP process and the range of tangible and intangible benefits it can deliver are challenging aspects to any M&E process, which is why evaluation should be based on clear criteria and a definition of success (Box 9) to help assess the effectiveness of the MSP process, whether it concerns the MSP process itself, the achievement of overarching

goals or more precise outcomes of the plan (TPEA, 2014; Jay, 2017). Assessing the effectiveness of MSP brings with it critical perspectives on MSP's ability to deliver its objectives and depends heavily on the processes of preparing and implementing MSP (Varjopuro, 2019).

The existing literature points to a set of general principles for MSP M&E that are relevant regardless of the specific setting or scale of the MSP process (TPEA, 2014; Jay & Kira (Eds.), 2014; Hopkins & Jay, 2017; Varjopuro, 2019), described as follows:

- Encompassing all the different stages of the MSP process under a comprehensive M&E framework, starting from the beginning of the process;
- Be based on a clear understanding of the focus and scope of the evaluation;
- Setting clear and measurable objectives, which evaluation can assess progress towards via respective indicators and desired outcomes;
- Matching evaluation criteria to suitable number of indicators, for which targets and baselines are also defined;
- Involving key stakeholders in M&E (see section "Stakeholder engagement within M&E");
- Tailoring M&E to each specific context, including for example elements of transboundary MSP, land-sea interactions and criteria for evaluating against an EBA;
- Acknowledging the availability of resources committed to M&E;
- Conducting regular reviews, with agreed periodicity and clearly assigned responsibilities.



Box 9. Example of signs of success in MSP M&E (Adapted from Ehler, 2014).

What can success look like?

» There is progress towards achieving established goals and objectives through the MSP process, over a reasonable period of time and considering the allocated resources;

» Stakeholders are actively involved and committed to the MSP process, supporting and endorsing both the process and its outputs, via well-organized stakeholder engagement actions and a transparent communication strategy;

» Results from M&E are informing institutionalized learning processes, being used to adjust and improve management and feeding into revisions of the plan;

» Implementation of the plan is consistent with the competent authorities and existing steering structures, as inclusive and transparent decision-making is taking place, based on clearly defined roles and responsibilities;

» Sustained high-level support is maintaining political momentum and mobilizing the necessary resources.

The importance of timing and scope in M&E: comprehensively covering the MSP cycle

Defining the scope of the evaluation is one of the first decisions to be made when designing M&E, to establish certain boundaries in terms of institutional, temporal, sectoral and geographical aspects, as well as necessary resources and timing. The key questions to ask when defining the scope concern what is going to be evaluated and when (Varjopuro et al., 2019).

The scope of M&E should take into account the expected uses of evaluation results, the maritime spatial plan's mandate and what needs to be addressed via other processes, as well as contextual factors that influence what is possible to be achieved through the plan (IOC-UNESCO/European Commission, 2021). It is advisable to choose M&E methods that are designed to enhance understanding of possible effects and impact mechanisms of MSP, rather than simply measuring them (Varjopuro et al., 2019).

GUIDING QUESTIONS

When should M&E be carried out?
M&E should cover the MSP process comprehensively, since the initial pre-planning and planning stages throughout implementation.

When it comes to timing, the earlier an evaluation is planned, the more informative it will be. What to evaluate depends on the timing of the evaluation and also the scope of - and criteria for - evaluation are bound by how far the planning process has progressed (Carneiro, 2013).

As MSP cycles are typically several years long, it is advisable that M&E follows up the several steps of the cycle as it advances (Figure 3). M&E can target different stages and aspects on MSP, such as plan making, the plan itself (e.g., contents and relevance), plan implementation and plan outcomes, and should be followed by a process of communicating its results (IOC-UNESCO/European Commission, 2021).

Hence, even though M&E are often placed at the latter stages of the planning cycle, when the maritime spatial plan is being implemented, these should be carefully pondered at the very beginning of the MSP process and throughout (Ehler, 2014), with recent guidelines pointing to its integration at the start of designing the planning process (IOC-UNESCO/European Commission, 2021).

More specifically, M&E can happen before, during and after an intervention in the context of the MSP cycle (Box 10) (Varjopuro, 2019). *Ex ante*, interim and *ex post* evaluations can address both impacts and processes. However, the timing of the evaluation in relation to timing of the MSP process that is being evaluated determines the specific focus of the evaluation (Varjopuro *et al.*, 2019).

Box 10. M&E before, during and after the intervention (Adapted from Carneiro, 2013; Barbanti et al., 2015; Varjopuro, 2019).

» M&E can be conducted while plans are being prepared, being called ***ex ante* or anticipatory assessment**, as it anticipates possible future impacts and side effects of planned policies. It relates to assessing the planning process within the decision-making process while it is ongoing, by evaluating its effects and benefits. It should produce results early enough in order to have a valuable and timely contribution to refine the plan. Such early evaluation planning gives valuable information to help choosing the appropriate evaluation design and guiding data collection on the following steps of the MSP process.

» M&E can take place throughout implementation, being called ***in itinere* assessment**, related to the assessment of the implementation of the plan as it happens. It can be linked to **interim assessment**, which helps assess whether measures are being implemented as predicted, whether the anticipated impacts are likely to be registered, and whether the assumptions about the plan's effects are correct.

» M&E often takes place afterwards or in the late stages of implementation, so-called ***ex post* assessment**, related to the final assessment of the plan before its revision, being applied to check to what extent results were achieved, to assess unintended impacts of the plans, to guide the process of revision of the planning proposal and to give place to the subsequent planning cycle.

Additionally, M&E design must be matched to the type of plan and the actual outcomes that are to be achieved. Different methods of assessment are required for different stages and components of the MSP process, making it impossible to establish a standardised model for evaluation in MSP, as it must reflect each respective context (Carneiro 2013).

Possible criteria for evaluation can relate to effectiveness (in terms of process and objectives), efficiency (adequacy of human, financial, technical and institutional resources), inclusiveness (involvement of relevant stakeholders) and transparency (accountability and dissemination of each phase) (Barbanti et al., 2015; Avgerinou-Kolonias et al., 2018).

As a general rule, a comprehensive M&E framework should cover the multiple dimensions of MSP, namely context, planning, process, inputs, outputs and outcomes (Hockings et al., 2000; de Vos et al., 2012b; de Vos et al., 2012a; TPEA, 2014; Varjopuro, 2019).

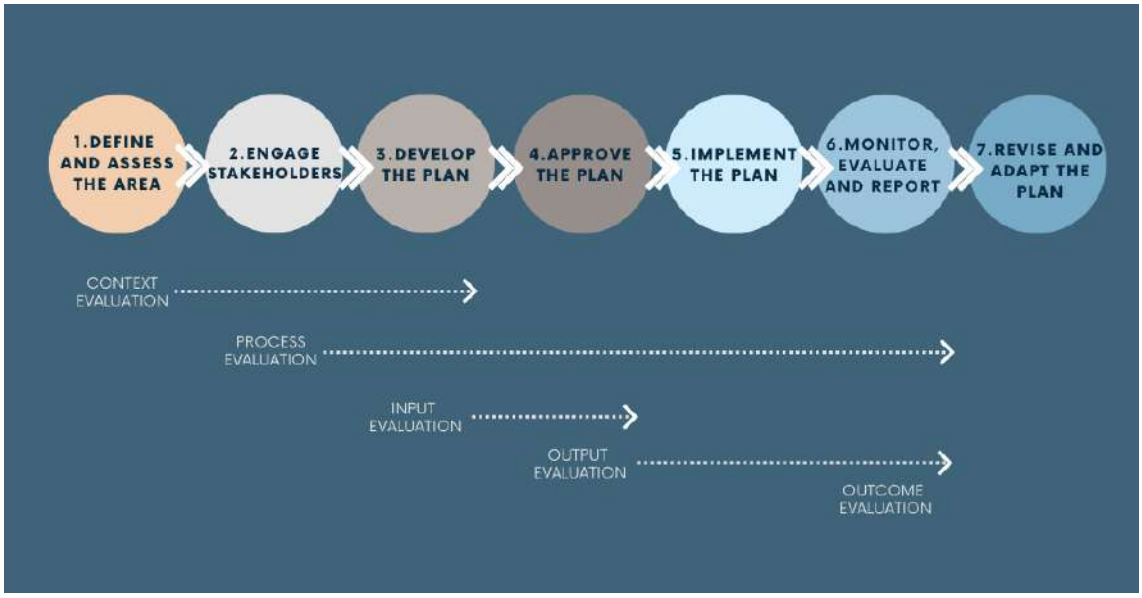


Figure 3. Different categories of evaluation in relation to steps of the spatial planning process (Adapted from Carneiro, 2013).

Objectives & indicators: a common denominator

The object of an evaluation is most commonly determined by the stated objectives for the intervention, i.e., the MSP initiative, and the value of such intervention is usually measured against the results it has been designed to accomplish. An assessment of the evaluability of an MSP initiative often includes the analysis of its objectives, to determine if these can be used to establish evaluation criteria (Carneiro, 2013).

MSP is usually rooted in a future planning vision and strategic goals, which reflect high-level policies used to frame the planning process and are often derived from national or regional legislation. These underpin the development of socio-economic, governance and environmental objectives needed to reach the goals, usually defined via participatory processes at the onset of a planning process. In turn, spatial and temporal allocations of human uses and activities are then defined to achieve those objectives (Ehler & Douvere, 2009). Thus, one way to evaluate the MSP process and plan is to determine the effectiveness of the implemented allocations in achieving the stated objectives.

MSP evaluation should build on a clear understanding of what should be evaluated, which in turn often depends on setting realistic and verifiable objectives for evaluation to assess progress towards. Indeed, a set of clearly articulated objectives can be seen as the stepping stone to most evaluations. The clearer the objectives and desired outcomes of a given MSP process, the easier it is to develop appropriate evaluation criteria (Carneiro, 2013; TPEA, 2014; Jay, 2017; GEF LME:LEARN, 2018).

Too broad, unrealistic or unverifiable objectives might make it impossible to discern the contribution of MSP to their achievement. As such, the attainability of stated goals and objectives must be considered in light of the functions and role of MSP and in the context of the existing information and data about the system, to allow for adequate descriptions of the baseline situation and setting of suitable targets (Carneiro, 2013).

Distinct methods can be used for guiding the assessment of goal attainment, such as the Driving Forces–Pressures-State-Impacts- Responses (DPSIR) model, the Logic Framework Analysis (LFA) model, and the development of Theories of Change (Carneiro, 2013; Varjopuro, 2017).

Ideally, early in the planning process, a set of verifiable objectives should be established against a given number of assumptions delineating the desired outcomes of the plan. Objectives should be linked to a limited number of indicators, which should be set against a baseline of current conditions, established at the

beginning of the process (Jay, 2017; GEF LME:LEARN, 2018). Indicators should be selected with the aims of simplifying, quantifying and communicating, and its number and diversity should not exceed what can be managed and funded, nor should it be less than the necessary for a comprehensive description of the system (Carneiro, 2013).

Despite the acknowledged value in considering stated objectives as the main source of evaluation criteria, other sources might come from other objectives valued by society or objectives contained in statutory instruments the plan must abide by. It is also important to look beyond the stated goals of a plan - to allow for hidden effects of planning to be uncovered. Goal-free evaluation is also a possibility, albeit less common, one that considers all the observable effects of an intervention, intended and otherwise and irrespective of stated objectives (Carneiro, 2013; TPEA, 2014).

The issue of available resources, cost-effectiveness and proportionality

Given that the extent of M&E is limited by the availability of resources, it is recommended that careful distinctions are made between what is necessary and what is useful, especially when considering the relative importance of the multiple objectives of a particular maritime spatial plan. M&E should prioritize the most important objectives of the plan and of the planning process, to ensure cost effective and proportionate resourcing - in function of the time and resources available, especially in participatory processes which are often considerably time and resource-consuming (Jay & Gee, 2014; IOC-UNESCO/European Commission, 2021).

Although supported in principle, M&E are often viewed as non-compulsory extras, useful in theory but difficult to put into practice, being frequently displaced by other everyday management activities viewed as more urgent (Day, 2008).

Considerably more resources are being set aside for plan-making than for M&E, which, although understandable, can result in an inability to systematically monitor and review the implementation and results of the plan, with the risk that resources may become wasted on plans that are not achieving their objectives (Ehler & Douvere, 2009; IOC-UNESCO/European Commission, 2021).

The application of an ecosystem-based approach in MSP M&E

During the past decade, the traditional sectoral approach to marine management – generally focused on single sectors, with little consideration towards the potential conflicts among sectors – has been recognized to be insufficient to address the cumulative effects of human activities on the marine environment and has shifted to a more holistic - ecosystem approach - that calls for comprehensive and integrated analysis of all environmental dimensions (Ehler, 2021).

EBA considers human society as an integral part of ecosystems, recognising the interconnectedness between systems, cumulative impacts and integrating ecological, social, economic and institutional perspectives. The goal of EBA is to ensure that marine ecosystems are healthy, productive and resilient in order to deliver ecosystem services to sustain human use. Thus, EBA moves away from approaches considering small spatial scales or short-term perspectives towards a management approach with longer spatial and temporal scales, which also includes stakeholders (Ansong et al., 2017; Hopkins & Jay, 2017).

Despite its general acceptance, implementation of EBA has been slow as the concept has found to be too broad and complex. It has essentially remained as a concept, widely discussed by the scientific community, but with few examples of actual practice. On the other hand, it has become increasingly apparent that governments lack concrete tools to make this approach operational in the marine environment. Hence, the present challenge is to bring the ecosystem approach beyond the conceptual level to a practical one through MSP (Ehler, 2021).

MSP has long been acknowledged as a practical approach toward implementing EBA - an established paradigm for ocean management aiming to ensure long-term sustainability and resilience of marine ecosystems and the services they provide (McLeod & Leslie, 2009; Katsanevakis et al., 2011; Frazão Santos et al., 2019). Inclusively, EBA is recognized as one of the key goals set up by the MSPD.

In order for MSP to work effectively as a tool for delivering ecosystem-based management, its principles must be incorporated into the MSP process. Ansong et al. (2017) identified seven core elements for an

ecosystem-based MSP, which include MSP implementation and monitoring and emphasize the importance of integrating the principles of EBA in MSP evaluation frameworks to ensure that this approach is made operational.

There are several examples of M&E frameworks integrating assessments of EBA. Dominguez-Tejo et al. (2016) have developed evaluation criteria for MSP processes that include assessing to what extent MSP processes have applied and implemented an EBA. The Baltic Scope Project has also developed a general ecosystem approach checklist that emphasises its multi-dimensional aspect and contributes with guidance for applying an ecosystem approach to MSP (Crona et al., 2017).

The evaluation frameworks proposed by the TPEA and SIMCelt projects also incorporate elements of EBA. In particular, Hopkins & Jay (2017) ask evaluation questions to gather information about a number of EBA criteria, such as the balance among environmental, social and economic values and its integration in the spatial analysis and the planning objectives and vision and the consideration of actual and potential effects of human activities on adjacent ecosystems.

Another example is the WWF guidance paper proposing a methodology to assess ecosystem-based MSP in Europe (WWF-European Policy Office, 2021), which established a set of indicators to measure the ecosystem-based management performance of MSP plans, including to what extent socio-economic principles have been respected, how the MSP process has been performed and how each MS has addressed the implementation of their plans.

Other example is BirdLife International's technical report analysing if maritime spatial plans from EU's MS are fit for nature and climate (Walsh et al., 2022). It comprises an *ex-ante* evaluation of the content of the plans against specific environmental criteria, building upon on the previously mentioned WWF Guidance Paper and expanding this approach beyond the MSFD to define a set of indicators that consider a broader set of EU environmental directives, key policy statements and international agreements.

It is also important to emphasise that the European Commission has published a study (European Commission, CINEA, 2021a) dedicated to providing guidelines for implementing EBA in MSP, which includes a section on how to monitor, evaluate and review the integration of EBA, considering both the plan itself as well as the MSP process.

Stakeholder engagement throughout M&E

Regular stakeholder dialogue should be an ongoing activity rather than an add-on at the end of the plan's life. Participatory processes open the dialogue and establish agreements and partnerships between stakeholders, shifting governance from a top-down to a bottom-up approach (Quesada-Silva et al., 2019).

There is extended literature on stakeholder engagement in decision-making and it is generally acknowledged that successful implementation of MSP initiatives depends on the identification and understanding of different stakeholders, their roles, needs, expectations and interests (Pomeroy & Douvere, 2008) and focusing on the "who, when and how" (Ehler & Douvere, 2009).

Stakeholders are a key resource for M&E in their capacity to provide information and insights that help design and implement the evaluation (Varjopuro, 2019). Stakeholder engagement is thus pivotal for a successful M&E process and can take many forms - from communication of evaluation results to collecting data and helping define evaluation criteria and indicators. Inputs from stakeholders, coming in as early as possible, can supplement evaluations by helping to assess the effects, relevance and quality of MSP.

A primary purpose of the M&E process should be to foster learning; not only for the commissioning public authorities, but for all who are engaged in the process. When evaluations are led as part of participatory policy-making processes, or when the evaluation itself is participatory, its results reach a wider audience (Varjopuro, 2019) and may contribute to promoting ocean literacy.

ADDITIONAL READING

Considering that MSP need to be periodically evaluated, not only in relation to its outputs and outcomes, but also through an analysis of the process, criteria to evaluate participation throughout the whole process are needed. An example of assessment framework specifically focused on participatory processes is presented by Quesada-Silva et al. (2019).

GUIDING QUESTIONS

Who should be involved in M&E?

M&E can be conducted by a wide range of actors, including external experts, internal staff, or a combination of both.

To ensure a well-managed M&E process, it is advisable that the responsibility is assigned to one competent authority or designated body in each country, which would coordinate and centralize requests for input from other entities with responsibilities in the areas and from stakeholders.

Clear identification of responsibilities is paramount as well as consensus on the level of involvement of stakeholders and the wider public, in terms of timing and methodology (TPEA, 2014).

If conducted in a systematic and structured way, stakeholders can help shed light on what are likely impacts and support identifying gaps or shortcomings in monitoring, reconfirm indicators, refine evaluation questions, review the adequacy of objectives and enhance the accountability and transparency of evaluation (Carneiro, 2013; IOC-UNESCO/European Commission, 2021).

Moreover, organising systematic expert and stakeholder assessment processes, based on a broad knowledge foundation, allows for collecting inputs in a deliberative process that acknowledges alternative ways of understanding the possible effects of MSP. Indeed, engaging stakeholders in M&E can significantly support information collected with the help of indicators and help reduce uncertainties about the outcomes of MSP and how it influences maritime sectors, the marine environment and society (Varjopuro et al., 2019).

Also, a way to extend the scope of evaluation that does not consist in increasing the allocated resources is by fostering regular dialogue with key actors, experts and stakeholders, which can have valuable insights and experiences that complement the evaluation results, including assessing the ways in which the plan has influenced their field of activity or communities (IOC-UNESCO/European Commission, 2021).

Participatory evaluation takes place when stakeholders are directly involved in planning, conducting and analysing the evaluation in collaboration with the evaluator. However, most evaluation frameworks proposed are predominantly evaluator-led and there are a number of shortcomings and challenges to participatory evaluations, which have yet to permeate M&E approaches (Carneiro, 2013).

Some challenges to effective stakeholder engagement can include poor communication, fragmented governance and the perception that decision-making is biased, which raises questions about MSP legitimacy, inclusivity, and social equity (Flannery, Healy, & Luna, 2018).

An important tool to strengthen stakeholder engagement is the use of online platforms such as the OR Ocean Governance Hub developed under the MSP-OR project. As stated in Gutierrez et al. (2022), platforms are being widely used as tools to safeguard the exchange between stakeholders and to ensure the recording and continuity of ocean governance activities across scales. Furthermore, platforms can gather data and facilitate solutions for future decisions (Rudolph et al., 2020; IOC-UNESCO/European Commission, 2021).

As such, it is possible to create a set of information that assists the sustainable development of the region, facilitating the implementation and monitoring of MSP (Pınarbaşı et al., 2017). For example, MSP-OR's OR Ocean Governance Hub is designed so that stakeholder can be engaged through designated areas such as the "lobby", the "ball room" and "chillout zones" inside thematic Working Groups (Gutierrez et al., 2022).

Why should stakeholders be involved in M&E?

- Engaging experts and stakeholders into M&E serves the purposes of knowing the effects of MSP, assessing the relevance of MSP or quality of the process (Varjopuro et al., 2019).
- Stakeholders possess expertise, knowledge and information that can be an invaluable resource for the evaluation, as they can provide important data to feed into M&E (Varjopuro, 2019).
- Broad involvement of stakeholders may enhance ownership and accountability for evaluation results and the credibility and transparency of evaluation (Ehler, 2014; Barbanti et al., 2015).
- Engaging relevant stakeholders in the review and update phases of the planning cycle is an opportunity to keep up the momentum gained in the plan-making phase (Varjopuro et al., 2019).
- Raising awareness and building capacity among stakeholders may prevent MSP from being dominated by the strongest interest group (Ehler et al., 2019).
- Stakeholders' willingness is also important for successful implementation of the spatial plans, especially if the plans are nonbinding (Varjopuro, 2019).

When is the best time to engage stakeholders in M&E?

» Implementation of the MSPD and organisation of the MSP process require all stakeholders to be mobilised throughout the planning process, from its early stages (scoping, drafting and consulting) to its final stages (implementing, evaluating and adapting) (European Commission, CINEA, 2021b).

» Stakeholder involvement should be put in place throughout the whole monitoring and evaluation process (Barbanti et al., 2015). Most decisions affecting evaluation design are taken early in the process, so stakeholders should be involved as early as possible (Gilliland & Laffoley, 2008; Carneiro, 2013).

How can stakeholders be integrated into M&E?

» Several levels of involvement are possible - some of them more interactive than others - going from communication, information, consultation, dialogue, concertation and deliberation to negotiation, collaboration, co-decision-making and process responsibility (Ehler & Douvere, 2009; Giacometti et al., 2020). The first levels correspond to the legal basis required by the MSPD and the MSFD, the latter aim to build MSP capacity among the stakeholders involved (European Commission, CINEA, 2021b).

» Engaging stakeholders should be an inclusive process that brings together different stakeholder groups to hear each other's viewpoints, while being conducted through open and transparent procedures and ensuring that a balance of views is represented and that all actors feel that their participation is meaningful (Ehler, 2014; Py et al., 2021).

» Early in the planning process, stakeholders can participate in determining objectives, in defining what success looks like, in determining what constitutes a good or bad outcome, in setting the scope of evaluation and in outlining the key evaluation questions (TPEA, 2014).

» Various individuals, communities and organisations are affected, positively or negatively, by the spatial plan that is being evaluated (Varjopuro, 2019). Stakeholders should be asked how they perceive the impact of MSP, and how and why it is making an impact.

» Stakeholders can provide conflict resolution alternatives when setting an evaluation procedure, selecting and guiding the evaluating team, drafting the terms of reference for the evaluation, assessing the selection of indicators, providing data for indicators, reviewing evaluation results and disseminating key findings (Ehler, 2014; Barbanti et al., 2015).

» Stakeholders can be involved in the actual evaluation, to identify gaps in monitoring, confirm the usefulness of indicators, refine evaluation questions and review the adequacy of stated objectives (Carneiro, 2013).

CHALLENGES AND LIMITATIONS IN M&E

There are a number of challenges to assess what effects MSP actually generates via monitoring and evaluation, the main one being the problem of attribution and causality, related to the difficulty in isolating the contribution of MSP to observed changes in the system, i.e., knowing if a change is caused by the plan and not by other factors and multiple simultaneous forces that may also influence the planning area. This is particularly prevalent in the marine environment, where human activities are but one of many forces and there may be several underlying causes to the observed effects, where causal links are often tenuous and where shifting baselines and lengthy time lags between cause and effects ultimately distort the linearity between plan-making, implementation, outputs and outcome (Carneiro, 2013). This issue has implications on the methods of M&E, the way the process is organized and the indicators selected, as it puts into question the ability of MSP to effectuate change and raises issues of uncertainty in identifying cause-effect relationships (Varjopuro et al., 2019).

GUIDING QUESTION

What distinct effects of MSP one can reasonably expect to assess given other multiple external influences and the dynamic nature of the marine environment?

Traditionally, the challenge of demonstrating causality has been addressed by constructing and testing against a counterfactual (i.e., asking what would have happened if the plan had not been implemented), which can be supported by expert or stakeholder consultations (TPEA, 2014). Another alternative is using theories of change, to anticipate and later test why an intervention produces intended and unintended effects, as is proposed by Varjopuro (2017). It has also been suggested that, rather than attempting to measure effects on the marine environment, it would be more meaningful to evaluate MSP against governance criteria, such

as stakeholder satisfaction, licensing procedures, or improved integration across government agencies, shifting from conformance evaluation to performance evaluation (Ehler & Douvere, 2009; TPEA, 2014, Varjopuro et al., 2019).

Adding to the difficulty in attributing changes to a particular plan, there are significant gaps in both the theory and practice of comprehensive M&E of MSP initiatives and challenges related to insufficient data, under-funding and under-prioritization of M&E and ambiguous plan objectives and evaluation criteria, which ultimately limit the scope of evaluations (Zuercher et al., 2022). Some examples of specific challenges reported in the literature include:

- Limited time and insufficient or inconsistent resources allocated to M&E, including the lack of human resources to develop proper M&E (Ehler, 2014; Frazão Santos et al., 2021);
- Lack of relevant data and information (e.g., socioeconomic data, cumulative effects);
- Lack of long-term data series and related assessment tools (Friess & Grémaud-Colombier, 2021);
- Issues with data sharing, accessibility, quality and reliability;
- High costs associated to collecting new data, especially long-term;
- Challenges in engaging stakeholders in M&E and ensuring proper capacity building;
- Constraints and barriers in institutional cooperation (Ehler & Douvere, 2009);
- Lack of political support (Ehler & Douvere, 2009);
- Unforeseen political, socio-economic and environmental changes (e.g., shifting baselines) (Ansong et al., 2017);
- Unclear hierarchy of goals and objectives, mutually exclusive objectives and lack of clear time frames to implement them (Hopkins & Jay, 2017);
- Difficulty in identifying appropriate standards against which success should be measured, hindered by the adoption of unmeasurable and highly ambitious plans (Hopkins & Jay, 2017; Zuercher et al., 2022);
- Difficulty in choosing appropriate indicators and linking indicators to MSP objectives, given that establishing a set of indicators covering socio-economic, environmental and governance dimensions is a very complex task (Frazão Santos et al., 2021);
- Evaluations based on stated objectives and indicators alone do not account for unintended impacts, and may not capture the full spectrum of societal values and aspirations associated with a plan (Ferreira et al., 2018);
- Inconsistent and vague terminologies and concepts applied to M&E hinders communication and understanding among organizations (Hopkins & Jay, 2017; Frazão Santos et al., 2021);
- Lack of comparability in M&E approaches, as every country has a different basis for MSP that requires different evaluation approaches, in addition to the differences in the scope of MSP in each region/subregion and the scale of each MSP plan;
- Predominantly sectoral monitoring and assessment programmes difficult exchanging knowledge across programmes at operational level (Grip & Blomqvist, 2021);
- Depending on the plan's legal status, it may have only limited power to directly guide decision-making in other sectors.

FOOD FOR THOUGHTS

It is fundamental to ensure a balance between M&E of the plan making/plan process and the plan implementation and its impacts and results, being this latest the ones that are especially crucial and support the adaptive management of the plan. The real question to be presented is if the plan is achieving its goals, if tendencies are appearing as programmed and to what extent is the plan successful. In this sense, the challenges also come down to if M&E for plan implementation and performance addresses these needs: is it enough to monitor objectives? What to do when they are vague? Is it possible to monitor plans impacts? Is it possible to combine MSP evaluation/monitoring with other ones (e.g., MSFD)?

TYPES OF M&E APPROACHES

The type of evaluation needed depends on the assumptions about planning, its function or purpose (Ehler, 2014). As previously stated, M&E can occur at diverse stages of the planning cycle and with different purposes. The scope of M&E in MSP can be refined by defining categories which reflect different aspects of an evaluation process. Possible "evaluation moments", linked to common types of MSP M&E, include:

- » Evaluation of the plan making process (process evaluation);
- » Evaluation of the plan (its contents and relevance);
- » Evaluation of plan implementation (MSP policy implementation, compliance, conformity);
- » Evaluation of plan outcomes and impacts/effects (outcome/performance evaluation).

Table 3 presents examples of M&E frameworks that cover the above-mentioned stages in the MSP process, applying distinct evaluation topics and criteria.

Table 3. Examples of topics and criteria considered in several MSP M&E frameworks according to the stages in the MSP cycle (adapted from Carneiro, 2013; TPEA (2014); Barbanti et al. (2015); Hopkins & Jay (2017); Avgerinou-Kolonias et al. (2018); IOC-UNESCO/European Commission, 2021).

EXAMPLES OF M&E FRAMEWORKS		
Focus & topic		**Criteria**
Carneiro (2013)		
Evaluation of organisational performance	Planning service quality	Efficiency, effectiveness, economy, equity and equality of main functions (e.g., understanding context, establishing a vision)
	Organisational quality	Leadership, skills, resources and integration of key roles (e.g., coordination, investments, regulation and maintenance)
Evaluation of plan-making process	Stakeholder participation	Process for facilitating stakeholder participation
		Degree of effective participation
		Influence of participation on the final plan
	Validity of data and analysis	Incorporation of best available information
		Use of suitable methods and technologies
		Robustness, clarity and reproducibility of analysis
	Consideration of alternatives	Methods for scenario-building
		Comprehensiveness and adequacy/justification of scenarios
		Procedures and methods for scenario assessment
	Prospective impact assessment	Comprehensiveness and robustness of impact assessment methods
		Incorporation of assessment results in draft and final plan
	Adequacy of resources	Evolution of resources over the plan-making process, including sources of funding
		Ratio between available and necessary resources
Evaluation of plan contents	Internal coherence	Logic of plan components-vision, goals, objectives, measures, and underlying assumptions and analysis
	Relevance of plan for the region or country	Relationships between the main needs and ambition of the region or country (socio-economic, environmental, cultural, governance) and the components of the plan
	Conformance with planning system	Conformance with strategic principles and objectives
		Conformance with statutory rules and guidance
		Harmonisation/conformance of planning methods
	External coherence	Harmonisation between the analyses and proposals in the plan and those of other policy and management instruments applicable to the same region or country
	Guidance for implementation	Comprehensiveness and clarity of provisions and schedule for implementation
		Clarity and adequacy of roles and responsibilities
		Adequacy of follow-up mechanisms
		Adequacy of resources for implementation
	Approach, data and methodology	Comprehensiveness and clarity of presentation of data
		Detail of descriptions of methodology
		Information about who conducted the analyses
		Clarity of the text, given the intended audience

	Quality of communication	Clarity of data and analyses
		Balance between level of detail and reader/user-friendliness
	Plan format	Structural correctness of the plan document (in view of intended use)
Evaluation of plan implementation	Prescribed steps and outputs	Degree to which prescribed steps and products of implementation are or have been followed and produced
	Adequacy of resources (for implementation)	Evolution of resources over the implementation process, incl. sources of funding
		Ratio between available and necessary resources
	Utilisation	Plan utilisation in decision-making (political level)
		Plan utilisation in management and development control (operational/technical level)
		Alignment of other policy and management instruments with the plan
Evaluation of plan outcomes and impacts	Outcomes and impacts	Observed (mid-term) outcomes and (long-term) impacts assessed against stated plan objectives and/or broader societal aspirations, including a measure of the degree to which outcomes and impacts can be attributed to the plan.
TPEA project - TPEA (2014)		
Process evaluation	Preparation	Legal and administrative framework
		Institutional capacity and cooperation
		Transboundary MSP area
		Formulation of strategic objectives
	Diagnosis	Area characteristics
		Uses & activities and cross-border relevance of coastal and maritime issues
		Governance framework
		Area of common interest
	Planning	Specific objectives
		Planning alternatives (options and scenarios)
		Planning documents
Data and information		Data availability and quality
Stakeholder engagement		Stakeholder engagement
Communication		Communication
Implementation		Roles, responsibilities and decision-making
		Resources
		Implementation
Outcomes and impact evaluation		Achievement of objectives
		Wider benefits
ADRIPLAN project - Barbanti et al. (2015)		
Integration (thematic, geographic, policy)		Balance and correlation among the social, economic and environmental aspects
		Typology of dynamics of maritime uses
		Overlapping of uses over space and time
		Cumulative impacts over space and time
		Policy frameworks for coastal and maritime planning
		Integration between coastal and maritime issues
		Policy effectiveness of MSP
		Transboundary integration
		Adherence to related policy frameworks
		EBA
Objectives		Identification of objectives

		Number of SMART objectives
		Acceptance of objectives during the implementation process
Governance		Transboundary character of the established actions
		Stakeholder involvement in plan implementation
		Awareness plans put in place
		Wider communication of planning outputs
		Cross-border cooperation: legal and administrative provisions
Actions		Interlinkage of proposed actions
		Existing or foreseen supporting structures/ mechanisms for the effective implementation of actions
		Financing mechanisms for implementation
		Estimated impact of the plan's implementation
		Effectiveness of actions in addressing perceived needs and opportunities
SIMCelt project – Hopkins & Jay (2017)		
Process evaluation	Preparation	Legal and administrative framework
		Institutional capacity and cooperation
		MSP area
		Formulation of strategic objectives
	Diagnosis	Governance framework
		Area characteristics
		Uses & activities and relevance of coastal and maritime issues
	Planning	Specific objectives
		Planning alternatives (options and scenarios)
		Efficiency
Plan evaluation		Coherence
		Relevance
		Scope/integration
		Conflict analysis
		Conformance
		Guidance for implementation
		Approach, data and methodology
		Quality of communication
Plan implementation		Roles and responsibilities
		Resources
		Implementation/utilization
Outcomes and impact evaluation		Achievement of objectives
		Monitoring and performance measures
Crosscutting themes	Stakeholder engagement	Stakeholder engagement
	Data and information	Data availability and quality
	Communication	Communication
	Transboundary	Regulatory framework
		Governance framework
	EBA	Plan
		Management objectives
	Ecosystem approach	Biological/cultural values given equal value
		Managers consider effects of their activities on adjacent and other ecosystems
		Need to understand and manage the environment in an economic context

		Conservation of ecosystem structure and functioning in order to maintain ecosystem services is a target;
		Ecosystem managed within the limits of functioning
		Ecosystem approach undertaken at the appropriate scale
		Appropriate balance between and integration of conservation and use of biological diversity
SUPREME project – Avgerinou-Kolonias et al. (2018)		
Preparation and baseline (Where are we now?)		Legal and administrative framework
		Institutional capacity and cooperation
		MSP area & Transboundary MSP area
		Formulation of strategic objectives
Diagnosis, Planning, Defining Objectives (where does MSP want to be and how do we get there?)		Area characteristics
		EBA
		Uses & activities and cross-border relevance of coastal and maritime issues
		Overlapping of uses over space and time
		Governance and policy framework for maritime and coastal issues
		Specific objectives
		Planning alternatives (options and scenarios)
		Cumulative impacts over space and time
Inputs - Data and Information (what is needed to achieve the desired results?)		Data availability and quality
Process (how do we go about management?)		Stakeholder Engagement
		Communication process
Output (What products or services were produced?)		MSP plan
		Evaluation plan
Outcomes, Plan Implementation, Impact Evaluation (What is achieved?)		Roles, responsibilities and decision-making
		Resources
		Implementation/ utilisation
		Achievement of objectives
		Monitoring and performance measures
		Wider benefits

M&E of plan making

When concerning **M&E of plan making** or **process evaluation,** it refers to evaluating the process of making the plan, assessing the overall effectiveness of the planning process and considering whether or not the MSP process has been carried out fully - which in turn might help explain observed results later on (see Box 11and Box 12) (Carneiro, 2013).

The process evaluation scrutinises how data and methods were used in the organisation process. It may also encompass the intrinsic value of the MSP process, such as the value of stakeholder participation (TPEA, 2014; IOC-UNESCO/European Commission, 2021).

ADDITIONAL READING

Quesada-Silva et al. (2019) developed a comprehensive assessment framework focused specifically on evaluating MSP participatory processes and respective outcomes.
This framework was divided in two main phases: 1) the first concerning why, who, when and how to engage stakeholders, as well as criteria for costs; 2) the second based on questions about participatory consequences considering specific criteria of the first phase and stakeholders' feedback.
The proposed framework can be adapted to a particular planning context and can be used not only for evaluation purposes, but also to plan meaningful participatory processes.

Indeed, an important element in the evaluation of planning processes is the involvement of stakeholders. Evaluation of stakeholder engagement is a means to address the overall consideration of social justice - representation, recognition and distribution - within MSP (IOC-UNESCO/European Commission, 2021).

The engagement of stakeholders could help the collection of baseline data and mapping during plan making, improving data quality and facilitating stakeholder endorsement of the plan (Shucksmith & Kelly, 2014). Failure to adequately engage stakeholders beyond consultation on plans can become a weakness and undermine implementation of the plans, particularly if stakeholders hold conflicting perspectives (Asirin et al., 2018).

Ultimately, the evaluation of the process and how stakeholder engagement was conducted may improve the knowledge base for planning and may help MSP processes become more cost-effective and inclusive by triggering adaptations to future planning processes (IOC-UNESCO/European Commission, 2021; Stelzenmüller et al., 2021).

Box 11. Example of general approaches for M&E of plan making.

Stelzenmüller et al. (2021) reviewed literature concerned with plan-making of specific plans from across the globe at different spatial scales, from local plans to transboundary, each focused on the process of plan making and participation processes, including the role of stakeholder engagement. Even though some studies referred to analysis conducted during the plan-making process, most were retrospective evaluations of the planning processes.

About half of the studies applied pre-established evaluation approaches, such as for example the UNESCO guide on MSP M&E (Ehler, 2014), the MESMA framework (Stelzenmüller et al., 2013) and the evaluation framework by Orr et al. (2008).

The methods proposed for this type of M&E were comprised of stakeholder participation and indicator-based assessments. For example, an assessment concerning the Northwest Pacific region applied indicators to assess differences in legal systems, institutional arrangements, and coastal management (Lin et al., 2016).

The key principles contained in the EU roadmap for MSP were considered as an appropriate guidance for an evaluation of plan-making, even though few examples were found for its application in structuring the evaluation of planning process, such as in specific North Sea areas (de Vos et al., 2012a, 2012b) and in Romania (V˜aidianu &Ristea, 2018).

Box 12. Practical examples of evaluating the planning process.

A practical example of evaluating the planning process is the case of Scotland's' Shetland islands, which revised licensing decisions and conducted interviews with stakeholders to evaluate plan-making. The resulting review of the spatial plan involved qualitative and quantitative assessments of stakeholder involvement, usability of the plan and licensing and permitting procedures (Kelly et al., 2014). Owing to an increased evidence basis conveyed by the plan, results indicate that plan developers were able to consider more easily other users and to reduce conflicts and investment uncertainty (Stelzenmüller et al., 2021).

In the case of the United Kingdom, surveys are run once every year to collect feedback from stakeholders involved in plan development. Additional information is also collected from sources not involved in the planning process, such as national statistics offices. As a follow-up to the surveys, verification interviews are carried out with selected stakeholders (Schultz-Zehden, 2021). The evaluation of plan-making found that certain sectors were using the plan to inform license applications, but further training and fostering communication was still needed to improve the users' understanding of the plan.

Another example was the approach taken in Belgium, where stakeholder questionnaires were applied to informally evaluate plan making, namely by assessing the level of satisfaction of stakeholders with the process of developing the first maritime spatial plan (Stelzenmüller et al., 2021).

M&E of the plan

When concerning M&E of the plan, it can refer to analysing the contents of the plan and assessing the plan's relevance. Plan evaluation is both prospective (*ex ante* evaluation) - in the sense that it anticipates the feasibility of the plan being implemented and promoting change - and retrospective in nature, as plan contents reflect what happened during plan-making (Carneiro, 2013).

The assessment of the plan's relevance focuses on the draft maritime spatial plan, by analysing which outcomes are realistic and whether they correspond with the goals defined for the plan. As such, it is expected that this process may yield refined and improved drafts where the plan is more likely to achieve its objectives in a cost-effective manner.

This can be done via theory-based evaluation, sustained in constructing theories of change. This implies formulating plausible steps - going from the plan to its expected effects – which can be a useful method to identify the outcomes that the plan or the planning process can produce (Varjopuro, 2019). To formulate plausible steps, it is essential to engage a broad range of stakeholders and experts with relevant understanding and novel perspectives on how MSP will influence sectors or the marine environment and what impacts and side effects can be expected (IOC-UNESCO/European Commission, 2021).

Plausible steps can be drawn up in various ways or combinations (e.g., narratives/storylines, visual representations), but should explain key assumptions on why the plan is expected to produce the outcomes, and the factors and relationships that foster or hinder the achievement of those outcomes (IOC-UNESCO/European Commission, 2021). Defining initial and intermediate outcomes can help in identifying necessary steps towards accomplishing a certain objective – the long-term outcome (Varjopuro, 2019).

In doing this, not only is it important to describe expected environmental, economic and social impacts, but also to pay attention to possible side-effects and bottlenecks. Such theory-based evaluation asks why the spatial plan produces intended and unintended effects, for whom and in what contexts and what mechanisms are triggered by the plan (Varjopuro, 2019).

This approach can have several advantages. Information coming from this process may help in fine-tuning the planned M&E activities, as the identification of factors that influence plan development, impacts and

side-effects may help to define quantitative or qualitative indicators for monitoring. Another important aspect is that, when experts and stakeholders are involved in describing plausible steps, it increases their knowledge of the plan and expected actions and can foster a sense of shared ownership of the plan.

M&E of plan implementation

When concerning M&E of plan implementation, it refers to checking whether prescribed steps and products of implementation are being - or have been - followed and produced (see Box 13). It represents an opportunity to check that the steps towards the final outcomes are being taken, and to report back.

Considering that plan implementation is a long process and review cycles can encompass several years (e.g., from 5 to 10 years, or more), it is advisable to follow up the implementation of the plan as it advances. Conducting a midterm evaluation, for example, can be useful when the review cycle is very long (IOC-UNESCO/European Commission, 2021).

It is also important that the follow-up activities look beyond the maritime spatial plan itself and assess the changes that have taken place throughout the years, especially concerning the development of maritime sectors and the state of the marine environment. These relate to context or situation monitoring, which tracks the setting in which the MSP process and plan operates, especially if it affects identified threats, risks and assumptions (e.g., changes in the economy or policy context, changes in environmental conditions) (TPEA, 2014; IOC-UNESCO/European Commission, 2021).

Considering that one of the key functions of a maritime spatial plan is to provide guidance to other marine management initiatives, this step may also include an evaluation of the uptake of the plan by decision-makers and practitioners in other policy-making processes (Carneiro, 2013).

M&E of plan implementation can focus on the evaluation of MSP policy implementation, which is often conducted as part of the legislative requirements of national MSP legal frameworks and generally follows established program evaluations that are typically part of the policy-making processes of governments (Stelzenmüller et al., 2021).

MSP policy implementation can be undertaken with the purpose of determining if the plan is in line with long-term policy goals and existing regulatory sectoral frameworks to manage human activities. As a result, it may reveal gaps in national legislation that need reviewing and ascertain whether the planning objectives reflect high level policy goals of MSP legislation (Stelzenmüller et al., 2021).

Assessing policy implementation may also examine whether sectoral competent authorities can abide to the spatial and temporal allocations on the plan. To address this, two perspectives are essential, those of conformity and compliance. The first refers to the implementation of a measure or a procedure as per a standard, a guideline or a code of practice. The second concerns the requirement for a user of the maritime space to legally comply with conditions stipulated in a license or a permit, hence sector authorities are accountable to consider the legally binding MSP plan as part of their licensing or permitting conditions for their respective activities to take place (Stelzenmüller et al., 2021).

Examples have been found in the literature of analysing the alignment of the plan with national and international policies (Teng et al., 2019), examining the influence of sector regulatory processes on MSP over time (Vrees, 2019), and addressing links between legislation and the spatial allocations of the plan (Brennan et al., 2014; Glegg et al., 2015; Sangiuliano, 2019; Stelzenmüller et al., 2021).

Box 13. Practical examples of evaluating plan implementation.

Belgium and Latvia have established annual meetings of an inter-agency working group with the purpose of checking how plan implementation is progressing. An assessment of measures to be taken or results to be achieved is done against defining relevant indicators, responsible authorities and date of completion. In addition, Belgium organizes stakeholder events to collect feedback on the implementation and effects of the plan. These provide an opportunity for information exchange and also serve to keep relevant actors informed of the MSP process (IOC-UNESCO/European Commission, 2021).

MSP policy implementation evaluation most often takes the form of compliance evaluation. In England and Scotland, a mid-term review determines how decisions are made against plan policies, and whether such decisions are appropriate, concentrating on how the plan is used to inform relevant decision-making. Scotland has conducted an evaluation of MSP policy implementation as part of the formal review of the Scottish marine plan, resulting from a 3-year-reporting requirement of the government (Scottish Government, 2018). The review was conducted to assess the success of plan policies and to provide the basis for future revisions and improvements. It reviewed the use of the plan in licensing through broader consultation with regulatory and decision-making organizations through an online questionnaire, a multi-stakeholder workshop and bilateral meetings (Stelzenmüller et al., 2021).

The Netherlands have a spatial monitoring and permit tracking system, which illustrates the current and foreseeable use of space and ascertains the validity of the various licenses issued. The Dutch system shows who has issued permits, for how long and for what area. In Belgium, regular meetings take place with the MSP national advisory body to evaluate how the plan is being implemented against a list of actions for the government integrated in the plan. The Welsh approach foresees a range of compliance indicators focusing on the number of licensing decisions taken using the plan (Stelzenmüller et al., 2021).

M&E of plan outcomes and results of MSP

The evaluation of plan outcomes/results and impacts varies widely from case to case, but often the focus of outcome evaluation is to assess progress toward pre-established objectives and expected outcomes and to check to which extent the objectives set for the plan and the MSP process were met. Thus, outcome evaluation can be viewed as an opportunity to collect evidence to test if – and why - the implementation of the plan evolved as anticipated and the expected results were achieved (Carneiro, 2013). Similarities can be found with strategic environmental assessments carried out during the plan revision stage, as it contains a comparison between the current plan, the new proposed plan and an alternative scenario (Stelzenmüller et al., 2021).

It should be decided if outcome and impact evaluation will be measured against the stated objectives of the plan, a broader set of objectives valued by society, or a combination of both. In case the outcome evaluation is done against stated objectives, it is vital that clear objectives are formulated at the beginning of the MSP process. The objectives should be realistic, clearly defined and verifiable, as discussed in more detail in chapter 2.

Qualitative and quantitative indicators are helpful in outcome evaluation, when linked to the objectives as a measure of their achievement against pre-established criteria (see chapter 2). Good examples of establishing clear linkages between objectives and indicator can be found in the literature (e.g., Domínguez-Tejo et al., 2016; Ferreira et al., 2018; Fang et al., 2019; Teng et al., 2019; Stelzenmüller et al., 2021).

Even when the plan applies specific and demonstrable objectives and respective indicators are suitably established, close attention should be paid to the challenge of knowing the exact outcomes of the MSP. Indeed, attribution of causality is likely to constitute the greatest challenge (Carneiro, 2013), especially for long-term results, for plans that are not very detailed or that cover multiple sectors and large maritime areas (see section "Challenges and limitations in M&E").

It should be noted that there are less examples, in the available literature, of operationalization of M&E of plan outcomes and results, not only due to the above-mentioned challenges, but also to the limitations posed by assessing plan outcomes via MSP objectives, especially when they are excessively broad and not linked to specific actions or tangible measures. This imbalance in practical method should not overshadow, however, the crucial importance of planning and implementing M&E of the plan 's impacts in relation to the remaining types of M&E approaches presented above.

Regularly consulting sectoral administrations and experts and gathering stakeholder input can help to minimize the uncertainty of knowing to which extent the plan itself is responsible for the observed outcomes, in relation to other contributing factors. Framing plausible steps going from the plan to preferred outcomes, considering theories of change, can be a way to circumvent this challenge (Varjopuro, 2017; Varjopuro, 2019). It can be useful to link the evaluation of outcomes with checking if MSP implementation is on the right track towards the objectives by sequencing the evaluation in relation to immediate, intermediate and long-term outcomes (see previous section "M&E of plan implementation") (IOC-UNESCO/European Commission, 2021).

In line with a more performance-oriented evaluation, which looks beyond merely assessing against stated objectives, the MSP process can be considered successful when the plan is used in the decision-making process for other sectors. On the other hand, outcomes may in fact be different from the stated objectives, if potential deviations can be justified. In addition, the outcome evaluation could identify side-effects and analyse how observed positive and negative outcomes are distributed among the actors (Carneiro, 2013; IOC-UNESCO/European Commission, 2021).

FOOD FOR THOUGHTS

According to Stelzenmüller et al. (2021), over the past decade, the focus of MSP evaluation at a global scale has shifted from predominantly evaluating plan outcomes towards the evaluation of plan making and policy implementation. The growing trend towards the assessment of regulatory plans reflects advances in global implementation of marine spatial plans. The most common practices have been to evaluate plan making and plan outcomes, while evaluation of the implementation of marine spatial plans is significantly less common. There is an undervalued need for standardised reporting of compliance and conformity, as required for evaluating MSP policy implementation. The evaluation of outcomes of environmental MSP objectives is the most structured, while plan-making evaluation applies more informal approaches.

02. ON THE DEVELOPMENT AND IMPLEMENTATION OF THE M&E FRAMEWORK

Taking from the step-wise approach proposed by Ehler (2014) and other relevant literature (Day, 2008; Ehler & Douvere, 2009; European Commission, EASME, 2018; Varjopuro et al., 2019), the present chapter focuses on a number of key aspects that M&E frameworks should cover, illustrated in Figure 4. Stakeholder and expert input may be collected in all or some of these stages, especially when selecting indicators and while conducting evaluation.

Figure 4. Essential steps in developing and implementing the M&E framework.

DESIGNING AND ORGANIZING THE M&E PROCESS

In order to enable the realization of M&E in MSP, a number of preparatory steps must be taken early on in the planning process, bearing in mind that the overall framework should be kept rather simple and pragmatic (Varjopuro et al., 2019). This section focuses on practical questions on how to design and arrange the M&E process. One of the most important aspects is to define the scope of the evaluation. Other essential prerequisites are deciding who holds responsibility and who performs the evaluation, how many resources can be committed to M&E and what is the role stakeholders will play throughout the M&E process.

Determining responsibility and establishing the M&E team

GUIDING QUESTIONS

The key questions to ask at the start of defining the M&E system are what is going to be evaluated and when.

Other important questions are what is driving the need for conducting M&E and who will benefit from the evaluation results.

The responsibility for evaluating the plan should be formally stated and roles clearly assigned to competent authorities, usually as the result of a political process resulting in a mandate to evaluate the maritime spatial plan. The same organisation will probably be tasked with designing the evaluation of the plan (Py et al., 2021).

An early step is to assemble a comprehensive and diverse M&E team, which can also be a designated working group or committee. Rules detailing commitment requirements, the roles within the team and the frequency for meeting and reporting should be stated.

Identifying the objectives, scope and purpose of MSP M&E

As stated in section “Keystones for M&E”, before designing and implementing the monitoring and evaluation process, it is important to identify the underlying need for the evaluation and to make decisions in terms of defining the scope and objectives of the evaluation. It is also essential to consider the expected and possible uses of evaluation results (Varjopuro, 2019).

In the case it is not possible to set a clear focus and task for the evaluation process, for example in the first MSP plan, the scope of evaluation may have to be more flexible at the start of the process, to be progressively refined as the MSP process unfolds (Varjopuro, 2019).

This constitutes an initial scoping phase to clarify the nature of the M&E process and to identify the general approach and assumptions underlying the evaluation, which should also include guiding elements on time frames and building capacity (Ehler, 2014).

The demanding nature of carrying out effective M&E requires skill, experience, and building institutional capacity, which constitutes a long-term effort. This capacity entails the ability to successfully establish indicators, the means to collect, compile, analyse and report the monitoring data; and the skills to conduct the evaluation and incorporate its findings in the MSP process (Ehler, 2014).

POSSIBLE OUTPUTS

» Assembling the M&E team.

» Draft work plan for M&E, including timeline and resources.

Ensuring appropriate resource allocation

Designing what the M&E process will look like has to be considered against the availability of human and financial resources and the time for conducting monitoring and evaluating results. Specifically, the scope of evaluation and its criteria should be realistic in relation to the committed resources. Hence, the matter of funding M&E activities is one that requires clarification early on in the process as it significantly limits the ways in which M&E can be conducted (Varjopuro, 2019).

A key question to ask when planning or commissioning M&E is to carefully consider the expected uses of evaluation results and the anticipated purposes and expectations for the evaluation, in order to fit the resources accordingly. Besides from financial resources, human resources can include the actors involved in the evaluation process and the end users of evaluation findings (Varjopuro, 2019).

The purpose and timing of the evaluation - as well as the issues dealt with in the spatial planning process - influence whether resources should be funnelled for internally or externally conducted evaluations. It may be preferable to rely more on internal resources for *ex ante* exercises, and on external resources for *ex post* evaluation. If the process addresses controversial topics, an external evaluation may be better received, in comparison to in-house evaluation (Varjopuro, 2019).

Planning the level of stakeholder engagement

Identification of relevant stakeholders - including the process of accessing them - the extent of stakeholder participation, the timing of the participatory processes, and the opportunities for stakeholders to influence M&E must be decided and communicated early on in the M&E process. Not only stakeholders may influence the planning process when writing the plan, but they may also be included in the M&E process (see section "Stakeholder engagement within M&E") (Py et al., 2021).

ADDRESSING MSP OBJECTIVES

Appropriately defining MSP objectives plays a critical role in M&E, helping to guide decision-making, to reduce uncertainty and to ultimately improve MSP over time. The importance of defining clear objectives is often emphasised in literature on evaluation. For the purpose of M&E, the objectives should be expressed in ways that are sufficiently specific to facilitate the identification of appropriate indicators, which can assess the level of achievement of the respective objectives (Day, 2008; Portman, 2011; Ehler, 2014; Kelly et al., 2014). Notwithstanding the general requirement that objectives should be specific, it is also possible that they may have different levels (e.g., operational, immediate, global, related to the MSP process), which illustrates that contributes to a wider framework (European Commission, EASME, 2018).

POSSIBLE OUTPUTS

» List of verifiable MSP objectives and expected outcomes.

As objectives are inherently linked to the selection of indicators, they should be more specific and operational than generic statements or general goals, such as "contributing to marine biodiversity conservation" (Ehler, 2014). Objectives are derived from goals, which can be linked to more than one objective (Ehler, 2014). Nonetheless, important distinctions should be made between goals and objectives.

Goals are high-level statements of general direction or intent on the desired outcomes to be achieved, often characterized for being broad, aspirational and long-term. On the other hand, an objective is a statement of a specific desired outcome that represents the achievement of a goal and that defines the tangible results that would be expected if they were fully realised (Ehler, 2014).

A focus on outcomes helps to build transparency and accountability into the planning process and to create a knowledge basis of the types of measures that work – or not - and why (Ehler & Douvere, 2009). It is also helpful to consider what outcomes are not expected, which highlights the polarity of possible outcomes and assists in identifying appropriate indicators to be monitored (Carneiro, 2013). Depending on the nature of

the plan, the MSP process and the M&E approach, objectives can also be linked to management actions that have to be implemented to achieve the objectives (Ehler, 2014).

It is often suggested in the literature that MSP objectives should meet the SMART criteria, which depends on the nature of the objective and its intended use (Ehler, 2014; European Commission, EASME, 2018):

- Specific: objectives should not be too broad, but rather concrete, detailed, focused, and well defined in terms of stating desirable outcomes of the MSP process;
- Measurable/ Verifiable: objectives should be defined in a way that allows their verification, using both qualitative and quantitative means;
- Achievable: objectives should be realistic and attainable within the relevant context and within a reasonable amount of effort and resources;
- Relevant: objectives should be relevant to the identified needs and lead to a desired goal, either on its own or in combination with other objectives;
- Time-bound: objectives should be set in a specific time frame in relation to what is to be accomplished.

Clearly defined objectives are a good foundation for generating indicators that are relevant to the stated objectives. Such detailed objectives encourage clarity of purpose and are needed to ensure successful monitoring, to which qualitative and quantitative indicators can be linked.

Despite the emphasis on SMART objectives in MSP guidance, the political process of planning often yields broad objectives with vague or unstated targets, being more difficult to categorize (Collie et al., 2013). On the other hand, SMART objectives have, by definition, a narrow perspective, and individually may not cover large societal objectives. Therefore, it is also recommended by Varjopuro et al. (2019) the formulation of goals concerning an overall direction and purpose for MSP.

Not all aspects of MSP should be translated into objectives and indicators, as these are only one aspect of the whole M&E process. Hence, it is also advisable to go beyond solely focusing on the achievement of MSP objectives, as there are several aspects of MSP than can be followed up, such as checking for the quality of the MSP process or collecting information on the broader context of MSP (e.g., on the development of maritime sectors, the marine environment and society) with indicators that assess the relevance of MSP (Varjopuro et al., 2019).

ADDITIONAL READING

Zuercher et al. (2022) have compared aspirational MSP goals to objectives from finalized and implemented plans to better understand how well these align and in what ways any misalignment may shape MSP evaluation. The study revealed that, in general, the stated objectives of maritime spatial plans remain distinct from theorized MSP goals. These gaps may be a result of many things, including the path-dependent nature of planning (e.g., choosing options that fit existing practices or previous decisions), issues related to policy layering (e.g., changing institutional frameworks), or the realpolitik of planning (e.g., resistance to objectives that change the *status quo*, such as those related to equity). Findings have shown that plans prioritize the environment, economy, and governance, while often not including objectives related to cultural heritage, human well-being and safety, indigenous rights, and climate change. Nevertheless, social and cultural objectives have become increasingly more prevalent over time. Results suggest that a lack of assessment, combined with mismatches identified between the academic literature and implemented plans, have produced unrealistic aspirations for MSP.

This is especially relevant in cases where no data are collected or no indicators are measured, as evaluations that focus only on stated objectives may overlook important progress or miss a lack of progress on important needs, and thus perpetuate unproven MSP narratives and inequities in planning. Hence, including a broader set of expectations in evaluation criteria (e.g., Fang et al., 2019; O'Hara et al., 2020) can help evaluators understand in what ways plans achieve positive and measurable progress toward unforeseen needs (Zuercher et al., 2022).

Even though it is challenging to evaluate plans based on objectives they did not explicitly set out to achieve, doing so will better portrait plan capabilities and outcomes, while allowing for some comparison across cases. Improving the collaboration between practitioners and experts and conducting meaningful, regular and sustained stakeholder engagement can help to gather information on the missing objectives and ensure that under-represented categories of objectives are considered (Zuercher et al., 2022).

DEVELOPING THE INDICATOR SYSTEM

The ensuing step after addressing MSP objectives is the development of an indicator system, which can be done according to the following (European Commission, EASME, 2018):

- Formulating possible indicators by defining links with MSP objectives;

» Identifying information sources;
» Establishing baselines for indicators;
» Defining targets and identifying external factors;
» Developing the indicator system.

Formulating indicators

Indicators have numerous functions and are widely acknowledged for their potential to improve MSP in terms of simplification, verification and communication (Ehler & Douvere, 2009; IOC-UNESCO/European Commission, 2021).

POSSIBLE OUTPUTS

» List of selected indicators for MSP M&E and respective baselines and targets, validated by stakeholder and expert consultation.

Generally, M&E indicators are derived from the goals and objectives set in the MSP plan. In the context of performance monitoring, a performance indicator should be defined for each type of identified planning decision applied to the maritime spatial plan (Ehler, 2014; IOC-UNESCO/European Commission, 2021).

They usually simplify complex phenomena, allowing for improved communication of information to decision-makers and other interested parties, including the general public. They can also provide concise messages for engagement, education and awareness (Belfiore et al., 2006; Ehler, 2014). They can provide qualitative and quantitative information with a view to helping managers negotiate or make decisions on MSP.

Indicators can help monitoring and assessing conditions, forecasting changes and trends, spotting early warning signs to emerging issues, and evaluating the effectiveness of the planning decisions. They are powerful tools in the feedback loop to a maritime spatial plan, being useful to monitor the impacts of MSP or the achievement of its objectives, as they collect information about the planning process and help gather feedback from stakeholders (Ehler & Douvere, 2009; IOC-UNESCO/European Commission, 2021). Stakeholder-based assessments of the impacts of MSP and stakeholder input on contextual factors, unintended consequences and affected parties provide useful information that can be a basis for identifying indicators (Varjopuro et al., 2019).

KEY CONCEPT

Indicator:
An indicator is a measure, quantitative or qualitative, of how close one is to achieving what it set out to achieve, i.e., objectives or outcomes.

Several studies provide detailed guidance on the formulation and use of MSP indicators (e.g., Belfiore et al., 2006; Ehler, 2014; TPEA, 2014; European Commission, EASME, 2018) and there are many examples of indicators relevant in the context of MSP (Day, 2008; Böhnke-Henrichs et al., 2013; Carneiro, 2013; Ehler, 2014; Botero et al., 2016; European Commission, EASME, 2018; Ferreira et al., 2018).

Despite the numerous advantages in using indicators in MSP, it should be noted that indicators are a support tool, not the monitoring and evaluation framework itself, and so they should not become an end in themselves and must be applied in moderation (European Commission, EASME, 2018; Varjopuro et al., 2019). In particular, special caution should be taken on the number and diversity of indicators, which should neither exceed what can be managed - in a way that is realistic and proportionate with the allotted time and resources - nor be less than what is necessary for a comprehensive system (Carneiro, 2013).

It is recommended that only a limited number of well-targeted, practical and cost-effective indicators should be selected, instead of aiming to cover all possible aspects of MSP (Varjopuro et al., 2019; Stelzenmüller et al., 2021). Indeed, indicators are not meant to measure all planning processes and outcomes, but rather the most relevant, which should ideally be verifiable (European Commission, EASME, 2018). Choosing the appropriate indicators is usually a trial-and-error process, which may take several repetitions (Ehler & Douvere, 2009).

Another limitation of using indicators concerns their composition and use, because they make up only a small portion of the complex MSP system and must fit the planning context, i.e., the specific needs addressed by MSP in a given national or regional setting. This is the reason why ready-made solutions should be avoided, as indicators must be tailored to each particular MSP setting. For example, one-to-one matches between MSP and the achievement of an objective can make it difficult to select indicators that realistically assess the success of MSP. The challenges and complexity of identifying and isolating the impact of a specific policy initiative among many others must be considered. It is also challenging to frame indicators based on a logical

model linking objectives and indicators, in case false relationships are created among them (European Commission, EASME, 2018; IOC-UNESCO/European Commission, 2021).

Despite there being no universal set of indicators applicable to all MSP processes, a small set of well-chosen indicators is widely considered as a good practice. Table 4 lists a set of diverse quality criteria that should be considered, including SMART criteria.

Table 4. Examples of criteria for formulating indicators in MSP M&E (Ehler & Douvere, 2009; Ehler, 2014; European Commission, EASME, 2018; IOC-UNESCO/European Commission, 2021).

CRITERIA FOR FORMULATING INDICATORS	
Concrete	Indicators should be observable rather than abstract and sufficiently specific so that they respond to the properties they are assessing, rather than to other external factors (i.e., whenever is possible to isolate the effects of MSP).
Verifiable	Indicators should be measurable and readily verifiable through monitoring programmes and ideally using already existing tools, whenever feasible.
Realistic	Indicators should be achievable within the set time and resource limits.
Relevant	Indicators should be pertinent to the objectives and outcomes of MSP it seeks to evaluate, including spatially relevant information.
Time-bound	Indicators should be outlined in a specific timeframe based on clear expectations for when the defined targets are expected to be achieved.
Cost-effective	Indicators should take into account that the cost of gathering, managing and analysing data on indicators must be justified and proportionate to the available resources for M&E. These resources are often limited and may require trade-offs to ensure that the costs of data collection do not outweigh the benefits of monitoring.
Normative	Indicators should identify a clear trend/ direction (increase or decrease) in which they are expected to evolve.
Straightforward	Indicators should be simple and easy to interpret and should be understood by as wide a rage of stakeholder as possible. When indicators are too complex, applying them can become counterproductive, not only because communicating them has limited effects, but also because it hinders the ability of stakeholders to understand the meaning of indicators and to contribute to their selection and usage.
Grounded	Indicators should be based on reliable data and scientific evidence and not subject to biases.
Sensitive	Indicators should be able to detect trends and changes in the planning decisions being monitored.
Responsive	Indicators should be able to provide timely and reliable feedback on what is being evaluated.
Comparable	Indicators should allow comparisons over time, which implies being consistently measured under the same assumptions, principles and definition.
Interpretable and accepted by stakeholders	Indicators should reflect stakeholder input in relation to quality, ownership, and provision of information: Stakeholders can be involved in the design of indicator systems from the onset of the MSP process, thus providing an additional quality check and allowing to indicators to reflect the concerns of stakeholders. Consulting stakeholders ensures their acknowledgement of the selected indicators and facilitates their subsequent involvement in monitoring activities. Additionally, engaging stakeholders in selecting indicators allows addressing the likely need that stakeholder data will be required to feed into the definition of baselines, targets, and their monitoring throughout the MSP process.

Different levels of objectives require different levels of indicators; hence, distinctions can be made between the following indicator categories: context, inputs, processes, outputs, and outcome (Table 5; Figure 5) (Varjopuro et al., 2019). These indicator categories can encompass social, economic, environmental and governance dimensions, (Barbanti et al., 2015; Avgerinou-Kolonias et al., 2018), which are not strictly delineated, as they could partially overlap.

Table 5. Different types of indicator categories in MSP M&E (Varjopuro et al., 2019).

INDICATOR CATEGORIES	
Context indicators	They gather information on general developments in maritime sectors and the marine environment. The resulting information helps in assessing the relevance of the MSP, especially in evaluating if it is focusing on the most important issues.
Input indicators	They collect information on assigned responsibilities, as well as on actions and resources used to develop plans. The resulting data supports the assessment of pre-conditions for successful planning.
Process indicators	They assemble data on the planning process and stakeholder involvement. The ensuing information helps in assessing the quality of the planning process, including aspects of equity and representativeness.
Output indicators	They collect information on the plan itself and on planning decisions and studies.
Outcome indicators	They gather data on short, intermediate and long-term outcomes and impacts, such as licencing procedures and projects resulting from the plan. The resulting information will aid in assessing progress in the implementation of the plan and the results of the plan.

Three main types of indicators can be distinguished, to which Ehler (2014) provides examples:

- **Institutional or governance indicators**, which concern phases and intrinsic aspects of the MSP process, e.g., the status of planning and implementation, legal authority, institutional arrangements, available resources, spatial and temporal boundaries for the plan, stakeholder participation, compliance and enforcement, as well the quality of the plan and the overall benefits of MSP. These are important to demonstrate progress in relation to inputs, processes and outputs of MSP, especially when considering the time lags between MSP implementation and observing its actual effects.
- **Socio-economic indicators**, which address the state of the human component of coastal and marine ecosystems, helping to assess the extent to which MSP is successful in managing the pressures and impacts of human activities and in producing sustainable socio-economic benefits, e.g., level of economic activity, quality of life. The MSP process should provide information for decision-making with respect to the socioeconomic value of marine areas and their resources and the costs and benefits of using them. These indicators can also serve to incorporate concerns and interests of stakeholders in the process and to evaluate the impacts of decision-making on stakeholders.
- **Ecological or environmental indicators**, which reflect trends in the state and characteristics of the marine environment: A combination of oceanographic, biological, biophysical, geological, geographical and ecological indicators can help guide MSP decision makers when dealing with core aspects of ecosystem health and environmental issues (Belfiore et al., 2006). The descriptors referred to in the MSFD can be used to frame indicators, which provide summary information on relevant ecological parameters that are usually affected by maritime sectors.

When considering indicators, it should be carefully pondered that MSP can benefit from both quantitative and qualitative assessments. Qualitative assessments are usually based on checklists and procedures related to the involvement of experts and stakeholders. Quantitative assessments are typically unable to cover all MSP aspects, but often attain results that can be compared over time to inform the evaluation process and start more complex discussions on MSP performance. However, quantitative approaches normally require that MSP objectives are linked to carefully selected indicators.

There are considerable challenges in knowing exactly the impacts of MSP, an aspect that must be taken into account when designing the indicator system to monitor MSP in terms of opting for quantitative or qualitative indicators. Both must be rigorously designed and justified carefully, and both have their pros and cons. Quantitative indicators provide a very clear measure of progress and are numerically comparable. If constructed in a methodologically robust manner, they often produce a straightforward result that does not require much more interpretation. On the other hand, the status and development of relevant topics in MSP are often aspects better captured by qualitative indicators, for example when conducting a yes/no verification of the achievement of a certain task, to which a more nuanced assessment of the usefulness of the information can be added (Varjopuro et al., 2019).

A combination of qualitative and quantitative indicators is set to produce more robust results. For instance, quantitative process indicators relative to the number of stakeholders consulted and of stakeholder events organized can be supplemented with qualitative feedback coming from those stakeholders (IOC-UNESCO/European Commission, 2021).

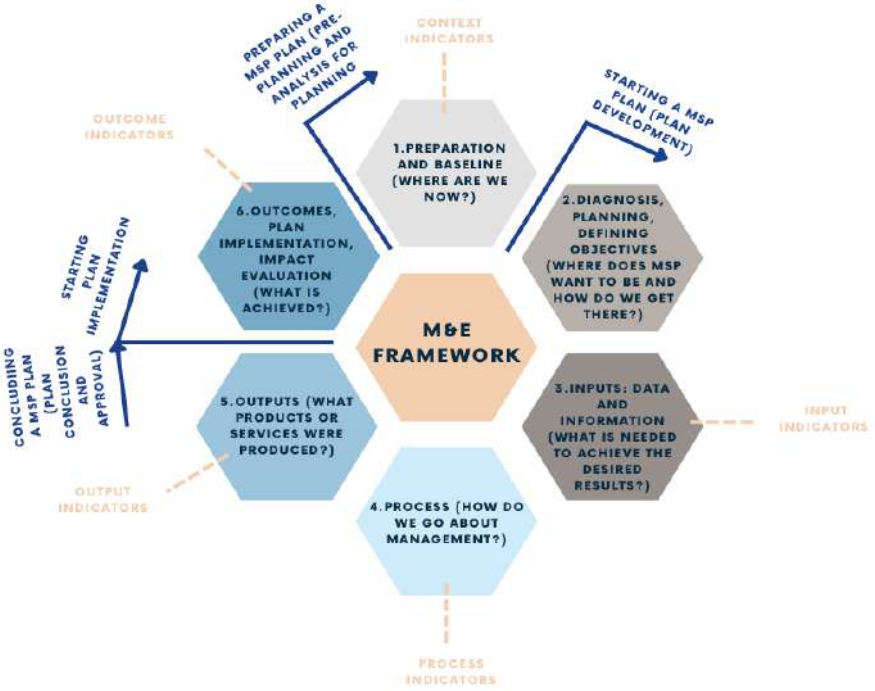


Figure 5. Example of the integration of different indicator categories throughout the stages of the MSP cycle (Adapted from Avgerinou-Kolonias et al., 2018).

Identifying information sources

A key aspect to consider when framing indicators in MSP M&E is identifying data sources and addressing the availability of information, as well as the issue of accessibility. This is especially important because, even in the case of specific and relevant indicators, in the absence of information to support their definition and monitoring, they would not be verifiable (European Commission, EASME, 2018).

Data sources for indicators can be either primary or secondary. Primary data are collected directly by the MSP organization concerned (e.g., administrative, financial or personnel data; surveys; interviews; direct observation). Secondary data concern data that have been collected by external organizations, and are gathered for other purposes (e.g., government and non-government administrative records; targeted interviews and surveys; reports from observers; and field measurements and tests) (Ehler, 2014).

GUIDING QUESTIONS

» Can the data source be accessed in a practical way, on a regular and timely basis?
» Can the data source provide quality data?
» Is primary data collection from the information source feasible and cost effective?
» Are the secondary data valid and reliable?

As a general guideline, MSP authorities should aim to use existing secondary sources of information for the indicators. Using secondary data sources can be advantageous in the sense that it is often more cost-efficient. This is especially useful when it is not feasible to regularly collect primary data, especially if information is not readily available and its assembly is expected to be costly. However, using secondary data sources also raises concerns as they have been gathered with other purposes and organizational goals in mind and may not be fit to adequately report progress and success in achieving the objectives and desired outcomes for MSP (Ehler, 2014).

For outcome and impact indicators, the information should be largely available from official statistics. For process and outputs indicators, which are within the scope of MSP authorities, the sources of information are expected to be input from stakeholders, existing studies, and the authorities themselves (European Commission, EASME, 2018).

In the identification of sources, it should also be pondered if they must provide data that is validated and up-to-date, available at the required frequency and at the appropriate geographical level. In general, indicators should be based on validated data as much as possible, as this increases trustfulness, especially within a stakeholder consultation process (European Commission, EASME, 2018).

Establishing baselines

After linking potential indicators with the MSP objectives and having identified sources of information for the indicators, the focus will be defining the baseline values of these indicators. It can be argued that the process of establishing a baseline works as a quality check on the verifiability of an indicator and puts the objectives and targets into perspective (European Commission, EASME, 2018).

Setting a baseline for each indicator is a necessary step to allow making an initial assessment of the current situation, which will in turn be used to compare to changes registered by the indicator during the MSP monitoring process (European Commission, EASME, 2018). Thus, a baseline establishes the existing conditions against which future changes can be tracked (Ehler, 2014).

GUIDING QUESTIONS

» What will be the data sources?
» How often will data sources be accessed?
» Will they be qualitative or quantitative data?
» What will be the data collection methods?
» What is the associated cost and effort?
»Who will collect, analyse and report the data?
» Who will use the data?

The baseline represents the starting point from which progress and success will be assessed against. It is the situation prior to the implementation of the maritime spatial plan and constitutes a necessary requirement before actual monitoring of the indicators begins. Measurements from the baseline will help planners and decision makers determine whether they are on track towards achieving stated objectives in MSP (Ehler & Douvere, 2009; Ehler, 2014).

This step entails collecting and organizing information to identify baseline values for every indicator; in case this is not feasible for all indicators, an explanation should be added on why there is no baseline. It is advisable that the reference year is as close as possible to the year of adoption of the maritime spatial plan. On the other hand, baselines can be taken from a prior generation of plans (European Commission, EASME, 2018).

If possible, MSP authorities should opt for dynamic baselines (i.e., a value based on a baseline scenario, a projection on how the value of the selected indicator would develop without MSP), instead of static baselines (i.e., a value at a certain reference point in the past or present) (European Commission, EASME, 2018).

Other recommendations on establishing baselines include using ranges if a concrete value cannot be determined, using a baseline of '0' instead of a baseline that is not properly defined, and clearly distinguishing a baseline '0' from a baseline 'Not applicable' or 'Not available' (European Commission, EASME, 2018).

The selected indicators, and the data collection methods used to track those indicators, have to be based of what data are available, what data can presently be delivered, and what capacity there is to expand the range and depth of data collection and analysis over time (Ehler, 2014).

Defining targets

The ensuing step is to define target values for indicators, which ideally should be aligned with the stated objectives and be based of well-defined baselines. These may include interim and final targets, when referring to targets approximately midway or at the end of the timing of an indicator or the MSP process, respectively (Ehler & Douvere, 2009; European Commission, EASME, 2018). Interim targets are useful to assess if the planning process is on track to achieving the expected final targets, i.e., the long-term outcomes.

Targets are based on outcomes, indicators and baselines. Target and baseline values should result from the same calculation methodologies/sources and have the same measurement unit (European Commission, EASME, 2018).

Target setting helps to keep the expected results of the plan realistic, upholds accountability and may improve decision-making. Knowing whether an indicator surpasses or underperforms its target helps to determine if the planning decisions are working according to plan, or whether adjustments may be necessary to the implementation or time frame. It is advisable that deviations over 10% should be explained in evaluation, and those superior to 20% should lead to a reassessing of the targets (Ehler, 2014; European Commission, EASME, 2018).

The process of defining targets must also consider the most significant external factors that could affect achieving the target values. For MSP process and output indicators, the influence of external factors is often much smaller when compared to the other levels of indicators. Thus, external factors outside the sphere of influence of MSP authorities are more significant for outcome and impact indicators and reduce their control over reaching their targets (European Commission, EASME, 2018).

In addition, MSP authorities should clearly state any assumptions made, namely the assumptions that need to hold true in order to reach the expected targets. Therefore, the validity of these assumptions also needs to be verified in time (European Commission, EASME, 2018).

Similarly to other tasks in the monitoring process, targets should be selected through a participatory process with stakeholders. Target definition should be based on known resources and a reasonable projection over a specified period of time (Ehler & Douvere, 2009). Thus, setting targets must not be a speculative process. In case no reliable targets can be defined when drafting the MSP plan, their use may be reconsidered or their definition may be subject to additional studies after MSP adoption or, alternatively, they can be converted to context indicators (i.e., monitored as a part of the MSP context, but without attributing their progress directly to the MSP process) (European Commission, EASME, 2018).

Developing the indicator system

After selecting possible indicators, identifying their information sources and defining their baseline and target values, attention should be turned to ensuring that a complete indicator system is established and translated into a concise and straightforward descriptive document.

The absence of a specific document describing the selected indicators often leaves room for interpretation, leading to poor quality and consistency of monitoring. Creating the document would allow stakeholders to have the same level of common understanding, but should avoid becoming a too-long and complex indicator manual (European Commission, EASME, 2018).

The document should provide a methodological description of the selected indicators, which may entail developing indicator fiches comprising a number of descriptive topics such as the ones listed in Table 6. Developing indicator fiches is a useful tool for ensuring consistency of data gathering and calculation of target values, even though it requires additional time and effort (European Commission, EASME, 2018).

Concluding the definition of the indicator system includes determining who are the organizations responsible for data collection, analysis and reporting; and deciding on the frequency of data collection and reporting, which should be aligned to the data availability and reporting requirements.

A description of the overall system may address the indicator development process, overall indicator structure, procedures for adjusting the indicator system, key assumptions and external factors affecting the achievement of target values, and ways of communicating the achievement of target values.

Table 6. Examples of topics for indicator fiches (European Commission, EASME, 2018; Fernandez et al., 2019).

INDICATOR FICHE TOPICS
Indicator title and identifier
Indicator category and type
Description
Relevancy
Related MSP objective
Baseline (year and value)
Target (interim and final)
Calculation method
Measurement unit
Desirable trend
Frequency of data collection and reporting
Information sources
Partnerships/ Agreements/ Protocols
Data storage and format
Reporting and communication arrangements
End users

MONITORING PROGRESS AND DATA COLLECTION

Collecting data and undertaking monitoring

Once the indicator system has been developed, the following stages concern collecting data and undertaking monitoring activities. Monitoring is a continuous data collection activity and its requirements depend upon the stipulated set of indicators. Monitoring generally implies observing whether the intended processes, outputs or results are delivered as expected, so it must gather the necessary data to inform the decision-making process to adapt MSP. Thus, the data and information gathered through monitoring should result in inputs to the evaluation and adaptation process in MSP (European Commission, EASME, 2018).

Data can be collected from many sources and using structured, semi-structured or unstructured approaches, depending on the time and other resources available. Possible data collection approaches include:

- Direct observation;
- Document review;
- Records and secondary data (e.g., Existing databases, government and non-government administrative records, reports from observers; census data, official statistics);
- Case study;
- Participatory methods (e.g., Community meetings);
- Focus group discussion;
- Interviews;
- Surveys;
- Laboratory testing;
- Direct field experimenting;
- Remote sensing data;
- Modelling;
- Self-reported checklists or sheets;
- Expert judgement.

Deciding on the data collection method depends on the organization's resource availability, access, needs and time constraints, as well as on the needs of the user of the information. It is also contingent to the available sources, the complexity of the data, the frequency of data collection and the types of data analysis to be conducted. It may require externally contracting to use the existing capacity at universities and research centres for data collection efforts, or data may need to be purchased from specific providers (Ehler, 2014).

A combination of multiple data collection strategies may be the best option to support tracking a set of selected indicators. The implications of selecting certain methods instead of other options must be carefully considered early on and with the involvement of stakeholders. Choosing will necessarily entail trade-offs in terms of cost, timeliness, credibility and precision. For instance, unstructured, less precise and more inexpensive strategies can be the preferred approach when data are needed frequently to support decision-making, in comparison to more structured and formal methods which tend to be more precise, but are costlier and more time consuming (Ehler, 2014).

A plan for monitoring an MSP initiative should include information needs, indicators, and methods, spatial scale and locations, time frame, and roles and responsibilities for collecting data (Ehler, 2014; Ehler & Douvere, 2009; European MSP Platform, 2022). Criteria to consider when designing the monitoring and data collection system, which can entail the development of a data collection plan linked to the indicators and the application of a data storage and management system, include (Ehler, 2014; TPEA, 2014):

- **Ownership**: related to ownership coming from all the users of the monitoring system, based on identified demands for information. A situation where users do not see the need - or use - for the data collected, may translate in an unwillingness to invest time and resources into monitoring and ultimately result in data quality and ownership issues. Support from political players may help enhance ownership, to highlight that data must be collected and analysed, as well as properly shared and reported;
- **Credibility**: related to how trusted and credible the monitoring system is perceived to be, which can be aided by using valid and reliable data and by having the ability to report all data, including negative results (e.g., failure to meet expected outcomes for MSP), thus sidestepping political biases.
- **Maintenance**: related to continually maintaining the monitoring system in order to prevent it from becoming inoperative and ensuring the information flow. This aspect heavily depends on allocating the necessary time, financial, human, and technical resources for organizations to carry out monitoring tasks. It also relies on ensuring proper capacity building and acknowledging the need to upgrade and modernize the existing management procedures and technologies over time.
- **Management**: related to determining who will be responsible for managing the monitoring system, as well as how and where this will be done. This implies that responsibilities – at organization and individual levels – are clearly delineated, as well as the relationship between specific monitoring tasks and the bigger picture of assessing MSP. Properly addressing management may help mitigate issues coming from overlap or duplication of data from different sources, as well as delays in receiving data to support decision-making.
- **Timeliness**: related to the frequency, recency and availability of the data, i.e., how often the data are collected, how recently were the data collected, and how available are the data to support decision making in a timely manner.
- **Consistency**: related to conducting data collection efforts consistently over time, which may allow for the identification of important trends and spotting outliers. Factors to consider in the evaluation of such data may include the seasonality of activities and environmental processes, data comparability, and attribution and causality.
- **Reliability**: related to the extent to which the system is stable and consistent across time and space, i.e., assessing indicators in the same way every time.
- **Validity**: related to the ability of the system to assess the actual and intended results of MSP as directly and concisely as possible, via indicators.
- **Stakeholder engagement**: related to the involvement of stakeholder throughout the monitoring and data collection activities, considering the pivotal role stakeholders can play in providing relevant data about their sector and in helping identify the need to make amendments to data collection (TPEA, 2014).

A fundamental requirement is to pre-emptively weigh the true costs and benefits of monitoring, considering that, even though important, long-term monitoring on a continuing basis can rapidly become expensive, making it hard to maintain funding even if considered useful and justifiable for management purposes (Day,

2008). Notwithstanding the usefulness of monitoring, it is also important to set realistic expectations regarding its results and the fact that its success is highly dependent on careful design of the monitoring approach, the realization of periodic evaluations, and a sustained allocation of resources (Ehler & Douvere, 2009).

Data for long-term monitoring and evaluation require a large investment, particularly in the early stages of setting up data handling systems, as well as a long-term commitment by the organizations managing MSP (Retzlaff & LeBleu, 2018). Additionally, adequate resources should be committed not only for data collection, but for their management and analysis over the long term (Ehler & Douvere, 2009). It may be useful to apply the same management structures, platforms or committees that are used for other processes (i.e., MSFD), in order to avoid duplication of work and to be more efficient with the resources available.

As stated in the previous section, it is often recommended using existing and available data, as it is less expensive and faster than collecting new data. When using secondary data sources, it is advisable to assess what data is missing and be mindful of when the data was collected, what variables were considered and how accurate and reliable are the data (Ehler, 2014). Thus, quality assurance processes are deemed necessary and data gaps should be dully registered for any required data. It may also be appropriate to establish data agreements with data owners and providers, as a way to ensure that the information is being collected and shared at the right time and frequency, according to the proper methodology. It has been reported that most datasets are collected under monitoring programmes other than MSP, therefore aspects such as the resolution, collection methods, reference systems and data formats may not be fit for the purpose of MSP, which also can occur across jurisdictional boundaries (TPEA, 2014).

As data collection is often one of the costliest aspects of MSP, one way to cut expenses is to reduce the amount of data collected, by critically assessing if the information is sufficient and only collecting the necessary data in function of the stated objectives and indicators, by determining the appropriate sample size and simplifying data collection instruments (e.g., cutting facultative questions from surveys). Other ways to reduce costs are to employ self-administered questionnaires and to look for alternative, budget-friendly methods, such as targeted qualitative approaches (Ehler, 2014). It is also advisable to start with a modest monitoring program, with few indicators, and expand the program later on according to the experience acquired over time (Day, 2008).

Another important aspect is reaching a compromise between the intensity and spatial reach of the monitoring activities, i.e., deciding if intensive monitoring will be carried out at a few sites or if less intensive monitoring will take place at more sites. The frequency and intensity of monitoring depends greatly on what one wants to evaluate. For instance, some features show annual changes, some seasonal changes (Vrees, 2019).

Another important factor is that monitoring objectives are clearly articulated to pose meaningful questions and that monitoring approaches are flexible enough to allow for necessary changes as a result of new information or shifting conditions (Ehler & Douvere, 2009). Data collection is an evolving process in itself, considering that data are often provided by external organisations and that data collection methods and technologies are regularly improving (TPEA, 2014). The results of monitoring may lead to changes in the indicator systems and to redefining the objectives (European Commission, EASME, 2018).

A possible approach to data collection is to establish early on a data model, detailing which datasets are desirable and taking into consideration how data can be used to contribute to the evaluation process. Important considerations in terms of data quality include compliance with the INSPIRE Directive, data standardisation and coordination across borders. As a result, evaluation may include an assessment of datasets collected against those initially predicted, as well as the number of times the data model has been refined to make data more useable and harmonized (TPEA, 2014).

FOOD FOR THOUGHTS

According to Stelzenmüller et al. (2021), most countries apply existing monitoring programmes unto MSP to reduce additional administrative burdens and generally, the respective data and assessments of the issues and concerns of the maritime activities were often conducted by experts from academic institutions and consulting agencies to inform planning authorities. Existing environmental monitoring data, carried out by sectoral authorities to meet other EU regulations such as the MSFD, is often used to assess environmental MSP objectives. This comes with the limitation that these data can only be indirectly linked to MSP objectives, as the purpose of monitoring did not originally include MSP-specific indicators and outcomes. Nonetheless, the data are still relevant for evaluating changes to the environmental context of the planning zone. Contrastingly, socio-economic monitoring is done with closer links to MSP objectives than environmental monitoring, but the same attribution issue applies. Socio-economic monitoring includes general economic and social characteristics of the planning area and the monitoring of developments within sectors, and changes in government policy.

Assessing monitoring results and conducting evaluation

The systematic collection of data done via monitoring activities should feed into evaluations of MSP, to provide managers and stakeholders with indications of the extent of progress toward the achievement of the set objectives of the MSP plan (European Commission, EASME, 2018). In practice, evaluations can be used by managers to improve their own performance via adaptive management, as well as for reporting, thus promoting accountability (Ehler & Douvere, 2009). Over time, monitoring and evaluation activities help to build a picture of successes or challenges faced throughout the MSP process and these lessons can be used to inform and improve future MSP processes (UNEP-WCMC, 2019).

POSSIBLE OUTPUT

» Data evaluation plan.

Comprehensive evaluation usually involves the use of indicators to assess effectiveness, which will require sufficient data from monitoring processes so that progress towards the achievement of the MSP objectives can be tracked (UNEP-WCMC, 2019). Indicators alone do not provide a full picture of performance; evaluations are needed to explain why and how objectives have been achieved or not (European Commission, EASME, 2018).

As discussed previously, evaluations should be undertaken periodically during the lifetime of the MSP process to assesses achievement against predetermined criteria, usually a set of goals and objectives. If MSP initiatives are based on vague and general goals and objectives, it is very difficult to determine the extent to which they have been achieved; hence, meaningful evaluation heavily relies on unambiguous MSP objectives and clearly established and properly monitored indicators. Additionally, the data should be analysed in comparison to earlier data and to the established baseline (Ehler & Douvere, 2009).

Some criteria to take into account when designing the evaluation process include (Douvere & Ehler, 2011; Ehler, 2014):

- **Usefulness**: information coming from evaluations should be timely and relevant - addressing the questions asked and the achievement of objectives - as well as presented in understandable formats;
- **Impartiality**: evaluation findings should be free of political or other bias, presented with transparency and acknowledging all relevant information, including a description of both strengths and weaknesses;
- **Adequacy**: the information underpinning evaluations should meet the usual technical and scientific standards (e.g., correct sampling methods, accurate design of questionnaires and interviews, suitable statistical analysis, adequate support for any conclusions and recommendations drawn);
- **Equity**: the evaluation process should take stock of the social distribution of costs and benefits of planning, prioritizing fair and equitable approaches;
- **Cost effectiveness and proportionality**: evaluations should take into account the cost/benefit balance and only employ the resources needed to get the required information, which should be proportional to the overall cost of MSP processes. Applying expensive data collection methods for when less costly means are available or gathering data that will not be used should be avoided.
- **Transparency & stakeholder involvement**: the relevant stakeholders must be consulted and involved in the evaluation effort, to ensure they trust and take ownership of the findings and agree to incorporate the lessons learned in the future MSP process.
- **Feedback and dissemination**: evaluation findings should be shared and disseminated in a targeted, regular and timely fashion to the relevant audiences.

A first step in organizing the evaluation process is preparing a data evaluation plan, stating the object of evaluation and the options for data analysis, while acknowledging their respective strengths and weaknesses, as well as the type/format of the information resulting from the interpretation of the data. The data analysis process entails converting the collected raw data into usable information, fit for reporting and uptake by managers and decision makers. This should be a continuous process throughout the planning cycle to make sense of the collected data to inform ongoing and future planning initiatives. Such analysis may be reliant on specific tools and may involve assessing progress against stated objectives, looking for trends, cause-effect relationships or other associations between different types of data, anticipating problems, as well as forming conclusions and recommendations for policy-making (Ehler, 2014).

Evaluations can apply both qualitative and quantitative methods and using more than one method has often many benefits. Quantitative data analysis usually entails using statistics and expert judgement to organize

and review the data, which can be sorted and categorized so that patterns and commonalities appear, to be subsequently interpreted to look for meaning and significance in the data. Analysing qualitative data, resulting from, for example, interviews and focus group, require the use of qualitative techniques to organize and make sense of non-numerical data, by means of interpreting the data, finding possible causal links, making inferences, attaching meanings, and addressing situations that contradict the analysis. This is also a resource and time-consuming analysis, but it can reveal insights about behaviours or processes that are not obtainable from quantitative data (Ehler, 2014).

Reporting and communicating evaluation findings

POSSIBLE OUTPUTS

» Evaluation report.
» Communication plan.
» Dissemination actions.

As previously stated, it is important that M&E data is reported to all interested parties, which may also come as a requirement under the MSP legal framework (Ehler & Douvere, 2009). The findings and recommendations from evaluation should be regularly reported and presented in a way that is easily understandable to stakeholders and adequate for uptake by managers and decision-makers (Day, 2008). It can be argued that learning occurs if and when evaluation findings are effectively communicated and reported (Ehler, 2014).

When it comes to reporting results, it should be noted that, given that M&E addresses different phases of the MSP cycle, its results must therefore be reported in various different stages, instead of only one final evaluation report (IOC-UNESCO/European Commission, 2021). Information coming from the evaluation should be shared early on - and on a regular basis - with key informants, to allow for an early review of first drafts of the evaluation report (Ehler, 2014).

Evaluation reports serve the main purpose of informing the appropriate audiences about the findings and conclusions coming from the collection, analysis and interpretation of M&E data. Findings are the insights that are gathered during the evaluation, proceeding from setting out the quantitative and qualitative evidence gathered against all evaluation questions and showing both positive and negative aspects in a clear and objective way, including contradictory findings, uncertainties and gaps in information (European Commission, CINEA, 2021a).

The information produced can be put to various others uses, which include demonstrating accountability on political processes, helping to gain support among stakeholders, supporting organizational learning and enhancing understanding of the MSP process and plan. It can also serve as an early warning system, by including information about poor outcomes and possible explanations and corrective measures (Ehler, 2014).

The evaluation report should be organized around major themes of the evaluation and stay focused in answering the evaluation questions, bearing in mind its purpose to communicate with decision makers, managers and stakeholders. Thus, the report should be written in a way that is best suited to reach the intended audiences, make use of data visualization techniques and be worded in a simple and intelligible way (Ehler, 2014). An example of simplifying the visualization of results coming from monitoring is to assign a specific colour to the trend of each indicator (e.g., traffic light rating), namely by classifying its evolution as positive or desirable (e.g., green), as negative or undesirable (e.g., red) and as null if no change has been registered (e.g., orange), based on the baseline reference and according to the relationship they have with the achievement of the objective (Fernandez et al., 2019).

Other recommendations for the evaluation report include clearly stating the evaluation scope, purpose and methodology, including its limitations, supporting all conclusions and recommendations with evidence, as well as avoiding jargon and abbreviations and remitting background information or very technical information to annex (Ehler, 2014). Evaluation reports should always include an executive summary, clearly identifying the evaluation questions and methodology, summarizing key findings and stating main conclusions and recommendations. The report usually closes with a section on conclusions and recommendations, the first being based on an assessment and judgement of the findings and the last focusing on prompting specific and feasible actions to be taken by target audiences (Ehler, 2014).

In some cases, the data will lead to clear conclusions; more frequently, they will provide a complex and not fully clear picture. As findings might point in different directions and not be completely clear-cut, reaching conclusions may require weighing the validity and reliability of the data gathered. It might also happen that it is not possible to reach a definite conclusion on key issues and thus the conclusions should identify areas where the data available – and data gaps – call for the precautionary principle. Draft findings, conclusions and recommendations can be discussed – and potentially co-developed – with key stakeholders and should

provide a balanced starting point for the new cycle, which will start with the update and revision of the plan (see next section) (European Commission, CINEA, 2021a).

When it comes to communicating results, generally speaking, evaluation findings should be communicated as widely as possible and made available to an extensive range of stakeholders, both throughout and after the evaluation process (TPEA, 2014). Some guidelines indicate that evaluation results should be communicated at least every 3 to 6 years, depending on the specific legal requirements; however, some cases may require shorter or longer time periods to identify effects and trends (TPEA, 2014). On the other hand, the more collaborative and participatory the approach to evaluation, the more frequent and inclusive the communication should be (Ehler, 2014).

Developing a communication plan may be the best way to appropriately setting the stage for a good communication strategy, which is essential for disseminating and sharing information with relevant audiences (Ehler & Douvere, 2009; Ehler, 2014). The communication plan establishes a set of actions to disseminate the results of an evaluation and should identify the organizations responsible for communicating, as well as the communication objectives, the target audiences, the methods and channels for communicating results and the available resources (Ehler, 2014). Responsibility for ongoing communication of evaluation results usually lies with the MSP authority, with inputs from those with shared competences and responsibilities in the planning area, including stakeholders (TPEA, 2014).

Communication of evaluation findings is more effective when limited to a few key messages (e.g., 3 to 5), concise and tailored to a language level to suit the intended audiences. Key messages may vary depending on the target audience and should be consistently disseminated (Ehler, 2014; IOC-UNESCO/European Commission, 2021). Information should be as straightforward as possible, but the style should be flexible and use different types of language - technical and non-technical - as deemed appropriate, considering that, for example, formal and operational messages may differ in style and focus from the messages communicated to stakeholders (TPEA, 2014).

Good practices for communication evaluation findings include making timely and frequent contact and applying a variety of reporting and communication formats, making use of multimedia (e.g., graphics, tables, illustrations, infographics, videos). Other important aspect to communicating results is making use of multiple dissemination channels to ensure significant outreach. Converting evaluation reports to summary papers delivered directly to decision-makers and organizing stakeholder events are some examples of ways to effectively reach key actors (Ehler, 2014; IOC-UNESCO/European Commission, 2021).

USING M&E RESULTS TOWARDS ADAPTIVE MANAGEMENT

The review process considers data and results collected via the monitoring and evaluation activities and proposes the necessary adaptations to the MSP plan and process. Indeed, results from M&E help to review, reconsider, adapt and improve the MSP process through a learning process. This is because, as stated previously, integrated and adaptive MSP is based on a circular - rather than linear - process (Ehler, 2014). Modifications to the MSP process should not be made in an improvised way; instead, they should be based on M&E results, which allow responsible entities to learn about the effects of planning decisions, and further adjust the MSP processes as part of the next round of planning (Ehler & Douvere, 2009).

Indeed, adaptive management focuses on systematic learning through experimentation, monitoring, and evaluation, and subsequent adaptation of planning and policy implementation options based on obtained results, often being used in tandem with ecosystem management. It recognizes the fact that uncertainty should not be the cause of delay or indecision in the implementation of policy decisions in MSP (Frazão Santos et

al., 2014). It acknowledges that MSP takes place in a dynamic world, where the context of MSP is in constant flux.

Nonetheless, practical examples of MSP embracing change and dynamics are rare and the inclusion of environmental variability, system and social-ecological dynamics, long-term changes and cause effect relations within the decision-making process in MSP remain challenging. Long-term temporal scales and climate change effects are only seldom considered and incorporated in methods and tools to support MSP. Efforts to incorporate change in MSP are mainly limited to environmental dynamics, while social and governance changes are rarely represented (Gissi et al., 2019).

Planning cycles are typically several years long, during which changes will inevitably take place in the political and governance landscape, the society, economy and technology, and also in the environment and as result of or new knowledge and data (IOC-UNESCO/European Commission, 2021). On the other hand, if MSP objectives are not being achieved on time, at a reasonable and fair cost-benefit ratio, then they should be modified (Ehler, 2014). For these reasons, an adaptive approach underpinning the revision of planning objectives and decisions from time to time may be the best course to ensure both MSP suitability and sustainability (Frazão Santos et al., 2014).

GUIDING QUESTIONS

The review step must address the following questions, which responses may be used to re-focus planning in the future (Ehler & Douvere, 2009):

» What has been accomplished through the MSP process and learned from its successes and failures?

» How has the context (e.g., environment, governance, technology, economy) changed since planning started?

In spite of the recognized importance of adaptive management to MSP, the main challenge arises from its actual implementation, due to the lack of well-established frameworks and practical examples of applying adaptive management, adding to the dominance of reactive - instead of proactive - management approaches (Frazão Santos et al., 2014). Findings from research on the use of adaptive management have been mixed (Retzlaff & LeBleu, 2018). Collie et al. (2013) found that most plans contain adaptive management as a planning goal, however, few operationalized the concept in practice. Mills et al. (2015) report that MSP plans are more likely to be adaptive if they include explicit provisions to support adaptation built into the plans, such as the definition of triggers to initiate review cycles. Fostering stakeholders' understanding of why plans must be adaptive and building resources, capacity, and institutional settings for ongoing adaptation of plans are also important requirements (Agardy, 2010; Mills et al., 2015).

The stages of review and revision of the plan aim to avoid the plan becoming ineffective or irrelevant and improve the processes and practices of plan design, based on lessons learned from previous plan implementation. In the review period, many of the stages of the MSP cycle may need to be revisited in order to ensure the relevance of the updated plan. This includes updates on the diagnosis of existing and future conditions, improving databases and analytical methods, revising the vision and MSP objectives, reframing the scope of pre-planning and ultimately updating the maritime spatial plan (IOC-UNESCO/European Commission, 2021).

Ideally, the process for adapting plans should be set out in the plan itself, which may outline a process for review, indicating the frequency of review, responsible entity and if there are thresholds, which when exceeded will automatically require a review (UNEP-WCMC, 2019). The reasons for regular adaptation of MSP can range from legislation requirements at specific intervals to new policy priorities. For instance, the MSPD indicates that Member States shall review maritime spatial plans at least every 10 years, while other guidelines recommend periodic review every 5 to 7 years in order to ensure adaption to unforeseen environmental effects (Gilbert et al., 2015). Intermediate reviews within planning cycles may also take place to incorporate new information or adapt to changing circumstances without having to review or revise the whole plan (Gilliland & Laffoley, 2008).

FOOD FOR THOUGHTS

According to Vrees (2019), the Netherlands use the simple and straightforward model of "Plan, Do, Check, Act". After the planning process ("Plan"), the implementation phase starts ("Do"). Regular M&E is conducted to assess if the plan evolves as expected ("Check") and, if not, the plan is adapted ("Act"). If urgencies require, this adaptation can take place in between two full planning cycles. Monitoring data can also be acquired through the granting of a permit with the obligation to monitor the impacts. For instance, as the first wind farms were built and monitoring started, it was learned that some restrictions applied because of the precautionary principle could be lifted.

As a result of the review process - considering M&E of initial results, as well as changes in the context of MSP - there should be clear and concrete proposals for revising MSP objectives, outcomes and strategies for the next round of planning, and for reallocating resources from what is not working to what is. This stage should also focus on the identification of critical knowledge gaps and short- and long-run data collection and research needs that could reduce uncertainties in decision making for the next planning cycle (Ehler & Douvere, 2009; Ehler, 2014).

An important aspect to consider is to what extent one changes the plan since the plan also needs to have continuity to stimulate investment for the development of certain maritime sectors and activities. Another important consideration is how and when the M&E results regarding unforeseen adverse effects should translate into changes to the planning process and how remedial action could potentially be conducted (Pinkau & Schiele, 2021).

The recommended changes should be communicated to decision makers, planners and stakeholders and meetings with the M&E team should take place in order to discuss the implications for changes in the next planning cycle and to allow for novel interpretations of the evaluation results to come to light (Ehler, 2014).

03. PROVIDING CONTEXT FOR MSP IN THE OUTERMOST REGIONS

MSP FRAMEWORK AND GENERAL APPROACH TO M&E

Proposed methodological approach

The present guide is expected to take into account the different processes and stages of MSP in each of the four Outermost Regions. Thus, this chapter is dedicated to providing context for MSP in the regions involved in the MSP-OR project, covering aspects related to the specific MSP framework and setting, the MSP processes, current status and future planning decisions, including a general approach to M&E.

The methodology underpinning this chapter consisted on developing a common layout for synthesizing information about each OR, namely by adopting a fiche template with a standardized set of topics on MSP (Annex II). This approach aims to facilitate the process of data filling by the partners, to improve the consistency of data gathering and to simplify the comparison between MSP processes and plans, in a more practical and synthetical way.

Afterwards it was developed an exercise to compare the information on the fiches of each OR in order to enable spotting shared approaches and main differences between the ORs on topics related to governance, legal and institutional frameworks, intrinsic aspects of the MSP process and plan, and monitoring and evaluation of MSP. To enable contrasting data on the different MSP frameworks, there are several topics for which specific checkboxes and multi-option answers were pre-established.

The application of fiches as a tool to synthesise and compare information of different MSP processes was mainly based on the methodology used in the European MSP Platform (European MSP Platform, 2022a) and the MSPglobal initiative (MSPglobal2030, 2022c) concerning the development of country profiles and data comparison documents, which is also applied by the Joint HELCOM-VASAB Maritime Spatial Planning Working Group (VASAB, 2022) and in projects such as MSPMED (Gutiérrez-Ruiz et al., 2019).

Besides these references, the contents of the fiche template were also based on the evaluation criteria proposed in several M&E frameworks (Day, 2008; Carneiro, 2013; Ehler, 2014; Varjopuro, 2019; WWF-European Policy Office, 2021; Zuercher et al., 2022), including those developed by other EU projects (SIMCelt, SUPREME; TPEA, Capacity4MSP). The requirements stated in the MSPD and the report of the European Commission on the status of implementation of the Directive were also used as guidelines for the contents of the fiche template.

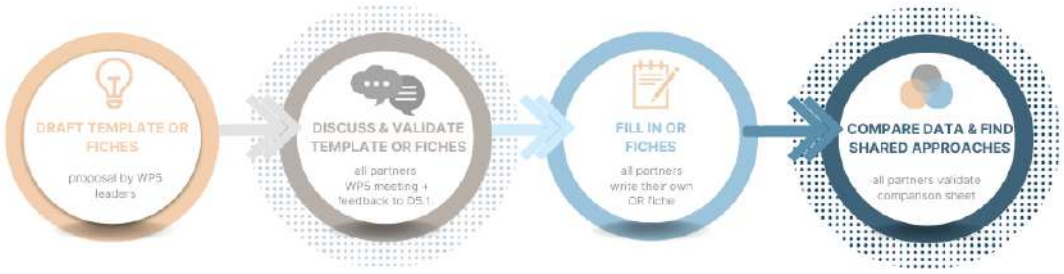


Figure 6. Methodological steps in the development of MSP data fiches.

Figure 6 shows the methodological steps proposed for developing the MSP data fiches and comparing the data between the ORs. The draft template for the fiches was first proposed by the WP5 leaders and subsequently presented and shared with the remaining consortium partners on the WP5 Accompaniment Meeting held in November 2022. An online whiteboard visual collaboration tool (Mural) was used during the meeting – and throughout the subsequent week – to gather the partner's first impressions on the template.

After that step, feedback was received as the first version of D5.1. by the consortium in December 2022, resulting in a concerted and agreed-upon model for the fiches. MSP-OR partners were asked to fill in the information about their respective region and have delivered a first version of their OR fiche by mid-May 2024. Inputs coming from interactive discussions at the Outermost Regions' Ocean Governance Hub have also contributed to the further development of this chapter. Finally, data from the four OR was compiled (Tables 7 to 10) and analysed via a comparison sheet of the MSP process and plans (Table 11), in order to detect shared features and highlight the main differences between them, synthesised in Box 14.

OR fiches

Table 7. MSP data fiche for the Azores Outermost Region.

OUTERMOST REGION		Azores
GOVERNANCE		
Member State		**Portugal**
MSP competent authorities	National level	• **DGRM** - The **Directorate-General for Natural Resources, Safety and Maritime Services** is responsible for the coordination of the Portuguese MSP instruments, which encompass the Situation Plan and Allocation Plans, and for developing the components of the Situation Plan corresponding to the Mainland Subdivision and to the Extended Continental Shelf Subdivision. It is also the competent authority for licensing the private use of the maritime space in the above-mentioned subdivisions; • **DGPM** - The **Directorate-General for Maritime Policy** is the competent authority regarding the implementation of the EU Maritime Spatial Planning Directive (MSPD), including its monitoring, in order to promote the permanent assessment of the different planning instruments for the national maritime space.
	Regional level	• **SRMP-DRPM** - The **Regional Directorate for Maritime Policies**, of the Regional Secretariat for the Sea and Fisheries, of the Regional Government of the Azores, is responsible for developing the Situation Plan in the maritime space adjacent to the Azores archipelago, between the baseline and the continental shelf until 200 nautical miles, corresponding to the Azores Subdivision. It is also the competent authority for licensing the private use of the maritime space in the above-mentioned subdivision.
Institutional capacity and cooperation		× **Yes** ☐ No × **MSP Consultative Committee** × **Working Groups** × **Other** MSP Consultative Committee: • Order No. 11494/2015, of October 14 (Despacho n.º 11494/2015, de 14 de outubro), began the process of preparation and development of the Situation Plan, for the Mainland, Madeira and Extended Continental Shelf Subdivisions. Later on, Order No. 3392/2023, of March 15 (Despacho n.º 3392/2023, de 15 de março), was published, concerning the Situation Plan for the Azores Subdivision, establishing the corresponding deadline, subjection to Strategic Environmental Assessment, and competent authorities responsible for preparing and supporting the process via a Consultative Committee, including its composition and operating rules (CC-Açores). CIAMA: • The preparation of the Situation Plan for the Azores Subdivision was accompanied by the Interdepartmental Commission for Sea Affairs of the Azores (CIAMA), a consultative body that evaluates the implementation of multisectoral macropolicy instruments for the sea, according to the Government Council Resolution no. 47/2017, of May 26 (Resolução do Conselho do Governo n.º 47/2017, de 26 de maio). The creation of seven thematic Working Groups (WG), their respective composition and mode of operation, was decided at CIAMA's 1st Plenary Meeting. Working Groups: • Working groups (WG) were created to monitor the elaboration of specific sectoral aspects of Situation Plan for the Azores Subdivision, which were coordinated by the competent authority in cooperation with a rapporteur by each WG. These working groups aimed at bringing together relevant public and private entities to make decisions about sectoral activities and uses. In the Azores, seven WG were formed: GT1 - Living marine resources; GT2 - Non-living marine resources; GT3 - Environment and conservation; GT4 - Research, technology, and knowledge transfer; GT5 - Tourism, recreation, sports, and culture; GT6 - Ports, navigation, and transport; GT7 - Safety, defence, surveillance, and civil protection.
LEGAL FRAMEWORK		
National/Regional MSP policy and legal framework		European: • **Directive 2014/89/EU** of the European Parliament and of the Council of 23 July 2014 - Establishes a framework for MSP, to promote the sustainable growth of marine economies, the sustainable development of marine areas, and the sustainable use of resources. National: • **Law no. 17/2014, of April 10** (Lei n.º 17/2014, de 10 de abril) - In 2014, Portugal defined the basis for the spatial planning and management policy of the national maritime space, also known as LBOGEM, which establishes the principles, goals and instruments of national MSP, from the baselines to the outer limit of the continental shelf beyond 200 nautical miles. • **Decree-Law No. 38/2015, of March 12** (Decreto-Lei n º 38/2015, de 12 de março) - A year later, Decree-Law no. 38/2015 developed the LBOGEM, namely the terms of the MSP instruments – the Situation Plan (PSOEM) and the Allocation Plans – and, also, the permanent monitoring and respective technical evaluation, promoting the development of the economic and financial regime associated with the private use of national maritime space. There are three ordinances related with Decree-Law no 38/2015, namely: o **Ordinance no. 125/2018, of May 8** (Portaria n.º 125/2018, de 8 de maio), which establishes the regime and value of the deposit, o **Ordinance no. 128/2018, of May 9** (Portaria n.º 128/2018, de 9 de maio), which regulates the calculation method for the tax, o **Ordinance no. 239/2018, of August 29** (Portaria n.º 239/2018, de 29 de agosto), which defines the conditions for civil liability insurance, all associated with the permits for private use of the maritime space (TUPEM). • **Order no. 11494/2015, of October 14** (Despacho n.º 11494/2015, de 14 de março) and **Order no. 3392/2023, of March15** (Despacho n.º 3392/2023, de 15 de março) - Establish the competent entities responsible for the preparation of the plan in the respective zones of the national maritime space - Mainland, Madeira and Extended Continental Shelf subdivisions, and Azores subdivision, respectively. It also established the corresponding deadline, and the subjection to strategic environmental assessment, as well as the composition and operational rules of the Consultative Committee.

<table>
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- **Resolution of the Council of Ministers no. 203-A/2019, of December 30** (Resolução do Conselho de Ministros n.º 203-A/2019, de 30 de dezembro) - Approves the Situation Plan for the Mainland, Madeira, and Extended Continental Shelf subdivisions.

Regional:

- **Resolution of the Government Council no. 47/2017, of May 26** (Resolução do Conselho do Governo n.º 47/2017, de 26 de maio) - Creates the Interdepartmental Commission for Maritime Affairs of the Azores (CIAMA), a consultative structure that assesses and follows the MSP process and the development and execution of its instruments.
- **Resolution of the Government Council no. 77-A/2024, of July 5** (Resolução do Conselho do Governo n.º 77-A/2024, de 5 de julho) - Approves the final version of the Situation Plan for the Azores Subdivision for the Regional Government to submit to the Central Government.
</td></tr>
<tr><td colspan="3">Integration with other National/Regional policies</td><td>
× Applicable ☐ Non-applicable
National:
National Ocean Strategy (ENM) 2013-2020 and 2021-2030;
National Strategy for the Conservation of Nature and Biodiversity (ENCNB) 2030;
National Strategy for Climate Change Adaptation (ENAAC) 2020/2025 - National Program for Climate Change (PNAC) 2020/2030;
National Strategy for Integrated Coastal Zone Management (ENGIZC);
National Territorial Planning Policy Program (PNPOT);
National Water Plan (PNA);
Industrial Strategy for Ocean Renewable Energies (EI-ERO) - Action Plan for Ocean Renewable Energies;
National Strategy for Geological Resources - Mineral Resources;
National Action Plan for Renewable Energy (PNAER) 2013-2020/2030;
National Action Plan for Energy Efficiency (PNAEE) 2017-2020;
National Energy and Climate Plan (PNEC) 2021-2030;
Tourism Strategy (ET27) 2027;
Strategic Concept for National Defence;
Strategic Plan for Portuguese Aquaculture (PEAP) 2014-2020 and 2021-2030;
Action Plan for the Portuguese Network of Biosphere Reserves 2018-2025;
Sectoral Plan for the Natura 2000 Network (PSRN2000);
Strategic Plan for Transport and Infrastructures 2014-2020.
Regional:
• Strategic instruments:
Regional Strategy for Climate Change (ERAC);
Action Plan for Scientific and Technological Culture (PACCTO Açores);
Internationalization Plan for Science and Technology of the Azores;
Research and Innovation Strategy for Smart Specialization for the Autonomous Region of the Azores (RIS3 Açores) 2014-2020 and 2022-2027;
Strategic and Marketing Plan for Tourism in the Azores 2030 (PEMTA);
Transport Plan for the Azores (PTA) for the period 2021-2030;
Regional Emergency Plan for Civil Protection of the Azores (PREPCA);
Marine Strategy for the Azores Subdivision;
Action Plan 2014-2020 for the Outermost Region of the Azores;
Action Plan 2019-2030: Sustainability of the Tourist Destination Azores;
Better Fishing, More Income: Strategic Measures for the Fishing Sector of the Azores 2015-2020;
Action Plan for the Restructuring of the Fishing Sector in the Azores;
• Territorial plans and programs covering the maritime area:
Regional Plan for Land Use of the Azores (PROTA);
Sectoral Plan for the Natura 2000 Network of the Autonomous Region of the Azores (PSRN2000);
Regional Water Program of the Autonomous Region of the Azores (PRA);
Management Plan for the Hydrographic Region of the Azores (PGRH-Açores);
Flood Risk Management Plan of the Autonomous Region of the Azores (PGRIA);
Drought and Water Scarcity Management Plan of the Azores (PSE-Açores);
Coastal Zone Management Plans (POOC);
Spatial Plan of Tourism of the Autonomous Region of the Azores (POTRAA);
Regional Program for Climate Change in the Azores (PRAC);
Strategic Waste Prevention and Management Program of the Azores 20+ (PEPGRA 20+);
Sectoral Land Use Plan for Extractive Activities of the Autonomous Region of the Azores (PAE);
Municipality's Director Plans.
</td></tr>
<tr><td rowspan="3">Coherence with EU MSPD</td><td colspan="2">Applicability</td><td>× Legally binding in the OR ☐ Not legally binding in the OR</td></tr>
<tr><td colspan="2">Transposition</td><td>12th March of 2015 (transposition by Decree-Law No. 38/2015, of March 12th). Law No. 17/2014, of April 10th is previous to the publication of EU MSPD)</td></tr>
<tr><td>Involvement in EU support initiatives</td><td>Participation in Member States expert group on maritime spatial planning</td><td>× Applicable ☐ Non-applicable
Representation is managed through the national authorities, which consult regional entities whenever specific information is required.</td></tr>
</table>

		Participation in Technical Expert Group on Data for MSP	× **Applicable** ☐ Non-applicable Representation is managed through the national authorities, which consult regional entities whenever specific information is required.
		Used support of the Assistance mechanism "European MSP Platform"	× **Applicable** ☐ Non-applicable Representation is managed through the national authorities, which consult regional entities whenever specific information is required. Portugal's country fiche is included in the European MSP Platform, mentioning OR Azores.
		Participation in EU MSP related funded projects	× **Applicable** ☐ Non-applicable The regional competent authority in the Azores has been participating in several EU MSP-related funded projects. For example, as beneficiary partners: • **MSP-OR - Advancing Maritime Spatial Planning in Outermost Regions (2021-2024):** The project aims to support competent authorities in the implementation of the EU MSPD in the Outermost Regions of the Azores, Madeira, Canary Islands and French Guiana, in advancing their own MSP processes, contributing to promote ocean governance through MSP and applying an ecosystem-based approach in MSP. Website at: https://msp-or.eu/. • **PLASMAR - Setting the basis for Sustainable Maritime Spatial Planning in Macaronesia (2017-2020):** The project aimed to provide a methodological guide for MSP and to facilitate the implementation of EU MSPD in the Macaronesian Region. Website at: https://www.plasmar2017.eu/. • **PLASMAR+ - Progress of Sustainable Planning of Marine Areas in Macaronesia (2019-2022):** The project originated from the results achieved in the previous PLASMAR project and aimed to promote the advancement of the MSP process by developing new tools based on scientific and technological knowledge within the framework of blue growth. Website at: https://www.plasmar.eu/. • **MarSP - Macaronesian Maritime Spatial Planning (2018-2019):** The project aimed to develop an MSP scheme for the three Outermost Regions of Macaronesia (Azores, Madeira and Canary Islands), in line with the EU MSPD, following an ecosystem-based approach and including mechanisms for cross-border cooperation. Website at: https://www.marsp.eu/. • **SMARTBLUE - Network of regional maritime clusters for the smart specialization of the blue economy (2014-2020):** The project aimed to increase maritime companies' competitiveness in the Macaronesia cooperation area, by creating a network of supra-regional clusters and maritime agents that promote innovation and internationalization processes and taking advantage of the synergies, capabilities, and joint resources. Website at: https://www.smartblueproject.com/. • **SMARTBLUE_F - Consolidating the Central Atlantic Alliance for SME Competitiveness in the blue economy (2019-2023):** The project followed up on the previous SMARTBLUE and aimed to increase the competitiveness of maritime companies by consolidating the transnational alliance of innovation support agents as a tool for promoting an innovative culture and internationalisation through the use of synergies, capacities and shared resources in the Macaronesia cooperation area. Website at: https://www.smartblueproject.com/. For example, as members of CoP or similar: • **MSP4BIO - Improved Science-Based Maritime Spatial Planning To Safeguard And Restore Biodiversity In A Coherent European MPA Network (2022-2025):** The project supports the implementation of the EU (European Union) Biodiversity Strategy (EUBS) 2030, the Convention on Biological Diversity (CBD) post-2020 framework, and the EU Green Deal. The MSP4Bio puts biodiversity considerations into policy decision processes to develop an integrated socio-ecological management of the marine ecosystems, looking at the compatibility between maritime/coastal uses and protection measures. Website at: https://msp4bio.eu/. • **MarinePlan - Improved transdisciplinary science for effective ecosystem-based maritime spatial planning and conservation in European Seas (2022-2025):** The project aims to develop the science base for ecosystem-based MSP and to provide guidance for its practical implementation in European Seas to support the European Green Deal and the Biodiversity Strategy. The project contributes to the EU demand for guidance on integrated planning to safeguard biodiversity loss and ecosystem functioning by developing tools and best practice standards. Website at: https://www.marineplan.eu/. • **eMSP NBSR - Emerging ecosystem-based Maritime Spatial Planning topics in North and Baltic Seas Region (2021-2024):** The aim of the project is to enable maritime spatial planners of managing authorities and policymakers from the North and Baltic Sea Regions to reflect on current MSP practices, to learn effectively from each other, and to collectively identify problems and solutions. This will provide new knowledge and information to national governments and the European Commission on implementation, development and research actions, and managerial approaches that can or should be taken to deal with future challenges and opportunities afforded by the sea in a coherent way and with involvement of industry, academia and non-governmental organisations. Website at: https://www.emspproject.eu/. • **GPS Azores - Geographical and Political Scenarios in MSP for the Azores and North Atlantic (2016-2019):** The project aimed to provide a detailed diagnosis of the maritime governance and political framework for the Azores, identify uses, conflicts and possible development scenarios and support the implementation of MSP in the area. Website at https://www.gpsazores.com/. • **MUSES - Multi-Use in European Seas (2016-2018):** The project examined the real and perceived challenges of developing multi-uses of ocean space from a number of perspectives and geographic scales. MUSES sought to provide a comprehensive understanding of environmental, spatial, economic and societal benefits of co-location of offshore and near-shore activities, highlighting inappropriate regulatory, operational, environmental, health and safety, societal and legal aspects that act as barriers to multi-use. Website at https://muses-project.com/. • **ATLAS - A trans-Atlantic assessment and deep-water ecosystem based spatial management plan for Europe (2016-2020):** The project provided essential new knowledge of deep ocean ecosystems in the North Atlantic. This ambitious project explored the world of deep-sea habitats (200-2000 m) where the greatest gaps in our understanding lie and certain populations and ecosystems are under pressure, with the aim to scenario-test and develop science-led, cost-effective adaptive management strategies that stimulate sustainable blue economy. Website at https://www.eu-atlas.org/.
		Participation in MSP dedicated events	× **Applicable** ☐ Non-applicable Representation is mainly managed through the national authorities, which consult regional entities whenever specific information is required. National and regional competent authorities have attended MSP dedicated events, such as the International Conference on Marine/Maritime Spatial Planning.
		Others	☐ Applicable × **Non-applicable**
Links to other EU and international policies,	European Green Deal & related actions[11],		4
	Integrated Maritime Policy		5
	Integrated Coastal Zone Management		5

[11] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

agreements, strategies and legislation	Common Fisheries Policy	4
	Marine Strategy Framework Directive	5
	Water Framework Directive	5
	Birds and Habitats Directives	5
	Bathing Waters Directive	4
	Renewable Energy Directive	3
	Environmental Impact Assessment Directive	4
	Strategic Environmental Assessment Directive	5
	INSPIRE Directive	4
	EU Climate Law	3
	EU sectoral policies (e.g., Trans-European transport network)	3
	Sea Basin Strategies (e.g., Atlantic Action plan)	3
	Strategy for the EU Outermost Regions	4
	Other	-
Links to international policies, agreements, strategies and legislation	United Nations Convention on the Law of the Sea	5
	Convention on Biological Diversity	5
	UN 2030 Agenda for Sustainable Development	5
	Regional Seas Conventions (e.g., OSPAR Convention, Barcelona Convention)	5
	MARPOL	4
	SAR Convention	3
	SOLAS Convention	4
	London Convention	3
	Bonn Convention	4
	Bern Convention	4
	Ramsar Convention	4
	CITES	4
	ESPOO Convention	3
	UNESCO Convention on the Protection of the Underwater Cultural Heritage	4
	Other	-
ADMINISTRATIVE FRAMEWORK		
Planning level		× **National** × **Regional** ☐ Local MSP is a process conducted at **national level,** and its main instrument, the Situation Plan, is a unique document that encompasses the entire national maritime space. The coordination of the MSP process at national level falls under the competent authority, General Directorate for Natural Resources, Safety and Maritime Services (DGRM), in shared responsibility with the Autonomous Region of the Azores and Madeira. The Situation Plan is structured according to the main four maritime subdivisions of Mainland Portugal, the Azores, Madeira and the Extended Continental Shelf. The development and implementation of the Situation Plan for the **Azores subdivision**, relating to the maritime space adjacent to the Azores archipelago, was carried out by the regional competent entity, the Regional Directorate for Maritime Policies (DRPM). The component of the Situation Plan concerning the Azores subdivision was further included in the national plan, to be published as a Resolution of the Council of Ministers.
Planning area (maritime regions)	Internal Maritime Waters	× **Applicable** ☐ Non-applicable
	Territorial Sea	× **Applicable** ☐ Non-applicable
	Exclusive Economic Zone	× **Applicable** ☐ Non-applicable
	Continental Shelf (until 200 nm)	× **Applicable** ☐ Non-applicable
	Continental Shelf (beyond200 nm)	☐ Applicable × **Non-applicable** The development and implementation of the Situation Plan for the Extended Continental Shelf subdivision, which encompasses the continental shelf beyond 200 nm, is carried out at national level, by the national competent entity.
Marine subdivision(s) (if applicable)		× **Yes** ☐ No **Azores subdivision.**
MSP instrument(s) (if applicable)		Following the national legislation, the Portuguese MSP is carried out through the following instruments: • The **Situation Plan (PSOEM)**, which identifies the temporal and spatial distribution of current and potential uses and activities, as well as the natural and cultural values relevant to environmental sustainability; • The **Allocation Plans**, which assign areas or volumes of the national maritime space to private uses and activities not considered in the Situation Plan.
Current status		☐ MSP Plan not approved × **MSP Plan approved and in force** At a national level, the MSP Plan is approved since December of 2019, concerning the Mainland, Madeira and Extended Continental Shelf subdivisions by **Resolution of the Council of Ministers no. 203-A/2019, of December 30** (Resolução do Conselho de Ministros n.º 203-A/2019, de 30 de dezembro).

		The **Resolution of the Government Council no. 77-A/2024, of July 5** (Resolução do Conselho do Governo n.º 77-A/2024, de 5 de julho) has approved the final version of the Situation Plan for the Azores Subdivision for the Regional Government to submit to the Central Government, now currently awaiting publication under Resolution of the Council of Ministers, considering that the Situation Plan for the Azores Subdivision was approved by the Council of Ministers on July 26th, 2024.
MSP process phases	Pre-planning	The pre-planning stage took place until 2019, based on the development of the national Situation Plan, and was supported by the MarSP project and entailed organizing the MSP process at regional level, including defining the vision and regional objectives, drawing scenarios for MSP, addressing the related legal framework, planning stakeholder participation, analysing existing and future conditions, diagnosing interactions between uses, the environment and land, as well as filling knowledge gaps.
	Planning (analysis for planning or plan development or plan completion)	The planning stage took place until 2021, with the development of the Situation Plan for the Azores Subdivision (Vol. I and II (Addenda), Vol. III-A and IV-A) throughout 2020 and its submission to the Working Groups to gather contributions from key stakeholders, resulting in the revision and improvement of the plan and its cartography in 2021. The Strategic Environmental Assessment (SEA) process took place simultaneously, resulting in alterations to the Environmental Report (Vol. V) to include inputs from previous consultation to entities with specific environmental responsibilities.
	Approval	The approval stage of the MSP process in the Azores followed the legal procedure for the approval of the Situation Plan, consisting of the submission to the Consultative Committee, which gave a final favourable opinion in July 2023, followed by a period of Public Consultation, which ran from January 5th to March 28th 2024. Following the analysis and integration of the contributions, the final version of the Situation Plan for the Azores Subdivision (for the Regional Government to submit to the Central Government) was approved by Resolution of the Government Council no. 77-A/2024, of July 5, now currently awaiting publication under Resolution of the Council of Ministers, considering that the Situation Plan for the Azores Subdivision was approved by the Council of Ministers on July 26th, 2024.
	Implementation	**x** The implementation stage is the current phase of the MSP process in the Azores, considering that the Situation Plan for the Azores Subdivision, now approved, is implemented in the region by the competent authority via the attribution of permits for private use of the maritime space (TUPEM) concerning uses and activities predicted in the plan. For any uses and activities not predicted in the Situation Plan, it will be necessary to develop and approve Allocation Plans. PSOEM also contributes for joint efforts between competent authorities to participate in applications to European projects to reinforce MSP process in the Macaronesia.
	Revision	Pursuant to Decree-Law No. 38/2015, the plan may be subject to revision only five years after entry into force, except in case of changes to environmental conditions or in compliance with EU rules. The revision implies a general reappraisal of the plan's components, which may take place as a response to the evolution of economic, social, cultural and environmental conditions or in case of suspension of the plan. According to Directive 2014/89/EU, MSP plans shall be reviewed by Member States as decided by them but at least every ten years.
Licensing/permitting framework (if applicable)		× **Yes** ☐ No Licencing and authorization processes for the private use of marine areas included in the Situation Plan are analysed under Decree-Law No. 38/2015, of March 12. According to Decree-Law No. 38/2015, if an activity or use is predicted in the Situation plan, then the attribution of rights for the private use of the national maritime space is done by issuing a permit for private use of the maritime space (TUPEM). For any activity or use not predicted in the Situation Plan, an Allocation Plan must be approved first and only afterwards can the corresponding TUPEM be attributed. Following the Decree-Law, three ordinances were published: • Ordinance no. 125/2018, of May 8, which defines the regime and the amount of the deposit allocated to ensure the maintenance of physical, chemical and biological aspects of the marine environment, when finished the right of private use; • Ordinance No. 128/2018, of May 9, which defines the base value of the fee components for the private use of national maritime space (TUEM) and its calculation formula; • Ordinance No. 239/2018, of August 29, which defines the minimum mandatory conditions that must be considered when contracting civil liability insurance by holders of titles for the private use of national maritime space.
Supporting projects and initiatives (EU funded or not)		× **Yes** ☐ No Participation in projects MSP-OR (https://msp-or.eu/), MarSP (https://www.marsp.eu/), PLASMAR (https://www.plasmar2017.eu/) and PLASMAR+ (https://www.plasmar.eu/): Between 2017 and 2024, competent authorities of Azores Autonomous Region participated in four MSP related projects: MarSP (2018-2019), PLASMAR (2017-2020), PLASMAR+ (2019-2023) and MSP-OR (2021-2024). The main goal of MarSP was to assist the competent authorities of the three EU Macaronesian Archipelagos – Azores, Madeira and Canary Islands – on promoting the development of operative mechanisms of MSP. PLASMAR developed robust scientific methodologies in support of MSP and Blue Growth, considering the biogeographic characteristics of the Macaronesian Region and searching for a balance between the diverse maritime sectors and the conservation of the natural marine heritage. PLASMAR+ was based on the results of PLASMAR and contributed to the advancement of the MSP process in Macaronesia, developing new tools based on scientific and technological knowledge with a view to the implementation period and supporting the sustainability of blue growth. MSP-OR intends to support competent authorities (PT/SP) on advancing the implementation of their MSP, filling regional gaps and provide a platform that allows maritime spatial planners to jointly develop approaches for MSP in outmost regions.
Resources and funding		× **Yes** ☐ No Resources and funding provided by the regional fund/budget, as well as EU funded projects.
MSP PLAN		
Type of plan		× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non- statutory ☐ Strategic or guiding plan ☐ Steering plan with defined rules and regulations × **Other** The plan is statutory, as it was required by the national MSP legislation, being published as a legal instrument (Resolution of the Council of Ministers). The provisions on the plan are legally binding for public entities and also, directly and immediately, for private individuals, according to art. 4 of Decree-Law No. 38/2015. The plan does not predict a specific regulation; it considers the existing rules and regulations for occupying the maritime space - originating in administrative easements and public utility restrictions, regimes for safeguarding natural and cultural resources, maritime security rules, specific licensing regimes for each use/activity – and the provisions contained in TUPEM, complemented by good practices and use compatibility guidelines defined in the Situation Plan.
Type of plan content		☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other In order to guarantee the coherence and uniformity of the criteria applied to the planning of the national maritime space, a common methodology and a joint vision were adopted for the Situation Plan and a single SEA procedure. Given that the Situation Plan is a single instrument, applicable to the entire national maritime space, it is made up of six volumes, where the respective framework, structure and dynamics (Volume I), as well as the methodology for spatialization of easements, uses and activities (Volume II), were prepared jointly by the competent authorities and are common to all subdivisions, whereas the *de facto* spatialization of easements, uses and activities for each subdivision (Volume III is made up of Volume III-C/PCE, Volume III-M, and Volume III-A, concerning the Mainland/Extended

	Continental Shelf, Madeira and Azores, respectively) and characterization report (Volume IV III is made up of Volume IV-C, Volume IV-M, Volume IV-A, and Volume IV-PCE concerning the Mainland, Madeira, Azores and Extended Continental Shelf, respectively)) is the responsibility of each of the competent authorities. The remaining documents (Volumes V and VI) relate to the SEA process and are also applicable to all subdivisions. Hence, Volumes I and II are broad core documents that integrate the vision, objectives, common criteria for zoning, as well as evaluation and monitoring aspects of the plan, applying to all marine subdivisions. Volumes III address the spatialization of a large range of sectors and conservation issues, which are further characterized in Volumes IV. PSOEM denotes the regional maritime space through the representation and identification of the spatial and temporal distribution of existing and potential uses and activities (of different sectors), while recognizing the natural and cultural values of strategic relevance for the environmental sustainability and intergenerational solidarity. Its elaboration took into consideration, the fact that the vast majority of uses/ activities occurs within the limits of territorial sea, whilst complying with other territorial management instruments, in order to establish and justify sectoral options and objectives with territorial impact, as well as other objectives presented by plans and programs that may have direct or indirect impact on the maritime space. The plan takes into account the different uses and activities in the Portuguese maritime space, including common uses (Recreation, sport and tourism, Commercial fishing, Scientific research, Navigation and maritime transport) and private uses (Aquaculture and fishing when associated with infrastructures; Marine biotechnology; Metallic mineral resources; Non-metallic mineral resources; Fossil fuels; Renewable energy; Submarine cables, pipelines and outfalls; Multipurpose platforms and floating structures; Scientific research (involving space reservation); Recreation, sport and tourism (involving space reservation); Underwater cultural heritage; Immersion of dredged; Sinking of ships and other structures; Geological carbon storage; Equipment and infrastructures (ports and marinas outside areas under port jurisdiction)).
Plan horizon (if applicable)	Planning with a **10-year** horizon.
Plan revision	Updating the plan at least every **5 to10 years**.
Vision (if applicable)	× **Yes** ☐ No The vision for the whole Portuguese maritime space established in the Situation Plan is the following: “An instrument of economic, social and environmental development, of spatial management, of legal consolidation and assertion of Portugal's geopolitical positioning in the Atlantic basin”. The vision of the Situation Plan is based on the objectives and principles that support LBOGEM and the vision of the National Ocean Strategy (2013-2020), which states that “Mar-Portugal is a national purpose whose potential will be realized through economic, social and environmental valorisation of the ocean and coastal areas, for the benefit of all Portuguese”. The component of the Situation Plan concerning the Azores Subdivision has also a specific vision, besides the previously mentioned: “The plan promotes and consolidates the geostrategic position of the Region. The sea in the Azores fulfils its potential for socioeconomic development, good environmental status, fruition and safeguarding of natural values, in an adaptive and participatory manner”.
General and/or specific objectives (if applicable)	× **Yes** ☐ No General objectives: The objectives of the Situation Plan arise from the objectives of LBOGEM and the National Ocean Strategy. The PSOEM aims to: • Contribute to the valorisation of the sea in the national economy, promoting the sustainable, rational and efficient exploitation of marine resources and ecosystem services, ensuring the safeguarding of the ocean's natural and cultural heritage. • Contribute to national cohesion, reinforcing Portugal's archipelagic dimension and the role of its interterritorial sea. • Contribute, through the planning of the national maritime space, to the planning of the Atlantic basin. • Contribute to strengthening Portugal's geopolitical and geostrategic position in the Atlantic basin as the largest coastal state in the EU. • Guarantee legal certainty and transparency of procedures in the attribution of TUPEM. • Ensure the maintenance of the good environmental status of marine waters, preventing the risks of human action and minimizing the effects resulting from natural disasters and climate actions. • Ensure the use of available information on the national maritime space. • Contribute to knowledge of the ocean and strengthen national scientific and technological capacity. Included in Decree-Law No. 38/2015, of March 12 there are also other objectives: • Implement the strategic development objectives established in the strategic planning and management policy instruments for the national maritime space, namely in the National Ocean Strategy; • Promote the sustainable, rational and efficient economic exploitation of marine resources and ecosystem services, ensuring the preservation, protection and recovery of natural values and coastal and marine ecosystems and the maintenance of the good environmental status of the marine environment and the good status of coastal and transitional waters, preventing the risks of human action and minimizing the effects resulting from natural disasters and climate change; • Spatialize the uses and activities to be developed in the national maritime space with respect for marine ecosystems and the safeguarding of underwater cultural heritage, aiming to ensure the sustainable use of resources and boost job creation; • Prevent or minimize potential conflicts between uses and activities carried out in the national maritime space. Regional objectives: The component of the Situation Plan concerning the Azores Subdivision has also specific objectives, besides the previously mentioned. These are divided in four categories: Policy & management objectives; Environmental objectives; Social objectives; Sectorial and economic objectives (to consult the regional objectives, see Volume III-A).
Principles/drivers (if applicable)	× **Yes** ☐ No The drivers for planning and management of the national maritime space, and consequently the Situation Plan, were defined in LBOGEM and are, in addition to those enshrined in the Basic Law for the Environment, namely: • **Ecosystem approach** - Integration of the dynamic and complex nature of ecosystems; • **Adaptive management** - Consideration of the evolution of knowledge and activities, and the dynamic changes in ecosystems; • **Integrated, multidisciplinary and transversal management** - Compatibility with relevant policies and instruments (e.g., economic, social, environmental development and territorial management policies), and consideration of public and private interests; • **Precautionary principle** - Adoption of preventive measures in the face of lack of knowledge or intervention capacity, to anticipate and mitigate environmental impacts; • **Subsidiarity** - Decision-making at appropriate hierarchical levels, mindful of the autonomous regions' competencies, close to the citizen; • **Cooperation & coordination towards responsible ocean governance** - National, regional, and cross-border collaboration, mindful of effects in adjacent maritime spaces, within a framework of responsible ocean governance and shared management; • **Valorisation and promotion of economic activities** - Ensuring effective application of the powers granted by TUPEM, under the conditions established therein, with a long-term perspective;

	• **Regional and cross-border cooperation and coordination** - Ensuring cooperation and coordination of ongoing or future uses/activities, taking into account the effects potentially arising to the maritime space of other States or to international borders; • **Participation and simplicity of perception** - Development with the active participation of various stakeholders and application of clear and simple language. The component of the Situation Plan concerning the Azores Subdivision has also cited other principles, besides the previously mentioned. • **Sustainable development** - Promotion of rational and efficient use of marine resources and ecosystem services; • **Economic growth** - Promotion of conditions for the development of economic activities related to maritime space, in harmony with a conscious use of natural and cultural resources, as well as the environmental and financial sustainability of the plan; • **Intra- and intergenerational solidarity** - Balanced utilization of resources ensuring their preservation for present and future generations; • **Compatibility of uses** - Prevention and minimization of conflicts between uses and activities carried out in the maritime space and maximization of potential synergies; • **Scientific and technical basis** - Support of planning options on existing scientific knowledge and the best available data on the marine environment; • **Co-responsibility** - Sharing responsibility with users of the maritime space and all who, directly or indirectly, cause environmental damage; • **Legal security** - Guarantee of pre-existing and legally consolidated rights, and of the predictability and transparency necessary for the development of blue economy, paired with the simplification of administrative procedures.
Governance structure	× **Yes** ☐ No The Situation Plan predicts a governance structure, where there is a national level coordination - carried out by **DGRM** - and two regional entities that coordinate at the level of their subdivision - **DRPM** in the Azores and **DRM** (Regional-Directorate of the Sea) in Madeira. **DGPM** is responsible for the evaluation of the spatial planning instruments and monitoring the National Ocean Strategy; and **IPMA** (Instituto Português do Mar e da Atmosfera) is responsible for the scientific/technical coordination of the monitoring programs and measures of the Marine Strategy Framework Directive (MSFD). In addition to these entities, three committees for each subdivision were appointed at the time of the publication of the Situation Plan, with the Accompaniment Committee for the Azores consisting of 19 regional and national entities, appointed at the time of the publication of Situation Plan for the Azores Subdivision – **AMN** (Autoridade Marítima Nacional), **APA** (Agência Portuguesa para o Ambiente), **DGEG** (Direção-Geral de Energia e Geologia), **DRP** (Direção Regional das Pescas), **DREC** (Direção Regional do Empreendedorismo e Competitividade), **DRCID** (Direção Regional da Ciência, Inovação e Desenvolvimento), **DRAAC** (Direção Regional do Ambiente e Alterações Climáticas), **DRRFOT** (Direção Regional dos Recursos Florestais e Ordenamento Territorial), **DRTu** (Direção Regional do Turismo), **DRAECE** (Direção Regional dos Assuntos Europeus e Cooperação Externa), **SRPCBA** (Serviço Regional de Proteção Civil e Bombeiros dos Açores), **DRM** (Direção Regional da Mobilidade), **DRC** (Direção Regional da Cultura), **DRD** (Direção Regional do Desporto), **Portos dos Açores S.A, Lotaçor S.A., AMRAA** (Associação de Municípios da Região Autónoma dos Açores), **Universidade dos Açores** and **PMA** (Parque Marinho dos Açores).
Measures (if applicable)	☐ Yes × **No** The plan does not predict a specific regulation, nor does it establish measures. PSOEM considers the existing rules and regulations for occupying the maritime space - originating in administrative easements and public utility restrictions, regimes for safeguarding natural and cultural resources, maritime security rules, specific licensing regimes for each use/activity - and the provisions contained in TUPEM, complemented by good practices and use compatibility guidelines defined in the Situation Plan. In the framework of the SEA procedure, some measures were defined considering the assessment carried out, consisting of a set of a) measures aimed at enhancing the positive effects arising from the implementation of the plan; b) measures designed to avoid or minimize adverse effects on the environment; and c) control measures, designed to evaluate the execution of previous measures, within a framework of greater environmental sustainability.
Subject to Strategic Environmental Assessment	× **Yes** ☐ No To ensure coherence and uniformity in the national maritime spatial planning criteria, a common methodology and a single environmental assessment was adopted for the entire national Situation Plan. In this way, the PSOEM was subject to a Strategic Environmental Assessment (SEA) procedure, pursuant to the provisions of Article 3(1)(a) of Decree-Law 232/2007 of 15 June, in its current wording. The Kingdom of Spain and the Kingdom of Morocco were also consulted. From the SEA carried out, it is important to highlight the effort to comply with the principles established in LBOGEM: cooperation and coordination, integrated management, adaptive management, precautionary approach and ecosystem approach. In the Autonomous Region of the Azores, the legal framework related to SEA procedures is established in Regional Legislative Decree no. 30/2010/A, of November 15. The process of developing the Situation Plan for the Azores subdivision updated the SEA documents accordingly, namely Volumes V and VI.
Maritime uses and activities included in the plan (spatialized in the plan)	× **Aquaculture**
	× **Fisheries**
	× **Biotechnology**
	× **Extraction of non-metallic mineral resources**
	☐ Extraction of metallic mineral resources
	☐ Oil and gas exploration/exploitation
	☐ Renewable energy
	× **Shipping and maritime transport**
	× **Military and defence**
	× **Ports and marinas**
	× **Scientific research**
	× **Recreation, sports and tourism**
	× **Underwater cultural heritage**
	× **Submarine cables, pipelines and outfalls**
	× **Artificial reefs**
	× **Immersion of dredged material**
	☐ Geological carbon storage

	× **Environment and nature conservation and protection (MPAs)** × **Coastal protection** ☐ Others
Identification of the spatial and temporal distribution of uses and activities, including zoning approach	× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The Situation Plan establishes potential areas for the development of private uses and activities in the national maritime space. The private use of the national maritime space requires the reservation of an area or volume for a use of the environment or marine resources or ecosystem services that exceeds what is obtained by common use and results in a benefit for the public interest. The occurrence of private uses and activities may imply the management of a multi-use space, allowing more than one private use, without prejudice to the need to respect administrative servitudes and applicable public utility restrictions, other relevant spatial limitations, and common uses. The common use of the national maritime space is not subject to TUPEM, but must, however, be carried out in accordance with applicable legislation. The Situation Plan also considered the analysis of interactions between uses and activities, embodied in a matrix of interactions - conflicts and synergies - with other private uses and activities and with common uses. The Situation Plan establishes **potential areas for the development of private uses and activities** in the maritime space. The approach to defining the potential situation included: • **Spatialization of specific areas**: aquaculture; extraction of non-metallic mineral resources; immersion of dredged material; sinking of ships and other structures (artificial reefs); equipment and infrastructure (ports and marinas outside port jurisdiction); recreation, sports and tourism (mooring buoy fields). • **Spatialization of exclusion areas**: submarine cables, pipelines and outfalls; • **Uses/activities, without spatialization**: fisheries (when associated to infrastructures); scientific research; marine biotechnology (bioprospecting); recreation, sport and tourism; underwater cultural heritage. • **Uses/activities without potential situation**: extraction of metallic mineral resources; oil and gas exploration/exploitation; renewable energy; multipurpose platforms and floating structures (not associated to other uses/activities); geological carbon storage. The **process of spatialization of private uses and activities** followed a number of steps, namely: • Identification of private uses and activities; • Identification and characterization of common uses; • Identification of easements and administrative restrictions; • Identification of planning instruments that affect the national maritime space; • Identification of incompatibilities and synergies between each of the activities/uses; • Identification of the most suitable oceanographic conditions for the installation of each activity/use.
Identification of system characteristics	× **Yes** ☐ No The Situation Plan includes an overview diagnosis of each marine subdivision, namely in Volume IV. It includes a general description of the corresponding marine subdivision and a characterization of: coastal and hydrographic features; marine physical and chemical conditions; marine biodiversity; spatial limitations related to protected areas and the identification of areas of significance for conservation; pressures, impacts and environmental status, according to the MSFD reporting; a description of current maritime uses and activities considered in the plans, including social-economic information and the results of a survey of most used areas. The general approach to characterizing the intervention area of the plan is based, in structure and content, on the reporting documents within the context of the MSFD, namely the Marine Strategy for the Azores Subdivision, both the initial assessment report of the environmental status of the marine environment, and the assessment report for the 2012-2018 period. The contents available on the SIGMAR-Azores Geoportal (https://geoportal.mar.azores.gov.pt/), accessible through the Maritime Spatial Planning - Azores web portal (https://oema.mar.azores.gov.pt/), include the "PSOEM Azores" cartographic viewer and the "Geoportal do Mar" viewer.
Consideration of environmental, economic, social & safety aspects	× **Yes** ☐ No Environmental, economic, social and safety aspects have been considered jointly within the different sections of the plan. The integration of these aspects in the Situation Plan includes the characterization of marine space in terms of physical, chemical, and biological conditions, and the inclusion of socioeconomic information for each marine economy sector. The Plan defines general criteria for coexistence and/or multiuse between different uses and activities, which help to guarantee the integration of these four aspects. Another key aspect is the description of constraints on space use, including administrative servitudes, public utility restrictions, and other spatial limitations like classified marine protected areas, Natura 2000 network, national ecological reserve, underwater cultural heritage, bathing areas, ports, marinas, recreational boating hubs, navigation and maritime safety constraints, military and aeronautical easements, and infrastructure and equipment. These considerations were also addressed in the Environmental Assessment process, aimed at supporting the development of the plan's options by incorporating environmental, social, and economic components through a more integrated and comprehensive approach. Moreover, article 27 of Decree-Law no. 38/2015 also specifies the criteria to be considered when there are conflicts between uses and activities: • Number of jobs created; • Qualifications of human resources; • Volume of investment; • Economic viability of the project; • Prediction of results; • Contribution to sustainable development; • Value creation; • Expected synergies in related activities; • Social responsibility of those interested in development of use or activity. In the particular case of the Situation Plan for the Azores Subdivision, SWOT analysis of various uses and activities were included, as well as environmental impact assessments based on the MSFD, and future sector trends influenced by demographic changes, climate change, RD&I advancements, and blue economy development policies. Moreover, safeguard areas around certain sites or infrastructures were

	spatialized for various purposes, including safeguarding people and property, navigation safety, environmental protection, and nature conservation, or ensuring the common use and enjoyment of certain areas.
Coherence with other processes & plans	× **Yes** ☐ No The MSP process has complied with the requirements of the EU MSPD by seeking to promote coherence between other rules, policies and plans relevant to the maritime space management. The coordination and compatibility of national maritime spatial planning and management with sectoral policies and economic, social, environmental and spatial planning development is one of the principles enshrined in LBOGEM. The strategic framework of the plan is based on the set of reference documents for the MSP process, at international and EU level. The instruments, policies and the legal and regulatory framework that apply to the entire national territory and in the Autonomous Region of the Azores were also considered in the strategic framework of the Situation Plan. The Situation Plan analysed the articulation and compatibility with programs and territorial plans that have an impact on the intervention area of the plan, from a perspective of integrated coastal management (e.g., Coastal Zone Management Plans (POOC)). Compatibility with the plans drawn up under the Water Framework Directive (WFD) has also been analysed (e.g., Azores Archipelago Hydrographic Region Management Plans). As regards the rules and guidelines for the sectoral and special programs covering maritime areas, these were analysed in the framework of the Situation Plan. The cartographic expression proposed for the potential areas considered the territorial model and the existing regimes so as not to create situations of conflict or dubious interpretation. Whenever incompatibilities were detected between existing activities and those instruments, the mapping of potential areas for these activities was prepared in order to correct these incompatibilities. It is considered that the Situation Plan for the Azores Subdivision embraces and integrates the provisions of the Coastal Management Plans, although it is needed to revise these plans so that they reflect the options of the most recent legislative framework. An example of this situation in the Azores are existing areas for the exploration of non-metallic mineral resources, in this case the extraction of sand for commercial purposes.
Consideration of land-sea interactions	× **Yes** ☐ No As mentioned before, during the elaboration of the Situation Plan, the ten Coastal Zone Management Plans (POOC) in Azores were taken into consideration, although three of them were in revision, so both versions were analysed. For the subdivision of the Azores, land-sea interactions were assessed from the perspective of interactions between human activities in the maritime space and in the coastal terrestrial space, considering the existing territorial management tools for the management of the coastal strip. The analysis of interactions at the interface between the marine and terrestrial environments resulted in the creation of a land-sea interaction matrix, based on the main typologies of areas established in the POOC. The analysis contrasted the spatial distribution of activities at sea (existing or potential) with the most recent survey of land use and the artificialization of the coastal zone in the Azores, and the relevant occupation categories and subcategories of the POOC, including the territorial constraints considered relevant. For uses that do not yet have a presence in the maritime space adjacent to the Azores archipelago, a prospective and theoretical analysis of possible interactions was carried out, should they occur in the future. Nonetheless, it is considered that there is room for improvement in the analysis of land-sea interactions in the next MSP cycle, adapted to specific cases and considering the inclusion of interactions related to natural processes. Some lack of clarity in the legal framework and in the administrative and institutional competencies, and the mechanisms for coordinating them when there is a need to integrate interactions between sea and land, sea and air, or all three, pose operational challenges, which can complicate the resolution of situations where these interactions are relevant, making decision-making reactive rather than preventive, integrated, and informed.
Application of ecosystem-based approach	× **Yes** ☐ No The Situation Plan for the Azores Subdivision assumes and incorporates the national vision and objectives, which integrate an ecosystem-based approach. In addition, it defined a specific vision and objectives for the Situation Plan, adapted to the regional context, resulting from the stakeholder consultation process. The vision is based on an ecosystem approach, and one of the specific objectives of the Situation Plan is to: "Contribute to achieving and maintaining the good environmental status of the Region's marine waters through an ecosystem-based management, in accordance with the MSFD and other applicable marine environmental policies". Examples of the practical application of the ecosystem approach in the Situation Plan include the analysis of ecosystem characteristics based on the MSFD reporting and privileging the multiple use of maritime space, considering its different components (sea soil, water column and surface), as it presupposes the sustainability of the marine environment. Moreover, compatibility between private or common uses was based on the principle of ecosystem sustainability. Regarding nature conservation, in addition to classified protected areas, areas important for the protection of biological, geological, and landscape natural heritage were also identified. Another example, particular to the Azores Subdivision, is the projection of indicative scenarios to guide the MSP process, considering future economic, social, and environmental trends. Nevertheless, applying an ecosystem-based approach is still challenging due to the difficulty in establishing reference thresholds and establishing application criteria with the specificity needed for effective operationalization. The Situation Plan acknowledges significant information gaps regarding ecosystem services and knowledge about the marine environment, including geological and geomorphological characteristics, climatological, oceanographic, and environmental conditions, as well as biology and ecology.
Consideration of climate change effects	× **Yes** ☐ No MSP is responsible for the distribution of activities and uses, in spatial and temporal terms, and is based on minimising conflicts, promoting compatibility, protecting the marine ecosystem and mitigating climatic phenomena. Whilst elaborating the Situation Plan for Azores Subdivision, the National Energy and Climate Plan (PNEC) 2021-2030, the Regional Strategy for Climate Change (ERAC) and the Regional Program for Climate Change in the Azores (PRAC) were taken into consideration. Moreover, the integration of land-sea interactions, and the complementation between the Situation Plan with PGRH and POOC allowed for a better understanding of possible effects of climate change in coastal erosion. The Situation Plan defined possible areas for artificial feeding of coastal stretched. The Situation Plan for the Azores Subdivision included a dedicated section addressing the implication of climate change to MSP and integrates, in the context of the sectorial diagnosis carried out for the main uses and activities considered in the plan, an analysis of the change factor "climate change". Its growing trend was related to direct and indirect pressures regarding future evolution of human activities at sea. The integration of risks to coastal zones was also carried out in the context of land-sea interactions, analysed in the plan from the perspective of the interdependence between human activities in the terrestrial and maritime spaces. Nevertheless, an important factor to progress the role of MSP in climate action is to address the underpinning knowledge gaps, namely in understanding the effects of climate change on chemical, physical, and biological conditions, and the way ecosystem structure and functioning is being affected, also considering the lack of baselines and thresholds. This is linked to another fundamental gap related to understanding the way changes in biotic and abiotic conditions are changing the provision of ecosystem services, including its spatial and temporal distribution, and thus affecting human activities, making for an added level of uncertainty to MSP processes.
Promotion of co-existence and compatibility of uses (including multiuse)	× **Yes** ☐ No The MSP process complies with the EU MSPD by representing and identifying the spatial and temporal distribution of existing and potential uses and activities. The Situation Plan sets out potential areas for the development of private uses and activities in the national maritime space, where the approach to defining potential situations included the following: spatialization of specific areas, spatialization of exclusion areas, uses/activities without spatialized potential situation, and uses/activities without potential situation. A multisectoral approach was also encouraged, based on the principle that the private use of national maritime space assumes the compatibility of uses, always favouring multiple use whenever possible, based on the various components of maritime space: seabed and subsoil, water column, and

	water surface. For each sector identified and characterized in the plan, good practices were identified, related to the utilisation and management of maritime space, as well to the compatibility of private uses, common use and fruition, and administrative servitudes and restrictions. The Situation Plan for the Azores Subdivision also considered the analysis of interactions between uses and activities, embodied in an interaction matrix – conflicts and synergies – with other private uses and activities and with common uses, based on previous stakeholder consultation.
Application of alternative scenarios	× **Yes** ☐ No The Situation Plan for the Azores Subdivision entailed the development of hypothetical future scenarios as an important part of the planning process, as it is based on outcomes grounded in actions, thus constituting a tool to guide the implementation and management of the project. This tool can guide not only monitoring and progress measures, such as indicators and goals, but also action measures and the construction of paths/routes that must be outlined with the intention of achieving predetermined objectives. The process of developing the Situation Plan considered the construction of scenarios, carried out within the framework of the MarSP project. The construction of narratives combined exploratory and normative methods with the overall objective of developing different hypothetical scenarios for the Azores archipelago. The approach provides a qualitative description of specific scenarios, constructed around the main objectives, as they were defined by political and institutional guidelines, evaluated and validated by stakeholders, and subsequently analyzed by regional experts.
Consideration of transboundary issues and transboundary cooperation	× **Yes** ☐ No The Situation Plan considers the transboundary aspects in relation to the maritime space under the jurisdiction or sovereignty of Spain and Morocco, in terms of existing infrastructure, servitudes and administrative restrictions, or in relation to the distribution of habitats and geological resources. The transboundary effects of the Situation Plan were analysed in the context of its SEA. Formal consultations also took place in 2021 in the context of the SEA of Spain's MSP process, which included the participation of the Azores and Madeira subdivisions. National and regional participation in EU initiatives aimed at promoting cooperation between Member States and third countries was achieved through involvement in the "European MSP Platform" and the "EU Maritime Forum", and in projects such as MarSP, PLASMAR and MSP-OR. Other examples are the MISTIC SEAS I, II, and III projects (2015 – 2021), which aimed to establish common methodologies for monitoring marine biodiversity and for assessing the good environmental status of trophic chains, from a cross-border perspective under the MSFD.
Stakeholder engagement	× **Yes** ☐ No Under article 8 of Decree-Law no. 38/2105, all citizens, as well as scientific, professional, trade union and business associations, directly or indirectly associated with maritime activities, have the right to participate in the preparation, amendment, review and evaluation of national maritime spatial planning instruments. They can do so by making suggestions and requests for clarification throughout the procedures for drafting, amending, reviewing and evaluating national maritime spatial planning instruments, as well as intervening in the public discussion phase that necessarily precedes their approval. The website www.psoem.pt, as well as https://oema.mar.azores.gov.pt/, is available for stakeholders to follow the MSP process. It provides general and technical information, including minutes of the technical working groups, public consultation and the geoportal of the Situation Plan at https://www.psoem.pt/geoportal_psoem/ and at https://geoportal.mar.azores.gov.pt/. The stakeholder involvement began at an early stage of the Situation Plan development. During the drafting process of the Situation Plan for the Azores Subdivision, the plan was subjected to discussion to ensure the right of citizen participation, whose comments and suggestions were considered, when properly substantiated. Throughout the plan's development, there were nine public participation sessions, gathering 209 participants, in the context of the MarSP project. Other stakeholder consultation actions were also developed, namely 139 sectoral consultations conducted, targeted at various representatives of the main sectors and maritime activities in the Azores. Based on the inventory of regional stakeholders, that corresponds to more than 810 contacts, periodic notifications were sent regarding public participation events in the Situation Plan development process. Furthermore, the consultation processes of the Situation Plan, with the seven WG, and its SEA, with entities with specific environmental responsibilities, resulted in substantial changes to the documents due to more than 495 contributions received. The Situation Plan for the Azores Subdivision was subject to public consultation from January 5 to March 28 2024, having received a total of 16 participations, which translated into 81 specific contributions, and included a public session for the general public, which registered 91 attendees.
Communication and dissemination	× **Yes** ☐ No The right to information was ensured through the provision of a dedicated website, the national PSOEM portal (www.psoem.pt), complemented by the Azores Maritime Spatial Planning Portal (https://oema.mar.azores.gov.pt/), where the contact information of the competent authorities was disclosed, through which any requests for clarification and contributions can be submitted. These online platforms aim to facilitate public participation and ensure free access to information about the development of the Situation Plan, as well as to consult geographical information related to the plan, available at the national PSOEM Geoportal https://www.psoem.pt/geoportal_psoem/, complemented by the SIGMAR-Açores Geoportal (https://geoportal.mar.azores.gov.pt/). During the public discussion period (05.01.2024 – 28.03.2024), on February 21 2024, a public session was held to present the proposal of Situation Plan for the Azores Subdivision.
Data	The Situation Plan included the best available scientific and technical data and information, being mainly produced by the competent authority and the remaining from other public entities and external sources. The geographical information produced in the framework of the Situation Plan for the Azores Subdivision is accompanied by metadata files, which adhere to the Azores Metadata Profile, as well as the National Metadata Profile for Geographical Information, the technical requirements emanating from the INSPIRE Directive and its implementing provisions on metadata, established through Commission Regulation (EC) No 1205/2008. Additionally, web viewing services were created, respecting OGC (Open Geospatial Consortium) standards. Another example is the use of *SeaSketch* in the planning stage, a spatial decision support tool for collaborative MSP processes, which facilitates and improves the implementation of consultation processes with stakeholders through collaborative mapping for maritime space and simplified solutions for the collection and visualization of public participation data.
Risk assessment and contingency	☐ Yes × **No**
MONITORING, EVALUATION & REVISION	
M&E considered within the MSP process and plan, tailored to the specific context	☐ M&E considered within the MSP process and plan, tailored to the specific context ☐ M&E not considered within the MSP process and plan × **Other** The Portuguese MSP plan includes a specific section within Volume I (part B), describing the basis of the monitoring and assessment of the plans, which stands on following key domains: the environmental component, based on the report to the MSFD; and the socioeconomic component, linked to the monitoring of the National Ocean Strategy and related SEAMIND initiative, which integrates indicators to evaluate the private use. It also mentions that monitoring should be coherent with the SEA conclusions, in order to evaluate and monitor the significant effects in the environment that may occur due to the implementation of the Situation Plan. Under articles 87 and 88 of Decree-Law no. 38/2015, the results from the permanent assessment of the different planning instruments for the national maritime space are published every three years through a publicly available report on the status of national MSP. This report must translate the balance of the implementation of the MSP instruments subject to evaluation, as well as the levels of internal and external coordination obtained, as well as pay attention to the strategic objectives established in the National Ocean Strategy, justifying a possible need for revision. The first periodic report "Relatório sobre o Estado do Ordenamento do Espaço Marítimo Nacional" (REOEMN), concerning the period 2015-2022, was published early in 2024 (not including the Azores Subdivision), being subject to public discussion for a period of 43 days (06.03.2024 to 17.04.2024).

			Moreover, a monitoring and evaluation model is being proposed with the support of the MSP-OR project, taking into account the regional specificities of both OR the Azores and Madeira.
Design and organization of M&E	Competent authorities		× **Yes** ☐ No **DGPM** - The **Directorate-General for Maritime Policy** is the competent authority regarding the implementation of the EU MSPD, including its monitoring, in order to promote the permanent assessment of the different planning instruments for the national maritime space (according to article 87 of Decree-Law No. 38/2015, of March 12), with the support of the remaining competent authorities (see above).
	M&E team or dedicated structures		☐ Yes × **No** ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups × **Other** There is no specific M&E team; however, the Situation Plan predicts a governance structure, made up as described above, that may serve as proxy until the establishment of a specific team.
	Purposes of M&E		There is no specific chapter dedicated to the OR; however, in the Situation Plan, namely in the specific section within Volume I (part B), it is assumed that monitoring is an essential process for adaptive management and that the plan considers relevant indicators that contribute to the assessment of the sustainable use of marine resources and the uses and activities that occur in the national maritime space.
	Challenges and limitations		Some of the main challenges identified in the OR Azores concerning M&E are: • Identification of appropriate indicators: Difficulty in choosing appropriate indicators and linking indicators to MSP objectives (also requiring improvement towards SMART objectives), given that establishing a set of indicators covering socio-economic, environmental and governance dimensions is a very complex task, adding to the difficulty in identifying appropriate standards against which success should be measured and to the issue of attribution and causality, related to the difficulty in isolating the contribution of MSP to observed changes in the system; • Lack of resources/ poor capacity: Limited time and insufficient or inconsistent resources allocated to M&E, including the lack of human resources to effectively conducting M&A throughout the MSP cycle, especially to gather data in the extensive maritime area; • Data issues: The limited availability of data can compromise the accuracy of the M&E process and insufficient, outdated, or incomplete information can hinder a comprehensive and precise assessment (accessing and sharing data, the quality and reliability of existing data, the lack of long temporal series, the discrepancies between different data sources, high costs associated to data collection, the prevalence of economic data in comparison to social data, integration with own regional system, articulation with NOS and strategic blue economy plan for the Azores); • Differing time frames: Time lag between the Azores subdivision in relation to the remaining subdivisions in the national MSP process may difficult the M&E process, especially when it comes to baselines and targets for indicators. There is also a misalignment with MSFD & WFD reporting; • Public awareness and continuous stakeholder dialogue: Limited public understanding of the planning process and its M&E can hinder participation and result in misinformation or incomplete information, as well as hamper engaging local communities and stakeholders. Community participation must be ongoing, before, during, and after the M&E process However, this continuous involvement faces challenges due to varying levels of participation and conflicting interests, resource constraints and the geographical dispersion of stakeholders; • Knowledge transfer: Constraints and barriers in institutional cooperation and the lack of effective communication in incorporating the findings of M&E into policy development and implementation can hinder the integration necessary changes into the decision making and future planning processes.
	Scope and timing of M&E	☐ M&E of plan making	There is no existing approach to M&E of the plan making process in the Situation Plan; however, as mentioned above, the monitoring and evaluation model proposed under the MSP-OR project predicts a number of indicators and evaluation questions for the plan making process (although the plan has been already developed, it was viewed as important to identify indicators for this phase of the plan to inform future MSP cycles).
		☐ M&E of the plan	There is no existing approach to M&E of the plan itself in the Situation Plan; however, as mentioned above, the monitoring and evaluation model proposed under the MSP-OR project predicts a number of indicators and evaluation questions for plan evaluation. Additionally, the REOEMN identified some improvements to the plan.
		☐ M&E of plan implementation	The existing approach to M&E of plan implementation predicted in the Situation Plan is the one described above, under the specific section within Volume I (part B). As also mentioned, the monitoring and evaluation model proposed under the MSP-OR project predicts further indicators, as well as evaluation questions tailored to assess plan implementation. Additionally, the REOEMN identified some aspects of plan implementation, namely related to the licensing procedure under TUPEM.
		☐ M&E of plan outcomes	The existing approach to M&E of plan outcomes predicted in the Situation Plan is the one described above, under the specific section within Volume I (part B). As also mentioned, the monitoring and evaluation model proposed under the MSP-OR project predicts further indicators, as well as evaluation questions tailored to assess plan outcomes. Additionally, the REOEMN identified some aspects of plan outcomes, namely relating the plan with the objectives of the newer National Ocean Strategy.
		☐ Others	-
	Resources for M&E		☐ Yes × **No** There are no specific resources predicted in the Situation Plan; however, besides from co-funded projects under the topic of MSP, the yearly budget of the Autonomous Region of the Azores can assign resources to the regional competent authority. Furthermore, according to article 75 of Decree Law no. 38/2015, the tax applicable to the issuance of TUPEM aims to offset administrative costs resulting from the maritime spatial planning and management, maritime safety, maintenance and inspection. Pursuant to its article 86, 75% of the revenues resulting from the tax collection should be allocated to the entity competent for granting the TUPEM, half of them to be applied in the financing of activities aimed at improving management and planning of the maritime space; in financing actions to maintain and achieve the good environmental status of the marine environment under the MSFD, as well as maintenance of security services and financing of monitoring systems.
Stakeholder involvement in M&E			☐ Yes × **No** There is no existing approach to stakeholder involvement in M&E in the Situation Plan; however, as mentioned above, the monitoring and evaluation model proposed under the MSP-OR project provides recommendations for stakeholder participation, as well as the evaluation of stakeholder engagement in itself.
Relation to MSP goals and objectives and desired outcomes			× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives The above-mentioned specific section within Volume I (part B) of the Situation Plan is indirectly linked to the MSP objectives, in the sense that they include the contribution of MSP to the maintenance of good environmental status under the MSFD, as well as the contribution of MSP to the achievement of the goals of the National Ocean Strategy. Moreover, the monitoring and evaluation model proposed under the MSP-OR project takes into consideration the relation of indicators with each MSP objective, considering that these are general objectives (also including the specific objectives defined for OR Azores), as well as the above-mentioned strategic instruments.
Indicator system			The above-mentioned specific section within Volume I (part B) of the Situation Plan integrates the existing environmental and socio-economic indicators under the SEAMIND initiative, in line with the monitoring of the MSFD and the National Ocean Strategy, taking also into account the indicators proposed in the framework of the SEA procedure. Additionally, the monitoring and evaluation model proposed under the MSP-OR project includes a proposal of indicator matrix, with indicators for each phase of the MSP cycle (plan making; plan; implementation of the plan; plan results and outcomes), which contribute to answering some of the identified questions relevant to evaluate the MSP process in the OR's. These indicators may contribute exclusively to one phase of the cycle, or several. In all cases, these indicators will require periodic data collection from different public entities and stakeholders.

Monitoring approach	The monitoring approach relies on the indicator system previously described.
Evaluation approach	The evaluation approach relies on the permanent assessment of the planning instruments for the national maritime space and the publication of the report on the status of national MSP, according to articles 87 and 88 of Decree-Law no. 38/2015. As such, the REOEMN identified some needs and challenges and took into consideration the evaluation of the socio-economic effects reached by the MSP instruments, in light of the strategic objectives established in the National Ocean Strategy. Moreover, the monitoring and evaluation model proposed under the MSP-OR project defines a set of evaluation criteria for each phase of the MSP cycle, requiring answering several evaluation questions, some of them based on the data coming from indicators.
Communication of M&E results	The communication of M&E is done through the REOEMN, a publicly available report resulting from the permanent assessment of the planning instruments for the national maritime space. In addition, the monitoring and evaluation model proposed under the MSP-OR project provides recommendations for the effective communication of M&E results.
Adaptation, revision and update framework	× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other Decree-Law no. 38/2015 outlines a general adaptive management framework to allow for updates and to reflect changing conditions in the maritime space, according to its articles 36 to 42. As such, the Situation Plan can be subject to four types of dynamic mechanisms, namely material corrections, amendments, revisions and suspensions: • **Material corrections** include fixing grammatical, spelling, calculation or cartographic errors, inconsistencies in execution rules or geo-spatial representation, and discrepancies between original and published acts; • **Amendments** occur upon the approval of Allocation Plans or the issuance or extinction of TUPEM; or due to changes in environmental conditions, in maritime safety, or socioeconomic development perspectives; or following the enactment of laws or regulations, namely territorial management instruments, following specific procedures and deadlines; • **Revisions** are prompted by evolving economic, social, cultural, or environmental conditions, and entail a comprehensive reconsideration of the plan, occurring no sooner than five years after the plan's implementation unless required by environmental changes or compliance with European Community standards; • **Suspensions** may be total or partial, to address exceptional circumstances impacting national maritime space planning and jeopardizing the pursuit of relevant public interests., but cannot exceed one year.
USEFUL RESOURCES AND LINKS	
MSP website (if applicable)	https://oema.mar.azores.gov.pt/; https://www.psoem.pt/
Geoportals/ cartographic viewers (if applicable)	https://geoportal.mar.azores.gov.pt/; https://webgis.dgrm.mm.gov.pt/
MSP authorities' websites	https://portal.azores.gov.pt/web/drpm https://www.dgrm.pt/ https://www.dgpm.mm.gov.pt/
Other useful links (if applicable)	https://msp-or.eu/ https://maritime-spatial-planning.ec.europa.eu/media/document/Portugal_countryprofile

Table 8. MSP data fiche for the Madeira Outermost Region.

OUTERMOST REGION		Madeira
GOVERNANCE		
Member State		**Portugal**
MSP competent authorities	National level	• **DGRM** - The **Directorate-General for Natural Resources, Safety and Maritime Services** is responsible for the coordination of the Portuguese MSP instruments, which encompass the Situation Plan and Allocation Plans, and for developing the components of the Situation Plan corresponding to the Mainland Subdivision and to the Extended Continental Shelf Subdivision. It is also the competent authority for licensing the private use of the maritime space in the above-mentioned subdivisions. • **DGPM** - The **Directorate-General for Maritime Policy** is the competent authority regarding the implementation of the EU Maritime Spatial Planning Directive (MSPD), including its monitoring, in order to promote the permanent assessment of the different planning instruments for the national maritime space;
	Regional level	• **DRM** - **The Regional-Directorate of the Sea** is responsible for the preparation and development of the Situation Plan in maritime space adjacent to the Madeira archipelago, between the baseline and the continental shelf until 200 nautical miles, named Madeira Subdivision. It is also the competent authority for licensing the private use of the maritime space in the above-mentioned subdivision.
Institutional capacity and cooperation		× **Yes** ☐ No × **MSP Consultative Committee** × **Working Groups** ☐ Other **MSP Consultative Committee:** • **Order No. 11494/2015, of October 14** (Despacho n.º 11494/2015, de 14 de outubro), began the process of preparation and development of the Situation Plan, for the Mainland, Madeira and Extended Continental Shelf Subdivisions. Order N.º 11494/ 2015 established the corresponding deadline, subjection to Strategic Environmental Assessment, and competent authorities responsible for preparing and supporting the process within each subdivision via a Consultative Committee, including its composition and operating rules (CC-Madeira). At the time, for Madeira subdivision it was the Regional Secretary for the Environment and Natural Resources, which is currently called Regional Secretary of Agriculture, Fisheries and Environment. **Working Groups:** • Working groups (WG) were created to monitor the elaboration of PSOEM, which were coordinated in each subdivision by the competent authority. These working groups aimed at bringing together relevant public entities to make decisions about sectoral activities and uses. In Madeira, five WG were formed: GT1 - Defense, security and navigation; GT2 - Nature conservation; GT3 - Tourism and leisure; GT4 - Scientific research and emerging activities and uses; GT5 - Territorial development.
LEGAL FRAMEWORK		
National/Regional MSP policy and legal framework		**European:** • **Directive 2014/89/EU** of the European Parliament and of the Council of 23 July 2014 - Establishes a framework for MSP, to promote the sustainable growth of marine economies, the sustainable development of marine areas, and the sustainable use of resources. **National:** • **Law no. 17/2014, of April 10** (Lei n.º 17/2014, de 10 de abril) - In 2014, Portugal defined the basis for the spatial planning and management policy of the national maritime space, also known as LBOGEM, which establishes the principles, goals and instruments of national MSP, from the baselines to the outer limit of the continental shelf beyond 200 nautical miles. • **Decree-Law No. 38/2015, of March 12** (Decreto-Lei n º 38/2015, de 12 de março) - A year later, Decree-Law no. 38/2015 developed the LBOGEM, namely the terms of the MSP instruments –the Situation Plan (PSOEM) and the Allocation Plans – and, also, the permanent monitoring and respective technical evaluation, promoting the development of the economic and financial regime associated with the private use of national maritime space. There are three ordinances related with Decree-Law no 38/2015, namely: ○ **Ordinance no. 125/2018, of May 8** (Portaria n.º 125/2018, de 8 de maio), which establishes the regime and value of the deposit, ○ **Ordinance no. 128/2018, of May 9** (Portaria n.º 128/2018, de 9 de maio), which regulates the calculation method for the tax, ○ **Ordinance no. 239/2018, of August 29** (Portaria n.º 239/2018, de 29 de agosto), which defines the conditions for civil liability insurance, all associated with the permits for private use of the maritime space (TUPEM). • **Order no. 11494/2015, of October 14** (Despacho n.º 11494/2015, de 14 de março) and **Order no. 3392/2023, of March 15** (Despacho n.º 3392/2023, de 15 de março) - Establish the competent entities responsible for the preparation of the plan in the respective zones of the national maritime space - Mainland, Madeira and Extended Continental Shelf subdivisions, and Azores subdivision, respectively. It also established the corresponding deadline, and the subjection to strategic environmental assessment, as well as the composition and operational rules of the Consultative Committee. • **Resolution of the Council of Ministers no. 203-A/2019, of December 30** (Resolução do Conselho de Ministros n.º 203-A/2019, de 30 de dezembro) - Approves the Situation Plan for the Mainland, Madeira, and Extended Continental Shelf subdivisions.
Integration with other National/Regional policies		× **Applicable** ☐ Non-applicable **National:** National Ocean Strategy (ENM) 2013-2020 and 2021-2030; National Strategy for the Conservation of Nature and Biodiversity (ENCNB) 2030; National Strategy for Climate Change Adaptation (ENAAC) 2020/2025 - National Program for Climate Change (PNAC) 2020/2030; National Strategy for Integrated Coastal Zone Management (ENGIZC); National Territorial Planning Policy Program (PNPOT); National Water Plan (PNA); Industrial Strategy for Ocean Renewable Energies (EI-ERO) - Action Plan for Ocean Renewable Energies;

			National Strategy for Geological Resources - Mineral Resources; National Action Plan for Renewable Energy (PNAER) 2013-2020/2030; National Action Plan for Energy Efficiency (PNAEE) 2017-2020; National Energy and Climate Plan (PNEC) 2021-2030; Tourism Strategy (ET27) 2027; Strategic Concept for National Defence; Strategic Plan for Portuguese Aquaculture (PEAP) 2014-2020 and 2021-2030; Action Plan for the Portuguese Network of Biosphere Reserves 2018-2025; Sectoral Plan for the Natura 2000 Network (PSRN2000); Strategic Plan for Transport and Infrastructures 2014-2020. **Regional:** • **Strategic instruments:** Plano Integrado Estratégico de Transportes da Região Autónoma da Madeira 2014-2020 (PIETRAM 2014-2020); Plano Referencial Estratégico Mar Madeira 2030 – Estratégia Mar Madeira 2030; Estratégia Clima – Madeira. Estratégia de Adaptação às Alterações Climáticas da Região Autónoma da Madeira. • **Territorial plans and programs covering the maritime area:** Programa Regional de Ordenamento do Território da Região Autónoma da Madeira (PROTRAM); Plano de Ordenamento para a Aquicultura Marinha da Região Autónoma da Madeira (POAMAR); Programa de Ordenamento Turístico da Região Autónoma da Madeira (POT); Plano Regional da Política do Ambiente (PRPA); Plano da Política Energética da Região Autónoma da Madeira (PPERAM); Plano de Ação para a Energia Sustentável - Ilha da Madeira e Plano de Ação para a Energia Sustentável – Ilha do Porto Santo; Plano Estratégico de Resíduos da Região Autónoma da Madeira (PERRAM); Plano Regional da Água (PRAM); Plano de Gestão da Região Hidrográfica do Arquipélago da Madeira 2016-2021 (PGRH 2016 - 2021); Plano de Gestão de Riscos e Inundações da Região Autónoma da Madeira (PGRI – RAM); Programa da Orla Costeira do Porto Santo (POC – Porto Santo); Plano Diretor do Porto do Funchal, Plano Diretor do Porto do Caniçal e Plano Diretor do Porto do Porto Santo; Planos Diretores Municipais. • **Protected areas planning and management programs:** Plano de Ordenamento e Gestão da Ponta de São Lourenço; Plano Especial de Ordenamento e Gestão da Reserva Natural Parcial do Garajau; Programa de Medidas de Gestão e Conservação do Sítio da Rede Natura 2000 - Ilhéu da Viúva; Plano de Ordenamento e Gestão da Rede de Áreas Marinhas Protegidas do Porto Santo; Plano de Ordenamento e Gestão das Ilhas Desertas; Plano de Ordenamento e Gestão das Ilhas Selvagens; Decreto Legislativo Regional – Parque Natural Marinho do Cabo Girão e respetivo Regime Jurídico; Resolução n.º 699/2016 de 17 de Outubro; Resolução n.º 1226/2015 de 29 de Dezembro – Aprova a alteração dos limites dos sítios classificados da Rede Natura 2000 – PTMAD 0003 – Ponta de São Lourenço; Área Protegida da Ponta do Pargo – Parque Natural Marinho da Ponta do Pargo.
Coherence with EU MSPD	Applicability		× **Legally binding in the OR** ☐ Not legally binding in the OR
	Transposition		**12th March of 2015** (transposition by Decree-Law No. 38/2015, of March 12th). Law No. 17/2014, of April 10th is previous to the publication of EU MSPD)
	Involvement in EU support initiatives	Participation in Member States expert group on maritime spatial planning	× **Applicable** ☐ Non-applicable Representation is managed through the national authorities, which consult regional entities whenever specific information is required.
		Participation in Technical Expert Group on Data for MSP	× **Applicable** ☐ Non-applicable Representation is managed through the national authorities, which consult regional entities whenever specific information is required.
		Used support of the Assistance mechanism "European MSP Platform"	× **Applicable** ☐ Non-applicable Representation is managed through the national authorities, which consult regional entities whenever specific information is required. Portugal's country fiche is included in the European MSP Platform, mentioning OR Madeira.
		Participation in EU MSP related funded projects	× **Applicable** ☐ Non-applicable Between 2017 and 2024, competent authorities of Madeira archipelago participated in 4 MSP related projects: MarSP (2018-2019), PLASMAR (2017-2020), PLASMAR+ (2019-2023) and MSP-OR (2021-2024). These projects combined several goals of MSP process and implementation and the development of robust scientific methodologies and tools to support MSP and Blue Growth.
		Participation in MSP dedicated events	× **Applicable** ☐ Non-applicable Representation is mainly managed through the national authorities, which consult regional entities whenever specific information is required. In November 2022, competent authorities of Madeira archipelago participated in the 3rd International Conference on Marine Spatial Planning, organized by DG Mare & IOC-UNESCO. This event aimed to assess the state of the art of MSP implementation and discuss challenges and opportunities to achieve the priority and target areas of the MSP roadmap.

	Others	☐ Applicable × **Non-applicable**
Links to other EU and international policies, agreements, strategies and legislation	European Green Deal & related actions[12],	4
	Integrated Maritime Policy	5
	Integrated Coastal Zone Management	5
	Common Fisheries Policy	3
	Marine Strategy Framework Directive	5
	Water Framework Directive	5
	Birds and Habitats Directives	5
	Bathing Waters Directive	4
	Renewable Energy Directive	5
	Environmental Impact Assessment Directive	4
	Strategic Environmental Assessment Directive	5
	INSPIRE Directive	5
	EU Climate Law	3
	EU sectoral policies (e.g., Trans-European transport network)	3
	Sea Basin Strategies (e.g., Atlantic Action plan)	3
	Strategy for the EU Outermost Regions	5
	Other	-6
Links to international policies, agreements, strategies and legislation	United Nations Convention on the Law of the Sea	5
	Convention on Biological Diversity	4
	UN 2030 Agenda for Sustainable Development	3
	Regional Seas Conventions (e.g., OSPAR Convention, Barcelona Convention)	3
	MARPOL	3
	SAR Convention	3
	SOLAS Convention	3
	London Convention	3
	Bonn Convention	3
	Bern Convention	3
	Ramsar Convention	4
	CITES	4
	ESPOO Convention	3
	UNESCO Convention on the Protection of the Underwater Cultural Heritage	4
	Other	-
ADMINISTRATIVE FRAMEWORK		
Planning level		× **National** × **Regional** ☐ Local MSP is a process conducted at **national level**, and its main instrument, the Situation Plan, is a unique document that encompasses the entire national maritime space. The coordination of the MSP process at national level falls under the competent authority General Directorate for Natural Resources, Safety and Maritime Services (DGRM), in shared responsibility with the Autonomous Region of Madeira and the Azores. Currently, in Madeira, the competent authority is the Regional Directorate of the Sea. The Situation Plan is structured according to the main four maritime subdivisions of Mainland Portugal, the Azores, Madeira and the Extended Continental Shelf. The development and implementation of the Situation Plan for the **Madeira subdivision**, relating to the maritime space adjacent to the Madeira archipelago, was carried out by the regional competent entity, and was further included in the national plan published under Resolution of the Council of Ministers.
Planning area (maritime regions)	Internal Maritime Waters	× **Applicable** ☐ Non-applicable
	Territorial Sea	× **Applicable** ☐ Non-applicable
	Exclusive Economic Zone	× **Applicable** ☐ Non-applicable
	Continental Shelf (until 200 nm)	× **Applicable** ☐ Non-applicable
	Continental Shelf (beyond200 nm)	☐ Applicable × **Non-applicable** The development and implementation of the Situation Plan for the Extended Continental Shelf subdivision, which encompasses the continental shelf beyond 200 nm, is carried out at national level, by the national competent entity.

[12] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

Marine subdivision(s) (if applicable)		× **Yes** ☐ No **Madeira subdivision.**
MSP instrument(s) (if applicable)		Following the national legislation, the Portuguese MSP is carried out through the following instruments: • The **Situation Plan (PSOEM)**, which identifies the temporal and spatial distribution of current and potential uses and activities, as well as the natural and cultural values relevant to environmental sustainability; • The **Allocation Plans**, which assign areas or volumes of the national maritime space to private uses and activities not considered in the Situation Plan.
Current status		☐ MSP Plan not approved × **MSP Plan approved and in force** At a national level, the MSP Plan is approved since December of 2019, concerning the Mainland, Madeira and Extended Continental Shelf subdivisions by **Resolution of the Council of Ministers no. 203-A/2019, of December 30** (Resolução do Conselho de Ministros n.º 203-A/2019, de 30 de dezembro).
MSP process phases	Pre-planning	The work to develop the PSOEM started in 2016 with the establishment of the Consultative Commission and the identification of the 5 Working Groups. Stakeholders were also involved to identify and solve any existing conflicts in the maritime space. Most of the meetings were focused on the activity of surfing and the conflicts in specific maritime areas with specific sectors, such as aquaculture and energy.
	Planning (analysis for planning or plan development or plan completion)	The PSOEM was developed as an instrument that considered the ecological sustainability of the oceans, economic and social development, and the juridical consolidation and geopolitical affirmation of Madeira and Portugal in the Atlantic basin. The period of public discussion of the Situation Plan, corresponding to the Madeira subdivision, took place from May 16 to July 31, 2018.
	Approval	The National Maritime Spatial Planning Situation Plan (PSOEM) for the mainland, Madeira and Extended Continental Shelf subdivisions was approved by the end of 2019, through Council of Ministers Resolution 203-A/2019.
	Implementation	x PSOEM implementation has pointed out the specificities of the maritime area of Madeira but also the importance of current and future activities and their impacts on the marine environment. Licencing procedures have become easier and faster as areas for current and futures uses have been already defined. PSOEM has also contributed for joint efforts between competent authorities to participate in applications to European projects to reinforce MSP process in the Macaronesia.
	Revision	Pursuant to Decree-Law No. 38/2015, the plan may be subject to revision only five years after entry into force, except in case of changes to environmental conditions or in compliance with EU rules. The revision implies a general reappraisal of the plan's components, which may take place as a response to the evolution of economic, social, cultural and environmental conditions or in case of suspension of the plan. According to Directive 2014/89/EU, MSP plans shall be reviewed by Member States as decided by them but at least every ten years.
Licensing/permitting framework (if applicable)		× **Yes** ☐ No Licencing and authorization processes for the private use of marine areas included in the Situation Plan are analysed under Decree-Law No. 38/2015, of March 12. According to Decree-Law No. 38/2015, if an activity or use is predicted in the Situation plan, then the attribution of rights for the private use of the national maritime space is done by issuing a permit for private use of the maritime space (TUPEM). For any activity or use not predicted in the Situation Plan, an Allocation Plan must be approved first and only afterwards can the corresponding TUPEM be attributed. Following the Decree-Law, three ordinances were published: • Ordinance no. 125/2018, of May 8, which defines the regime and the amount of the deposit allocated to ensure the maintenance of physical, chemical and biological aspects of the marine environment, when finished the right of private use; • Ordinance No. 128/2018, of May 9, which defines the base value of the fee components for the private use of national maritime space (TUEM) and its calculation formula; • Ordinance No. 239/2018, of August 29, which defines the minimum mandatory conditions that must be considered when contracting civil liability insurance by holders of titles for the private use of national maritime space. The licensing process for aquaculture facilities is carried out in accordance with the Decree-Law No. 40/2017, of April 4, adapted to Madeira archipelago by the Regional Decree-Law No. 5/2023, of January 9. Aquaculture separate legislation includes not only the marine space reservation, but also the licencing process of the facilities. These kinds of facilities do not present a Title (TUPEM), but are subjected to the payment of TUEM, as the reserve marine space.
Supporting projects and initiatives (EU funded or not)		× **Yes** ☐ No Participation in projects MSP-OR (https://msp-or.eu/), MarSP (https://www.marsp.eu/), PLASMAR (https://www.plasmar2017.eu/) and PLASMAR+ (https://www.plasmar.eu/): Between 2017 and 2024, competent authorities of Madeira Autonomous Region participated in four MSP related projects: MarSP (2018-2019), PLASMAR (2017-2020), PLASMAR+ (2019-2023) and MSP-OR (2021-2024). The main goal of MarSP was to assist the competent authorities of the three EU Macaronesian Archipelagos – Azores, Madeira and Canary Islands – on promoting the development of operative mechanisms of MSP. PLASMAR developed robust scientific methodologies in support of MSP and Blue Growth, considering the biogeographic characteristics of the Macaronesian Region and searching for a balance between the diverse maritime sectors and the conservation of the natural marine heritage. PLASMAR+ was based on the results of PLASMAR and contributed to the advancement of the MSP process in Macaronesia, developing new tools based on scientific and technological knowledge with a view to the implementation period and supporting the sustainability of blue growth. MSP-OR intends to support competent authorities (PT/SP) on advancing the implementation of their MSP, filling regional gaps and provide a platform that allows maritime spatial planners to jointly develop approaches for MSP in outmost regions.
Resources and funding		× **Yes** ☐ No Resources and funding provided by the regional fund/budget, as well as EU funded projects.
MSP PLAN		
Type of plan		× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non-statutory ☐ Strategic or guiding plan ☐ Steering plan with defined rules and regulations × **Other** The plan is statutory, as it was required by the national MSP legislation, being published as a legal instrument (Resolution of the Council of Ministers). The provisions on the plan are legally binding for public entities and also, directly and immediately, for private individuals, according to art. 4 of Decree-Law No. 38/2015. The plan does not predict a specific regulation; it considers the existing rules and regulations for occupying the maritime space - originating in administrative easements and public utility restrictions, regimes for safeguarding natural and cultural resources, maritime security rules, specific licensing regimes for each use/activity – and the provisions contained in TUPEM, complemented by good practices and use compatibility guidelines defined in the Situation Plan.
Type of plan content		☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other

	In order to guarantee the coherence and uniformity of the criteria applied to the planning of the national maritime space, a common methodology and a joint vision were adopted for the Situation Plan and a single SEA procedure. Given that the Situation Plan is a single instrument, applicable to the entire national maritime space, it is made up of six volumes, where the respective framework, structure and dynamics (Volume I), as well as the methodology for spatialization of easements, uses and activities (Volume II), were prepared jointly by the competent authorities and are common to all subdivisions, whereas the *de facto* spatialization of easements, uses and activities for each subdivision (Volume III is made up of Volume III-C/PCE, Volume III-M, and Volume III-A, concerning the Mainland/Extended Continental Shelf, Madeira and Azores, respectively) and characterization report (Volume IV III is made up of Volume IV-C, Volume IV-M, Volume IV-A, and Volume IV-PCE concerning the Mainland, Madeira, Azores and Extended Continental Shelf, respectively)) is the responsibility of each of the competent authorities. The remaining documents (Volumes V and VI) relate to the SEA process and are also applicable to all subdivisions. Hence, Volumes I and II are broad core documents that integrate the vision, objectives, common criteria for zoning, as well as evaluation and monitoring aspects of the plan, applying to all marine subdivisions. Volumes III address the spatialization of a large range of sectors and conservation issues, which are further characterized in Volumes IV. PSOEM denotes the regional maritime space through the representation and identification of the spatial and temporal distribution of existing and potential uses and activities (of different sectors), while recognizing the natural and cultural values of strategic relevance for the environmental sustainability and intergenerational solidarity. Its elaboration took into consideration, the fact that the vast majority of uses/ activities occurs within the limits of territorial sea, whilst complying with other territorial management instruments, in order to establish and justify sectoral options and objectives with territorial impact, as well as other objectives presented by plans and programs that may have direct or indirect impact on the maritime space. The plan takes into account the different uses and activities in the Portuguese maritime space, including common uses (Recreation, sport and tourism, Commercial fishing, Scientific research, Navigation and maritime transport) and private uses (Aquaculture and fishing when associated with infrastructures; Marine biotechnology; Metallic mineral resources; Non-metallic mineral resources; Fossil fuels; Renewable energy; Submarine cables, pipelines and outfalls; Multipurpose platforms and floating structures; Scientific research (involving space reservation); Recreation, sport and tourism (involving space reservation); Underwater cultural heritage; Immersion of dredged; Sinking of ships and other structures; Geological carbon storage.
Plan horizon (if applicable)	Planning with a **10-year** horizon.
Plan revision	Updating the plan at least every **5 to 10 years.**
Vision (if applicable)	× **Yes** ☐ No The vision for the whole Portuguese maritime space established in the Situation Plan is the following: "An instrument of economic, social and environmental development, of spatial management, of legal consolidation and assertion of Portugal's geopolitical positioning in the Atlantic basin". The vision of the Situation Plan is based on the objectives and principles that support LBOGEM and the vision of the National Ocean Strategy (2013-2020), which states that "Mar-Portugal is a national purpose whose potential will be realized through economic, social and environmental valorisation of the ocean and coastal areas, for the benefit of all Portuguese".
General and/or specific objectives (if applicable)	× **Yes** ☐ No The objectives of the Situation Plan arise from the objectives of LBOGEM and the National Ocean Strategy. The PSOEM aims to: • Contribute to the valorisation of the sea in the national economy, promoting the sustainable, rational and efficient exploitation of marine resources and ecosystem services, ensuring the safeguarding of the ocean's natural and cultural heritage. • Contribute to national cohesion, reinforcing Portugal's archipelagic dimension and the role of its interterritorial sea. • Contribute, through the planning of the national maritime space, to the planning of the Atlantic basin. • Contribute to strengthening Portugal's geopolitical and geostrategic position in the Atlantic basin as the largest coastal state in the EU. • Guarantee legal certainty and transparency of procedures in the attribution of TUPEM. • Ensure the maintenance of the good environmental status of marine waters, preventing the risks of human action and minimizing the effects resulting from natural disasters and climate actions. • Ensure the use of available information on the national maritime space. • Contribute to knowledge of the ocean and strengthen national scientific and technological capacity. Included in Decree-Law No. 38/2015, of March 12 there are also other objectives: • Implement the strategic development objectives established in the strategic planning and management policy instruments for the national maritime space, namely in the National Ocean Strategy; • Promote the sustainable, rational and efficient economic exploitation of marine resources and ecosystem services, ensuring the preservation, protection and recovery of natural values and coastal and marine ecosystems and the maintenance of the good environmental status of the marine environment and the good status of coastal and transitional waters, preventing the risks of human action and minimizing the effects resulting from natural disasters and climate change; • Spatialize the uses and activities to be developed in the national maritime space with respect for marine ecosystems and the safeguarding of underwater cultural heritage, aiming to ensure the sustainable use of resources and boost job creation; • Prevent or minimize potential conflicts between uses and activities carried out in the national maritime space.
Principles/drivers (if applicable)	× **Yes** ☐ No The drivers for planning and management of the national maritime space, and consequently the Situation Plan, were defined in LBOGEM and are, in addition to those enshrined in the Basic Law for the Environment, namely: • **Ecosystem approach** - Integration of the dynamic and complex nature of ecosystems; • **Adaptive management** - Consideration of the evolution of knowledge and activities, and the dynamic changes in ecosystems; • **Integrated, multidisciplinary and transversal management** - Compatibility with relevant policies and instruments (e.g., economic, social, environmental development and territorial management policies), and consideration of public and private interests; • **Precautionary principle** - Adoption of preventive measures in the face of lack of knowledge or intervention capacity, to anticipate and mitigate environmental impacts; • **Subsidiarity** - Decision-making at appropriate hierarchical levels, mindful of the autonomous regions' competencies, close to the citizen; • **Cooperation & coordination towards responsible ocean governance** - National, regional, and cross-border collaboration, mindful of effects in adjacent maritime spaces, within a framework of responsible ocean governance and shared management; • **Valorisation and promotion of economic activities** - Ensuring effective application of the powers granted by TUPEM, under the conditions established therein, with a long-term perspective; • **Regional and cross-border cooperation and coordination** - Ensuring cooperation and coordination of ongoing or future uses/activities, taking into account the effects potentially arising to the maritime space of other States or to international borders; • **Participation and simplicity of perception** - Development with the active participation of various stakeholders and application of clear and simple language.

Governance structure	× **Yes** ☐ No The Situation Plan predicts a governance structure, where there is a national level coordination - carried out by **DGRM** - and two regional entities that coordinate at the level of their subdivision - **DRPM** (Direção regional de Políticas Marítimas) in the Azores and **DRM** in Madeira. **DGPM** is responsible for the evaluation of the spatial planning instruments and monitoring the National Ocean Strategy; and **IPMA** (Instituto Português do Mar e da Atmosfera) is responsible for the scientific/technical coordination of the monitoring programs and measures of the Marine Strategy Framework Directive (MSFD). In addition to these entities, three committees for each subdivision were appointed at the time of the publication of the Situation Plan, with the Accompaniment Committee for Madeira consisting of 15 regional and national entities: **AMN** (Autoridade Marítima Nacional), **APA** (Agência Portuguesa para o Ambiente), **DGEG** (Direção-Geral de Energia e Geologia), **AMRAM** (Associação de Municípios da Região Autónoma da Madeira), **IFCN IP-RAM** (Instituto das Florestas e Conservação da Natureza), **DRP** (Direção Regional de Pescas), **DRET** (Direção Regional da Economia e Transportes), **DRT** (Direção Regional do Turismo), **DRC** (Direção Regional de Cultura), **DRAECE** (Direção Regional dos Assuntos Parlamentares e da Cooperação Externa), **DRJD** (Direção Regional de Juventude e Desporto), **APRAM** (Administração de Portos da Região Autónoma da Madeira), **OOM** (Observatório Oceânico da Madeira), **AREAM** (Agência Regional da Energia e Ambiente da Região Autónoma da Madeira), **ACIF-CCIM** (Associação Comercial e Industrial do Funchal - Câmara do Comércio e Indústria da Madeira).
Measures (if applicable)	☐ Yes × **No** The plan does not predict a specific regulation, nor does it establish measures. PSOEM considers the existing rules and regulations for occupying the maritime space - originating in administrative easements and public utility restrictions, regimes for safeguarding natural and cultural resources, maritime security rules, specific licensing regimes for each use/activity - and the provisions contained in TUPEM, complemented by good practices and use compatibility guidelines defined in the Situation Plan. In the framework of the SEA procedure, some measures were defined considering the assessment carried out, consisting of a set of a) measures aimed at enhancing the positive effects arising from the implementation of the plan; b) measures designed to avoid or minimize adverse effects on the environment; and c) control measures, designed to evaluate the execution of previous measures, within a framework of greater environmental sustainability.
Subject to Strategic Environmental Assessment	× **Yes** ☐ No To ensure coherence and uniformity in the national maritime spatial planning criteria, a common methodology and a single environmental assessment was adopted for the entire national Situation Plan. In this way, the PSOEM was subject to a Strategic Environmental Assessment (SEA) procedure, pursuant to the provisions of Article 3(1)(a) of Decree-Law 232/2007 of 15 June, in its current wording. The Kingdom of Spain and the Kingdom of Morocco were also consulted. From the SEA carried out, it is important to highlight the effort to comply with the principles established in LBOGEM: cooperation and coordination, integrated management, adaptive management, precautionary approach and ecosystem approach.
Maritime uses and activities included in the plan (spatialized in the plan)	× **Aquaculture** ☐ Fisheries × **Biotechnology** × **Extraction of non-metallic mineral resources** ☐ Extraction of metallic mineral resources ☐ Oil and gas exploration/exploitation × **Renewable energy** × **Shipping and maritime transport** × **Military and defence** × **Ports and marinas** × **Scientific research** × **Recreation, sports and tourism** × **Underwater cultural heritage** × **Submarine cables, pipelines and outfalls** × **Artificial reefs** × **Immersion of dredged material** ☐ Geological carbon storage × **Environment and nature conservation and protection (MPAs)** × **Coastal protection** ☐ Others
Identification of the spatial and temporal distribution of uses and activities, including zoning approach	× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The Situation Plan establishes potential areas for the development of private uses and activities in the national maritime space. The private use of the national maritime space requires the reservation of an area or volume for a use of the environment or marine resources or ecosystem services that exceeds what is obtained by common use and results in a benefit for the public interest. The occurrence of private uses and activities may imply the management of a multi-use space, allowing more than one private use, without prejudice to the need to respect administrative servitudes and applicable public utility restrictions, other relevant spatial limitations, and common uses. The common use of the national maritime space is not subject to TUPEM, but must, however, be carried out in accordance with applicable legislation. The Situation Plan also considered the analysis of interactions between uses and activities, embodied in a matrix of interactions - conflicts and synergies - with other private uses and activities and with common uses. The Situation Plan establishes **potential areas for the development of private uses and activities** in the maritime space. The approach to defining the potential situation included: • **Spatialization of specific areas**: aquaculture; renewable energy; • **Uses/activities, without spatialization**: marine biotechnology (bioprospecting); recreation, sport and tourism; underwater cultural heritage; submarine cables, pipelines and outfalls; • **Uses/activities without potential situation**: extraction of metallic mineral resources; oil and gas exploration/exploitation; multipurpose platforms and floating structures (not associated to other uses/activities); geological carbon storage. The **process of spatialization of private uses and activities** followed a number of steps, namely:

	• Identification of private uses and activities; • Identification and characterization of common uses; • Identification of easements and administrative restrictions; • Identification of planning instruments that affect the national maritime space; • Identification of incompatibilities and synergies between each of the activities/uses; • Identification of the most suitable oceanographic conditions for the installation of each activity/use.
Identification of system characteristics	× **Yes** ☐ No The Situation Plan includes an overview diagnosis of each marine subdivision, namely in Volume IV. It includes a general description of the corresponding marine subdivision and a characterization of: coastal and hydrographic features; marine physical and chemical conditions; marine biodiversity; spatial limitations related to protected areas and the identification of areas of significance for conservation; pressures, impacts and environmental status, according to the MSFD reporting; a description of current maritime uses and activities considered in the plans, including social-economic information and spatial distribution. The general approach to characterizing the intervention area of the plan is based, in structure and content, on the reporting documents within the context of the MSFD, namely the Marine Strategy for the Madeira Subdivision, namely the initial assessment report of the environmental status of the marine environment.
Consideration of environmental, economic, social & safety aspects	× **Yes** ☐ No Environmental, economic, social and safety aspects have been considered jointly within the different sections of the plan. The integration of these aspects in the Situation Plan includes the characterization of marine space in terms of physical, chemical, and biological conditions, and the inclusion of socioeconomic information for each marine economy sector. The Plan defines general criteria for coexistence and/or multiuse between different uses and activities, which help to guarantee the integration of these four aspects. Another key aspect is the description of constraints on space use, including administrative servitudes, public utility restrictions, and other spatial limitations like classified marine protected areas, Natura 2000 network, national ecological reserve, underwater cultural heritage, bathing areas, ports, marinas, recreational boating hubs, navigation and maritime safety constraints, military and aeronautical easements, and infrastructure and equipment. These considerations were also addressed in the Environmental Assessment process, aimed at supporting the development of the plan's options by incorporating environmental, social, and economic components through a more integrated and comprehensive approach. Moreover, article 27 of Decree-Law no. 38/2015 also specifies the criteria to be considered when there are conflicts between uses and activities: • Number of jobs created; • Qualifications of human resources; • Volume of investment; • Economic viability of the project; • Prediction of results; • Contribution to sustainable development; • Value creation; • Expected synergies in related activities; • Social responsibility of those interested in development of use or activity.
Coherence with other processes & plans	× **Yes** ☐ No The MSP process has complied with the requirements of the EU MSPD by seeking to promote coherence between other rules, policies and plans relevant to the maritime space management. The coordination and compatibility of national maritime spatial planning and management with sectoral policies and economic, social, environmental and spatial planning development is one of the principles enshrined in LBOGEM. The strategic framework of the plan is based on the set of reference documents for the MSP process, at international and EU level. The instruments, policies and the legal and regulatory framework that apply to the entire national territory and in the Autonomous Region of Madeira were also considered in the strategic framework of the Situation Plan. The Situation Plan analysed the articulation and compatibility with programs and territorial plans that have an impact on the intervention area of the plan, from a perspective of integrated coastal management (e.g., Coastal Zone Programmes (POC)). Compatibility with the plans drawn up under the Water Framework Directive (WFD) has also been analysed (e.g., Madeira Archipelago Hydrographic Region Management Plan 2016-2021). As regards the rules and guidelines for the sectoral and special programs covering maritime areas, these were analysed in the framework of the Situation Plan (e.g., Management Plan for Marine Aquaculture in the Autonomous Region of Madeira). The cartographic expression proposed for the potential areas considered the territorial model and the existing regimes so as not to create situations of conflict or dubious interpretation. Whenever incompatibilities were detected between existing activities and those instruments, the mapping of potential areas for these activities was prepared in order to correct these incompatibilities. An example of this situation in Madeira was the occurrence of existing areas for the exploration of non-metallic mineral resources, in this case the extraction of aggregates, and one of the selected areas for marine aquaculture production.
Consideration of land-sea interactions	× **Yes** ☐ No As mentioned before, during the elaboration of the Situation Plan, the Costal Programs (POC) of Madeira and Porto Santo were taken into consideration, although at the time only POC of Proto Santo was formally approved. However, Costal Program of Madeira was already under development and considering POC acts until bathymetric of 30 meters depth, it was necessary to take care of all the situations included in it, since the intervention area is directly related to sea-land interactions. Nonetheless, it is considered that there is room for improvement in the analysis of land-sea interactions in the next MSP cycle, adapted to specific cases and considering the inclusion of interactions related to natural processes. Some lack of clarity in the legal framework and in the administrative and institutional competencies, and the mechanisms for coordinating them when there is a need to integrate interactions between sea and land, sea and air, or all three, pose operational challenges, which can complicate the resolution of situations where these interactions are relevant, making decision-making reactive rather than preventive, integrated, and informed.
Application of ecosystem-based approach	× **Yes** ☐ No The Situation Plan for the Madeira Subdivision assumes and incorporates the national vision and objectives, which integrate an ecosystem-based approach. Examples of the practical application of the ecosystem approach in the Situation Plan include the analysis of ecosystem characteristics based on the MSFD reporting and privileging the multiple use of maritime space, considering its different components (sea soil, water column and surface), as it presupposes the sustainability of the marine environment. Moreover, compatibility between private or common uses was based on the principle of ecosystem sustainability. Regarding nature conservation, in addition to classified protected areas, areas important for the protection of biological, geological, and landscape natural heritage were also identified (including potential areas). Nevertheless, applying an ecosystem-based approach is still very challenging due to inexistence or very limited information regarding the reference state of marine habitats and the determination and characterization of ecosystems services.
Consideration of climate change effects	× **Yes** ☐ No

	MSP is responsible for the distribution of activities and uses, in spatial and temporal terms, and is based on minimising conflicts, promoting compatibility, protecting the marine ecosystem and mitigating climatic phenomena. Whilst elaborating the Situation Plan for the Madeira Subdivision, the CLIMA Strategy was taken into consideration. This strategic document integrates knowledge about the influence of climate on various sectors (agriculture and forestry, biodiversity, energy, water resources, hydro geomorphological risks, human health and tourism) and defines an integrated approach, setting out guiding measures to help the region adapt to climate change and reduce its vulnerability to its impacts. Moreover, the integration of land-sea interactions, and the complementation between the Situation Plan with PGRH and POC's allowed for a better understanding of possible effects of climate change in coastal erosion. The Situation Plan defined possible areas for artificial feeding of coastal stretched. Nevertheless, the Plan did not apply a holistic approach to estimate and discuss the effects of climate change on the development and implementation of the Situation Plan.
Promotion of co-existence and compatibility of uses (including multiuse)	× **Yes** ☐ No The MSP process complies with the EU MSPD by representing and identifying the spatial and temporal distribution of existing and potential uses and activities. The Situation Plan sets out potential areas for the development of private uses and activities in the national maritime space, where the approach to defining potential situations included the following: spatialization of specific areas, spatialization of exclusion areas, uses/activities without spatialized potential situation, and uses/activities without potential situation. A multisectoral approach was also encouraged, based on the principle that the private use of national maritime space assumes the compatibility of uses, always favouring multiple use whenever possible, based on the various components of maritime space: seabed and subsoil, water column, and water surface. For each sector identified and characterized in the plan, good practices were identified, related to the utilisation and management of maritime space, as well to the compatibility of private uses, common use and fruition, and administrative servitudes and restrictions. The compatibility between private uses and common uses was the result of exhaustive work carried out with the entities that made up the Consultative Commission for the Madeira Subdivision and other entities external to the plan, which, due to their importance, were included in some meetings.
Application of alternative scenarios	× **Yes** ☐ No Most of the private and common uses and activities are concentrated in the territorial sea and inland marine waters, and therefore require greater attention from the public authorities, in order to mitigate or minimise them and unlock the existing potential associated with the maritime space and thus contribute to regional economic development. The meetings held between the sectoral working groups and with organisations outside the Consultative Commission for the Madeira Subdivision have made it possible to identify existing or potential conflicts, as well as to find a way for the different interests in the maritime space to coexist. The main conflicts encountered, and the respective proposed scenarios, were included in the Situation Plan. These proposed scenarios were carried out within the framework of the MarSP project.
Consideration of transboundary issues and transboundary cooperation	× **Yes** ☐ No The Situation Plan considers the transboundary aspects in relation to the maritime space under the jurisdiction or sovereignty of Spain and Morocco, in terms of existing infrastructure, servitudes and administrative restrictions, or in relation to the distribution of habitats and geological resources. The transboundary effects of the Situation Plan were analysed in the context of its SEA. Formal consultations also took place in 2021 in the context of the SEA of Spain's MSP process, which included the participation of Madeira and the Azores subdivisions. National and regional participation in EU initiatives aimed at promoting cooperation between Member States and third countries was achieved through involvement in the "European MSP Platform" and the "EU Maritime Forum", and in projects such as MarSP, PLASMAR and MSP-OR. Other examples are the MISTIC SEAS I, II, and III projects (2015 – 2021), which aimed to establish common methodologies for monitoring marine biodiversity and for assessing the good environmental status of trophic chains, from a cross-border perspective under the MSFD.
Stakeholder engagement	× **Yes** ☐ No Under article 8 of Decree-Law no. 38/2105, all citizens, as well as scientific, professional, trade union and business associations, directly or indirectly associated with maritime activities, have the right to participate in the preparation, amendment, review and evaluation of national maritime spatial planning instruments. They can do so by making suggestions and requests for clarification throughout the procedures for drafting, amending, reviewing and evaluating national maritime spatial planning instruments, as well as intervening in the public discussion phase that necessarily precedes their approval. The website www.psoem.pt, as well as www.marmadeira.com, is available for stakeholders to follow the MSP process. It provides general and technical information, including minutes of the technical working groups, public consultation and the geoportal of the Situation Plan at https://www.psoem.pt/geoportal_psoem/. The stakeholder involvement began at an early stage of the Situation Plan development. Several meetings were held between the Consultative Committee for the Madeira Subdivision (CC-Madeira) and external entities/stakeholders which play an important role in the maritime space during the elaboration of the Situation Plan. The main objectives of these meetings were to prevent and find solutions for any potential or existent conflicts in the regional maritime space. Whilst elaborating the Situation Plan for Madeira subdivision, five Working Groups were established to accompany the drafting of the PSOEM: • GT 1 – Defense, Security and Navigation; • GT2 – Nature Conservation; • GT 3 – Tourism and Recreation; • GT 4 – Scientific Research and Emergent uses and Activities; • GT 5 – Territorial Development.
Communication and dissemination	× **Yes** ☐ No The right to information was ensured through the provision of a dedicated website, the national PSOEM portal (www.psoem.pt), where the contact information of the competent authorities was disclosed, through which any requests for clarification and contributions can be submitted. This online platform aims to facilitate public participation and ensure free access to information about the development of the Situation Plan, as well as to consult geographical information related to the plan, available at the national PSOEM Geoportal (https://www.psoem.pt/geoportal_psoem/). Madeira is also going to have a regional geoportal where users can easily find the information regarding this subdivision. During the public discussion period (30.04.2018 – 31.07.2018), on June 7 2018, a public session was held to present the proposal of Situation Plan.
Data	The Situation Plan included the best available scientific and technical data and information, being mainly collected under, mainly, the different authorities in charge of maritime issues (both at national and regional level). The geographical information produced in the framework of the Situation Plan for the Madeira Subdivision is accompanied by metadata files, which adhere to the National Metadata Profile for Geographical Information, the technical requirements emanating from the INSPIRE Directive and its implementing provisions on metadata, established through Commission Regulation (EC) No 1205/2008.
Risk assessment and contingency	☐ Yes × **No**
MONITORING, EVALUATION & REVISION	
M&E considered within the MSP process and plan, tailored to the specific context	☐ M&E considered within the MSP process and plan, tailored to the specific context ☐ M&E not considered within the MSP process and plan × **Other**

			The Portuguese MSP plan includes a specific section within Volume I (part B), describing the basis of the monitoring and assessment of the plans, which stands on following key domains: the environmental component, based on the report to the MSFD; and the socioeconomic component, linked to the monitoring of the National Ocean Strategy and related SEAMIND initiative, which integrates indicators to evaluate the private use. It also mentions that monitoring should be coherent with the SEA conclusions, in order to evaluate and monitor the significant effects in the environment that may occur due to the implementation of the Situation Plan. Under articles 87 and 88 of Decree-Law no. 38/2015, the results from the permanent assessment of the different planning instruments for the national maritime space are published every three years through a publicly available report on the status of national MSP. This report must translate the balance of the implementation of the MSP instruments subject to evaluation, as well as the levels of internal and external coordination obtained, as well as pay attention to the strategic objectives established in the National Ocean Strategy, justifying a possible need for revision. The first periodic report "Relatório sobre o Estado do Ordenamento do Espaço Marítimo Nacional" (REOEMN), concerning the period 2015-2022, was published early in 2024 (including Madeira Subdivision), being subject to public discussion for a period of 43 days (06.03.2024 to 17.04.2024). Moreover, a monitoring and evaluation model is being proposed with the support of the MSP-OR project, taking into account the regional specificities of both OR Madeira and the Azores.
Design and organization of M&E	Competent authorities		× **Yes** ☐ No **DGPM** - The **Directorate-General for Maritime Policy** is the competent authority regarding the implementation of the EU MSPD, including its monitoring, in order to promote the permanent assessment of the different planning instruments for the national maritime space (according to article 87 of Decree-Law No. 38/2015, of March 12), with the support of the remaining competent authorities (see above).
	M&E team or dedicated structures		☐ Yes × **No** ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups × **Other** There is no specific M&E team; however, the Situation Plan predicts a governance structure, made up as described above, that may serve as proxy until the establishment of a specific team.
	Purposes of M&E		There is no specific chapter dedicated to the OR; however, in the Situation Plan, namely in the specific section within Volume I (part B), it is assumed that monitoring is an essential process for adaptive management and that the plan considers relevant indicators that contribute to the assessment of the sustainable use of marine resources and the uses and activities that occur in the national maritime space.
	Challenges and limitations		Some of the main challenges identified in the OR Madeira concerning M&E are: • To identify the most appropriate indicators; • Data collection (and existence): whilst choosing the indicators, one should also consider that frequently there is insufficient, outdate and incomplete information to fill out the metadata files of the selected indicators; • Moreover, there is difficulty in ensuring the quality and reliability of the existing data as well as ensuring long term series; • To have human resources capacitated to collect and analyse the information in due time; • To involve stakeholders in the process of identification and filling of the selected indicators.
	Scope and timing of M&E	☐ M&E of plan making	There is no existing approach to M&E of the plan making process in the Situation Plan; however, as mentioned above, the monitoring and evaluation model proposed under the MSP-OR project predicts a number of indicators and evaluation questions for the plan making process (although the plan has been already developed, it was viewed as important to identify indicators for this phase of the plan to inform future MSP cycles).
		☐ M&E of the plan	There is no existing approach to M&E of the plan itself in the Situation Plan; however, as mentioned above, the monitoring and evaluation model proposed under the MSP-OR project predicts a number of indicators and evaluation questions for plan evaluation. Additionally, the REOEMN identified some improvements to the plan.
		☐ M&E of plan implementation	The existing approach to M&E of plan implementation predicted in the Situation Plan is the one described above, under the specific section within Volume I (part B). As also mentioned, the monitoring and evaluation model proposed under the MSP-OR project predicts further indicators, as well as evaluation questions tailored to assess plan implementation. Additionally, the REOEMN identified some aspects of plan implementation, namely related to the licensing procedure under TUPEM.
		☐ M&E of plan outcomes	The existing approach to M&E of plan outcomes predicted in the Situation Plan is the one described above, under the specific section within Volume I (part B). As also mentioned, the monitoring and evaluation model proposed under the MSP-OR project predicts further indicators, as well as evaluation questions tailored to assess plan outcomes. Additionally, the REOEMN identified some aspects of plan outcomes, namely relating the plan with the objectives of the newer National Ocean Strategy.
		☐ Others	-
	Resources for M&E		☐ Yes × **No** There are no specific resources predicted in the Situation Plan; however, besides from co-funded projects under the topic of MSP, the yearly budget of the Autonomous Region of Madeira can assign resources to the regional competent authority. Furthermore, according to article 75 of Decree Law no. 38/2015, the tax applicable to the issuance of TUPEM aims to offset administrative costs resulting from the maritime spatial planning and management, maritime safety, maintenance and inspection. Pursuant to its article 86, 75% of the revenues resulting from the tax collection should be allocated to the entity competent for granting the TUPEM, half of them to be applied in the financing of activities aimed at improving management and planning of the maritime space; in financing actions to maintain and achieve the good environmental status of the marine environment under the MSFD, as well as maintenance of security services and financing of monitoring systems.
Stakeholder involvement in M&E			☐ Yes × **No** There is no existing approach to stakeholder involvement in M&E in the Situation Plan; however, as mentioned above, the monitoring and evaluation model proposed under the MSP-OR project provides recommendations for stakeholder participation, as well as the evaluation of stakeholder engagement in itself.
Relation to MSP goals and objectives and desired outcomes			× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives The above-mentioned specific section within Volume I (part B) of the Situation Plan is indirectly linked to the MSP objectives, in the sense that they include the contribution of MSP to the maintenance of good environmental status under the MSFD, as well as the contribution of MSP to the achievement of the goals of the National Ocean Strategy. Moreover, the monitoring and evaluation model proposed under the MSP-OR project takes into consideration the relation of indicators with each MSP objective, considering that these are general objectives, as well as the above-mentioned strategic instruments.
Indicator system			The above-mentioned specific section within Volume I (part B) of the Situation Plan integrates the existing environmental and socio-economic indicators under the SEAMIND initiative, in line with the monitoring of the MSFD and the National Ocean Strategy, taking also into account the indicators proposed in the framework of the SEA procedure. Additionally, the monitoring and evaluation model proposed under the MSP-OR project includes a proposal of indicator matrix, with indicators for each phase of the MSP cycle (plan making; plan; implementation of the plan; plan results and outcomes), which contribute to answering some of the identified questions relevant to evaluate the MSP process in the OR's. These indicators may contribute exclusively to one phase of the cycle, or several. In all cases, these indicators will require periodic data collection from different public entities and stakeholders.
Monitoring approach			The monitoring approach relies on the indicator system previously described.
Evaluation approach			The evaluation approach relies on the permanent assessment of the planning instruments for the national maritime space and the publication of the report on the status of national MSP, according to articles 87 and 88 of Decree-Law no. 38/2015. As such, the REOEMN identified some needs and challenges and took into consideration the evaluation of the socio-economic effects reached by the MSP instruments, in light of the strategic objectives established in the National Ocean Strategy. Moreover, the monitoring and evaluation model proposed under the MSP-OR project defines a set of evaluation criteria for each phase of the MSP cycle, requiring answering several evaluation questions, some of them based on the data coming from indicators.

Communication of M&E results	The communication of M&E is done through the REOEMN, a publicly available report resulting from the permanent assessment of the planning instruments for the national maritime space. In addition, the monitoring and evaluation model proposed under the MSP-OR project provides recommendations for the effective communication of M&E results.
Adaptation, revision and update framework	× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other Decree-Law no. 38/2015 outlines a general adaptive management framework to allow for updates and to reflect changing conditions in the maritime space, according to its articles 36 to 42. As such, the Situation Plan can be subject to four types of dynamic mechanisms, namely material corrections, amendments, revisions and suspensions: • **Material corrections** include fixing grammatical, spelling, calculation or cartographic errors, inconsistencies in execution rules or geo-spatial representation, and discrepancies between original and published acts; • **Amendments** occur upon the approval of Allocation Plans or the issuance or extinction of TUPEM; or due to changes in environmental conditions, in maritime safety, or socioeconomic development perspectives; or following the enactment of laws or regulations, namely territorial management instruments, following specific procedures and deadlines; • **Revisions** are prompted by evolving economic, social, cultural, or environmental conditions, and entail a comprehensive reconsideration of the plan, occurring no sooner than five years after the plan's implementation unless required by environmental changes or compliance with European Community standards; • **Suspensions** may be total or partial, to address exceptional circumstances impacting national maritime space planning and jeopardizing the pursuit of relevant public interests., but cannot exceed one year.
USEFUL RESOURCES AND LINKS	
MSP website (if applicable)	https://www.psoem.pt/
Geoportals/ cartographic viewers (if applicable)	https://webgis.dgrm.mm.gov.pt/ (Madeira geoportal is under development)
MSP authorities' websites	https://marmadeira.madeira.gov.pt/ https://www.dgrm.pt/ https://www.dgpm.mm.gov.pt/
Other useful links (if applicable)	https://msp-or.eu/ https://maritime-spatial-planning.ec.europa.eu/media/document/Portugal_countryprofile

Table 9. MSP data fiche for the Canary Islands Outermost Region.

OUTERMOST REGION			Canary Islands
GOVERNANCE			
Member State			**Spain**
MSP competent authorities	National level		**MITECO - Ministry for the Ecological Transition and the Demographic Challenge.**
	Regional level		-
Institutional capacity and cooperation			× **Yes** ☐ No ☐ MSP Consultative Committee × **Working Groups** × **Other** Already existing inter-administrative coordination bodies of the Marine Strategies have been capitalized for the MSP process: the Inter-Ministerial Commission on Marine Strategies (for coordination with ministerial departments) and the Monitoring Committees (for coordination with autonomous communities –regional governments–). Within the Inter-Ministerial Commission on Marine Strategies, a specific working group for MSP has been created (GT-OEM). Besides, ad-hoc working groups have been created for specific key issues, involving both national and regional authorities.
LEGAL FRAMEWORK			
National/Regional MSP policy and legal framework			The Directive 2014/89/EU was transposed into the Spanish legal system by the Royal Decree 363/2017, of 8th April, establishing a framework for maritime spatial planning. The first Maritime Spatial Plans in Spain were approved by the Royal Decree 150/2023, of 28th February, approving maritime spatial plans for the five Spanish marine subdivisions.
Integration with other National/Regional policies			× **Applicable** ☐ Non-applicable The Royal Decree 363/2017, of 8th April, establishing a framework for maritime spatial planning, was published as a development of the article 4.2 of the Law 41/2010, of 29th December, on the protection of the marine environment. This article establishes that the Government may approve common guidelines for all marine strategies with the aim of ensuring the coherence of its objectives. In Spain, MSP cycle last 6 years, in order to encompass it with the Programmes of Measures of Marine Strategies.
Coherence with EU MSPD	Applicability		× **Legally binding in the OR** ☐ Not legally binding in the OR
	Transposition		**8th April of 2017**
	Involvement in EU support initiatives	Participation in Member States expert group on maritime spatial planning	× **Applicable** ☐ Non-applicable Spanish MSP Competent Authority participates directly in the Member States expert group on maritime spatial planning.
		Participation in Technical Expert Group on Data for MSP	× **Applicable** ☐ Non-applicable Spain also participates in the Technical Expert Group on Data for MSP through scientific and technical institutions which support the MSP process, such as the Spanish Institute of Oceanography (IEO(CSIC)) and the Centre for harbours and coastal studies (CEPYC) of the Centre for Studies and Experimentation in Public Works (CEDEX).
		Used support of the Assistance mechanism "European MSP Platform"	× **Applicable** ☐ Non-applicable Spain's country fiche is included in the European MSP Platform.
		Participation in EU MSP related funded projects	× **Applicable** ☐ Non-applicable Spain has participated and participates in several EU MSP-related funded projects, mainly through scientific and technical institutions which support the MSP process, such as IEO(CSIC) and CEPYC, of CEDEX, and in some projects (such as MSP-OR) the Competent Authority also participates directly as a partner. Some of the projects have been, and are: SIMWESTMED, SIMNORAT, SIMAtlantic, MSPMED, MSP-OR, MSP-GREEN and REGINA-MSP.
		Participation in MSP dedicated events	× **Applicable** ☐ Non-applicable Members of the Spanish Competent Authority have participated in several MSP dedicated events, such as the different editions of the international conference and forum on MSP, organized by MSPglobal.
		Others	× **Applicable** ☐ Non-applicable The scientific and technical institutions which support the MSP process, in particular IEO(CSIC), support the coordination of the Community of Practices of MSP in the Mediterranean (MED-MSP-CoP), which is an open discussion forum for MSP-related issues and sharing experiences in the Mediterranean; and participates in ICES working group on Marine Planning and Coastal Zone Management (WGMPCZM) and the Technical Expert Group of data on MSP.
Links to other EU and international policies, agreements, strategies and legislation	European Green Deal & related actions[13]		4
	Integrated Maritime Policy		5
	Integrated Coastal Zone Management		4
	Common Fisheries Policy		4
	Marine Strategy Framework Directive		5
	Water Framework Directive		3
	Birds and Habitats Directives		4
	Bathing Waters Directive		3
	Renewable Energy Directive		4
	Environmental Impact Assessment Directive		3
	Strategic Environmental Assessment Directive		4

[13] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

	INSPIRE Directive	5
	EU Climate Law	4
	EU sectoral policies (e.g., Trans-European transport network)	3
	Sea Basin Strategies (e.g., Atlantic Action plan)	3
	Strategy for the EU Outermost Regions	3
	Other	-
Links to international policies, agreements, strategies and legislation	United Nations Convention on the Law of the Sea	5
	Convention on Biological Diversity	5
	UN 2030 Agenda for Sustainable Development	5
	Regional Seas Conventions (e.g., OSPAR Convention, Barcelona Convention)	5
	MARPOL	4
	SAR Convention	3
	SOLAS Convention	3
	London Convention	4
	Bonn Convention	4
	Bern Convention	4
	Ramsar Convention	4
	CITES	4
	ESPOO Convention	3
	UNESCO Convention on the Protection of the Underwater Cultural Heritage	4
	Other	-
ADMINISTRATIVE FRAMEWORK		
Planning level		× **National** × **Regional** ☐ Local The process is carried out at a national level, but there are five maritime spatial plans, one for each one of the five marine subdivisions established in Spain.
Planning area (maritime regions)	Internal Maritime Waters	× **Applicable** ☐ Non-applicable
	Territorial Sea	× **Applicable** ☐ Non-applicable
	Exclusive Economic Zone	× **Applicable** ☐ Non-applicable
	Continental Shelf (until 200 nm)	× **Applicable** ☐ Non-applicable
	Continental Shelf (beyond200 nm)	× **Applicable** ☐ Non-applicable
Marine subdivision(s) (if applicable)		× **Yes** ☐ No 5 marine subdivisions: North Atlantic, South Atlantic, **Canary Islands**, Strait and Alboran and Levantine-Balearic.
MSP instrument(s) (if applicable)		Royal Decree no. 150/2023, of 28th February, approving the maritime spatial plans for the five Spanish marine subdivisions.
Current status		☐ MSP Plan not approved × **MSP Plan approved and in force since 28th February 2023**
MSP process phases	Pre-planning	From 2014 to 2017: elaboration of the legal instrument transposing the MSPD (Royal Decree 363/2017, of 8th April). From 2017 to 2020: establishment of the basis of the planning in coordination with other public administrations (guiding principles, objectives, etc.).
	Planning (analysis for planning or plan development or plan completion)	From 2020 to 2022: The process included, among others, the following tasks: drafting of the plans, gathering environmental and socio-economic information, gathering spatial information, analysing the information, analysing interactions between uses and activities, zoning of uses and activities, establishment of criteria and establishment of measures for the implementation of the plans, drafting the environmental strategic assessment study, conducting public consultations, and final drafting. On a cross-cutting basis, intense inter-administrative coordination took place, and different stakeholders' involvement events were organised. Best available scientific and technical information was used.
	Approval	Royal Decree 150/2023, of 28th February, approving the maritime spatial plans for the five Spanish marine subdivisions.
	Implementation	x Most of the measures included in the plans are being implemented, the first meeting with other public administrations has been held, and the first participatory events are being organised.
	Revision	The Plans are foreseen to be reviewed in 2027 with support of the specific-developed MSP monitoring programme.
Licensing/permitting framework (if applicable)		☐ Yes × **No**
Supporting projects and initiatives (EU funded or not)		× **Yes** ☐ No MSP-OR, MSP-GREEN, REGINA-MSP, Member States expert group on maritime spatial planning, Technical experts group on data for MSP, MSP Platform, WestMED.
Resources and funding		× **Yes** ☐ No Public resources/Own resources (Competent Authority)
MSP PLAN		
Type of plan		× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non- statutory

	× **Strategic or guiding plan** ☐ Steering plan with defined rules and regulations ☐ Other The plans have been published as a legal instrument (Royal Decree). The provisions on the plans are legally binding for public administrations, but the plans don't create by themselves rights or obligations for individuals or entities. Most provisions have a strategic and guiding nature or are already published in other planning tools or legal instruments.
Type of plan content	☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other The plan is shaped by a core document that integrates the vision, the objectives, common criteria, zoning, measures, as well as evaluation and monitoring of the plans, all of them applying to all marine subdivisions. Besides, the plan is supported by 5 documents, related to block III, "Diagnosis", which includes and analyse baseline data and information of each marine subdivision. The plans take into account the different uses and activities that take place in the Spanish maritime space, including general-interest uses (biodiversity conservation, national defence, underwater cultural heritage, marine surveillance or ensuring water quality) and sectorial uses (mainly aquaculture, fisheries, energy, cables, maritime and aerial navigation, ports and tourism). Uses and activities expected to develop in the short-term have also been considered. The plans describe the zoning for uses and activities for general-interest, called Priority Use Areas; and the zoning for sectorial uses (High Potential Areas).
Plan horizon (if applicable)	Planning with a **6-year** horizon.
Plan revision	Updating the plan at least every **6 years** (first revision foreseen in 2027)
Vision (if applicable)	× **Yes** ☐ No A marine space where different uses and activities can coexist, while maintaining the Good Environmental Status of marine waters.
General and/or specific objectives (if applicable)	× **Yes** ☐ No The general objective of the plans is to foster sustainable activity and growth in the maritime sectors in a way that is compatible with respect for the values of marine spaces and with sustainable use of resources. Specific objectives have been categorised into three groups: general-interest objectives, multi-sector horizontal objectives and sectorial objectives.
Principles/drivers (if applicable)	× **Yes** ☐ No The plans include a set of guiding principles, such as sustainable development, ecosystem approach, economic diversification, coordination, participation or the use of best available data, among others.
Governance structure	× **Yes** ☐ No The Directorate General of the Coast and the Sea (DGCM), within the MITECO, is the Competent Authority. Two already existing coordination bodies have been capitalized for the MSP process, in order to avoid the duplication of efforts: the Inter-Ministerial Commission on Marine Strategies (for the coordination with other Ministerial Departments) and the monitoring committees of Marine Strategies for the 5 marine demarcations (for the coordination with coastal Autonomous Communities). Also, various participatory events with civil society have been organised, and the plans have been under mandatory public consultation periods. For specific topics, ad-hoc working groups have been established.
Measures (if applicable)	× **Yes** ☐ No The plans include a total of 26 measures. Nine general measures, 3 measures related to land-sea interactions, and 14 specific measures related to the different objectives established (conservation of biodiversity, R&D, ports, aquaculture, etc.).
Subject to Strategic Environmental Assessment	× **Yes** ☐ No The Strategic Environmental Assessment of the MSP Plans includes the following sections: introduction; overview of the plans; objectives of the plans; relations with other planning tools; environmental characteristics of the five marine subdivisions (including main environmental concerns); related environmental objectives on international, European, national and regional instruments; analysis of alternatives; potential environmental effects of the plans; potential transboundary effects; strategic environmental measures; and the environmental surveillance programme. International consultations were conducted with neighbouring countries with Italy, France and Portugal expressing interest. Additionally, following public consultations and the analysis of received allegations, considerations from the Strategic Environmental Declaration (SED) have been incorporated. SED was approved by the Resolution of 2nd December 2022, of the Directorate General for Quality and Assessment.
Maritime uses and activities included in the plan (spatialized in the plan)	× **Aquaculture**
	× **Fisheries**
	☐ Biotechnology
	× **Extraction of non-metallic mineral resources**
	☐ Extraction of metallic mineral resources
	× **Oil and gas exploration/exploitation**
	× **Renewable energy**
	× **Shipping and maritime transport**
	× **Military and defence**
	× **Ports and marinas**
	× **Scientific research**
	× **Recreation, sports and tourism**
	× **Underwater cultural heritage**
	× **Submarine cables, pipelines and outfalls**
	× **Artificial reefs**
	× **Immersion of dredged material**
	☐ Geological carbon storage
	× **Environment and nature conservation and protection (MPAs)**
	× **Coastal protection**

	☐ Others
Identification of the spatial and temporal distribution of uses and activities, including zoning approach	× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The plans include Priority Use Areas (PUA) and High Potential Areas (HPA). PUA correspond to areas where general-interest uses are currently taking place, and are established to guarantee such purposes. HPA correspond to areas where it is foreseen that certain activities take place in the (near) future (both general-interest and sectorial activities). There are 6 categories of PUA (for the protection of biodiversity, for the extraction of marine aggregates for coastal protection purposes, for national defence, for navigation safety, for R&D and for underwater cultural heritage); and 6 categories of HPA (for the conservation of biodiversity, for the extraction of marine aggregates for coastal protection purposes, for R&D, for ports activity, for the development of offshore wind energy and for aquaculture).
Identification of system characteristics	× **Yes** ☐ No The plans include a specific section (block III) dedicated to the diagnosis of each marine subdivision. It includes: a general description of the corresponding marine subdivision; a description of the current state of the maritime uses and activities considered in the plans (including the spatial distribution); current spatial limitations to such uses and activities, derived from the existence of MPAs and related regulations; foreseen future spatial distribution of maritime uses and activities; analysis of land-sea interactions; as well as a final analysis of spatial interactions between the different uses and activities considered in the plans. An appendix with the description and spatial distribution of the main elements that constitute the marine green infrastructure in each marine demarcation is also included.
Consideration of environmental, economic, social & safety aspects	× **Yes** ☐ No Environmental, economic, social and safety aspects have been taken into account jointly within the different sections of the plans. The plans include general criteria for coexistence and criteria for the different uses and activities, which help to guarantee the integration of these four aspects.
Coherence with other processes & plans	× **Yes** ☐ No Within the section (block) II of the plans (guiding principles and objectives), an analysis of already existing objectives at an international, European, national and regional level have been made. The objectives of the MSP Plans have been defined taking into account these objectives. Besides, the Strategic Environmental Assessment of the plans includes the identification of related planning instruments and their connections with the MSP plans.
Consideration of land-sea interactions	× **Yes** ☐ No Each one of the five maritime spatial plans (one for each marine subdivision) include a specific land-sea interaction section. This section contains one factsheet for each land-sea and sea-land interaction identified, including a general characterization of the interaction in the marine subdivision, a description of the activities involved, an analysis of the already existing planning tools addressing the issue, and the role of the MSP plans (the MSP plans will only address those topics which have not been already addressed by other planning tools). 7 land-sea interactions topics have been identified (related to land-based pollutant discharges, alteration of coastal sedimentary dynamics, effects of coastal infrastructures, or the modification of natural conditions on land derived from climate change that may have consequences at sea). 6 sea-land topics have been identified (related to the increase of inland infrastructures resulting from the development of maritime uses, impacts on the sea landscape, pollution, or the modification of natural conditions at sea derived from climate change that may have consequences on land).
Application of ecosystem-based approach	× **Yes** ☐ No The Spanish MSP plans have taken into account the ecosystem-based approach since its inception. The Royal Decree establishing a framework for MSP was published as a development of the Spanish Law on the protection of the sea. The plans are closely related to Spanish Marine Strategies. Several objectives of the plans (including the general objective) are related to the integration of environmental dimension in maritime activities. Environmental characteristics have been described and taken into account in the planning. The plans include priority use areas for the protection of biodiversity (MPAs already declared) and high-potential areas for the conservation of biodiversity (areas which may become MPAs). The plans also include environmental criteria for the different uses and activities, and measures related to the integration of environmental issues in marine activities. The monitoring plans also include the monitoring of environmental characteristics of the marine environment and some of the monitoring programmes of marine strategies are included in the monitoring programme of the Spanish MSP plans.
Consideration of climate change effects	× **Yes** ☐ No Climate change is a transversal issue in the Spanish MSP plans, included within different parts of it (objectives, criteria, measures, monitoring, etc.). Mitigation and adaptation to climate change have been also taken into account within the strategic environmental assessment of the plans.
Promotion of co-existence and compatibility of uses (including multiuse)	× **Yes** ☐ No The diagnosis of the Spanish MSP plans includes an analysis of interactions between maritime uses and activities as a first approach -and to provide a basis- to the planning. Besides, different criteria for coexistence have been included: • General criteria for sustainable coexistence • Land-sea interaction criteria • Sectorial criteria
Application of alternative scenarios	× **Yes** ☐ No Within the diagnosis of the plans, available forecasts for the different maritime uses and activities have been taken into account.
Consideration of transboundary issues and transboundary cooperation	× **Yes** ☐ No Within the strategic environmental assessment of the plans, transboundary consultations were made to Portugal, France and Italy. Spain also participates in several transboundary cooperation projects funded by the European Commission.
Stakeholder engagement	× **Yes** ☐ No During the elaboration of the Spanish MSP plans, several participation activities were organized, including workshops and participation in sectorial events organized by different stakeholders. The elaboration and approval process also included three different public consultation processes. The plans have included a specific measure (OEM7) in order to elaborate a stakeholder engagement strategy.
Communication and dissemination	× **Yes** ☐ No The plans have been disseminated, mainly, through media (website, press releases, etc.) and through the organisation and participation in different events (meetings, workshops, conferences, etc.).

Data			The Spanish MSP plans have included the best available scientific and technical data and information. This information has been collected, mainly, from the initial assessment of the Marine Strategies, as well as from the different authorities in charge of maritime issues (both at national and regional level).
Risk assessment and contingency			× **Yes** ☐ No The monitoring plan will include indicators and mechanisms for the assessment of the implementation of the plans, as well as for the assessment of the environmental and socio-economic changes in order to detect risks.
MONITORING, EVALUATION & REVISION			
M&E considered within the MSP process and plan, tailored to the specific context			× **M&E considered within the MSP process and plan, tailored to the specific context** ☐ M&E not considered within the MSP process and plan ☐ Other The Spanish MSP plans include a specific section within block V, describing the basis of the monitoring and assessment of the plans. A complete monitoring and evaluation plan is being elaborated. This plan will take into account the information and recommendations from different sources, including the results of the WP5 of the MSP-OR project.
Design and organization of M&E	Competent authorities		× **Yes** ☐ No The Competent Authority for the elaboration, implementation, monitoring and evaluation of the plans is the **Directorate General of the Coast and the Sea, of the Spanish Ministry for the Ecological Transition and the Demographic Challenge**. This Directorate General, through its MSP area, will gather, annually, all the necessary information from the different regional and national authorities.
	M&E team or dedicated structures		× **Yes** ☐ No ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups × **Other** The Directorate General of the Coast and the Sea, of the Spanish Ministry for the Ecological Transition and the Demographic Challenge, is the Competent Authority for the elaboration, implementation, monitoring and evaluation of the plans. This Directorate General counts with a specific MSP area. The elaboration of the monitoring and evaluation plan will be subcontracted.
	Purposes of M&E		To evaluate the effectiveness of the plans and to detect potential changes in the environmental and socio-economic changes, which may require adaptations or modifications of the plans.
	Challenges and limitations		Bureaucratic problems have been experienced in the materialization of the contract by which the monitoring and evaluation plan will be elaborated.
	Scope and timing of M&E	☐ M&E of plan making	-
		× **M&E of the plan**	The Spanish MSP plans describe the basis of the monitoring and evaluation plan, including a first set of indicators associated with each objective of the plan. The elaboration of the M&E plan will be subcontracted and shall include, at least, the monitoring and evaluation of the following aspects: 1. Environmental status of marine waters; 2. Human uses and activities at sea; 3. Socio-economic context; 4. Effectiveness of the plans.
		× **M&E of plan implementation**	The Royal Decree 363/2017 establishing a framework for maritime spatial planning states, in its article 12, that the Directorate General of the Coast and the Sea (MSP Competent Authority) will gather, annually and from the responsible authorities in charge of each measure and issue, the information related to the implementation of the plans.
		× **M&E of plan outcomes**	The M&E of the plan outcomes is foreseen in the plans, but the specific processes and mechanisms haven't been defined yet.
		☐ Others	-
	Resources for M&E		× **Yes** ☐ No The elaboration of the monitoring and evaluation plan will be subcontracted. The implementation of this M&E plan will be developed by the MSP area.
Stakeholder involvement in M&E			× **Yes** ☐ No The involvement of stakeholders in the M&E is foreseen in the plans, but the specific processes and mechanisms haven't been defined yet.
Relation to MSP goals and objectives and desired outcomes			× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives
Indicator system			Although the complete M&E plan has not been finished yet, the MSP plans include a first set of indicators. These indicators are directly associated to the objectives of the plans, which are simple, concrete and measurable. Some of them are already being monitored within other planning tools, and some of them have been defined specifically for the MSP plans.
Monitoring approach			As mentioned above, the monitoring and evaluation programme have not been elaborated yet, but the basis have been established within the section V of the MSP Plans. The monitoring programme shall include four main aspects (environmental status, uses and activities and its impacts on environment, socio-economic context and effectiveness of the plans), and the MSP Competent Authority will gather the necessary information from the different responsible authorities.
Evaluation approach			As mentioned above, the monitoring and evaluation programme has not been elaborated yet, but the basis has been established within the section V of the MSP Plans. The evaluation programme shall include the same four main aspects that the monitoring programme, and the MSP Competent Authority will gather the necessary information from the different responsible authorities.
Communication of M&E results			The communication strategy has not been defined yet, but it is foreseen that the results of the M&E programme will be disseminated within the different activities for the coordination with other public administrations and through engagement of stakeholders, as well as by repositories, website, and other internet tools.
Adaptation, revision and update framework			× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other The Royal Decree 150/2023 approving the Spanish MSP plans foresees their revision every six years. The results of the M&E plan will be incorporated in the different revisions of the plans, in order to detect changes needed for the improvement of the plans.
USEFUL RESOURCES AND LINKS			
MSP website (if applicable)			https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/ordenacion-del-espacio-maritimo.html
Geoportals/ cartographic viewers (if applicable)			https://infomar.miteco.es
MSP authorities' websites			https://www.miteco.gob.es/es/costas/temas.html
Other useful links (if applicable)			-

Table 10. MSP data fiche for the French Guiana Outermost Region.

OUTERMOST REGION			French Guiana
GOVERNANCE			
Member State			**France**
MSP competent authorities	National level		**Secretariat State of the Sea - Directorate General for Maritime Affairs, Fisheries and Aquaculture** (Secrétariat d'État de la Mer - Direction Générale des Affaires Maritimes, de la Pêche et de l'Aquaculture (DGAMPA))
	Regional level		**Prefect of French Guiana - French Guiana General Direction for Territories and Sea** (Préfet de Guyane - Direction Générale des Territoires et de la Mer (DGTM))
Institutional capacity and cooperation			× **Yes** ☐ No × **MSP Consultative Committee** × **Working Groups** ☐ Other **Sea basin Council (CMU):** governance body whose mission is to define a maritime strategy for French Guiana and issues recommendations on all relevant subjects of the sea and the coast at the scale of the region, including waters under French sovereignty or jurisdiction. It is responsible for developing the Sea Basin strategic document (DSBM). It is made up of six colleges: 1° Representatives of the State and its public establishments; 2° Representatives of local authorities; 3° Representatives of companies present in the basin concerned, whose activity relates to the exploitation or direct use of the sea or the coast; 4° Representatives of employee union organizations whose activities have a direct link with the exploitation or use of the sea or the coast; 5° Representatives of associations and foundations for the protection of the coastal or marine environment, or users of the sea and the coast; 6° Qualified personalities representative in particular of the scientific community. For the development of the DSBM, the CMU relies on a **dedicated commission**, which brings together members of state and local authorities.
LEGAL FRAMEWORK			
National/Regional MSP policy and legal framework			The **National strategy for the Sea and Coast** is responsible for providing a framework for public policy on the sea and coast, setting out its long-term goals in this area. This document forms the baseline for environmental protection, optimisation of marine resources and the integrated, consensus-based management of activities relating to the sea and coast. For each sea basin in metropolitan France, a planning document – the Sea Basin Strategy Document (document stratégique de façade - DSF, also known, in Overseas France, as the Sea Basin Strategy Document (DSBM)) - refines and supplements the general orientations established by the national strategy, reflecting the economic, social and ecological considerations specific to each sea basin.
Integration with other National/Regional policies			× **Applicable** ☐ Non-applicable The National Strategy for the Ecological Transition to Sustainable Development, the National Research Strategy and the National Biodiversity Strategy.
Coherence with EU MSPD	Applicability		☐ Legally binding in the OR × **Not legally binding in the OR**
	Transposition		**3rd May 2017** (Decree No. 2017-724 of May 3, 2017 integrating maritime planning and the action plan for the marine environment into the DSF)
	Involvement in EU support initiatives	Participation in Member States expert group on maritime spatial planning	× **Applicable** ☐ Non-applicable
		Participation in Technical Expert Group on Data for MSP	× **Applicable** ☐ Non-applicable At the national scale, Shom is the institution designated by the MSP national authority.
		Used support of the Assistance mechanism "European MSP Platform"	× **Applicable** ☐ Non-applicable France has its own fiche on the platform, but only referring to the inland MS plans, not the OR's plans.
		Participation in EU MSP related funded projects	× **Applicable** ☐ Non-applicable The DGTM is involved in MSP-OR productions, regarding French Guiana.
		Participation in MSP dedicated events	× **Applicable** ☐ Non-applicable At least through the MSP-OR events, or events where MSP-OR French partners were involved (EMD for instance).
		Others	☐ Applicable × **Non-applicable**
Links to other EU and international policies, agreements, strategies and legislation	European Green Deal & related actions[14].		5
	Integrated Maritime Policy		5
	Integrated Coastal Zone Management		5
	Common Fisheries Policy		5
	Marine Strategy Framework Directive		5
	Water Framework Directive		3
	Birds and Habitats Directives		4
	Bathing Waters Directive		3
	Renewable Energy Directive		3
	Environmental Impact Assessment Directive		2

[14] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

	Strategic Environmental Assessment Directive	5
	INSPIRE Directive	3
	EU Climate Law	3
	EU sectoral policies (e.g., Trans-European transport network)	3
	Sea Basin Strategies (e.g., Atlantic Action plan)	2
	Strategy for the EU Outermost Regions	3
	Other	-
Links to international policies, agreements, strategies and legislation	United Nations Convention on the Law of the Sea	5
	Convention on Biological Diversity	5
	UN 2030 Agenda for Sustainable Development	5
	Regional Seas Conventions (e.g., OSPAR Convention, Barcelona Convention)	5
	MARPOL	4
	SAR Convention	3
	SOLAS Convention	3
	London Convention	3
	Bonn Convention	3
	Bern Convention	3
	Ramsar Convention	3
	CITES	3
	ESPOO Convention	3
	UNESCO Convention on the Protection of the Underwater Cultural Heritage	3
	Other	-
ADMINISTRATIVE FRAMEWORK		
Planning level		☐ National × **Regional** ☐ Local The General Direction of territories and Sea is the service dedicated to the implementation of the DSBM, in the respect of the national framework (national strategy for sea and coastline). It is under the responsibility of the prefect of French Guiana, who is the representative of the French State at the regional level.
Planning area (maritime regions)	Internal Maritime Waters	× **Applicable** ☐ Non-applicable
	Territorial Sea	× **Applicable** ☐ Non-applicable
	Exclusive Economic Zone	× **Applicable** ☐ Non-applicable
	Continental Shelf (until 200 nm)	× **Applicable** ☐ Non-applicable
	Continental Shelf (beyond200 nm)	× **Applicable** ☐ Non-applicable
Marine subdivision(s) (if applicable)		× **Yes** ☐ No **French Guiana Sea Basin.**
MSP instrument(s) (if applicable)		DSBM, Regional Development Plan (Schéma d'Aménaagement Régional (SAR) for coastal issues.
Current status		☐ MSP Plan not approved × **MSP Plan approved and in force since 18th January 2024**
MSP process phases	Pre-planning	Decree No. 2014-483 of May 13, 2014 relating to Sea basin Councils and strategic Sea Basin documents. The development of the French Guiana Sea basin strategic document was launched during the first plenary session of the Sea Basin Council in April 2015. It began with the realization of the existing situation within the perimeter of the basin. This study was produced in 2018, and updated for consultation in 2021.
	Planning (analysis for planning or plan development or plan completion)	The Sea Basin council is met in seminars to discuss the issues and objectives to be retained for the French Guiana basin by 2030. The working groups approached the subjects thematically, then the proposals of each group were reorganized to be presented according to the first four themes of the national strategy. The strategic aspect of the DSBM was the subject of a public consultation carried out for a month in November 2021. The results of the consultation were considered to adapt the strategic objectives. The objectives were then spatialized in the vocation map and broken down into actions to implement the DSBM in an operational manner.
	Approval	The complete DSBM project was validated in the plenary session of the CMU on 09/08/2022 to be submitted to institutional consultations and put available to the public, before its final adoption by the CMU on 09/11/2023. The DSBM was then approved by prefectural decree on January 17, 2024.
	Implementation	X Some of the measures included in the plan are being implemented, for instance in the field of training and capacity building, some of them have yet to start.
	Revision	Every six years.
Licensing/permitting framework (if applicable)		☐ Yes × **No**
Supporting projects and initiatives (EU funded or not)		× **Yes** ☐ No MSP-OR.
Resources and funding		× **Yes** ☐ No Public resources.

MSP PLAN	
Type of plan	× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non- statutory × **Strategic or guiding plan** ☐ Steering plan with defined rules and regulations ☐ Other
Type of plan content	☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other
Plan horizon (if applicable)	Planning with a **2030** horizon (6 years).
Plan revision	Updating the plan at least every **6 years**
Vision (if applicable)	× **Yes** ☐ No The existing situation in the French Guiana Sea Basin has made it possible to bring out both ecological and socio-economic issues, affecting all maritime sectors. On this basis, the CMU members expressed the desired future for the basin by 2030.
General and/or specific objectives (if applicable)	× **Yes** ☐ No The strategic objectives must make it possible to progress towards the vision of the desired future for the Sea Basin, defined previously and are set at the time scale of the DSBM. These objectives include: • Environmental objectives, linked to the preservation of marine habitats and marine species as well as the reduction of pressures; • Socio-economic objectives, which aim to give impetus to the maritime economy; • Transversal objectives, linked to governance and cooperation.
Principles/drivers (if applicable)	× **Yes** ☐ No The objectives are organized around 6 axes to be carried out simultaneously: • Fight against illegal foreign fishing; • The protection of the environment, natural resources, biological and ecological balances as well as the preservation of sites, landscapes and heritage; • Risk prevention and coastline management; • Knowledge, research and innovation as well as education and training for maritime professions; • The sustainable development of economic, maritime and coastal activities and the valorisation of natural mineral, biological and energy resources.
Governance structure	× **Yes** ☐ No One of the actions of the MS plan is to Establish an exclusive structure for coordination and exchanges between all stakeholders.
Measures (if applicable)	× **Yes** ☐ No 91 actions/measures are described in the action plan of the DSBM.
Subject to Strategic Environmental Assessment	× **Yes** ☐ No The methodology used for the environmental assessment of the DSBM is based on a selective, progressive, iterative and interactive approach. Each action set out in the DSBM was evaluated by considering the nature of the impact, its direct or indirect nature, its geographical extent and the expected response time. This analysis was repeated for each environmental theme. In view of the impacts thus highlighted, compensatory measures can then be proposed, particularly in the case of negative impacts. An analysis of the monitoring system was carried out by seeking to relate the environmental issues of the territory and the state indicators of the proposed environment.
Maritime uses and activities included in the plan (spatialized in the plan)	× **Aquaculture**
	× **Fisheries**
	☐ Biotechnology
	× **Extraction of non-metallic mineral resources**
	☐ Extraction of metallic mineral resources
	☐ Oil and gas exploration/exploitation
	× **Renewable energy**
	× **Shipping and maritime transport**
	☐ Military and defence
	× **Ports and marinas**
	× **Scientific research**
	× **Recreation, sports and tourism**
	☐ Underwater cultural heritage
	☐ Submarine cables, pipelines and outfalls
	☐ Artificial reefs
	☐ Immersion of dredged material
	☐ Geological carbon storage
	× **Environment and nature conservation and protection (MPAs)**
	× **Coastal protection**
	☐ Others

Identification of the spatial and temporal distribution of uses and activities, including zoning approach			× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The establishment of a vocation map allows a perspective on the distribution of all the strategic objectives between the territories and promotes the definition of strategic priorities (vocations) for identified sectors. These zones are defined by the homogeneity of the issues involved. Each zone is the subject of a particular vocation which expresses a projection into the future or a desire for evolution concerning the activities and the environment.
Identification of system characteristics			× **Yes** ☐ No The method consisted of: • Identifying the objectives of the project having a spatial dimension, in particular those whose location remains to be defined; • Creating maps of socio-economic and ecological issues, both based on the existing situation; • Evaluating the impacts between strategic objectives, possible conflicts of use or impact on the environment, to identify areas under tension; • For locations to be defined, identify possible options with their advantages and disadvantages.
Consideration of environmental, economic, social & safety aspects			× **Yes** ☐ No
Coherence with other processes & plans			× **Yes** ☐ No This aspect is one oh the issues that have been addressed by the SEA.
Consideration of land-sea interactions			× **Yes** ☐ No Actions are planned in order to establish integrated management of the coastline and the land-sea interactions with regard to coastal hazards.
Application of ecosystem-based approach			× **Yes** ☐ No The vocation map intends to include ecosystems in the reflection, as the SEA approach does.
Consideration of climate change effects			× **Yes** ☐ No One chapter is dedicated to climate change in the initial assessment. Marine renewable energy development is one of the levers identified to mitigate CC effects.
Promotion of co-existence and compatibility of uses (including multiuse)			× **Yes** ☐ No This is what is meant with the “vocational” approach.
Application of alternative scenarios			☐ Yes × **No**
Consideration of transboundary issues and transboundary cooperation			× **Yes** ☐ No One of the actions is the establishment of governance mechanisms in order to improve transboundary cooperation.
Stakeholder engagement			× **Yes** ☐ No
Communication and dissemination			× **Yes** ☐ No One action of the plan is “doing actions of communication”.
Data			The production of data, data availability are expressed in the MS plan.
Risk assessment and contingency			☐ Yes × **No**
MONITORING, EVALUATION & REVISION			
M&E considered within the MSP process and plan, tailored to the specific context			× **M&E considered within the MSP process and plan, tailored to the specific context** ☐ M&E not considered within the MSP process and plan ☐ Other • Indicators enabling the achievement of the DSBM objectives to be assessed; • Regular assessment of the progress of the action plan presented annually at the CMU.
Design and organization of M&E	Competent authorities		× **Yes** ☐ No Same as the MS plan.
	M&E team or dedicated structures		☐ Yes × **No** ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups ☐ Other The CMU secretariat is identified as M&E leader for reporting purposes to the national and local authorities.
	Purposes of M&E		Assessment of the efficiency of the plan and the achievement of the objectives assigned to the plan, in order to update it if necessary.
	Challenges and limitations		The need for data production, and the definition of quantitative indicators.
	Scope and timing of M&E	☐ M&E of plan making	-
		☐ M&E of the plan	-
		× **M&E of plan implementation**	M&E is achieved through the completion of the indicators by the CMU secretariat. The revision of indicators could occur after three years of implementation, depending on the context changes. Indicators linked to priority objectives are evaluated annually.
		☐ M&E of plan outcomes	-
		☐ Others	-
	Resources for M&E		☐ Yes × **No** To be defined.
Stakeholder involvement in M&E			× **Yes** ☐ No Through the CMU.
Relation to MSP goals and objectives and desired outcomes			× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives

Indicator system	Around 70 indicators described for M&E of the implementation of the MS plan.
Monitoring approach	To be determined.
Evaluation approach	As the MS plan should be revised every 6 years, it should be based on the evaluation of the results of the former version of the plan.
Communication of M&E results	To be determined.
Adaptation, revision and update framework	× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other
USEFUL RESOURCES AND LINKS	
MSP website (if applicable)	-
Geoportals/ cartographic viewers (if applicable)	https://experience.arcgis.com/experience/0191c3319f2b47b696b1094a7d48c250/?draft=true
MSP authorities' websites	https://www.guyane.gouv.fr/Actions-de-l-Etat/Mer-Littoral-et-Fleuves/Strategies-de-bassin-maritime/Document-strategique-de-bassin-maritime
Other useful links (if applicable)	https://maritimelimits.gouv.fr/

Comparative matrix

Table 11. Comparative analysis of MSP data fiche for the Outermost Regions of the Azores, Madeira, Canary Islands and French Guiana.

OUTERMOST REGION			AZORES	MADEIRA	CANARY ISLANDS	FRENCH GUIANA
GOVERNANCE						
Member State			**Portugal**		**Spain**	**France**
MSP competent authorities	National level		**DGRM** **DGPM**		**MITECO**	**Secretariat State of the Sea – DGAMPA**
	Regional level		**SRMP-DRPM**	**DRM**	-	**Prefect of French Guiana – DGTM**
Institutional capacity and cooperation			× **Yes** ☐ No × **MSP Consultative Committee** × **Working Groups** × **Other** (ClAMA) Order no. 3392/2023 referred to the development of the Situation Plan for the Azores subdivision, forming a Consultative Committee (CC-Açores), which was preceded by ClAMA, a consultative body that followed the plan's elaboration. Seven working groups (WG) were created to monitor the elaboration of Situation Plan for the Azores subdivision.	× **Yes** ☐ No × **MSP Consultative Committee** × **Working Groups** ☐ Other Order no. 11494/2015 referred to the development of Situation Plan for Mainland, Madeira, and Extended Continental Shelf subdivisions, forming a Consultative Committee (CC-Madeira). Five working groups (WG) were created to monitor the elaboration of Situation Plan for Madeira subdivision.	× **Yes** ☐ No ☐ MSP Consultative Committee × **Working Groups** × **Other** Existing inter-administrative bodies are used for MSP, namely the Inter-Ministerial Commission on Marine Strategies and the Monitoring Committees for Marine Strategies for the 5 marine demarcations. A specific WG for MSP and ad-hoc groups for key issues have been created, involving national and regional authorities.	× **Yes** ☐ No × **MSP Consultative Committee** × **Working Groups** ☐ Other The Sea Basin Council (CMU) defines French Guiana's maritime strategy and develops the Sea Basin Strategic Document (DSBM). It issues recommendations on all relevant maritime and coastal issues within the region. It relies on a dedicated commission for DSBM development, integrating members of state and local authorities.
LEGAL FRAMEWORK						
National/Regional MSP policy and legal framework			• Directive 2014/89/EU, of 23 July 2014; • Law no. 17/2014, of April 10; • Decree-Law No. 38/2015, of March 12; • Ordinance no. 125/2018, of May 8; • Ordinance no. 128/2018, of May 9; • Ordinance no. 239/2018, of August 29; • Order no. 11494/2015, of October 14; • Resolution of the Council of Ministers no. 203-A/2019, of December 30 *In the Azores: • Resolution of the Government Council no. 47/2017, of May 26; • Resolution of the Government Council no. 77-A/2024, of July 5.		Directive 2014/89/EU was transposed by Royal Decree no. 363/2017, of April 8. The first maritime spatial plans for the five Spanish subdivisions were approved by the Royal Decree 150/2023, of February 28.	The National Strategy for the Sea and Coast (SNML) provides the framework and long-term goals for maritime and coastal public policy, setting the basis for environmental protection, resource optimization and integrated management. For each sea basin, a planning document - the Sea Basin Strategy Document (DSF, Document Stratégique de Façade -) in mainland France or the Maritime Basin Strategy Document (DSBM, Document Stratégique de Bassin Maritime -) overseas - refines and supplements the general orientations established by the national strategy.
Integration with other National/Regional policies			× **Applicable** ☐ Non-applicable Integration with national instruments, and regional instruments, namely strategic instruments and territorial plans and programs covering the maritime area. *In Madeira also included: Integration with protected areas planning and management programs.		× **Applicable** ☐ Non-applicable Royal Decree 363/2017 sets Spain's MSP framework, as a development of Law 41/2010, of December 29. In Spain, the MSP cycle last 6 years, aligned with the Marine Strategies process under the MSFD.	× **Applicable** ☐ Non-applicable Integration with national instruments, namely the National Strategy for the Ecological Transition to Sustainable Development, the National Research Strategy and the National Biodiversity Strategy.
Coherence with EU MSPD	Applicability		× **Legally binding in the OR** ☐ Not legally binding in the OR		× **Legally binding in the OR** ☐ Not legally binding in the OR	☐ Legally binding in the OR × **Not legally binding in the OR**
	Transposition		12th March of 2015 (Decree-Law no. 38/2015)		8th April of 2017 (Royal Decree no. 363/2017)	3rd May 2017 (Decree no. 2017-724)
	Involvement in EU support initiatives	Participation in Member States expert group on maritime spatial planning	× **Applicable** ☐ Non-applicable Representation managed through the national authorities, with consultation to the regional entities.		× **Applicable** ☐ Non-applicable Spanish MSP competent authority participates directly in the group.	× **Applicable** ☐ Non-applicable
		Participation in Technical Expert Group on Data for MSP	× **Applicable** ☐ Non-applicable Representation managed through the national authorities, with consultation to the regional entities.		× **Applicable** ☐ Non-applicable Spain participates in the group through scientific and technical institutions, such as IEO(CSIC) and CEPYC-CEDEX.	× **Applicable** ☐ Non-applicable At the national scale, Shom is designated by the MSP national authority.

OUTERMOST REGION			AZORES	MADEIRA	CANARY ISLANDS	FRENCH GUIANA
		Used support of the Assistance mechanism "European MSP Platform"	× **Applicable** ☐ Non-applicable Representation managed through the national authorities, with consultation to the regional entities. Portugal's country fiche included in the platform, mentioning both OR.		× **Applicable** ☐ Non-applicable Spain's country fiche is included in the platform.	× **Applicable** ☐ Non-applicable France's country fiche is included in the platform (not including the OR's plans).
		Participation in EU MSP related funded projects	× **Applicable** ☐ Non-applicable The regional competent authorities in both OR have been participating in EU-funded MSP related projects MarSP, PLASMAR, PLASMAR+, and MSP-OR, which combine MSP implementation with scientific methodologies and support tools. *In the Azores: Participation as CoP member of the regional competent authority in the Azores in projects MSP4BIO, MarinePlan, eMSP NBSR, GPS Azores, MUSES, ATLAS.		× **Applicable** ☐ Non-applicable Spain participates in several EU MSP-related projects through the competent authority, IEO(CSIC) and CEPYC, such as SIMWESTMED, SIMNORAT, SIMAtlantic, MSP-MED, MSP-OR, MSP-GREEN, and REGINA-MSP.	× **Applicable** ☐ Non-applicable DGTM's involvement in the MSP-OR project.
		Participation in MSP dedicated events	× **Applicable** ☐ Non-applicable Representation managed through the national authorities, with consultation to the regional entities (e.g., International Conference on MSP).		× **Applicable** ☐ Non-applicable Spain's competent authority has participated in various MSP events, including multiple editions of the International Conference on MSP and MSPforum.	× **Applicable** ☐ Non-applicable MSP-OR events, and events such as EMD.
		Others	☐ Applicable × **Non-applicable**		× **Applicable** ☐ Non-applicable The scientific and technical institutions supporting MSP, in particular IEO(CSIC), help coordinate MSP Community of Practices in the Mediterranean, under the WestMED initiative, and other working groups, such as ICES WGMPCZM and the TEG data.	☐ Applicable × **Non-applicable**
Links to other EU and international policies, agreements, strategies and legislation	European Green Deal & related actions[15],		4	4	4	5
	Integrated Maritime Policy		5	5	5	5
	Integrated Coastal Zone Management		5	5	4	5
	Common Fisheries Policy		4	3	4	5
	Marine Strategy Framework Directive		5	5	5	5
	Water Framework Directive		5	5	3	3
	Birds and Habitats Directives		5	5	4	4
	Bathing Waters Directive		4	4	3	3
	Renewable Energy Directive		3	5	4	3
	Environmental Impact Assessment Directive		4	4	3	2
	Strategic Environmental Assessment Directive		5	5	4	5
	INSPIRE Directive		4	5	5	3
	EU Climate Law		3	3	4	3
	EU sectoral policies (e.g., Trans-European transport network)		3	3	3	3
	Sea Basin Strategies (e.g., Atlantic Action plan)		3	3	3	2
	Strategy for the EU Outermost Regions		4	5	3	3
	Other		-	-	-	--
Links to international	United Nations Convention on the Law of the Sea		5	5	5	5
	Convention on Biological Diversity		5	4	5	5

[15] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

OUTERMOST REGION		AZORES	MADEIRA	CANARY ISLANDS	FRENCH GUIANA
policies, agreements, strategies and legislation	UN 2030 Agenda for Sustainable Development	5	3	5	5
	Regional Seas Conventions (e.g., OSPAR Convention, Barcelona Convention)	5	3	5	5
	MARPOL	4	3	4	4
	SAR Convention	3	3	3	3
	SOLAS Convention	4	3	3	3
	London Convention	3	3	4	3
	Bonn Convention	4	3	4	3
	Bern Convention	4	3	4	3
	Ramsar Convention	4	4	4	3
	CITES	4	4	4	3
	ESPOO Convention	3	3	3	3
	UNESCO Convention on the Protection of the Underwater Cultural Heritage	4	4	4	3
	Other	-	-	--	--
ADMINISTRATIVE FRAMEWORK					
Planning level		× **National** × **Regional** ☐ Local MSP conducted at **national level,** coordinated by DGRM, in shared responsibility with the Autonomous Regions of the Azores and Madeira, via the competent authorities for the Situation Plan for the **Azores and Madeira subdivisions**, DRPM and DRM, respectively.		× **National** ☐ **Regional** ☐ Local MSP carried out at **a national level**, but there are five maritime spatial plans, for each marine subdivisions in Spain.	☐ **National** × **Regional** ☐ Local The DGTM, under the Prefect of French Guiana, is the service dedicated to DSBM's implementation, in the respect of the national framework (national strategy for sea and coastline).
Planning area (maritime regions)	Internal Maritime Waters	× **Applicable** ☐ Non-applicable		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
	Territorial Sea	× **Applicable** ☐ Non-applicable		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
	Exclusive Economic Zone	× **Applicable** ☐ Non-applicable		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
	Continental Shelf (until 200 nm)	× **Applicable** ☐ Non-applicable		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
	Continental Shelf (beyond200 nm)	☐ Applicable × **Non-applicable**		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
	Continental Shelf (until 200 nm)	× **Applicable** ☐ Non-applicable		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
	Continental Shelf (beyond200 nm)	☐ Applicable × **Non-applicable** Carried out at national level, by the national competent entity.		× **Applicable** ☐ Non-applicable	× **Applicable** ☐ Non-applicable
Marine subdivision(s) (if applicable)		× **Yes** ☐ No **Azores subdivision** (one of four subdivisions)	× **Yes** ☐ No **Madeira subdivision** (one of four subdivisions)	× **Yes** ☐ No 5 marine subdivisions: North Atlantic, South Atlantic, **Canary Islands**, Strait and Alboran and Levantine-Balearic.	× **Yes** ☐ No **French Guiana Sea Basin.**
MSP instrument(s) (if applicable)		• **Situation Plan (PSOEM).** • **Allocation Plans.**		**Maritime spatial plans** for the five Spanish marine subdivisions	DSBM, Regional Development Plan (Schéma d'Aménaagement Régional (SAR) for coastal issues).
Current status		☐ MSP Plan not approved × **MSP Plan approved and in force** • Since December 30th 2019 (Situation Plan concerning the Mainland, Madeira and Extended Continental Shelf subdivisions). • Since July 26th 2024 (Approval of the Council of Ministers of the Situation Plan concerning the Azores subdivision; awaiting publication).		☐ MSP Plan not approved × **MSP Plan approved and in force** • Since February 28th 2023	☐ MSP Plan not approved × **MSP Plan approved and in force** Since January 18th 2024
MSP process phases	Pre-planning	Until 2019: Definition of MSP goals and stakeholder involvement and analysis of legal framework, scenarios, existing and future conditions, interactions between uses, the environment and land.	From 2016: Establishment of the Consultative Commission and five Working Groups. Stakeholders addressed conflicts in the maritime space, mainly focusing on surfing, aquaculture, and energy.	From 2014 to 2017: Elaboration of the legal instrument transposing the MSPD (Royal Decree 363/2017, of 8th April). From 2017 to 2020: Setting the planning basis in coordination with other public administrations (principles, objectives, etc.).	In 2014, Decree no. 2014-483 of May 13 was published, relating to Sea Basin Councils and the DSF/DSBM. In April 2015, the development of the French Guiana DSBM was launched in plenary session of the Sea Basin Council, starting with an assessment of the existing situation, completed in 2018 and updated in 2021.
	Planning (analysis for planning or plan development or plan completion)	Until 2021: Drafting plan and integration of working groups' input and SEA adjustments.	Until 2018: Drafting plan as an instrument integrating ecological sustainability, socioeconomic development, and geopolitical affirmation. Public discussion for Madeira's subdivision occurred from May 16 to July 31, 2018.	From 2020 to 2022. Drafting the plans, gathering data, analysing interactions between uses, zoning activities, setting plan implementation measures, drafting the SEA study, conducting public consultations. Inter-administrative coordination and stakeholder engagement were key.	The Sea Basin Council held seminars to set objectives for French Guiana DSBM by 2030. Thematic WG presented proposals, later aligned with the national strategy. After public consultation in November 2021, the objectives were adapted and then spatialized in a vocation map, and translated into actions for DSBM implementation.
	Approval	Until mid-2024: After favourable opinion from the Consultative	Unti late 2019: The Situation Plan for the Mainland, Madeira and	Until early 2023: The maritime spatial plans for the five Spanish marine subdivisions were approved by Royal Decree 150/2023.	The DSBM project was validated by the CMU on August 2022, followed by institutional consultations and being made publicly available, before its

OUTERMOST REGION		AZORES	MADEIRA	CANARY ISLANDS	FRENCH GUIANA
		Committee and a period of public consultation, the Situation Plan for the Azores subdivision was approved by the Council of Ministers on July 26, 2024.	Extended Continental Shelf subdivisions was approved by Council of Ministers Resolution no. 203-A/2019.		final adoption by the CMU on November 2023. The DSBM was then approved by prefectural decree on January 17, 2024.
	Implementation	x Current implementation of the Situation Plan via permits for private use of the maritime space (TUPEM); eventual approval of Allocation Plans for any uses and activities not predicted.	x Current implementation of the Situation Plan streamlined licensing via TUPEM by predefining potential areas and fostered collaboration in EU MSP projects in Macaronesia, highlighting regional maritime specifics and future activities' environmental impacts.	x Most measures in the plans are being implemented. The first meeting between public administrations was held, and participatory events are being organised.	x Some of the measures included in the plan are being implemented, for instance in the field of training and capacity building, some of them have yet to start.
	Revision	Future revision of the Situation Plan between 5 to 10 years after entry into force.		Future revision of the plans foreseen in 2027, with support of MSP monitoring programme.	Revision every 6 years.
Licensing/permitting framework (if applicable)		× **Yes** ☐ No Licensing for private use of the maritime space follows Decree-Law no. 38/2015, with permits (TUPEM) required for planned activities. Three ordinances regulate deposits, fees, and insurance requirements. *In Madeira: The licensing of aquaculture facilities follows Decree-Law no. 40/2017, adapted to Madeira by Regional Decree-Law no. 5/2023. Aquaculture requires licencing of the facilities and maritime space reservation, by payment of the tax (TUEM), but not involving issuance of TUPEM.		☐ Yes × **No**	☐ Yes × **No**
Supporting projects and initiatives (EU funded or not)		× **Yes** ☐ No Between 2017 and 2024, regional competent authorities participated in four MSP related projects: MarSP (2018-2019), PLASMAR (2017-2020), PLASMAR+ (2019-2023) and MSP-OR (2021-2024).		× **Yes** ☐ No Projects MSP-OR, MSP-GREEN, REGINA-MSP, WestMED, and participation in EU's expert groups on MSP and assistance mechanism.	× **Yes** ☐ No MSP-OR.
Resources and funding		× **Yes** ☐ No Regional fund/budget and EU funded projects.		× **Yes** ☐ No Public resources/ competent authority resources	× **Yes** ☐ No Public resources.
MSP PLAN					
Type of plan		× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non- statutory ☐ Strategic or guiding plan ☐ Steering plan with defined rules and regulations × **Other** The statutory plan, legally binding for public and private entities, does not predict a specific regulation, but follows existing regulations, TUPEM provisions, best practices and use compatibility guidelines.		× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non- statutory × **Strategic or guiding plan** ☐ Steering plan with defined rules and regulations ☐ Other The plans, published as a Royal Decree, are legally binding for public administrations but don't directly create rights or obligations for individuals. Most provisions serve a strategic/ guiding role, coming from other legal instruments.	× **Binding** ☐ Non-legally binding × **Statutory** ☐ Non- statutory × **Strategic or guiding plan** ☐ Steering plan with defined rules and regulations ☐ Other
Type of plan content		☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other The Situation Plan ensures coherence in MSP with a unified methodology, being made up of six volumes: Volumes I and II cover common criteria; Volumes III and IV concern spatialization of uses and characterization of the maritime space for each region; and Volumes V and VI relate to the SEA process. The plan integrates diverse maritime uses, including common and private activities, while considering natural and cultural sustainability.		☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other The plan is shaped by a core document that integrates vision, objectives, criteria, zoning, measures and M&E for all subdivisions. It is supported by five other documents analysing baseline data. The plan covers general-interest uses and sectoral uses, as well as future activities expected in the short-term.	☐ The content is single sector focused or conservation focused × **The content is broad and includes a large range of sectors and conservation issues** ☐ Other
Plan horizon (if applicable)		**10-year** horizon		**6-year** horizon	Planning with a **2030** horizon (7 years).
Plan revision		Every **5 to10 years**		Every **6 years** (2027)	Every **6 years**
Vision (if applicable)		× **Yes** ☐ No		× **Yes** ☐ No	**Yes** ☐ No

OUTERMOST REGION	AZORES	MADEIRA	CANARY ISLANDS	FRENCH GUIANA
	"An instrument of economic, social and environmental development, of spatial management, of legal consolidation and assertion of Portugal's geopolitical positioning in the Atlantic basin". *In the Azores: "The plan promotes and consolidates the geostrategic position of the Region. The sea in the Azores fulfils its potential for socioeconomic development, good environmental status, fruition and safeguarding of natural values, in an adaptive and participatory manner".		A marine space where different uses and activities can coexist, while maintaining the GES of marine waters.	The existing situation in the French Guiana Sea Basin has highlighted ecological and socio-economic issues affecting all maritime sectors. Based on this, the CMU outlined a vision for the basin's future by 2030.
General and/or specific objectives (if applicable)	× **Yes** ☐ No The Situation Plan aims to promote sustainable marine resource use, preserve natural and cultural heritage, reinforce Portugal's role in the Atlantic, and ensure legal transparency. It also addresses environmental protection, national cohesion, knowledge enhancement, and conflict minimization in maritime activities. *In the Azores: Regional objectives include policy, environmental, social, and economic objective.		× **Yes** ☐ No The plans aim to foster sustainable activity and growth in the maritime sectors, with respect for the values of marine spaces and with sustainable use of resources. Specific objectives were categorised as general-interest, multi-sector horizontal and sectorial objectives.	× **Yes** ☐ No The strategic objectives are linked to the vision for the basin's future and are set at DSBM's time scale. They include environmental goals for habitat and species preservation, socio-economic objectives to boost the maritime economy, and transversal objectives focused on governance and cooperation.
Principles/drivers (if applicable)	× **Yes** ☐ No The drivers for national MSP include an ecosystem approach, adaptive management, integrated, multidisciplinary and transversal management, precautionary principle, subsidiarity, cooperation and coordination, valorisation of economic activities, stakeholder participation and accessibility. *In the Azores: Key regional drivers include sustainable development, economic growth, intergenerational solidarity, compatibility of uses, scientific basis, co-responsibility, legal security, and administrative simplification.		× **Yes** ☐ No The plans' guiding principles include sustainable development, ecosystem approach, economic diversification, coordination, participation, and use of best available data.	☒ **Yes** ☐ No The objectives are organized around 6 axes: combating illegal fishing, protecting the environment and resources, managing coastal risks, promoting research and education, and fostering sustainable maritime economic development.
Governance structure	× **Yes** ☐ No The Situation Plan's governance structure involves national coordination by DGRM and regional coordination by DRPM (Azores) and DRM (Madeira). DGPM handles MSPD evaluation, IPMA oversees MSFD monitoring. There are 3 Accompaniment Committee for each subdivision, made up of 19 and 15 regional and national entities in the Azores and Madeira, respectively.		× **Yes** ☐ No The competent authority is DGCM, from MITECO. There were existing coordination bodies, the Inter-Ministerial Commission on Marine Strategies and the Monitoring Committees on marine strategies for the 5 marine demarcations, besides from ad-hoc WG, participatory events with civil society and public consultations.	× **Yes** ☐ No One of the foreseen actions is establishing an exclusive structure for coordination and exchanges between all stakeholders.
Measures (if applicable)	☐ Yes × **No** PSOEM does not predict specific regulations or measures, but relies on existing maritime rules and TUPEM provisions, complemented by good practices and use compatibility guidelines. The SEA procedure defines measures to enhance benefits, minimize environmental impacts, and ensure sustainability.		× **Yes** ☐ No The plans set 26 measures: 9 general measures, 3 related to land-sea interactions, and 14 addressing different established objectives (conservation of biodiversity, R&D, ports, aquaculture, etc.).	× **Yes** ☐ No 91 actions/measures are described in the action plan of the DSBM.
Subject to Strategic Environmental Assessment	× **Yes** ☐ No A common methodology and single SEA procedure was adopted for the Situation Plan, encompassing the whole national maritime space, materialized in Volumes V and VI. *In the Azores: The second stage of developing the Situation Plan, concerning the Azores subdivision, updated the SEA documents.		× **Yes** ☐ No SEA of the plans covers plan objectives, relation with other planning tools, environmental characteristics, objectives from other instruments, analysis of alternatives, environmental and transboundary effects, environmental measures and surveillance programme. Neighbouring countries, Italy, France and Portugal, were consulted. After public consultations, the Strategic Environmental Declaration (SED) was approved.	× **Yes** ☐ No The environmental assessment of the DSBM uses a selective, iterative approach, evaluating each DSBM action's impact, scope, spatial extent and timing. Compensatory measures can be proposed, specially for negative impacts. The monitoring system was analysed to relate environmental issues and state indicators.
Maritime uses and activities included in the plan	× **Aquaculture**	× **Aquaculture**	× **Aquaculture**	× **Aquaculture**
	× **Fisheries**	☐ Fisheries	× **Fisheries**	× **Fisheries**
	× **Biotechnology**	× **Biotechnology**	☐ Biotechnology	☐ Biotechnology

OUTERMOST REGION	AZORES	MADEIRA	CANARY ISLANDS	FRENCH GUIANA
	× **Extraction of non-metallic mineral resources**	× **Extraction of non-metallic mineral resources**	× **Extraction of non-metallic mineral resources**	× **Extraction of non-metallic mineral resources**
	☐ Extraction of metallic mineral resources	☐ Extraction of metallic mineral resources	☐ Extraction of metallic mineral resources	☐ Extraction of metallic mineral resources
	☐ Oil and gas exploration/exploitation	☐ Oil and gas exploration/exploitation	× **Oil and gas exploration/exploitation**	☐ Oil and gas exploration/exploitation
	☐ Renewable energy	× **Renewable energy**	× **Renewable energy**	× **Renewable energy**
	× **Shipping and maritime transport**	× **Shipping and maritime transport**	× **Shipping and maritime transport**	× **Shipping and maritime transport**
	× **Military and defence**	× **Military and defence**	× **Military and defence**	☐ Military and defence
	× **Ports and marinas**	× **Ports and marinas**	× **Ports and marinas**	× **Ports and marinas**
	× **Scientific research**	× **Scientific research**	× **Scientific research**	× **Scientific research**
	× **Recreation, sports and tourism**	× **Recreation, sports and tourism**	× **Recreation, sports and tourism**	× **Recreation, sports and tourism**
	× **Underwater cultural heritage**	× **Underwater cultural heritage**	× **Underwater cultural heritage**	☐ Underwater cultural heritage
	× **Submarine cables, pipelines and outfalls**	× **Submarine cables, pipelines and outfalls**	× **Submarine cables, pipelines and outfalls**	☐ Submarine cables, pipelines and outfalls
	× **Artificial reefs**	× **Artificial reefs**	× **Artificial reefs**	☐ Artificial reefs
	× **Immersion of dredged material**	× **Immersion of dredged material**	× **Immersion of dredged material**	☐ Immersion of dredged material
	☐ Geological carbon storage	☐ Geological carbon storage	☐ Geological carbon storage	☐ Geological carbon storage
	× **Environment and nature conservation and protection (MPAs)**	× **Environment and nature conservation and protection (MPAs)**	× **Environment and nature conservation and protection (MPAs)**	× **Environment and nature conservation and protection (MPAs)**
	× **Coastal protection**	× **Coastal protection**	× **Coastal protection**	× **Coastal protection**
	☐ Others	☐ Others	☐ Others	☐ Others
Identification of the spatial and temporal distribution of uses and activities, including zoning approach	× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The Situation Plan establishes potential areas for private activities in the maritime space, namely: spatialization of specific areas, spatialization of exclusion areas (in the Azores), uses without spatialization, and uses without potential situation. This may signify a multi-use space, addressing conflicts and synergies with other private uses and with common uses and considering existing restrictions.	× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The plans create Priority Use Areas (PUA) - where general-interest uses are currently taking place - and High Potential Areas (HPA) - where certain general-interest and sectorial activities are foreseen in the near future. There are 6 categories of PUA (protection of biodiversity, extraction of marine aggregates coastal protection, national defence, navigation safety, R&D and underwater cultural heritage); and 6 categories of HPA (conservation of biodiversity, extraction of marine aggregates coastal protection, R&D, port activities, offshore wind energy and aquaculture).	× **Spatially explicit plan (with zoning options)** ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning × **Indicative zoning** The vocation map depicts the distribution of all the strategic objectives between the territories and promotes the definition of strategic priorities for identified sectors, based on issue homogeneity. Each zone has a particular vocation, projecting the evolution of activities and the environment.
Identification of system characteristics	× **Yes** ☐ No The Situation Plan's Volume IV follows MSFD's report documents and provides a diagnosis of each marine subdivision, covering: coastal features, marine physical and chemical conditions, marine biodiversity, protected areas, pressures and impacts, and current maritime activities.	× **Yes** ☐ No The plans include a specific section (Block III) dedicated to the diagnosis of each marine subdivision, covering: general description, current state of the maritime uses and activities, spatial limitations, foreseen spatial distribution of uses and activities, land-sea interactions, spatial interactions between uses and spatial distribution of marine green infrastructure's main elements.	**Yes** ☐ No The diagnosis entailed identifying objectives with spatial dimension, creating maps of socio-economic and ecological issues, assessing possible conflicts of use or environmental impacts and identifying location options' pros and cons.
Consideration of environmental, economic, social & safety aspects	× **Yes** ☐ No The Situation Plan incorporates all these aspects throughout, for example, by integrating a characterization of the maritime space, while ensuring coexistence between uses and considering spatial restrictions, like protected areas, and applying criteria for conflict resolution. *In the Azores: Other examples include SWOT analyses, addressing environmental impacts, considering future sector trends, designing safeguard areas.	× **Yes** ☐ No All aspects were taken into account jointly within the different sections of the plans, which include general criteria for coexistence and criteria for the different uses and activities, which support the integration of these four aspects.	× **Yes** ☐ No
Coherence with other processes & plans	**Yes** ☐ No The Situation Plan ensures coherence with several policies at international and EU level, as well as with instruments and legal frameworks that apply at national and regional levels, with an emphasis on the articulation and	× **Yes** ☐ No The plans include a specific section (Block II) with the analysis of existing objectives at an international, EU, national and regional level, which were	× **Yes** ☐ No This aspect is one oh the issues addressed by the SEA.

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	compatibility with territorial management instruments (e.g., POOC/POC, PGRH). It addresses detected incompatibilities, for example existing areas for the extraction of sand for commercial purposes in the Azores and a conflict between aquaculture and aggregates extraction in Madeira.		considered when defining the objectives of the MSP plans. SEA has also identified related planning instruments and their connexions with the plans.	
Consideration of land-sea interactions	× **Yes** ☐ No The Situation Plan took into consideration the Coastal Zone Management Plans/ Coastal Programs (POOC/POC), both in force and in revision. However, future MSP cycles should improve this analysis by addressing operational challenges, lack of legal clarity, and coordination mechanisms for integrating land-sea interactions. *In the Azores: Land-sea interactions were analysed in a matrix that contrasted the spatial distribution of activities at sea with the relevant occupation categories of POOC.		× **Yes** ☐ No Each one of the five maritime spatial plans include a specific land-sea interaction section, containing a factsheet for each land-sea and sea-land interaction identified, with a general characterization, description of the activities, analysis of existing planning tools and the role of MSP plans (in addressing the topics not already addressed by other instruments). 7 land-sea interactions and 6 sea-land topics have been identified.	× **Yes** ☐ No Actions are planned in order to establish integrated management of the coastline and the land-sea interactions with regard to coastal hazards.
Application of ecosystem-based approach	× **Yes** ☐ No The Situation Plan adopts an ecosystem-based approach, balancing maritime space use with conservation. Examples include privileging multiuses and promoting the compatibility between private or common uses, and identifying areas relevant for nature conservation. Challenges remain due to knowledge gaps and difficulty in setting reference thresholds. *In the Azores: Scenarios were projected to guide MSP based on economic, social, and environmental trends.		× **Yes** ☐ No The plans integrate an ecosystem-based approach since its inception, being closely related to Spanish Marine Strategies and with objectives integrating environmental aspects into maritime activities. Plans included PUA and HPA for the protection of biodiversity - designated and potential MPAs, respectively. The plans included environmental criteria for maritime uses and measures for the integration of environmental issues, and predicted environmental marine monitoring.	× **Yes** ☐ No The vocation map intends to include ecosystems in the reflection, as the SEA approach does.
Consideration of climate change effects	× **Yes** ☐ No MSP manages the spatial and temporal distribution of uses, while addressing climate change impacts. However, knowledge gaps remain regarding its effects on ecosystems and its impact on human activities. Regional climate plans were considered during planning, as well as risks to coastal zones under the land-sea interaction analysis. The Situation Plan defined possible areas for artificial feeding of coastal stretches. *In the Azores: The plan addressed the implications of climate change to MSP, including to the evolution of activities at sea.		× **Yes** ☐ No Climate change is a transversal issue in the plans, being included in its objectives, criteria, measures, monitoring, etc. SEA took into account mitigation and adaptation to climate change.	× **Yes** ☐ No One chapter is dedicated to climate change in the initial assessment. Marine renewable energy development is one of the levers identified to mitigate its effects.
Promotion of co-existence and compatibility of uses (including multiuse)	× **Yes** ☐ No The Situation Plan sets out potential areas for private activities, favouring multi-use whenever possible, based on good practices for the compatibility of uses. *In the Azores, an interaction matrix was created from previous stakeholder consultation, characterizing conflicts and synergies between private uses and with common uses. *In Madeira, compatibility analysis between private and common uses was achieved through extensive collaboration with the Consultative Commission and meetings with other key external entities.		× **Yes** ☐ No The diagnosis of the plans includes an analysis of interactions between maritime uses and activities as planning basis, besides from criteria for sustainable coexistence, namely general, land-sea interaction and sectorial criteria.	× **Yes** ☐ No This is what is meant with the “vocational” approach.
Application of alternative scenarios	× **Yes** ☐ No The Situation Plan for the Azores Subdivision used hypothetical future scenarios as part of the planning process, based on the construction of narratives combining exploratory	× **Yes** ☐ No During sectoral meetings, conflicts and respective scenarios and possible solutions were identified and incorporated in the Situation Plan. Most activities occur in the territorial sea and inland waters,	× **Yes** ☐ No The diagnosis of the plans considered available forecasts for the maritime uses and activities.	☐ Yes × **No**

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	and normative methods and validated by stakeholders.	requiring close public oversight to minimize conflicts and unlock economic potential.		
Consideration of transboundary issues and transboundary cooperation	× **Yes** ☐ No The Situation Plan considers transboundary maritime aspects with Spain and Morocco, analyzing effects via SEA. National and regional participation in EU initiatives promoting cooperation between Member States and third countries was achieved through projects supporting MSPD and MSFD implementation.		× **Yes** ☐ No Transboundary consultations were made in the framework of the SEA. Spain also participates in transboundary cooperation EU-funded projects.	× **Yes** ☐ No One of the actions is the establishment of governance mechanisms in order to improve transboundary cooperation.
Stakeholder engagement	× **Yes** ☐ No Under Decree-Law no. 38/2105, stakeholders and citizens can participate in MSP instruments, by making suggestions and intervening in the public discussion, including via online dedicated platforms. *In the Azores, throughout the plan's development, there was extensive public engagement, with 209 participants across nine sessions and 139 sectoral consultations. Consultations to WG and ERAE registered more than 495 contributions, leading to substantial revisions. Public consultation ran from January to March 2024, registering 16 participations, and a public session with 91 attendees. *In Madeira, stakeholder involvement began early on, with meetings between the Consultative Committee and key stakeholders to address conflicts. Five WG were formed covering defense, conservation, tourism, research, and territorial development.		× **Yes** ☐ No Several participation activities were organized during the plans' development, including workshops and sectorial events organized by stakeholders. The approval process included 3 public consultation processes. The plans include a measure to develop a stakeholder engagement strategy (OEM7).	× **Yes** ☐ No
Communication and dissemination	× **Yes** ☐ No Public access to information on MSP is ensured through dedicated websites and geoportals, at national and regional level. *In the Azores, a public session on the Situation Plan was held on February 21, 2024. *In Madeira, a public session on the Situation Plan was held on June 7, 2018.		**Yes** ☐ No The plans have been mainly disseminated through the media (website, press releases, etc.) and different events (meetings, workshops, conferences, etc.).	× **Yes** ☐ No One action of the plan is "doing actions of communication".
Data	The Situation Plan included the best available scientific and technical data. The geographical information produced is accompanied by metadata complying with National Metadata Profiles and considering the INSPIRE Directive. *In the Azores, geographical information was mainly produced by the competent authority and the remaining from other public entities and external sources. *In Madeira, geographical information was mainly collected from different authorities in charge of maritime issues at national and regional level.		The plans have included the best available scientific and technical data. Information has been mainly collected from the initial assessment of the Marine Strategies and from different authorities in charge of maritime issues at national and regional level.	The production of data, data availability are expressed in the plan.
Risk assessment and contingency	☐ Yes × **No**		× **Yes** ☐ No The monitoring plan will include indicators and mechanisms to assess plan implementation and environmental and socio-economic changes in order to detect risks.	☐ Yes × **No**
MONITORING, EVALUATION & REVISION				
M&E considered within the MSP process and plan, tailored to the specific context	☐ M&E considered within the MSP process and plan, tailored to the specific context ☐ M&E not considered within the MSP process and plan × **Other** The Situation Plan includes a M&E section standing on an environmental component - based on the report to the MSFD - and a socioeconomic component - linked to the monitoring of the National Ocean Strategy and		× **M&E considered within the MSP process and plan, tailored to the specific context** ☐ M&E not considered within the MSP process and plan ☐ Other The plans include a specific section (Block V) describing the basis of the monitoring and assessment of the plans. A complete M&E plan is being	× **M&E considered within the MSP process and plan, tailored to the specific context** ☐ M&E not considered within the MSP process and plan ☐ Other Indicators enabling the achievement of the DSBM objectives will be evaluated and regular assessment of the progress of the action plan will be presented annually at the CMU.

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			related SEAMIND initiative. It should be coherent with SEA conclusions, to monitor the plan's effects in the environment. Under Decree-Law no. 38/2015, results are published every three years. The first report, named REOEMN, covered the 2015-2022 period and included Madeira but not the Azores. Moreover, a M&E model is being proposed with the support of MSP-OR project, taking into account the regional specificities of both OR.		elaborated, taking into account information and recommendations from different sources, including the MSP-OR project.	
Design and organization of M&E	Competent authorities		× **Yes** ☐ No DGPM		× **Yes** ☐ No DGCM, of MITECO.	× **Yes** ☐ No Prefect of French Guiana – DGTM.
	M&E team or dedicated structures		☐ Yes × **No** ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups × **Other** There is no specific M&E team; however, the Situation Plan's governance structure may serve as proxy.		× **Yes** ☐ No ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups × **Other** The DGCM, of MITECO, is the competent authority for the implementation, monitoring and evaluation of the plans and will gather, annually, all the necessary information from the different regional and national authorities. The elaboration of the M&E plan will be subcontracted.	☐ Yes × **No** ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups ☐ Other The CMU secretariat is identified as M&E leader for reporting purposes to the national and local authorities.
	Purposes of M&E		The Situation Plan lacks a specific chapter for the OR, but emphasizes monitoring for adaptive management, using indicators to assess sustainable marine resource use and activities in the maritime space.		To evaluate the effectiveness of the plans and detect environmental and socio-economic changes, which may require adaptations or modifications of the plans.	To assess the efficiency of the plan and the achievement of the objectives assigned to the plan, in order to update it if necessary.
	Challenges and limitations		Difficulties selecting indicators linked to objectives, limited resources, data availability and quality issues, the time lag compared to other subdivisions, low public awareness, and institutional cooperation barriers.	Identifying appropriate indicators, dealing with insufficient or outdated data, ensuring data quality, and availability of long-term series. Additionally, skilled human resources and stakeholder involvement are essential.	Bureaucratic problems have been experienced in the materialization of the contract by which the M&E plan will be elaborated.	The need for data production, and the definition of quantitative indicators.
	Scope and timing of M&E	M&E of plan making	The Situation Plan lacks an M&E approach for the plan-making process, but MSP-OR proposes indicators and evaluation questions to inform future MSP cycles, even though the plan is already developed.		-	-
		M&E of the plan	The Situation Plan lacks an approach for plan evaluation, but MSP-OR proposes indicators and evaluation questions. The REOEMN has also identified plan improvements.		x The plans describe the basis of the M&E, including a first set of indicators associated with each plan objective. The elaboration of the M&E plan will be subcontracted and shall include M&E of the environmental status of marine waters, of human uses and activities, of the socio-economic context, and of plan's effectiveness.	-
		M&E of plan implementation	x The existing approach to M&E of plan implementation is predicted in the Situation Plan (Volume I, part B) and MSP-OR adds further indicators and evaluation questions. REOEMN identified aspects related to the licensing procedure under TUPEM.		x Royal Decree 363/2017 establishes that DGCM will gather, annually, the information related to plan implementation from the responsible authorities in charge of each measure and issue.	x M&E is achieved through the completion of the indicators by the CMU secretariat. The revision of indicators can occur 3 years after implementation, depending on context changes. Indicators linked to priority objectives are evaluated annually.
		M&E of plan outcomes	x The current approach to M&E of plan outcomes is identified in the Situation Plan (Volume I, part B), now expanded under the MSP-OR project with additional indicators and evaluation questions. The REOEMN links plan outcomes with the objectives of the new National Ocean Strategy.		x The M&E of the plan outcomes is foreseen in the plans, but the specific processes and mechanisms haven't been defined yet.	-
		Others	-		-	-
	Resources for M&E		☐ Yes × **No** No specific resources are planned in the Situation Plan, but the regional budgets can assign funds for MSP. The tax applicable to TUPEM aims to offset administrative costs, as 75% of revenues must be allocated to the competent authority, with 50% of them to improve maritime management and planning, including financing of monitoring systems.		× **Yes** ☐ No The elaboration of the M&E plan will be subcontracted and its implementation will be developed by the MSP area.	☐ Yes × **No** To be defined.
Stakeholder involvement in M&E			☐ Yes × **No** There is no existing approach to stakeholder involvement in M&E in the Situation Plan; however, MSP-OR provides recommendations for		× **Yes** ☐ No Stakeholders' involvement in M&E is foreseen in the plans, but the specific processes and mechanisms haven't been defined yet.	× **Yes** ☐ No Through the CMU.

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	stakeholder participation, as well as the evaluation of stakeholder engagement in itself.			
Relation to MSP goals and objectives and desired outcomes	× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives The M&E framework in the Situation Plan is indirectly linked to the MSP objectives, by contributing to achieving the goals of the MSFD and the National Ocean Strategy. MSP-OR proposed indicators related with each MSP objective (including specific Azores objectives).		× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives	× **M&E framework based on MSP goals and objectives** ☐ M&E framework not based on MSP goals and objectives
Indicator system	The Situation Plan integrates environmental and socio-economic indicators from the SEAMIND initiative, aligning with the MSFD, the National Ocean Strategy, and SEA results. MSP-OR proposes a monitoring model with indicators for each MSP phase, some to help answer identified evaluation questions, requiring periodic data collection.		Although the complete M&E plan is not yet finished, the MSP plans include a first set of indicators, directly associated to the plan's' objectives, some already being monitored within other planning tools, while some were defined specifically for the plans.	Around 70 indicators described for M&E of the implementation of the plan.
Monitoring approach			The basis for M&E was established in section V of the MSP Plans. Even though the M&E plan has not been elaborated yet, it shall cover environmental status, uses and activities and its impacts on the environment, socio-economic context and effectiveness of the plans. The competent authority will gather the necessary information from the responsible authorities.	To be determined.
Evaluation approach	The evaluation approach involves continuous assessment of national MSP instruments and the publication of the report on the status of national MSP. The first REOEMN took into consideration the evaluation of socio-economic effects, in light of the National Ocean Strategy's objectives. MSP-OR proposes a set of evaluation criteria for each MSP phase, requiring answering several evaluation questions, some of them based on data-driven indicators.			As the plan should be revised every 6 years, it should be based on the evaluation of the results of the former version of the plan.
Communication of M&E results	M&E results are communicated via the REOEMN, a public report assessing national MSP. MSP-OR also offers recommendations for improving communication of M&E results.		The communication strategy has not been defined yet, but M&E results will be disseminated within the different activities, in coordination with other public administrations, and via stakeholders' engagement, adding to repositories, website, and other internet tools.	To be determined.
Adaptation, revision and update framework	× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other Decree-Law no. 38/2015 establishes an adaptive management framework for MSP updates to ensure the Situation Plan remains responsive to evolving conditions. Alterations can come from material corrections of errors; amendments due to TUPEM and Allocation Plans or environmental, safety, socioeconomic or regulatory changes; revisions after five years; and suspensions in exceptional cases up to one year.		× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other Royal Decree 363/2017 foresees their revision every 6 years. M&E results will be incorporated in revisions of the plans, in order to detect changes necessary to improve the plans.	× **MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions** ☐ MSP doesn't outline the adaptive management framework ☐ Other
USEFUL RESOURCES AND LINKS				
MSP website (if applicable)	https://oema.mar.azores.gov.pt/	https://www.psoem.pt/	https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/ordenacion-del-espacio-maritimo.html	-
Geoportals/ cartographic viewers (if applicable)	https://geoportal.mar.azores.gov.pt/	https://webgis.dgrm.mm.gov.pt/	https://infomar.miteco.es	https://experience.arcgis.com/experience/0191c3319f2b47b696b1094a7d48c250/?draft=true
MSP authorities' websites	https://portal.azores.gov.pt/web/drpm https://www.dgrm.pt/ https://www.dgpm.mm.gov.pt/	https://marmadeira.madeira.gov.pt/ https://www.dgrm.pt/ https://www.dgpm.mm.gov.pt/	https://www.miteco.gob.es/es/costas/temas.html	https://www.guyane.gouv.fr/Actions-de-l-Etat/Mer-Littoral-et-Fleuves/Strategies-de-bassin-maritime/Document-strategique-de-bassin-maritime
Other useful links (if applicable)	https://msp-or.eu/ https://msp-or.eu/regioes/azores/	https://msp-or.eu/ https://maritime-spatial-planning.ec.europa.eu/media/document/Portugal_countryprofile	-	-

Key insights from the comparative analysis

The comparative matrix (Table 11) aggregates and summarizes information on the MSP processes of the Azores, Madeira, Canary Islands, and French Guiana, making it possible to spot the main similarities and differences between them, while also showcasing the unique approaches taken by each region and aspects where there is still room for improvement on the next stages of the MSP cycle. Based on the analysis of the matrix, some meaningful insights are presented in Box 14 organized according to the main themes present in the OR fiches.

Box 14. Key insights from the comparative analysis between the OR.

GOVERNANCE

- Centralized vs. regional governance: While all RUP operate within a national MSP framework, the Azores and Madeira have more direct regional involvement compared to a more centralized governance in French Guiana and, predominantly, in the Canary Islands, the only case with exclusively a national competent authority. This aspect is also reflected in broader governance structures. The model of governance for MSP is a direct reflection of the legal, political, and administrative statutes of each OR, and all have their pros and cons. A centralized system may ensure a more uniform development of national policies and standards across the planning area, simplifying compliance with national and international regulations, while possibly leveraging national resources, expertise, and data collection, which might be lacking at the regional level. However, it may overlook local nuances and community participation, or become excessively bureaucratic, or fail to account for the unique socio-economic and environmental needs of small islands. As such, while centralized governance often promotes consistency and resource sharing, regional governance enables context-specific and usually more participative, and responsive decision-making. Autonomy empowers regions to innovate and prioritize local needs; however, it may lead to inconsistent practices across regions and be more resource-intensive. An effective MSP system for small islands often requires a balance between these approaches, integrating national oversight with some level of regional involvement.

- Dedicated inter-institutional cooperation structures: All RUP applied thematic WG to support the development of specific themes within the MSP process. In all regions, dedicated committees were created to accompany and/or validate the MSP instruments in a broader sense. However, both the Canary Islands and the Azores partly capitalized on existing inter-administrative bodies, namely the Interministerial Commission of Marine Strategies and the Interdepartmental Commission for Sea Affairs of the Azores, respectively. Setting WG was a method transversally used, thus emerging as a popular tool to support effective MSP implementation. WG can be a versatile tool to address the multifaceted challenges of managing maritime spaces in a more balanced and informed way, as well as play a pivotal role in conflict resolution, cross-sectoral integration, and adaptive management. Additionally, whether they are created specifically for MSP, or they already exist to support other policies, inter-institutional cooperation structures, namely formal committees, were applied in all RUP. These bodies, often established to manage overlapping jurisdictional or sectoral interests, are particularly useful in the complex and multi-dimensional context of MSP, where a variety of interests—ranging from environmental protection to economic activities—need to be balanced. The key advantages of leveraging pre-existing structures is to use the mechanisms already in place for communication and collaboration across institutions, reducing duplication of work, and resources, ultimately acting as a bridge with related policies, strategies, and goals across different areas of governance, ensuring a more streamlined and inclusive decision-making process.

LEGAL FRAMEWORK

- Different backgrounds and integration levels: In the case of the Azores, Madeira, and French Guiana, the legal framework establishes a direct link between MSP plans and national strategies for the sea. The Canary Islands present a particularity concerning the legal MSP framework, published as a development of the Law no. 41/2010, on the protection of the marine environment, being closely interlinked with the Marine Strategies under the MSFD. All OR integrate MSP with other relevant national and regional instruments, such as strategic sectoral instruments, environmental monitoring and nature conservation policies, and territorial plans and programs covering the maritime area. While this can improve coherence between MSP instruments and other policies, it may also make it challenging to coordinate MSP efforts at a broader, cross-regional level.

- Alignment with the EU MSP Directive: All four OR operate under robust legal frameworks that are aligned with Directive 2014/89/EU, considering that Portugal, Spain, and France have transposed the Directive into their respective national legal framework, albeit on varying timings and to differing extent, with important adaptations and specific interpretations. The MSP Directive is legally binding for all OR, but for French Guiana, due to its location outside the MSPD application area (the marine regions defined in the MSFD). Nonetheless, the MSPD still influenced MSP in the region, but to a lesser extent.

  - Strong involvement in EU Initiatives: All OR have participated in EU support initiatives, projects and events regarding MSP, mainly via national coordination and representation, and in the case of the Canary Islands and French Guiana, with the intervention of institutions of scientific or technical nature. The level of participation has been more expressive in the Azores, Madeira, and Canary Islands, which have integrated several EU-funded projects, tailored to the Macaronesia region and to the North-Atlantic, directly or indirectly designed around the topic of MSP. These initiatives facilitate knowledge sharing, capacity building, and cross-border collaboration, which strengthens the OR's ability to implement MSP plans. However, in many cases, participation occurs through national representation, which might possibly limit the ability of regional authorities to advocate directly for their specific needs and priorities in the context of MSP. Projects can offer the involvement of regions by specific case studies.

- Relative importance of EU and international policies: A few policies, like the UNCLOS, the MSFD, and the IMP were universally regarded as critical to MSP across the four OR, while others, such as EU sectoral policies were seen as less pivotal. This variability in perceived importance can lead to uneven implementation of MSP and hinder cohesive progress across, particularly when certain regions' policies are prioritized over others. Nonetheless, Regional Seas Conventions, the UN 2030 Agenda for Sustainable Development, the European Green Deal and most EU policies and legislation regarding nature conservation, environmental assessments, coastal management, were also transversally viewed as relevant to MSP in all the OR, which ensures regions adhere to globally recognized standards for maritime governance and environmental sustainability. However, the integration of multiple policies can add complexity to the legal framework governing MSP, as regions may struggle to reconcile the requirements of different policies.

ADMINISTRATIVE FRAMEWORK

» Different planning levels: In all OR, MSP is coordinated at national level, but the MSP plans are organized according to the marine subdivisions, encompassing the maritime zones under national sovereignty or jurisdiction. In the Portuguese MSP, four subdivisions were considered, two of them corresponding to the Azores and Madeira, both conducted at regional level. In Spanish MSP, five subdivisions were considered, one of them corresponding to the Canary Islands, conducted at national level. In French MSP, each of the five overseas sea basins has an individual plan in place by the regional authorities, corresponding to the DSBM, one of them corresponding to French Guiana, even though all share a common high-level national strategy, the SNML.

  » Transversely approved MSP plans: MSP plans concerning the four OR have all been approved, the first one in Madeira in 2019, followed by the Canary Islands in 2023, then French Guiana, and lastly, the Azores, both in 2024. The current phase of the MSP cycle is the implementation of MSP plans in all the OR. Due to its earlier publication, Madeira has a longer experience in implementing the plan.

» Licensing framework under MSP: Only the Portuguese legislation predicts a licensing framework linked to the MSP instruments, the Situation Plan and Allocation Plans, corresponding to TUPEM. The licensing scheme in Azores and Madeira can help prevent conflicts between different uses and activities, ensure better management of maritime space occupation, and provide greater legal certainty for investors, even though it may also represent an added bureaucratic layer.

MSP PLANS

» Comprehensive MSP plans: The MSP plans across all OR are legally binding, required by legislation, which promotes a greater level of accountability in the implementation of MSP plans. All four regions have broad, sector-inclusive MSP plans, which are mostly of a strategic nature, as they do not create specific regulations or directly establish rights and obligations for users (even though zoning of potential areas for specific activities was applied in the OR). On the other hand, there are notable differences in the focus and structure of these plans. Each OR tailored its MSP to prioritize specific activities based on regional needs, however, all OR included traditional core maritime uses and activities in their plans, as well as marine protected areas.

  » Focus on sustainable development: Generally, all plans prioritize sustainable development, balancing economic growth with environmental conservation and a rational use of marine resources, which is reflected in the plans' visions and is coherent with the plans' overall objectives and principles. All four regions adopt an ecosystem-based approach to planning, aiming to manage maritime spaces in a way that supports the long-term sustainability of ecosystems, by integrating environmental criteria in planning maritime uses and by identifying areas relevant for nature conservation. This approach is also coherent at the level of environmental assessments, considering that the MSP plans of all OR were subject to SEA. In the case of the Azores, Madeira, and Canary Islands, the SEA considered transboundary issues and cooperation.

- Differing time frames for revision: The Azores and Madeira estimate a 5 to 10-year horizon for plan revision, while in the Canary Islands and French Guiana the revision frequency is defined at the 6-year mark. Different implementation and revision times can lead to delays or gaps in the implementation of cohesive MSP strategies when cross-border cooperation is needed, thus requiring additional effort to promote continuous dialogue and collaboration.
    - Inclusion of measures in MSP plans: Only the plans for the Canary Islands and French Guiana establish specific measures that address different key domains and issues in the regional context, whereas the plans for the Azores and Madeira do not include measures, relying on existing maritime rules and TUPEM provisions, complemented by good practices and use compatibility guidelines. While not having measures can offer more flexibility, foster innovation and reduce bureaucratic hurdles, it may also introduce difficulties in tracking progress and more subjectivity in assessing the accomplishment of MSP goals and objectives.
- Zoning approach: All regions adopted a spatially explicit, indicative zoning approach, meaning they established areas with potential/priority/vocation for the development of certain activities, without rigid prescriptions. This may allow more flexibility in managing the maritime space (except in the case of the Azores and Madeira, where Allocation Plans apply for activities not predicted in the Situation Plan) based on evolving conditions and stakeholder needs; however, it may also pose challenges in managing conflicts between different uses, especially in high demand areas.
    - Compatibility of uses at the forefront: All four regions emphasize the promotion of coexistence and compatibility between maritime uses, minimizing conflicts and in some cases leveraging synergies by encouraging multi-uses. Applying tools such as setting alternative scenarios and developing interaction matrixes in the Azores and Madeira, defining priority use and high potential areas in the Canary Islands, and using vocational mapping in French Guiana, helps prevent potential conflicts and promote harmonious use of the maritime space. Moreover, each region's MSP plan demonstrates a strong commitment to balancing environmental, economic, social & safety aspects, as planning was based on a previous diagnosis and characterization of the maritime space, using the best available scientific and technical data.
- Fostering integrated coastal management and climate action: Each region's MSP was designed to be coherent with existing territorial management instruments and sectoral strategies, ensuring that maritime activities complement terrestrial regulations and that conflicts are prevented or mitigated. Similarly, all regions took into account land-sea interactions, to varying degrees, integrating an analysis of existing planning tools and their implications to MSP or including coastal risks. The four OR have all included climate change considerations in their respective MSP, with varying extent and focus, from integrating climate strategies into the planning process to proactively adopting measures to address coastal erosion by defining areas for artificial feeding.
    - Degree of stakeholder engagement: Stakeholder engagement is a key feature across all regions, which have taken distinct yet overlapping approaches in their respective MSP plans, with public consultations, dedicated events, online platforms, and working groups playing a significant role in the development and dissemination of MSP plans. While all regions prioritized stakeholder involvement, the participation levels varied significantly, reflecting differences in geography, resources, and institutional structures. Some approaches were more formal and structured than others, and in certain cases, stronger emphasis was placed on integrating scientific input and technical expertise.

MONITORING, EVALUATION AND REVIEW

» Emphasis on adaptive management: M&E frameworks in all regions are geared towards adaptive management, to allow for flexibility in response to evolving economic, social, and environmental conditions, ensuring that plans are reviewed on a periodic basis, to reflect changes in scientific knowledge, environmental status or regional priorities, for instance. The M&E frameworks in all regions strive to align with broader national and EU-level instruments, so that MSP monitoring contributes to wider environmental objectives and reporting requirements. For instance, all OR included in the Macaronesia region integrate elements of the MSFD into their environmental monitoring. However, the level of implementation of this approach varies significantly.

    » Underdeveloped M&E frameworks: In all four OR, the respective MSP M&E frameworks are still in their early stages of development and implementation; however, it is expected that they become more robust, fine-tuned and tailored to their specific contexts, as competent authorities gain experience in implementing MSP plans. In the Canary Islands and French Guiana, a general M&E framework was considered within the MSP process and plan, including the identification of a set of indicators (e.g. associated to MSP plans, reused from the MSFD). The Canary Islands will use subcontracting to develop a tailored M&E plan, which shall cover environmental status, uses and activities and its impacts on the environment, socio-economic context and effectiveness of the plans. In the Azores and Madeira, the national MSP plan established guidelines on M&E, which rely on pre-existing monitoring programmes for the MSFD and the National Ocean Strategy (and respective SEAMInd initiative), but did not define specific indicators. A first report on the status of MSP in Portugal was already published, including OR Madeira but not the Azores, due to the uneven pace of national MSP. The results coming from MSP-OR's WP5 will support further developments of the M&E system in the Canary Islands, the Azores and Madeira.

» Overlapping challenges to M&E: Most regions struggle with data availability and quality, which are crucial requirements for effective M&E of MSP plans. Data gaps, outdated information, and incomplete datasets are common limitations that affect the precision of assessments and the ability to create long-term data series. This issue hampers the ability to establish reliable indicators, adding to difficulties that the OR have reported in selecting appropriate indicators and linking them to MSP objectives. It is further aggravated by human and financial resource constraints, which limit the scope of data collection and the quality of analysis. Resource constraints may also jeopardize the potential for stakeholder engagement and consistent continuous public participation, which is also challenged by geographical dispersion and conflicting interests for maritime space use. Even though all the OR have competent authorities designated for MSP M&E, namely at national level, there are no dedicated teams or structures, thus relying on pre-existing bodies and on data gathering by the competent authority, in cooperation with other regional and national entities. Not only human resources are lacking, but also planning for specific resources to conduct M&E, depending on allocation from regional budgets and eventual revenues from the licenses issued. Each one of the OR faces constraints in terms of adequate funding and capacity, which are necessary requirements so that M&E does not become a superficial exercise, rather than a valuable tool for adaptive management. The only exception applied to the Canary Islands, which estimated resources to be allocated for M&E.

CLOSING REMARKS

The guidelines presented in this document have supported the MSP-OR project partners in developing the M&E framework specific to the MSP process of each of the four Outermost Regions - Azores, Madeira, Canary Islands, and French Guiana.

The guide emphasized the role of M&E in strengthening MSP effectiveness and adaptiveness and presents a number of overarching themes that should be addressed when looking to comprehensively monitor and evaluate MSP initiatives, instead of opting for proposing a single evaluation framework common to all the ORs. This allowed its uptake and adaptation to the particular MSP settings, needs and stages of each OR.

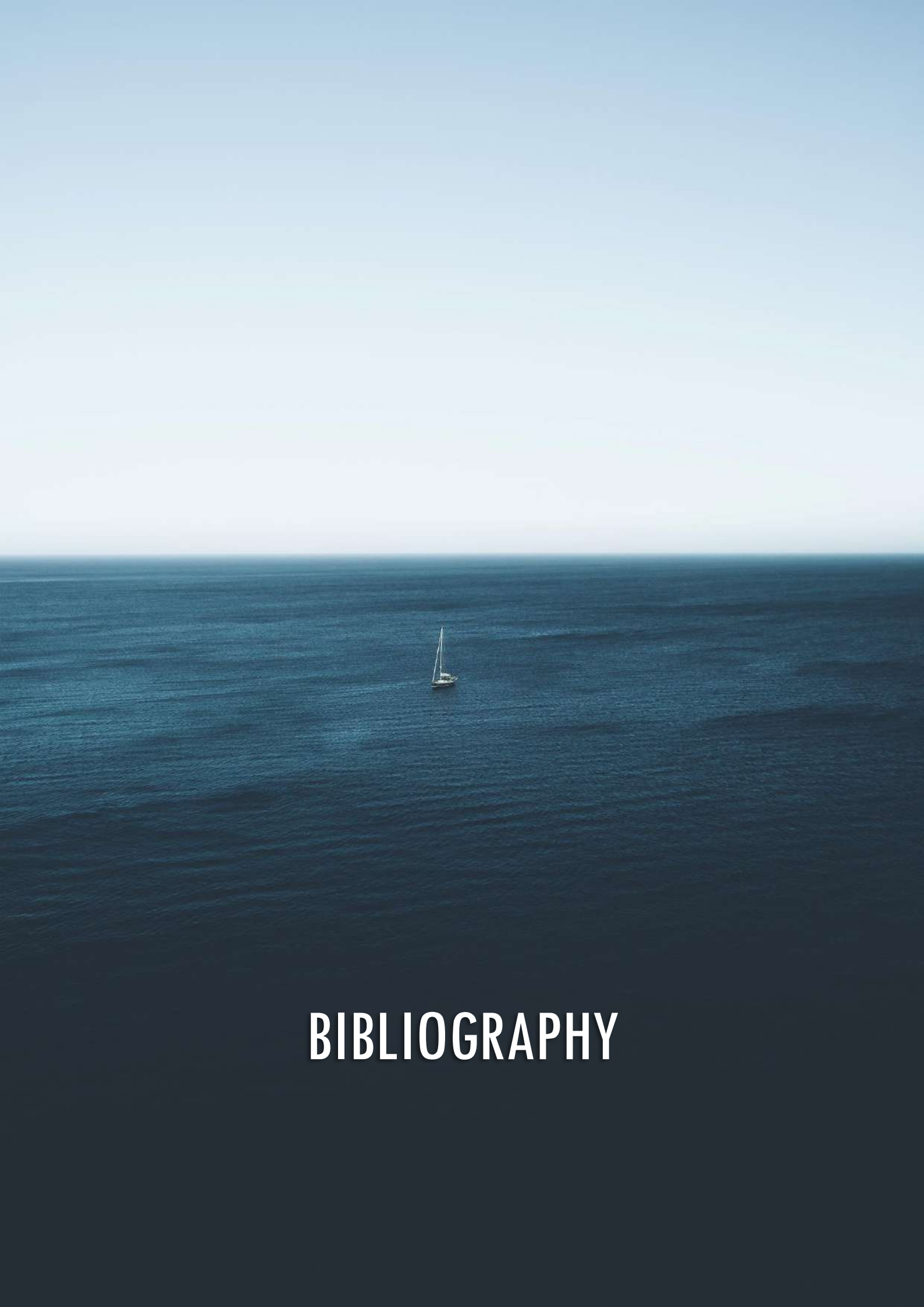
The report proposed overarching guidelines and recommendations for M&E, taking into consideration the specific context for MSP in the ORs, by applying a common layout for synthesizing information in the form of a template of MSP data fiche. This approach aimed to facilitate contributions from partners of each OR and enabling data comparison to reveal shared approaches and key differences between the regions, on topics related to the specific MSP framework and setting, the MSP processes, current status and future planning decisions, including general approach to M&E.

Based on the described literature review, and focusing on a number of key resources as a reference framework for the guide, some overarching practices, essential principles and possible evaluation frameworks were highlighted. This work revealed that there is a good set of practices available which can be used as a starting point to guide the development of the M&E frameworks in the ORs, directing readers on where to look for references and materials for additional information.

Key recommendations on MSP M&E contained in the report include:

- Adapt and tailor the M&E framework to each specific MSP context, stage and needs;
- Opt for a comprehensive M&E framework that targets the different stages of the MSP process, and not as an afterthought;
- Develop the evaluation approach based on a clear and solid understanding of its focus and scope, prompted by appropriate evaluation questions and criteria;
- Design the M&E framework mindful of the resources committed, the available capacity and political support, prioritizing the most important objectives and aspects of planning;
- Regularly engage stakeholders in the M&E process, based on inclusive, meaningful and transparent participation methods and on an early decision about the level of stakeholder involvement;
- Acknowledge the need for clearly-stated, verifiable and attainable objectives in relation to which evaluation can assess progress towards, which may require reframing original MSP objectives;
- Match evaluation criteria to a limited number of sound indicators, for which baselines and targets must be defined;
- Conduct fit for purpose data collection and monitoring efforts, while also establishing, protocols and agreements to support the monitoring system;
- Coordinate with other planning frameworks, so that MSP M&E contributes to and is supported by them, including taking stock of pre-existing monitoring programmes;
- Regularly report and communicate evaluation findings aligned with the M&E system, aiming to make the data available and disseminate the information to the widest possible audience, with careful consideration to tailoring key messages and using the appropriate language and communication channels;
- Maintain flexibility in MSP practice by conducting interim assessments and regular reviews to ensure adaptive management, with previously agreed periodicity and clearly assigned responsibilities;
- Use simple and straightforward decision support tools to help conducting M&E.

The work performed on the report set the basis for the development of the subsequent WP5 deliverables: D5.2 “Selection of monitoring indicators and metadata sheets”, D5.3 “Pilot test and baseline from a set of monitoring indicators selected” and D5.4 “Model for monitoring plans”, taking into account received feedback and contributes by the MSP-OR partners, which have contributed to the continuous updating of this dynamic document, culminating in the present final version.



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ANNEXES

ANNEX I – DATABASE OF SELECTED LITERATURE ON MSP AND EVALUATION AND MONITORING

Table I.1. Non-exhaustive database of main reference documents on MSP and evaluation and monitoring.

Title	Authors	Full reference	Link
Guideline documents, studies and publications			
Marine Spatial Planning: a step-by-step approach toward ecosystem-based management	Ehler C., Douvere F.	Ehler C., Douvere F. (2009). Marine Spatial Planning: a step-by-step approach toward ecosystem-based management. IOC Manuals and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO, Intergovernmental Oceanographic Commission and Man and the Biosphere Programme, 99 pp.	https://unesdoc.unesco.org/ark:/48223/pf0000186559
A Guide to Evaluating Marine Spatial Plans	Ehler, C.	Ehler, C. (2014). A Guide to Evaluating Marine Spatial Plans. IOC Manuals and Guides No. 70, ICAM Dossier No. 8. Paris: UNESCO, Intergovernmental Oceanographic Commission UNESCO IOC, 96 pp.	https://unesdoc.unesco.org/ark:/48223/pf0000227779/PDF/227779eng.pdf.multi
Toolbox for monitoring, evaluation and revision of MSP: final report	European Commission, European Climate, Infrastructure and Environment Executive Agency	European Commission, European Climate, Infrastructure and Environment Executive Agency (2022). Toolbox for monitoring, evaluation and revision of MSP: final report. Luxembourg: Publications Office of the European Union, 84 pp. https://doi.org/10.2926/974797	https://op.europa.eu/en/publication-detail/-/publication/02e564da-ba0a-11ec-b6f4-01aa75ed71a1
Systems and tools for monitoring, evaluation and revision of maritime spatial plans, including in the context of the implementation of Directive 2014/89/EU: final report	European Commission, European Climate, Infrastructure and Environment Executive Agency	European Commission, European Climate, Infrastructure and Environment Executive Agency (2022). Systems and tools for monitoring, evaluation and revision of maritime spatial plans, including in the context of the implementation of Directive 2014/89/EU: Final Report. Luxembourg: Publications Office of the European Union, 50 pp. https://doi.org/10.2926/1963	https://op.europa.eu/en/publication-detail/-/publication/687c35cd-ba0b-11ec-b6f4-01aa75ed71a1/language-en
Assessment of the relevance and effect of the Maritime Spatial Planning Directive in the context of the European Green Deal: final report	European Commission, European Climate, Infrastructure and Environment Executive Agency, Burg, S., Chouchane, H., Kraan, M., Selnes, T., Roebeling, P., Bogers, M., Neumann, T., Finello, F., Pirlot, A., Giraud, L., Arora,	European Commission, European Climate, Infrastructure and Environment Executive Agency, Burg, S., Chouchane, H., Kraan, M., Selnes, T., Roebeling, P., Bogers, M., Neumann, T., Finello, F., Pirlot, A., Giraud, L., Arora, G., Roestenberg, T., Viana de Miranda, A. (2022). Assessment of the relevance and effect of the Maritime Spatial Planning Directive in the context of the European Green Deal: final report. Publications Office of the European Union, 57 pp. https://doi.org/10.2926/911941	https://op.europa.eu/en/publication-detail/-/publication/f8b398c2-1f69-11ed-8fa0-01aa75ed71a1/language-en

	G., Roestenberg, T., Viana de Miranda, A., Deloitte, Ramboll		
Study on Integrating an Ecosystem-based Approach into Maritime Spatial Planning: What are the lessons from current practice in applying Ecosystem-Based Approaches in Maritime Spatial Planning? Results from the literature review	European Commission, European Climate, Infrastructure and Environment Executive Agency, Strosser, P., Loudin, S., Zaiter, Y., de Paoli, G., Piet, G., Gea, G., Labayle, L., Lukacova, S., Oulès, L., Zamparutti, T., ACTeon, Wageningen Marine Research	European Commission, European Climate, Infrastructure and Environment Executive Agency, Strosser, P., Loudin, S., Zaiter, Y., de Paoli, G., Piet, G., Gea, G., Labayle, L., Lukacova, S., Oulès, L., Zamparutti, T. (2021). Study on Integrating an Ecosystem-based Approach into Maritime Spatial Planning: What are the lessons from current practice in applying Ecosystem-Based Approaches in Maritime Spatial Planning? Results from the literature review. Luxembourg: Publications Office of the European Union, 61 pp. https://doi.org/10.2926/13709	https://op.europa.eu/en/publication-detail/-/publication/be6c1830-2d63-11ec-bd8e-01aa75ed71a1/language-en/format-PDF/source-search
Guidelines for implementing an ecosystem-based approach in maritime spatial planning: including a method for the evaluation, monitoring and review of EBA in MSP	European Commission, European Climate, Infrastructure and Environment Executive Agency, Ruskule, A., Oulès, L., Zamparutti, T., Dworak, T., Lieberknecht, L., Strosser, P., Gea, G., Veidemane, K., Piet, G., ACTeon, BEF, Fresh Thoughts, GRID-Arendal, Milieu, WUR	European Commission, European Climate, Infrastructure and Environment Executive Agency, Ruskule, A., Oulès, L., Zamparutti, T., Dworak, T., Lieberknecht, L., Strosser, P., Gea, G., Veidemane, K., Piet, G. (2021). Guidelines for implementing an ecosystem-based approach in maritime spatial planning: including a method for the evaluation, monitoring and review of EBA in MSP. Luxembourg: Publications Office of the European Union, 102 pp. https://doi.org/10.2926/84261	https://op.europa.eu/en/publication-detail/-/publication/a8ee2988-4693-11ec-89db-01aa75ed71a1
Maritime Spatial Planning (MSP) for blue growth: final technical study	European Commission, Executive Agency for Small and Medium-sized Enterprises, Lukic, I., Nigohosyan, D., Vet, J.M., Pascual, M., Fernandez, J., Schultz-Zehden, A., s.Pro GmbH Germany, Ecorys Spain, Ecorys Belgium	European Commission, Executive Agency for Small and Medium-sized Enterprises, Lukic, I., Nigohosyan, D., Vet, J.M., Pascual, M., Fernandez, J., Schultz-Zehden, A. (2018). Maritime Spatial Planning (MSP) for blue growth: final technical study. Luxembourg: Publications Office of the European Union, 311 pp. https://doi.org/10.2826/04538	https://op.europa.eu/en/publication-detail/-/publication/0223d4a6-41ec-11e8-b5fe-01aa75ed71a1
MSP Data Study: Evaluation of data and knowledge gaps to implement MSP	European Commission, Executive Agency for Small and Medium-Sized Enterprises, Cahill, B., Schulz Zehden, A., Gee, K., Miguez, B.M., Calewaert, J.B., Ramieri, E., s.Pro GmbH Germany, Seascape Consultants UK, Thetis Italy	European Commission, Executive Agency for Small and Medium-Sized Enterprises, Cahill, B., Schulz Zehden, A., Gee, K., Miguez, B.M., Calewaert, J.B., Ramieri, E. (2017). MSP Data Study: Evaluation of data and knowledge gaps to implement MSP. Technical Study under the Assistance Mechanism for the Implementation of Maritime Spatial Planning. Luxembourg: Publications Office of the European Union, 131 pp. https://doi.org/10.2826/25289	https://op.europa.eu/en/publication-detail/-/publication/f01f1b26-1b60-11e7-aeb3-01aa75ed71a1

Study on the Economic Impact of Maritime Spatial Planning: Final Report	European Commission, Executive Agency for Small and Medium-Sized Enterprises, Cogea, CETMAR, Poseidon, Seascape Belgium, Universidade de Vigo	European Commission, Executive Agency for Small and Medium-Sized Enterprises, Cogea, CETMAR, Poseidon, Seascape Belgium, Universidade de Vigo (2020). Study on the Economic Impact of Maritime Spatial Planning: Final Report. Luxembourg: Publications Office of the European Union, 316 pp. https://doi.org/10.2826/892087	https://op.europa.eu/pt/publication-detail/-/publication/254a6ac4-b689-11ea-bb7a-01aa75ed71a1/language-en
Cross-border cooperation in maritime spatial planning: final report	Carneiro, G., Thomas, H., Benzaken, D., Stanwell-Smith, D., Olsen, S., Fletcher, S., Méndez Roldán, S., Commonwealth Fund for Technical Cooperation, Netherlands Institute for the Law of the Sea, SEA Indonesia, Southern Atlantic Environmental Research Institute, The Nature Conservancy, UN Environment World Conservation Monitoring Centre, University of Rhode Island Coastal Resources Center, World Maritime University, Xiamen University	European Commission, Executive Agency for Small and Medium-sized Enterprises, Carneiro, G., Thomas, H., Olsen, S., Benzaken, Fletcher, S., Méndez Roldán, S., D., Stanwell-Smith, D. (2017). Cross-border cooperation in maritime spatial planning: final report. Luxembourg: Publications Office of the European Union, 110 pp. https://data.europa.eu/doi/10.2826/28939	https://op.europa.eu/en/publication-detail/-/publication/985c28bb-45ab-11e7-aea8-01aa75ed71a1
Marine Spatial Planning Toolkit	Large Marine Ecosystems Learning Exchange and Resource Network	GEF LME:LEARN (2018). Marine Spatial Planning Toolkit. Paris, France. 129 pp.	https://iwlearn.net/resolveuid/5c714161-b726-47a1-b4af-89e521d5f2db
An Introduction to Indicators	Hales D., UNAIDS	Hales D., UNAIDS (2010). An Introduction to Indicators. UNAIDS Monitoring and Evaluation Fundamentals. Geneva: UNAIDS. https://www.unaids.org/sites/default/files/sub_landing/files/8_2-Intro-to-IndicatorsFMEF.pdf [Accessed 26 Apr 2022]	https://www.unaids.org/sites/default/files/sub_landing/files/8_2-Intro-to-IndicatorsFMEF.pdf
Regional Maritime Spatial Planning Roadmap 2021-2030	HELCOM-VASAB	HELCOM-VASAB (2021). Regional Maritime Spatial Planning Roadmap 2021-2030. Joint HELCOM-VASAB Maritime Spatial Planning Working Group. 11 pp.	https://helcom.fi/wp-content/uploads/2021/10/Regional-Maritime-Spatial-Planning-Roadmap-2021-2030.pdf
Voluntary guidance for assessment of cross-border coherence in Maritime Spatial Planning	HELCOM-VASAB	HELCOM-VASAB (2022). Voluntary guidance for assessment of cross-border coherence in Maritime Spatial Planning. Version submitted to HELCOM-VASAB Maritime Spatial Planning Working Group 23-2021. 30 pp.	https://helcom.fi/wp-content/uploads/2022/02/Voluntary-guidance-for-assessment-of-cross-border-coherence-in-MSP-.pdf

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Marine Spatial Planning Quality Management System	ICES/CIEM	ICES/CIEM (2015). Marine Spatial Planning Quality Management System. Copenhagen, ICES/CIEM. ICES Cooperative Research Report No. 327. https://doi.org/10.17895/ices.pub.5495	https://ices-library.figshare.com/articles/report/Marine_Spatial_Planning_Quality_Management_System/18624104
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Evaluating Performance of Portuguese Marine Spatial Planning	Ferreira, M.A.	Ferreira, M.A. (2016). Evaluating Performance of Portuguese Marine Spatial Planning. Doctoral (Ph.D.) Dissertation, Faculdade de Ciências Sociais e Humanas da Universidade Nova de Lisboa, Lisbon. 213 pp.	https://run.unl.pt/bitstream/10362/20611/1/Tese_Ferreira_2016.pdf
Marine Spatial Planning from an Irish perspective: Towards Best Practice in Integrated Maritime Governance	Flannery, W.	Flannery, W. (2011). Marine Spatial Planning from an Irish perspective: Towards Best Practice in Integrated Maritime Governance. Doctoral (Ph.D.) Dissertation, National University of Ireland, Galway. 187 pp.	https://tethys.pnnl.gov/sites/default/files/publications/2011FlanneryPhD.pdf
Marine spatial planning in Portugal: an ocean policy analysis	Frazão Santos, C.	Frazão Santos, C. (2016). Marine spatial planning in Portugal: an ocean policy analysis. Doctoral (Ph.D.) Dissertation, Faculdade de Ciências da Universidade de Lisboa, Lisbon. 269 pp.	https://repositorio.ul.pt/bitstream/10451/24858/1/ulsd729867_td_Catarina_Santos.pdf
Marine spatial planning: Facilitating sustainability in an ocean of ambiguity	Kirkfeldt, T.S.	Kirkfeldt, T.S. (2021). Marine spatial planning: Facilitating sustainability in an ocean of ambiguity. Aalborg Universitetsforlag. Ph.d.-serien for Det Tekniske Fakultet for IT og Design, Aalborg Universitet. 227 pp.	https://vbn.aau.dk/ws/portalfiles/portal/429763432/PHD_TSK_E_pdf.pdf
Advances in Maritime Spatial Planning, under an ecosystem-based approach, by developing and implementing decision support tools	Pınarbaşı, K.	Pınarbaşı, K. (2020). Advances in Maritime Spatial Planning, under an ecosystem-based approach, by developing and implementing decision support tools. Doctoral (Ph.D.) Dissertation, Universidad del País Vasco, Bilbao. 198 pp.	https://addi.ehu.es/bitstream/handle/10810/49809/TESIS_PINARBASI_KEMAL.pdf?sequence=1

ANNEX II – TEMPLATE OF MSP DATA FICHE FOR THE OUTERMOST REGIONS

Table II.1. Template of MSP data fiche for the Outermost Regions.

OUTERMOST REGION			[ADD NAME]
GOVERNANCE			
Member State			[Add name]
MSP competent authorities	National level		[Add name(s) and defined role(s)]
	Regional level		[Add name(s) and defined role(s)]
Institutional capacity and cooperation			☐ Yes ☐ No ☐MSP Consultative Committee ☐ Working Groups ☐ Other [Specify in case of "other" and briefly describe in max. 1000 characters, including spaces, the type of cooperation mechanisms and bodies and the types of entities involved]
LEGAL FRAMEWORK			
National/Regional MSP policy and legal framework			[Add name(s) of legal diploma(s)] [Briefly describe in max. 1000 characters, including spaces, the legal framework]
Integration with other National/Regional policies			[Add name(s)of the policies or processes] [Briefly describe in max. 1000 characters, including spaces, the articulation with other policies]
Coherence with EU MSPD	Applicability		☐Legally binding in the OR ☐ Not legally binding in the OR
	Transposition		[Insert transposition date into national/regional legal framework]
	Involvement in EU support initiatives	Participation in Member States expert group on maritime spatial planning	☐ Applicable ☐ Non-applicable [Briefly describe in max. 1000 characters, including spaces]
		Participation in Technical Expert Group on Data for MSP	☐ Applicable ☐ Non-applicable [Briefly describe in max. 1000 characters, including spaces]
		Used support of the Assistance mechanism "European MSP Platform"	☐ Applicable ☐ Non-applicable [Briefly describe in max. 1000 characters, including spaces]
		Participation in EU MSP related funded projects	☐ Applicable ☐ Non-applicable [Briefly describe in max. 1000 characters, including spaces]
		Participation in MSP dedicated events	☐ Applicable ☐ Non-applicable [Briefly describe in max. 1000 characters, including spaces]
		Others	☐ Applicable ☐ Non-applicable [Specify what in max. 1000 characters, including spaces]
Links to other EU	European Green Deal & related actions[16],		[Rate from "1 – Not relevant" to "5 – Very relevant"]

[16] Communication "On a new approach for a sustainable blue economy in the EU" (COM/2021/240 final); Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system" (COM/2020/381 final); Communication "An EU strategy to harness the potential of offshore renewable energy for a

and international policies, agreements, strategies and legislation	Integrated Maritime Policy	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Integrated Coastal Zone Management	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Common Fisheries Policy	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Marine Strategy Framework Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Water Framework Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Birds and Habitats Directives	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Bathing Waters Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Renewable Energy Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Environmental Impact Assessment Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Strategic Environmental Assessment Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	INSPIRE Directive	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	EU Climate Law	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	EU sectoral policies (e.g., Trans-European transport network)	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Sea Basin Strategies (e.g., Atlantic Action plan)	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Strategy for the EU Outermost Regions	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Other	[Specify what and rate from "1 – Not relevant" to "5 – Very relevant"]
Links to international policies, agreements, strategies and legislation	United Nations Convention on the Law of the Sea	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Convention on Biological Diversity	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	UN 2030 Agenda for Sustainable Development	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Regional Seas Conventions (e.g., OSPAR Convention, Barcelona Convention)	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	MARPOL	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	SAR Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	SOLAS Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	London Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Bonn Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Bern Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]

climate neutral future" (COM/2020/741 final); Communication "EU Biodiversity Strategy for 2030" (COM/2020/380 final); Communication "Sustainable and Smart Mobility Strategy (COM/2020/789 final); Communication "Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change" (COM/2021/82 final); Communication "Pathway to a Healthy Planet for All EU Action Plan: Towards Zero Pollution for Air, Water and Soil" (COM/2021/400 final).

	Ramsar Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	CITES	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	ESPOO Convention	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	UNESCO Convention on the Protection of the Underwater Cultural Heritage	[Rate from "1 – Not relevant" to "5 – Very relevant"]
	Other	[Specify what and rate from "1 – Not relevant" to "5 – Very relevant"]
ADMINISTRATIVE FRAMEWORK		
Planning level		☐ National ☐ Regional ☐ Local [Briefly describe in max. 1000 characters, including spaces, if the planning is managed at national level and/or regional level and/or local level]
Planning area (maritime regions)	Internal Maritime Waters	☐ Applicable ☐ Non-applicable
	Territorial Sea	☐ Applicable ☐ Non-applicable
	Exclusive Economic Zone	☐ Applicable ☐ Non-applicable
	Continental Shelf (until 200 nm)	☐ Applicable ☐ Non-applicable
	Continental Shelf (beyond200 nm)	☐ Applicable ☐ Non-applicable
Marine subdivision(s) (if applicable)		☐Yes ☐No [Add names]
MSP instrument(s) (if applicable)		[Briefly describe the instrument(s) in max. 1000 characters, including spaces]
Current status		☐ MSP Plan not approved ☐ MSP Plan approved and in force since [add date]
MSP process phases	Pre-planning	[Mark with "x" if this is the current phase] ☐ [Indicate the respective period and briefly describe the process in max. 1000 characters, including spaces]
	Planning (analysis for planning or plan development or plan completion)	[Mark with "x" if this is the current phase] ☐ [Indicate the respective period and briefly describe the process in max. 1000 characters, including spaces]
	Approval	[Mark with "x" if this is the current phase] ☐ [Indicate the respective period and briefly describe the process in max. 1000 characters, including spaces]
	Implementation	[Mark with "x" if this is the current phase] ☐ [Indicate the respective period and briefly describe the process in max. 1000 characters, including spaces]
	Revision	[Mark with "x" if this is the current phase] ☐ [Indicate the respective period and briefly describe the process in max. 1000 characters, including spaces]
Licensing/permitting framework (if applicable)		☐ Yes ☐ No [Describe the framework in max. 1000 characters, including spaces]
Supporting projects and initiatives (EU funded or not)		☐ Yes ☐ No [Add names and respective links; briefly describe in max. 1000 characters, including spaces, the projects and their contribution to the MSP process]
Resources and funding		☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the existing resources and funding sources]
MSP PLAN		
Type of plan		☐ Binding ☐ Non-legally binding

	☐ Statutory ☐ Non- statutory ☐ Strategic or guiding plan ☐ Steering plan with defined rules and regulations ☐ Other [Briefly describe in max. 1000 characters, including spaces, each selection and specify in case of "other"]
Type of plan content	☐The content is single sector focused or conservation focused ☐The content is broad and includes a large range of sectors and conservation issues ☐Other [Briefly describe in max. 1000 characters, including spaces, the selection and specify in case of "other"]
Plan horizon (if applicable)	[Fill in: Planning with a … year horizon]
Plan revision	[Fill in: Updating the plan every … years]
Vision (if applicable)	☐ Yes ☐ No [Add the plan's vision] [Describe in max. 1000 characters, including spaces, the process of creating the vision, if applicable]
General and/or specific objectives (if applicable)	☐ Yes ☐ No [Add the plan's goals/general objectives and specific objectives, whenever applicable] [Describe in max. 1000 characters, including spaces, the process of formulating objectives, if applicable]
Principles/drivers (if applicable)	☐ Yes ☐ No [Describe in max. 1000 characters, including spaces, the plan's principles or drivers]
Governance structure	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the defined roles and governance structure]
Measures (if applicable)	☐ Yes ☐ No [Describe in max. 1000 characters, including spaces, the plan's measures]
Subject to Strategic Environmental Assessment	☐ Yes ☐ No [Briefly describe the SEA, in max. 1000 characters, including spaces]
Maritime uses and activities included in the plan	☐ Aquaculture
	☐ Fisheries
	☐ Biotechnology
	☐ Extraction of non-metallic mineral resources
	☐ Extraction of metallic mineral resources
	☐ Oil and gas exploration/exploitation
	☐ Renewable energy
	☐ Shipping and maritime transport
	☐ Military and defence
	☐ Ports and marinas
	☐ Scientific research
	☐ Recreation, sports and tourism
	☐ Underwater cultural heritage
	☐ Submarine cables, pipelines and outfalls
	☐ Artificial reefs
	☐ Immersion of dredged material
	☐ Geological carbon storage
	☐ Environment and nature conservation and protection (MPAs)
	☐ Coastal protection
	☐ Others (specify)
Identification of the spatial and temporal distribution of uses and activities, including zoning approach	☐ Spatially explicit plan (with zoning options) ☐ Not spatially explicit plan (no zoning options) ☐ Prescriptive zoning ☐ Indicative zoning

	[Describe in max. 1000 characters, including spaces, the types/categories of zones and the approach to identifying the spatial and temporal distribution of uses and activities and their interaction]
Identification of system characteristics	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the general approach to characterizing the area of intervention of the plan (e.g., environmental and socioeconomic characteristics)]
Consideration of environmental, economic, social & safety aspects	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the general approach to encompassing environmental, socioeconomic and safety aspects]
Coherence with other processes & plans	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the approach to ensure integration, compatibility and harmonization with other policies, plans and instruments, including the identification of gaps and inconsistencies]
Consideration of land-sea interactions	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the approach to addressing land-sea interactions and relation to coastal management]
Application of ecosystem-based approach	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the approach to addressing ecosystem-based management and relation to conservation measures, e.g., marine protected areas]
Consideration of climate change effects	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the approach to addressing climate change effects]
Promotion of co-existence and compatibility of uses (including multiuse)	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the approach to addressing the coexistence of uses and activities, minimizing conflicts and promoting multiuse]
Application of alternative scenarios	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the scenario-building approach applied in planning]
Consideration of transboundary issues and transboundary cooperation	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the approach to addressing transboundary issues and the cooperation mechanisms with other regions, member states or third countries, including at the sea-basin level]
Stakeholder engagement	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the overall strategy, methods and tools for stakeholder participation, targeted stakeholder communities and main results]
Communication and dissemination	☐ Yes ☐ No [Briefly describe in max. 1000 characters, including spaces, the overall strategy, methods and tools for communicating and disseminating the MSP process and its outputs and outcomes]
Data	[Briefly describe in max. 1000 characters, including spaces, the main data sources and considerations on data availability, collection methods, quality and

			needs, as well as the data sharing methods (e.g., geoportal, EMODnet) and the data model, if applicable]
Risk assessment and contingency			☐ Yes ☐ No [Describe in max. 1000 characters, including spaces, the existing or foreseeable approach to assessing and mitigating risks, e.g., elaboration of contingency plans]
MONITORING, EVALUATION & REVISION			
M&E considered within the MSP process and plan, tailored to the specific context			☐ M&E considered within the MSP process and plan, tailored to the specific context ☐ M&E not considered within the MSP process and plan ☐ Other [Briefly describe in max. 1000 characters, including spaces, the selection and specify in case of "other"]
Design and organization of M&E	Competent authorities		☐ Yes ☐ No [Add name(s) and defined role(s), in max. 1000 characters, including spaces]
	M&E team or dedicated structures		☐ Yes ☐ No ☐ Assembly of M&E team ☐ Consultative Committee ☐ Working Groups ☐ Other [Specify in case of "other" and briefly describe in max. 1000 characters, including spaces, the assembly of the M&E team and/or the creation of dedicated bodies and the types of entities involved]
	Purposes of M&E		[Briefly describe in max. 1000 characters, including spaces, the main reasons and drivers for M&E in the specific context of the OR]
	Challenges and limitations		[Briefly describe in max. 1000 characters, including spaces, the most significant challenges and limitations to M&E in the specific context of the OR]
	Scope and timing of M&E	☐ M&E of plan making	[Describe in max. 1000 characters, including spaces, the existing or foreseeable approach to M&E of the plan making process (e.g., institutional and legal framework, stakeholder engagement), if applicable]
		☐ M&E of the plan	[Describe in max. 1000 characters, including spaces, the existing or foreseeable approach to M&E of the plan itself (e.g., contents, coherence, relevance, guidance for implementation), if applicable]
		☐ M&E of plan implementation	[Describe in max. 1000 characters, including spaces, the existing or foreseeable approach to M&E of the implementation of the plan (e.g., policy uptake, compliance, conformity, interim checks), if applicable]
		☐ M&E of plan outcomes	[Describe in max. 1000 characters, including spaces, the existing or foreseeable approach to M&E of plan outcomes and impacts/effects (e.g., performance evaluation), if applicable]
		☐ Others	[If applicable, add information in max. 1000 characters, including spaces]
	Resources for M&E		☐ Yes ☐ No [Describe in max. 1000 characters, including spaces, the existing or foreseeable resource allocation for M&E]
Stakeholder involvement in M&E			☐ Yes ☐ No [Describe in max. 1000 characters, including spaces, the overall strategy, methods and tools for stakeholder involvement in M&E, the targeted

	stakeholder communities, and main results, if applicable]
Relation to MSP goals and objectives and desired outcomes	☐ M&E framework based on MSP goals and objectives ☐ M&E framework not based on MSP goals and objectives
Indicator system	[Describe in max. 1000 characters, including spaces, if the existing or foreseeable indicators meet the criteria for good indicators, how baselines and targets are established, what specific data fluxes are predicted, if applicable] [List the existing or foreseeable indicators, if applicable]
Monitoring approach	[Describe in max. 1000 characters, including spaces, the existing or foreseeable monitoring system, e.g., monitoring programme, data collection methods, data agreements)
Evaluation approach	[Describe in max. 1000 characters, including spaces, the existing or foreseeable evaluation system, e.g., evaluation plan, data analysis methods, evaluation report]
Communication of M&E results	[Describe in max. 1000 characters, including spaces, the existing or foreseeable strategy for communicating and disseminating the results of M&E, e.g., communication plan, abridged evaluation report, transferability to stakeholders and decision-makers]
Adaptation, revision and update framework	☐ MSP outlines the adaptive management framework to facilitate updates and reflect changing conditions ☐ MSP doesn't outline the adaptive management framework ☐ Other [Specify in case of "other" and briefly describe in max. 1000 characters, including spaces, the adaptive management framework (e.g., plan adaptability, triggers for amendment or plan revisions, identification of gaps and needs, competent authorities), if applicable]
USEFUL RESOURCES AND LINKS	
MSP website (if applicable)	[Add link(s)]
Geoportals/ cartographic viewers (if applicable)	[Add link(s)]
MSP authorities' websites	[Add link(s)]
Other useful links (if applicable)	[Add link(s)]

MSP-OR
Advancing Maritime
Spatial Planning
in Outermost Regions

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