MSP-OR
Advancing Maritime Spatial Planning in Outermost Regions

D.3.1. MARSP LEGACY MATRIX

October 2022

Grant Agreement number:
101035822 — MSP-OR — EMFF-MSP-2020
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Coordinated by

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ABSTRACT

Public policy processes are iterative cycles that are improved over time with each evaluation and new planning phases. The MarSP project (2018-2020) resulted in various deliverables that overall aimed to assist Spain and Portugal implement the European Marine Spatial Planning Directive 2014/89/EU (MSP Directive) in their respective outermost archipelagos, the Azores, Madeira and the Canary Islands. Now, MarSP follow-up project, the MSP-OR project, will keep assisting competent authorities in their MSP processes. Similar to the famous quote attributed to Isaac Newton, "if [we] have seen further it is by standing on the shoulders of giants", this deliverable has been designed to recognize the "shoulders" upon which the MSP-OR project stands. Thus, as one of the first deliverables of the project, the MarSP legacy matrix has been developed as a guided tour across the different theoretical steps of an MSP process, highlighting the previous contribution of the different MarSP deliverables to set the bases upon which further MSP-OR project work will continue assisting Spain and Portugal, and advancing French Guiana in their MSP Directive implementation.

Co-funded by the European Union

SUMMARY

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS AND ACRONYMS

CEDEX	**Centro de Estudios y Experimentación de Obras Públicas**
DAPSI(W)R(M)	**Drivers-Activities-Pressures-State changes-Impacts on wellbeing-Responses**
EMD	**European Maritime Day**
EMFF	**European Maritime and Fisheries Fund**
EMODnet	**European Marine Observation and Data Network**
EU	**European Union**
FBIO	**Fundación Biodiversidad**
FRCT	**Fundo Regional para a Ciência e Tecnologia**
GES	**Good Environmental Status**
GIS	**Geographic Information System**
IEO (CSIC)	**Instituto Español de Oceanografía-Agencia Estatal Consejo Superior de Investigaciones Científicas**
INSPIRE	**Infrastructure for Spatial Information in Europe**
MarSP	**Macaronesian Maritime Spatial Planning**
MPAs	**Marine Protected Areas**
MSP-OR	**Advancing Maritime Spatial Planning in Outermost Regions**
MTERD-DGCM	**Ministerio para la Transición y el Reto Demográfico**
SRMP-DRAM	**Secretaria Regional do Mar e das Pescas**
PSOEM	**Marine Spatial Planning Plan**
WP	**Working Package**

1. INTRODUCTION

MarSP project reinforced Maritime Spatial Planning (MSP) processes in the three EU Macaronesian archipelagos of the Azores, Madeira and the Canary Islands. Furthermore, it assisted the competent authorities of Portugal (Azores and Madeira) and Spain (Canary Islands) in promoting the development of operational MSP mechanisms between January 2018 and December 2019. During the project timeline, numerous analyses and studies, including related reports and guidelines were delivered including bulletins/newsletters; maritime infographics; a MarSP Atlas; the Macaronesia web viewer, the MSP data standard, the required data collections, three MSP platforms, capacity buildings actions and several stakeholder engagement processes and related workshops (Figure 1).

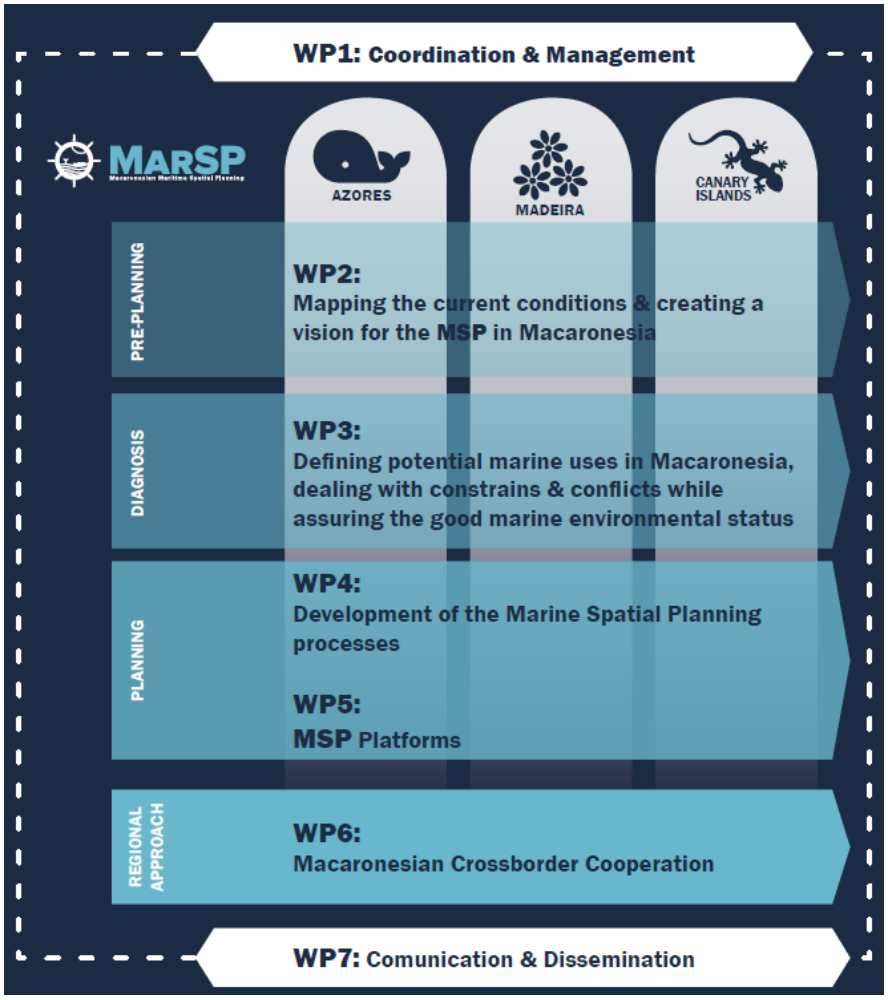

Figure 1 - Macaronesian Maritime Spatial Planning (MarSP) project structure. Source: MarSP Booklet https://marsp.eu/result/48

Within the MarSP implementation, communication and dissemination actions were included, which successfully announced the project results to the MSP community. Results can be consulted at the project website (https://www.marsp.eu/) within the deliverables "public" repository. All these deliverables are not only still potentially reusable in current MSP processes in the EU Macaronesia but can serve as examples to be extrapolated and inspire MSP actions in other European outermost regions. Through the present legacy matrix, MarSP results will come back to the spotlight of the undergoing planning processes. Thus, this document provides a fast-reading guidance that logically structure what has already been done while defines the baseline upon which the MSP-OR project will continue to contribute.

2. METHODOLOGY

To highlight what the MarSP project has been achieved and how its various deliverables can provide inspiration for other EU outermost regions, the present legacy matrix has been structured following the worldwide applied MSP step-by-step approach (Ehler & Douvere, 2009). Although, the main aim of this approach is to aid MSP processes, but was also be applied to other public policies such as the Marine Strategy Framework Directive 2008/56/EC (Figure 2).

More recently, the IOC-UNESCO and the European Commission has published the guide entitled "MSPglobal International Guide on Marine/Maritime Spatial Planning (2021). This guide, as stated in it, "presents the marine spatial plan as different topics illustrated by lessons learned and case studies by topic, rather than as a clear sequence of steps". Thus, it has been considered more suitable for practical reasons to follow the already numbered step-by-step approach during the development of the legacy matrix. Nevertheless, the reader can consult the Annex I to see a cross-reference table between these two guides. It is worth noting though that this table has been built to fit the purpose of this deliverable and should not be considered in a strict sense. Lessons learned of the MSPglobal guide can often be applied in multiple of the planning "steps".

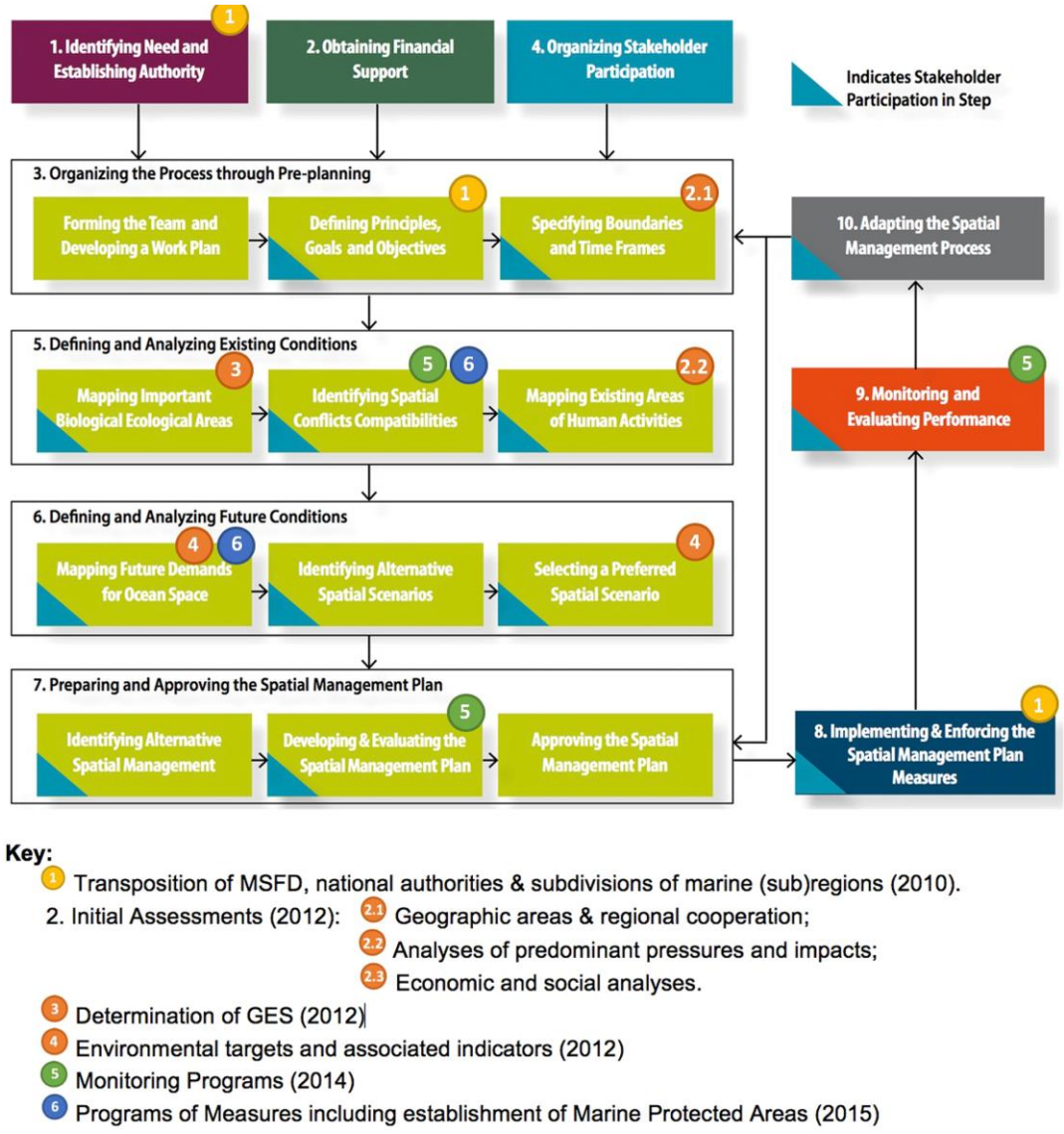

Figure 2 - Use of the "MSP step-by-step approach" to analyse the implementation of the Marine Strategy Framework Directive in the Macaronesia while highlights the synergies with the MSP process. Source: https://doi.org/10.1016/j.marpol.2020.104273

Thus, each deliverable, workshop, report, capacity building and bulletin have been gathered from the MarSP project official webpage (www.marsp.eu) and assessed in relation to each of the planning "steps". Besides, each step was described following the step-by-step guidance document (Ehler & Douvere, 2009). Each mapped deliverable includes a short description and direct link on the results repository of the MarSP project to allow further details reading.

Furthermore, an extensive explanation of how exactly each of the MarSP will contribute to set the baseline for further works in the MSP-OR project has been considered out of the scope of the present legacy matrix. However, the links between these consecutive projects and the potential contributions of MSP-OR future deliverables have been outlined in Annex I.

To avoid confusion and repetition, MarSP results have only been described once in the step that has been considered more appropriate. However, it should be noted that the results have often contributed (or will contribute in the case of MSP-OR) to more than one step and thus can be useful in a general sense to the overall MSP process.

Thus, as one of the first deliverables of the project, the MarSP legacy matrix has been developed as a guided tour across the different theoretical steps of an MSP process, highlighting the previous contribution of the different MarSP deliverables to set the bases upon which further MSP-OR project work will continue assisting in the MSP Directive implementation.
Within the development of this document were used graphical designs included in the *MarSP booklet*. It can be considered as a first re-use of MarSP project results within the MSP-OR project.

3. MARSP RESULTS APPLICABILITY TO THE MSP PROCESS

A Step-by-Step approach

Step 1

IDENTIFYING NEEDS AND ESTABLISHING THE AUTHORITY

Within this step it must be delivered a decision about what type of authority need to coordinate MSP process and implement MSP. European MSP Directive (2014/89/EC) required all Member States to define the national institution/entity in charge of marine planning and report it to the EU Commission by 2017.

The MarSP did not approach this step directly, thought overall it helped identifying the needs of MSP for the outermost regions of the European Macaronesia. Besides, the configuration of the consortiums of the MarSP project first and the MSP-OR project secondly, can be consider as an important milestone in strengthening the regional cross-border cooperation amongst the national and regional MSP competent authorities.

BROADENING AND STRENGTHENING THE CONSORTIUM | FROM MarSP TO MSP-OR

MARSP
Macaronesian Maritime Spatial Planning

Coordinated by

Governo dos Açores
Secretaria Regional do Mar, Ciência e Tecnologia

FRCT
Fundo Regional para a Ciência e Tecnologia

Funded by

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Governo Regional

Secretaria Regional do Ambiente e Recursos Naturais
Direção Regional do Ordenamento do Território e Ambiente

dgrm
Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos

dgpm
Direção-Geral de Política do Mar

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Figure 3. Respectively, the MarSP project consortium (above) and the MSP-OR project (bellow).

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A Step-by-Step approach

Step 2

OBTAINING FINANCIAL SUPPORT

"Maritime spatial planning (MSP) is not possible without adequate financing. Although MSP is inherently a governmental responsibility, a common problem occurs when funding [including human resources], is not available for MSP activities" (Ehler & Douvere, 2009).

MarSP financial support
The MarSP project was co-financed up to 80% by the European Maritime and Fisheries Fund (EMFF) with a total budget of 2.1 M€. This represented an important financial support to assist the regional authorities on the development of MSP operative mechanisms to apply EU Directive 2014/89/UE. 2014/89/UE.

Figure 4. Main characteristics of the MarSP project. Source: MarSP booklet (https://www.marsp.eu/result/48).

A Step-by-Step approach

Step 3

ORGANISING THE PROCESS THROUGH PRE-PLANNING

"Marine spatial planning is likely to be most successful in achieving expected or desired outcomes/results when conducted on the basis of an "objective-based approach" (Ehler & Douvere, 2009). Overall, this step was related to tasks regarding the design of the planning process, such as creating an MSP working group and planning team with the desired skills; defining the work plan and the spatial-temporal boundaries of the plan, its principles, vision, goals and objectives; as well as planning the monitoring system to evaluate their achievement.

ORGANIZING THE MSP WORKING GROUP AND PLANNING TEAM WITH THE DESIRED SKILLS

MarSP multidisciplinary consortium.
Within the MarSP consortium, including both research/academic and competent authorities enabled sharing a broad range of "know-how" from theoretical to more practical MSP aspects, which promoted "thinking-outside-the-box" to find innovative approaches to MSP.

Capacity building workshops on spatial data management (D.5.2).
These results may serve to strengthen the capacities of the MSP Macaronesia team. Within the two years, 3 capacity building - technical workshops were delivered: (1) Data management related to the MSP, (2) the application of the MSP INSPIRE data model, and (3) the usage of the regional MSP platforms that were developed including interconnected metadata catalogues and harmonized viewers across borders.
The reports are available at the following links:
(D.5.2.WS1) https://marsp.eu/result/14
(D.5.2.WS2) https://marsp.eu/result/15
(D.5.2.WS3) https://marsp.eu/result/47

Figure 5. Hands on session on MSP INSPIRE data model delivered by ULPGC and IEO, March 2019.

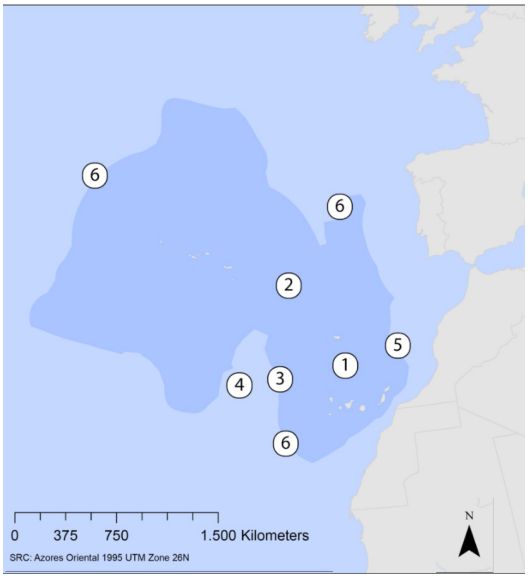
DEFINING BOUNDARIES AND TIME FRAME

- **Guidance report on Transboundary MSP: an approach for cross-border cooperation in Macaronesia (D.6.3).**
- **Lessons learned and good practices: report and implementation for Macaronesia (D.6.4).**

There is no single way to carry out a MSP process or easily comparable contexts. However, these reports contained, respectively, a compilation of good practices and lessons learned for MSP both for crosscutting themes and specific steps of the planning process; and, based on these, a series of recommendations for transboundary MSP specifically for the European Macaronesia were proposed.
These compilations may provide support and inspiration to the MSP processes and guidance on cross-border cooperation mechanisms.
The reports are available at the following links:
(D.6.4) https://marsp.eu/result/41
(D.6.3) https://marsp.eu/result/50

Figure 6. Typology of jurisdictional borders around the archipelagos of the EU Macaronesia. Source: D.6.4

Map Nº	MAIN BORDER TYPES
1	Border between the EEZ of the Canary Islands (Spain) – the EEZ of Madeira (Portugal)
2	EEZ Border of the Azores (Portugal) – High Seas – EEZ of Madeira (Portugal)
3	EEZ Border of Madeira (Portugal) – High Seas – EEZ of theCanaries (Spain)
4	Border of Madeira/Azores (Portugal) – High Seas – Canary Islands (Spain)
5	Border of Madeira (Portugal)/Canary Islands (Spain) – Waters around other riparian States
6	Seabed Border of Madeira/Azores (Portugal)/Canary Islands (Spain) – High seas



DEFINING THE SET OF PRINCIPLES, GENERAL GOALS, AND OBJECTIVES

Policy-oriented guidelines for Maritime Spatial Planning in the European Macaronesia (D.4.11).
This document is intended to be a guide for policy-makers, facilitating an improved understanding and follow-up of MSP as well as informing the development of MSP for Macaronesia.

The report is available at the following link:
(D.4.11) https://marsp.eu/result/38

Regional reports on MSP objectives – Macaronesia (D.2.6).
This report proposes a methodology to define MSP objectives based on an international, European, national and regional policy review; followed by a classification and prioritisation process with the engagement of stakeholders. This result may help the different MSP processes to assess the alignment of their principles, goals and objectives about the international framework and maritime sectorial legislation.

The report is available at the following link:
(D.2.6) https://marsp.eu/result/32

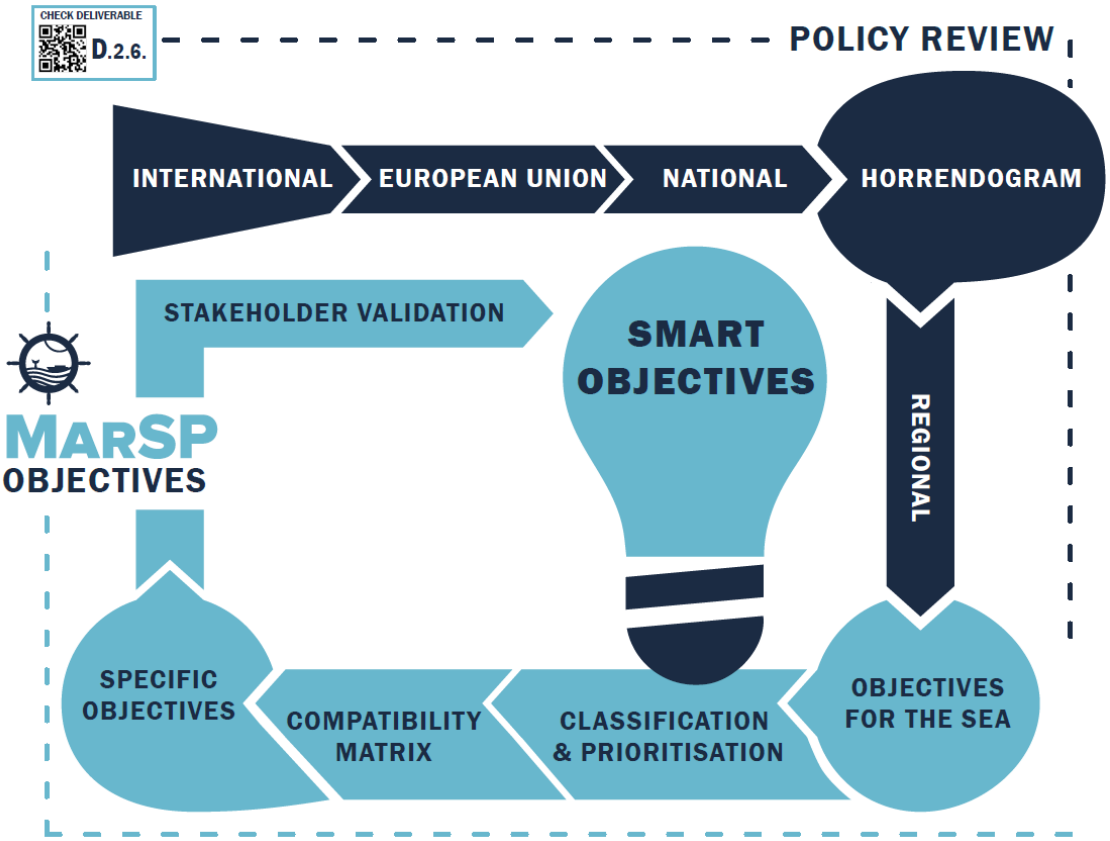


Figure 7. Methodological summary of the regional reports on MSP objectives. Note: The term horrendogram refers to the resulting diagram illustrating the complex interrelationship between the relevant policy instruments influencing on the marine environment management. Source: MarSP booklet (https://www.marsp.eu/result/48).

A cooperation approach for MSP in the European Macaronesia: policy recommendations (D.6.7). This policy brief summarizes the work undertaken in MarSP regarding cross-border cooperation containing a series of recommendations and mechanisms to promote it. This is directed to decision-makers aiming to support adopting coherent ecosystem-based approach principles and specific cross-border objectives for MSP to promote the sustainable use of natural shared resources in the sea basin.

The report is available at the following link:
(D.6.7) https://marsp.eu/result/43

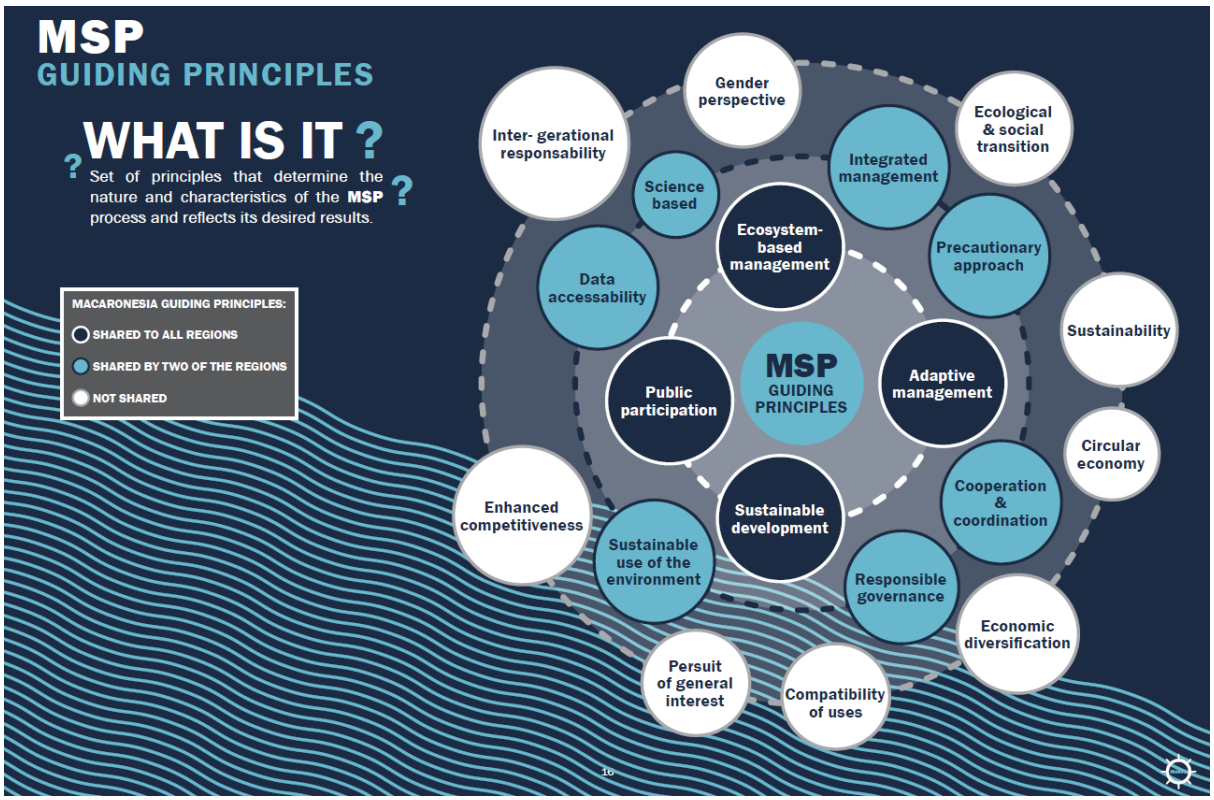


Figure 8. Visual example of the MSP guiding principles. Source: MarSP booklet (https://www.marsp.eu/result/48).

PLANNING THE MONITORING AND EVALUATION OF THE PLAN

Implementing monitoring and evaluation in MSP plans of Macaronesia (D.4.10). Despite the implementation of the MSP Plan will theoretically be monitored and evaluated during step 9, this result may serve to promote the successful achievement of these tasks by starting to consider them beforehand during the pre-planning stage. Thus, this report aims to set a common methodology to monitor and evaluate the Maritime Spatial Plans through a set of indicators and provides some recommendations to improve these planning steps.

The report is available at the following link:
(D.4.10) https://marsp.eu/result/37

A Step-by-Step approach

Step4

ORGANISING STAKEHOLDER PARTICIPATION

The engagement of stakeholders in the planning process is key to achieve the multiple objectives of MSP. Since the beginning of the MarSP project, the Stakeholder Engagement Processes focused on informing, consulting, and involving all the stakeholders. These processes aimed to be transparent and inclusive, involving all actors actively to create a common vision, and fill the knowledge gaps of both existing and future marine uses to support MSP. Overall, these processes within the MarSP served to pave the way for further stakeholders' engagement initiatives.

IDENTIFYING KEY STAKEHOLDERS AND DEFINING WHEN AND HOW TO INVOLVE THEM

- **Stakeholder Engagement Strategy (D.2.1).**
- **Public Participation Guidelines (D.2.3).**
- **Implementation guidelines II - Stakeholder-oriented to provide guidance for long-term stakeholders' participation (D.4.12).**
- **Regional Stakeholder's directory (D.2.4).**

The public participation and long-term stakeholders' engagement guidelines provided a common theoretical basis and strategic approach to inform the engagement processes in the three regions but were flexible to be adapted to the particular features and needs of each archipelago. Also, a series of methods and recommendations for public participation are offered to guide the participatory workshops. Finally, three regional directories were made to identify the key stakeholders and categorized them according to their maritime sector, their origin (i.e. legal, economic, political, scientific or social) and their capacity to influence planning. Besides, whenever it was possible, their relationship (i.e. positive or negative) regarding the MSP process and with other sectors and stakeholders was described. This regional directory is based on a shared initial approach – the identification of the stakeholders to be invited and involved in the MSP process, with the necessary flexibility to be adapted to the particular features and needs of each archipelago (Azores, Madeira and Canary Islands).

The reports are available at the following links:
(D.2.1) https://marsp.eu/result/30 (D.2.3) https://marsp.eu/result/31 (D.4.12) https://marsp.eu/result/39

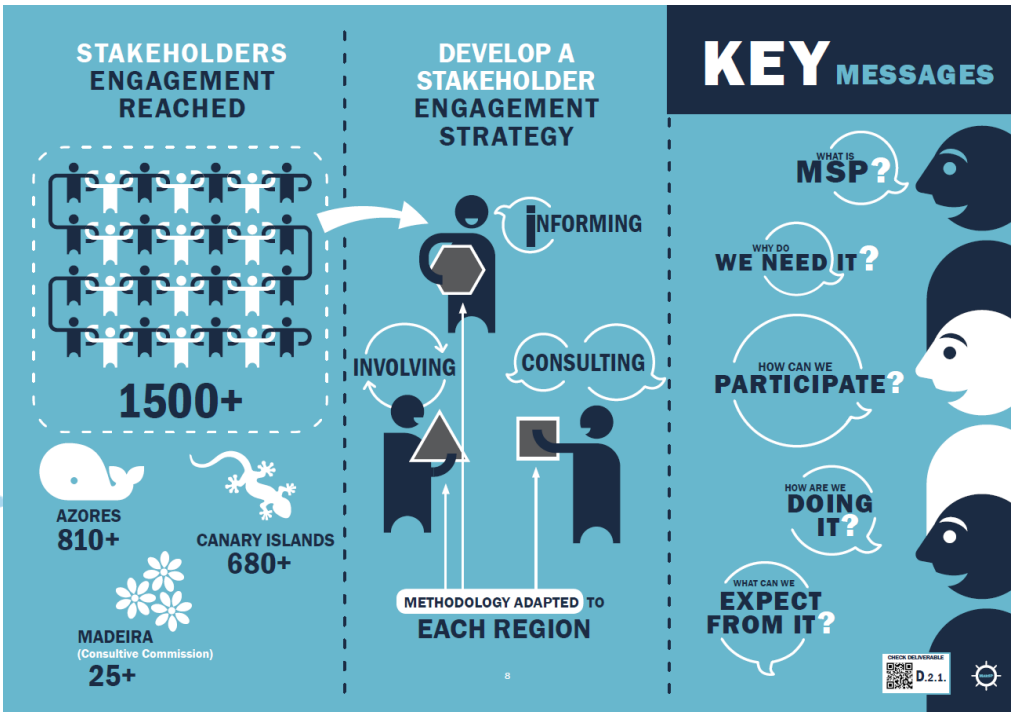


Figure 9. Shows general characteristics of the stakeholder engagement process followed in the MarSP project. Source: MarSP booklet (https://www.marsp.eu/result/48).

- **General reports on the stakeholder's workshops held in each archipelago (D.4.7 & D.4.9).**
- **9 stakeholder's workshops held in the European Macaronesia (D.2.2).**

These reports described the aim, methodology, the participants' profiles and the main results achieved during the stakeholders' engagement process carried out in each archipelago. Additionally, these reports provided different methodologies to identify and assess through participation MSP-related aspects such as the establishment and validation of a long-term vision, and/or interactions between sectors, land-sea or with the environment.

More in-depth details can be found in each of the reports of the nine workshops (3 in each archipelago) that were held throughout the MarSP project.

Stakeholder's workshops are available at:

The Azores
(Report) https://www.marsp.eu/result/34
(1° WS) https://marsp.eu/result/10
(2° WS) https://marsp.eu/result/17
(3° WS) https://marsp.eu/result/21

Madeira:
(1° WS) https://marsp.eu/result/11
(2° WS) https://marsp.eu/result/18
(3° WS) https://marsp.eu/result/23

The Canary Island:
(Report) https://www.marsp.eu/result/36
(1° WS) https://marsp.eu/result/12
(2° WS) https://marsp.eu/result/27
(3° WS) https://marsp.eu/result/22

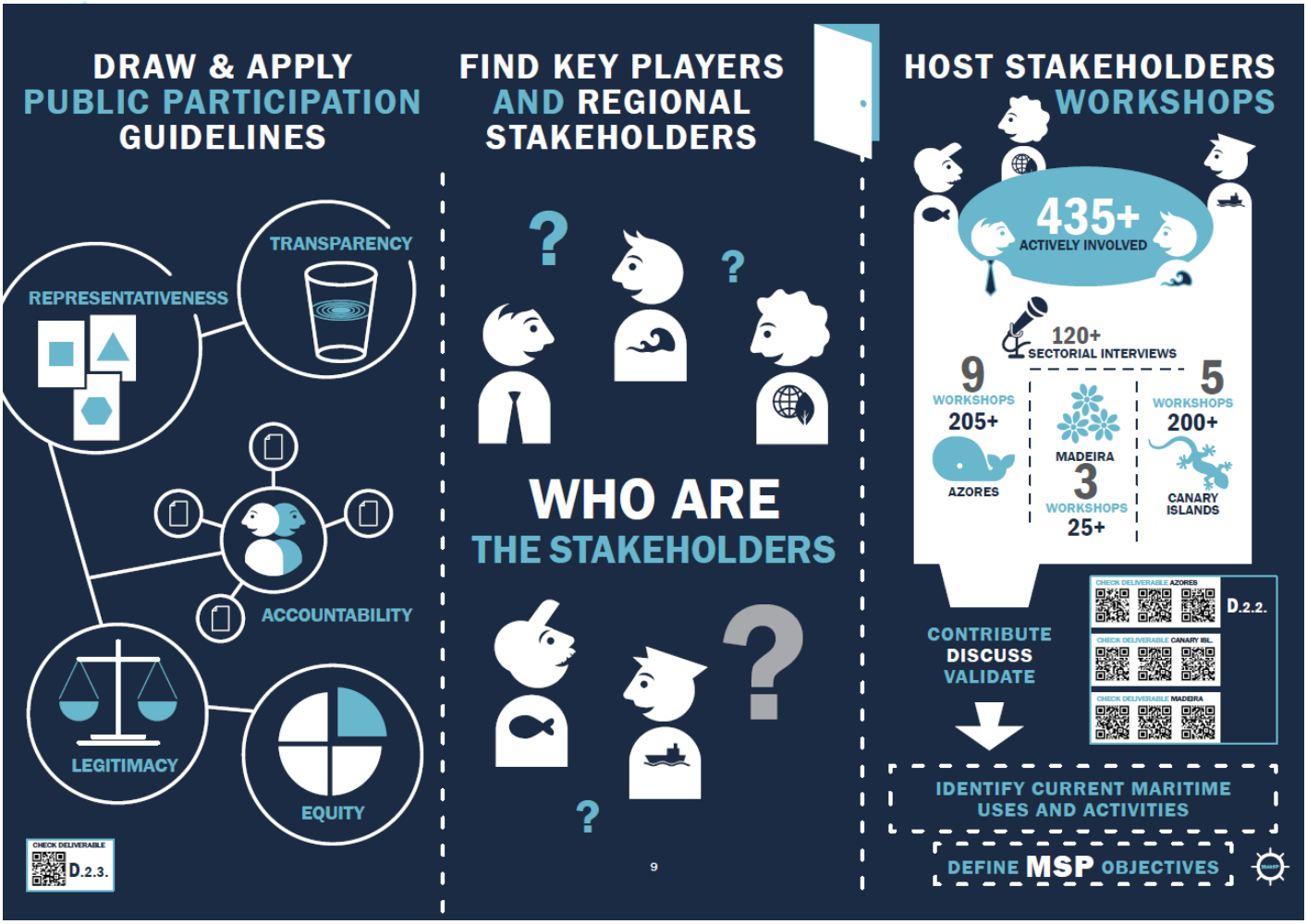


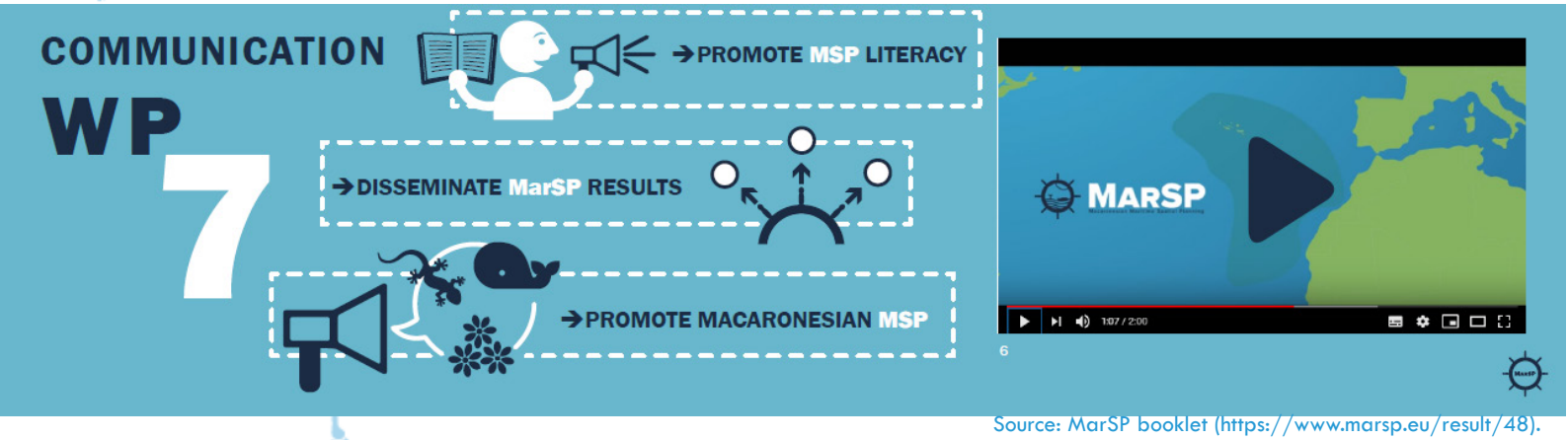
Figure 10. Shows general characteristics of the stakeholder engagement process followed in the MarSP project .
Source: MarSP booklet (https://www.marsp.eu/result/48).

- **4 Macaronesian MSP bulletins (D.6.2).**
- **The MarSP project from the stakeholders' perspective (video).**
- **How MarSP contributed to the Macaronesian MSP process (Booklet).**
- **MarSP Final Conference (FC).**
- **European Maritime Day (2019) workshop: Innovative Tools and Transferability in MSP projects (EMD).**

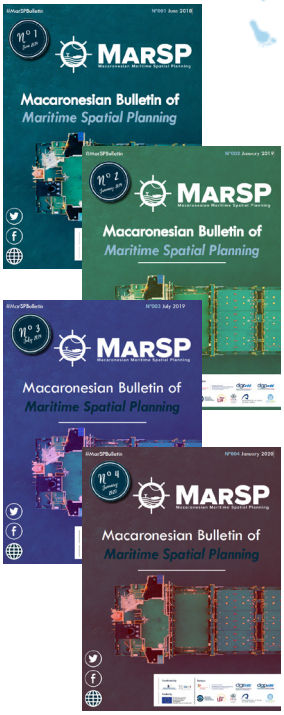
The content developed as well as workshops, and meetings contributed to MSP literacy, raising awareness about this discipline among coastal communities and promoting their willingness to participate actively in the MSP process.

The series of four bulletins' content, translated to both Portuguese and Spanish, focused on disseminating information, facts and curiosities about the maritime culture and heritage across the European Macaronesia enhancing a regional common sense of belonging.

The reports are available at the following links:
(D.6.2.1) https://marsp.eu/result/1 (D.6.2.2) https://marsp.eu/result/13 (D.6.2.3) https://marsp.eu/result/16 (D.6.2.4) https://marsp.eu/result/26 (Video) https://marsp.eu/result/20 (Booklet) https://marsp.eu/result/48 (FC) https://marsp.eu/result/25 (EMD) https://marsp.eu/result/46



Source: MarSP booklet (https://www.marsp.eu/result/48).



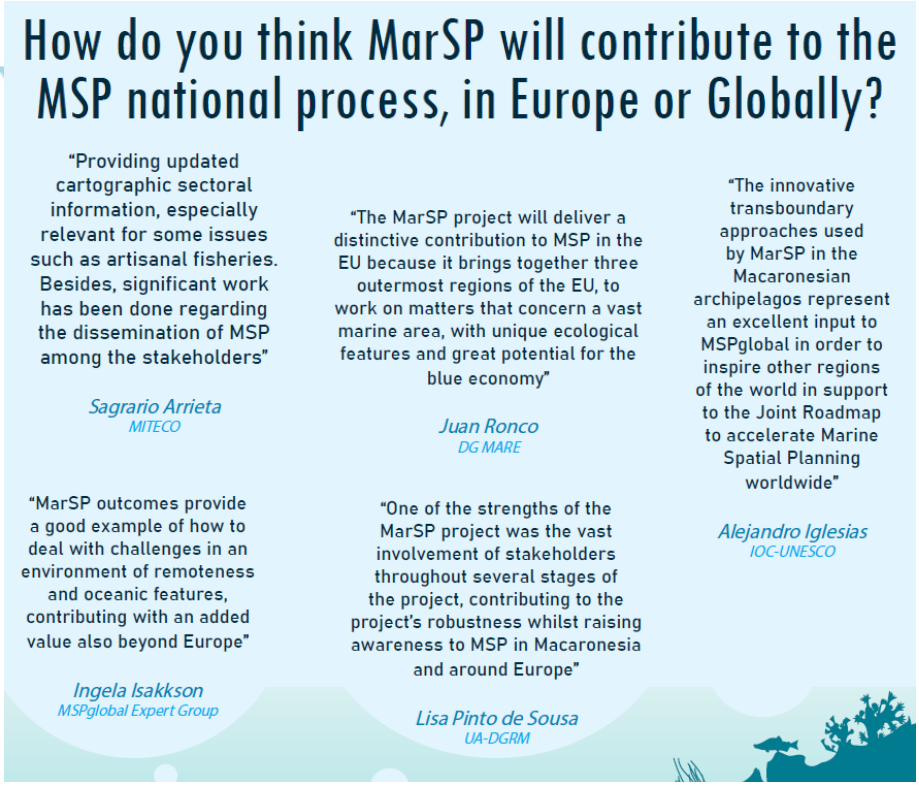


Figure 11. Examples of take-home messages of the Advisory Board members of the MarSP project. Source: MarSP Fourth bulletin (https://www.marsp.eu/result/26).

A Step-by-Step approach

Step5

DEFINING AND ANALYZING EXISTING CONDITIONS

"Compiling and mapping data is expensive and can take large amounts of time and resources. Not all the data you collect will be useful for maritime spatial planning and so careful selection will be needed. A general rule is that data should be up-to-date, objective, reliable, relevant and comparable" (Ehler & Douvere, 2009).

DATA HARMONIZATION AND COMPARABILITY

Macaronesian MSP Platforms.

Data and maps that were collected are stored in the spatial data infrastructures within the MarSP project developed MSP platforms, including SIGMAR Azores, Sistema Centralizado de Gestão do Ordenamento do Espaço Marítimo Regional (Madeira), and Plataforma MSP Canarias. Applied data management is following the INSPIRE principles on publicly discoverable and available data, including harmonization and comparability.

The MSP INSPIRE data model was developed within the MarSP project to offer the Member States a common symbology and data structure to describe their maritime activities, thus, enabling MSP plans' coherence across sea basins. This is a crucial aspect to promote comparability of data collections within a cross-border context and more broadly at European level.

Discover the regional MSP Platforms here:
SIGMAR-Açores: https://oema.mar.azores.gov.pt/
Sistema Centralizado de Gestão do Ordenamento do Espaço Marítimo Regional (Maderia):
https://www.sonar.pt/portal/apps/sites/#/portaldomar
Plataforma MarSP Canarias: http://www.geoportal.ulpgc.es/marsp/

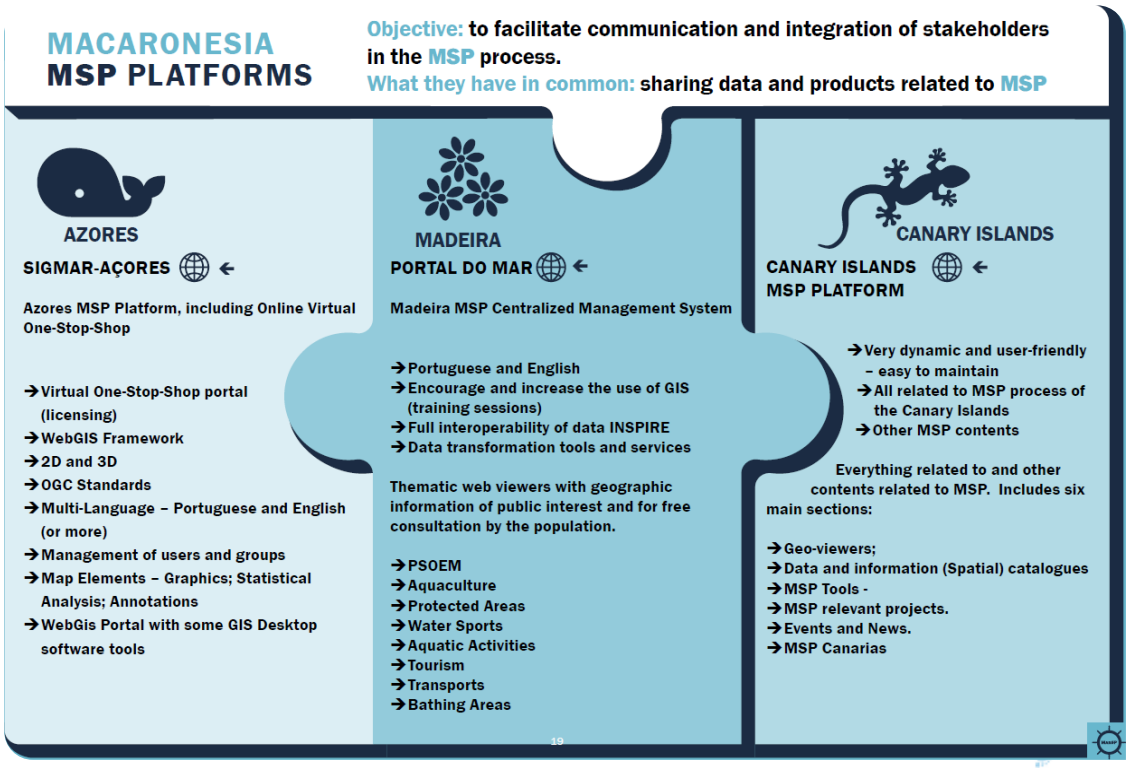


Figure 12. Overview of the data infrastructure platforms of the EU Macaronesia. Source: MarSP booklet (https://www.marsp.eu/result/48).

DEFINING THE DIFFERENT SCALES OF PLANNING

MSP governance analysis of the European Macaronesia (D.6.5).
In this result, for both national and regional scales, the reader can expect a comprehensive description of (1) the international context, (2) the competent authorities, (3) the distribution of institutional competencies, and (4) the key legislation and instruments, regarding both the MSP Directive implementation and management of each maritime sectors. This result can help identify vertical and horizontal needs of institutional coordination and collaboration for MSP.

The report is available at the following links:
(D.6.5) https://marsp.eu/result/42

Table 1. An example of the distribution of competencies for the management of maritime sectors in the Canary Islands. Source: D.6.5.

Maritime activities	Canary Islands management competencies		
	Internal waters	Territorial Sea (12 nm)	Exclusive Economic Zone (200nm)
Aquaculture			
Coastal and maritime tourism			
Underwater cultural heritage			
Fisheries			
Seabed mineral resources			
Energy			
Sea rescue and border control			
Research and biotechnology			
Ports and maritime transport	*Depending on the type of port and transport*		
Marine protected areas (MPAs)	*MPAs are generally nationally managed except for those with ecological continuity with a terrestrial protected area, which will be managed at a regional scale.*		
Legend:			
Regional	National	Regional/National (shared)	

The Macaronesian Geopolitical Atlas, its web viewer and complementary infographics on the "states, maritime boundaries and International cooperation" and "land-sea Interactions" (D.6.9).
The purpose of the MarSP Atlas of the Macaronesia (including Web viewer – MarSP Atlas) is to provide users with an information platform with maps, statistical data, and explanations of the different typologies of administrative and jurisdictional borders as well as other complementary information such as a series of infographics. These infographics contribute visually to reflect on the different spatial scales for maritime activities management, as well as mechanisms of cross-border cooperation according to the borders' typology. It may also encourage users to learn about maritime scenarios.

The reports are available at the following links:
(Atlas) https://marsp.eu/result/44 (Viewer) https://marsp.eu/result/45
(Infographics) https://marsp.eu/result/6 https://marsp.eu/result/7

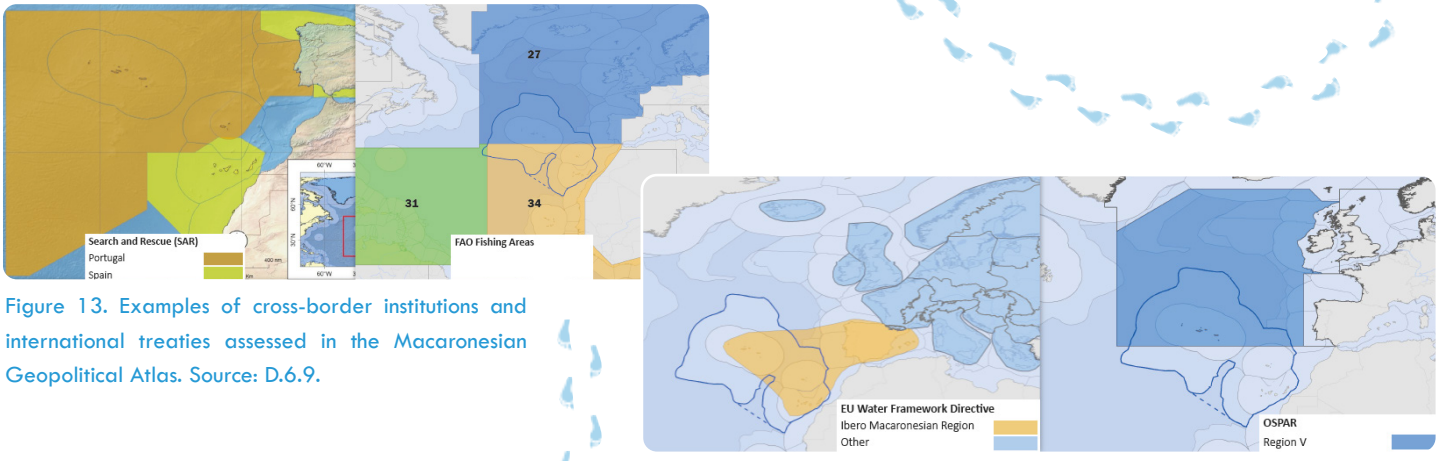


Figure 13. Examples of cross-border institutions and international treaties assessed in the Macaronesian Geopolitical Atlas. Source: D.6.9.

COLLECTING AND MAPPING ECOLOGICAL AND ENVIRONMENTAL INFORMATION

- **List of areas of ecological and biological significance (EBSAs) and vulnerable marine ecosystems (D.3.2).**
- **List of marine protected areas (MPAs) (D.3.3).**

These results may help promote the ecosystem-based approach in MSP by collecting and mapping information about ecological, environmental, and oceanographic conditions.

The reports are available at the following links:
(D.3.2) https://marsp.eu/result/28
(D.3.3) https://marsp.eu/result/29

- **Spatial distribution maps of species, habitats and impacts (D.3.5).**

This deliverable was important to fill knowledge gaps by collecting data about the species and habitats as well as those areas exposed to higher human pressures. This result helped to identify the most suitable areas for particular uses and activities while pursuing the good environmental status.

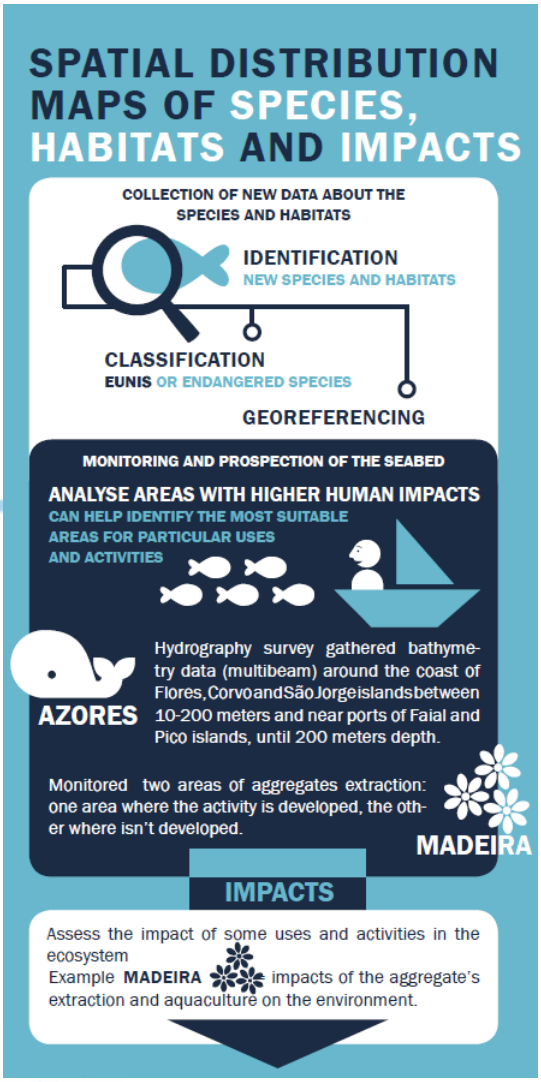


Figure 15: Infographic regarding the spatial distribution maps of species, habitats and impacts. Source: MarSP booklet (https://www.marsp.eu/result/48).

Figure 14. Infographic of the identification of potential maritime uses and activities case-study. Source: MarSP booklet (https://www.marsp.eu/result/48).

- **Matrix of constraints applied to maritime space of Macaronesia (D.3.6).**

This report presents a methodology (to be adapted to each specific regional context) to define the multi-use potential of uses and activities in the maritime space. This is done through a matrix of constraints that should be applied to maritime space of each Macaronesia Region (Madeira, Azores and Canaries).

COLLECTING AND MAPPING HUMAN ACTIVITIES, CONFLICTS AND SYNERGIES

Mapping current maritime uses, activities and constraints in Macaronesia (D.2.5).

This report identified and mapped, for each archipelago, existing maritime uses and activities, as well as their associated constraints, restrictions and synergies. The latter were also mapped and assessed through stakeholder's workshops providing an opportunity to complement the official planning processes with the inputs from stakeholders. Thus, this report can serve as an initial base to be adapted to the particular features and needs of each MSP process.

The report is available at the following link:
(D.2.5) https://marsp.eu/result/33

Characterisation of the socio-ecological system of the European Macaronesia in support of MSP (D.6.1).

Following a DAPSI(W)R approach, this report described the main common drivers (D) beyond the maritime activities (A), which exert a series of pressures (P) altering the state of marine ecosystems (S) and their provision of ecosystems' goods and services for the human well-being (I(W)) of coastal communities, as well as the main adopted political responses (R). This can help identify common issues to implement a regional ecosystem-based MSP and cross-border initiatives.

The report is available at the following link: (D.6.1) https://marsp.eu/result/49

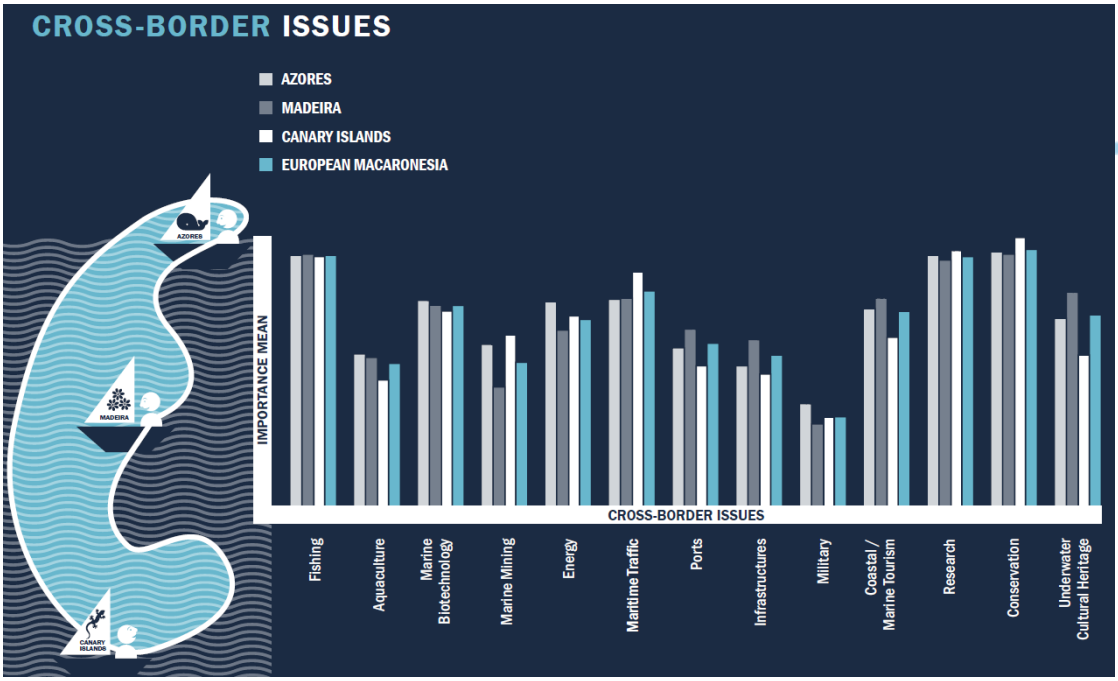


Figure 16. Issues identified by stakeholders of the EU Macaronesia as important for cross-border cooperation. Source: MarSP booklet (https://www.marsp.eu/result/48).

DEFINING AND ANALYZING FUTURE CONDITIONS

A Step-by-Step approach

Step6

"MSP is a future-oriented activity. Its purpose is to help envision and create a desirable future and enable proactive decision-making in the short run to move toward what is desired. The purpose of this phase of the planning process is to answer another seemingly simple question: Where do we want to be? The answer takes the form of alternative spatial sea use scenarios and the selection of a preferred scenario" (Ehler & Douvere, 2009).

PROJECTING CURRENT TRENDS AND ESTIMATING SPATIAL AND TEMPORAL FUTURE DEMANDS

Potential distribution maps for other maritime sectors (D.3.4)

Developed for the MSP process in Madeira (see D.4.8. The Situation Plan), other potential maritime uses and activities were identified, and their future location assessed through a series of workshops and meetings, surveys and interviews of several maritime representatives from various public bodies and private entities.

IDENTIFYING POSSIBLE ALTERNATIVE FUTURES FOR THE PLANNING AREA

• **Manual of scenarios for MSP in the Azores (D.4.6).** This report described 3 main pre-established scenarios balancing the pillars of sustainable development: "Blue Society", "Blue Growth" and "Blue Development". These were then validated and finally chosen based on stakeholder engagement processes. This report can be useful to propose a methodology to define, assess, and validate through participation possible future development scenarios within official MSP processes. This deliverable is not available for public dissemination but can be shared within the MarSP and MSP-OR consortium.

• **Technical report on potential scenarios (D.3.1).** Potential uses and/or scenarios for the maritime space of Macaronesia were identified through a multi-criteria analysis based on the mapped uses, habitats, species, and oceanographic parameters (see D.3.2, D.3.3, D.3.4, D.3.5), as well as the constraints and synergies for multi-use development (see D.3.6).

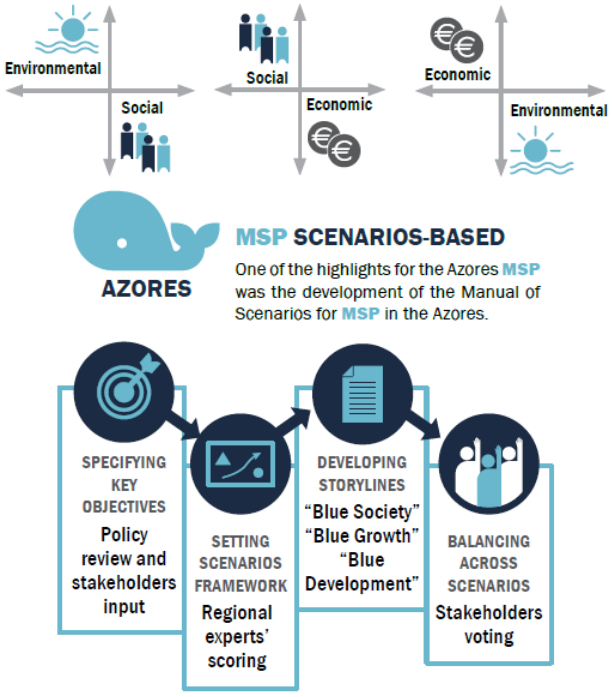


Figure 17: Infographic regarding the MSP scenarios development in the Azores. Source: MarSP booklet (https://www.marsp.eu/result/48).

A Step-by-Step approach

Step7

PREPARING AND APPROVING THE SPATIAL MANAGEMENT PLAN

"A spatial management plan is a comprehensive, strategic document that provides the framework and direction for marine spatial management decisions. it should identify when, where, and how goals and objectives will be met" (Ehler & Douvere, 2009).

PREPARING THE SPATIAL MANAGEMENT PLAN

The process of MSP in Madeira – The Situation Plan (D.4.8).
This report offered a compilation of all previously mentioned results (i.e. (inter)national legislation, policies, programs and restrictions, current and future spatial distribution of human uses and their conflicts and synergies between them, designed scenarios, etc.) and organises it following the structure of an actual MSP plan for Madeira. This is an example of the great applicability of the data and information developed within the MarSP project for the MSP Directive's implementation.
The report is available at the following link:
(D.3.4) https://marsp.eu/result/35

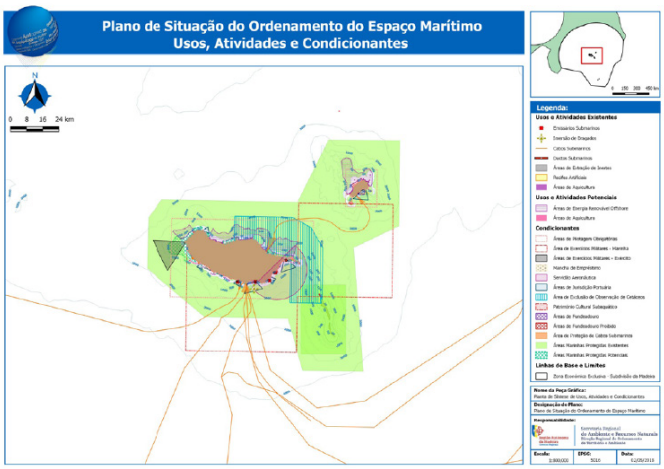


Figure 18. Detail of existing and potential uses and activities - Madeira Island and Porto Santo. Source: MarSP booklet (https://www.marsp.eu/result/48)

Co-funded by the European Union

- **Report describing the Situation Plan (D.4.1).**
- **Geographic dataset corresponding to the Situation Plan (D.4.2).**
- **Final report defined as a proposal for a law document on the MSP in the Azores, corresponding to the Situation Plan (D.4.3).**
- **Model for the Maritime Spatial Plan of the Azores report (D.4.4).**

These results served to organize the data and information gathered throughout the MarSP project following the structure of a Situation Plan, i.e. the official MSP plan for the Azores. This is another example of the great utility of the MarSP project assisting the competent authorities on the implementation of the MSP Directive.

IDENTIFYING MANAGEMENT MEASURES, INCENTIVES AND INSTITUTIONAL ARRANGEMENTS

Pilot projects for cross-border cooperation in MSP (D.6.8).

This report outlined a series of strategic objectives and actions to foster cross-border cooperation. It may serve as inspiration for Member States to adopt specific spatial and temporal management measures and/or governance arrangements toward coherent MSP across borders in the sea basin. Besides, these pilot projects (as management measures) can promote reflection on the dependence of human activities on common natural resources that expand beyond national jurisdictions.

The report is available at the following link:
(D.6.8) https://marsp.eu/result/51

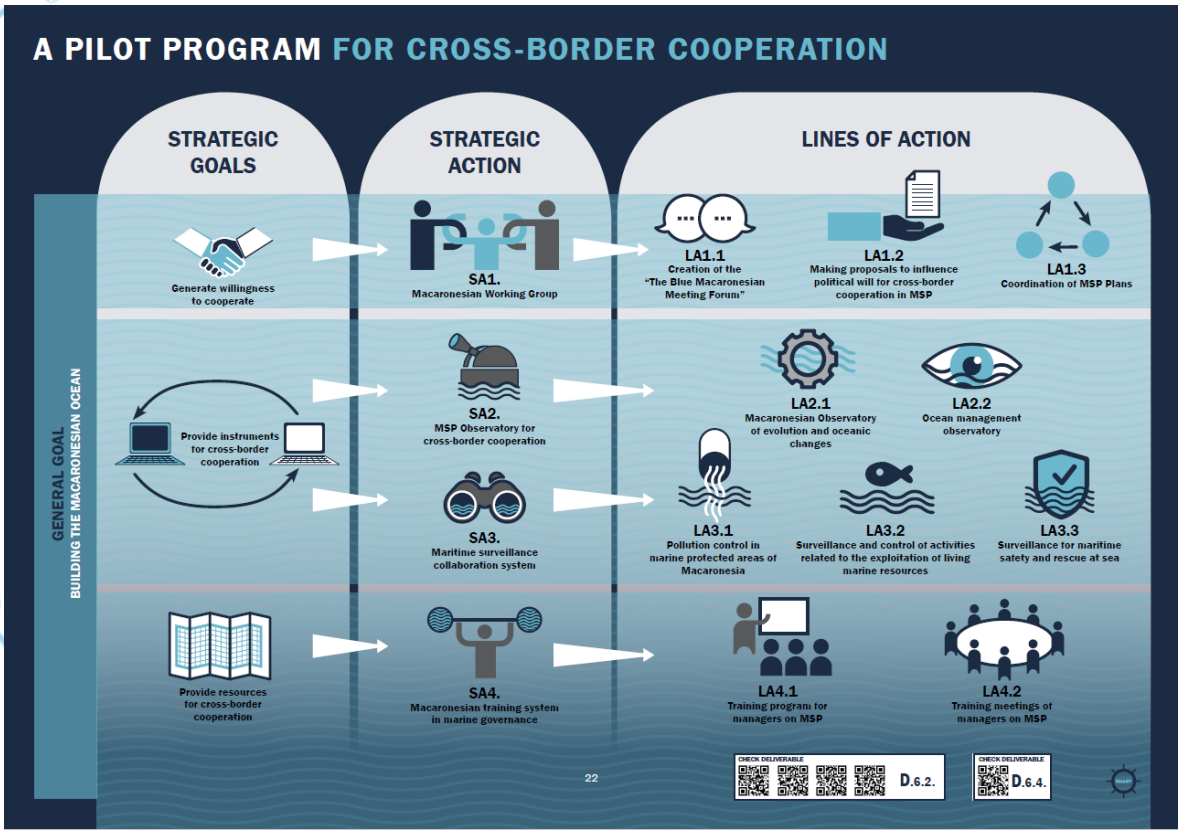


Figure 19. Strategic goals, actions and projects constituting a regional Program to promote cross-border cooperation in the EU Macaronesia. Source: MarSP booklet (https://www.marsp.eu/result/48).

DEVELOPING THE SPATIAL PLAN (INCORPORATING DATA STANDARDS FOR EUROPEAN COMPARABILITY)

Data specification for MSP: INSPIRE data model (D.5.1).
Aiming for data interoperability across Member States, the MSP INSPIRE data model was developed and tested practically in the EU Macaronesia MSP processes. This data model was built and discussed with the main MSP authorities as well as with GIS and MSP experts. The resulting model was object of a hands-on capacity building session. To facilitate its application so that it could be used by GIS users of any level of expertise, a data specifications & guidance document, templates and practical application examples [see the MSP zoning for Madeira (example.1) and the Canary Islands (example.2)] were developed. This MarSP deliverable was included in the Technical Expert Group on MSP Data recommendation document (European Commission, 2021) for development of harmonized European MSP data layer. Further, MSP INSPIRE Data model has been used as a base for development of the EMODnet MSP model, together with BASEMAPS model delivered by HELCOM.

The reports are available at the following links:
(D.5.1) https://marsp.eu/result/40 (D.5.2.WS2) https://marsp.eu/result/15
(Example.1) http://www.geoportal.ulpgc.es/visor2/?json=mspmadeira.json#
(Example.2) http://www.geoportal.ulpgc.es/visor2/?json=mspcanarias.json#

A Step-by-Step approach

Step8

IMPLEMENTING AND ENFORCING THE PLAN

A Step-by-Step approach

Step9

MONITORING AND EVALUATING THE PLAN

A Step-by-Step approach

Step10

REVIEWING AND ADAPTING THE PLAN

The MarSP project did not directly contribute to these steps as during the project duration the focus was the plans development. However, the follow up MSP-OR project intends to contribute actively to these steps.

To be continued in MSP-OR…

4. CONCLUSION

Similar to the famous quote attributed to Isaac Newton, "if [we] have seen further it is by standing on the shoulders of giants", this deliverable has been designed to recognize the "shoulders" upon which the MSP-OR project stands. The deliverable 3.1. MarSP Legacy Matrix, within Work Package 3, resumes the developments of the Macaronesian Maritime Spatial Planning project (MarSP) held from January 2018 to December 2019.

In this document, deliverables have been structured following a theoretical MSP process resulting in fast-reading guidance that organizes logically what has already been done during the MarSP, while defining the baseline for the follow-up MSP-OR project.

The matrix was structured within the worldwide applied MSP step-by-step approach (Ehler & Douvere, 2009). Thus, deliverables are mapped within the "steps" related to a theoretical MSP process. The present document intends to be particularly useful in setting the baseline upon which the MSP-OR project partners can keep assisting in the implementation of the MSP Directive according to the respective development stages of their MSP processes in the outermost regions.

Results showed that the MarSP project deliverables were of special relevance to the MSP steps related to preplanning, understanding the current situations within the maritime sectors, and projecting and elaborating possible future conditions and scenarios. Besides, these steps were strongly supported by stakeholder engagement actions, capacity-building workshops and the promotion of cross-border cooperation among the project's consortium through the assessment of transboundary issues and elaboration of guidelines. Moreover, the spatial component of planning was strengthened with the development of MSP platforms and infrastructure systems for spatial data and information sharing, including the standard for the harmonization and development of the EU MSP data layer.

Overall, the great utility of the MarSP results and their contribution to current MSP processes were especially exemplified in the case of Madeira and the Azores during the preparation and approval of the spatial management plan (step 7). Nevertheless, for the MSP applicability in the Canary Islands, and the overall Spanish MSP process, the MarSP served as an MSP literacy process among regional stakeholders as well as gathering relevant data and information to assess the current and future conditions.

Although MSP planning steps related to implementation, enforcement, monitoring, evaluation, review and the iterative adaption of the plan were not directly addressed during the MarSP project, the MSP-OR project will actively contribute to these steps standing from the MarSP "shoulders".

5. REFERENCES

Ehler, C., & Douvere, F. (2009). *Marine spatial planning: a step-by-step approach toward ecosystem-based management*. http://unesdoc.unesco.org/images/0018/001865/186559e.pdf

European Commission. (2021). *Proposal for making harmonized MSP plan data available across Europe. Results of the work of the Technical Expert Group (TEG) on MSP data*. https://ec.europa.eu

UNESCO-IOC/European Commission. (2021). MSPglobal International Guide on Marine/Maritime Spatial Planning. In A. Iglesias-Campos, J. Rubeck, D. Sanmiguel-Esteban, & G. Schwarz (Eds.), *Maritime Spatial Planning* (IOC Manual). UNESCO/European Commission. https://doi.org/10.1007/978-3-319-98696-8

ANNEX I

It is worth noting that the present table has been built to fit the purpose of this deliverable and should not be considered in a strict sense. Lessons learned of the MSPglobal guide, as well as the MarSP and MSP-OR results, can often be applied in multiple of the planning "steps".

MSP process steps				**Result of the MarSP project**		**Future contributions of MSP-OR**
Step-by-step approach (Ehler and Douvere, 2009)		MSPglobal International Guide (UNESCO-IOC/EU)		**Name**	**Link**	**Name**
Steps	**Tasks**	**Topics**	**Lessons learned**			
Step 1. Identifying need and establishing authority	Task 1.1. Identifying why you need marine spatial planning	How to set the scene	Identifying existing needs for planning ocean resources at local, subnational, national or regional scale, including transboundary aspects.			D.3.1. MarSP legacy matrix
	Task 1.2. Establishing appropriate authority for marine spatial planning		Defining how MSP will be established within the existing governance and legal frameworks related to the coasts and ocean.			
			Identifying existing national legal and institutional frameworks.			
			Identifying existing international laws, regulations and agreements applicable			

			and/or adopted by the country or countries.			
Step 2 Obtaining financial support	Task 2.1. Identifying alternative financing mechanisms		Identifying sources of funding for MSP.			
	Task 2.2. Defining the feasibility of alternative funding					
			Creating an MSP working group.	• Data specification for MSP: INSPIRE data model (D.5.1). • Capacity building workshops on spatial data management (D.5.2).	(D.5.1) https://marsp.eu/result/40 (D.5.2.WS1)https://marsp.eu/result/14 (D.5.2.WS2)https://marsp.eu/result/15 (D.5.2.WS3)https://marsp.eu/result/47	D.2.1. Report on Needs, Barriers and Enablers for MSP and Capacity Building. D.3.9. Maritime safety of navigation expertise.
Step 3 Organizing the process through pre-planning	Task 3.1. Creating the marine spatial planning team.	Designing the planning process	The planning team.			
	Task 3.2. Developing a work plan.		Defining the work plan for the MSP team.			
	Task 3.3. Defining boundaries and timeframe.		Definition of the planning boundaries and time frame.	• Lessons learned and good practices: report and implementation for Macaronesia (D.6.4). • Guidance report on Transboundary MSP: an approach for cross-border cooperation in Macaronesia (D.6.3).	(D.6.4)https://marsp.eu/result/41 (D.6.3)https://marsp.eu/result/50	D.4.2. Conclusions and recommendations for MSP downscaling from French Guiana case studies D.4.3. Conclusions and recommendations from Portuguese MPAs case studies.

						D.4.4. Conclusions and recommendations on integrating MSP and environmental policies (downscaled to the specific maritime sectors)
	Task 3.4. Defining principles.		Defining the principles, initial vision, goals and objectives.	Regional reports on MSP objectives – Macaronesia (D.2.6)	(D.2.6)https://marsp.eu/result/32	
	Task 3.5. Defining goals and objectives.			A cooperation approach for MSP in the European Macaronesia: policy recommendations (D.6.7).	https://marsp.eu/result/43	
				Policy-oriented guidelines for MSP in the European Macaronesia (D.4.11)	https://www.marsp.eu/result/38	
			Planning the monitoring and evaluation of the plan.	Implementing monitoring and evaluation in MSP plans of Macaronesia (D.4.10)	https://www.marsp.eu/result/37	D.3.2. Data specification on monitoring module. D.3.3. Monitoring assessment integrated with example. D.5.1. General guidelines for monitoring and evaluating MSP in the OR. D.5.2. Selection of monitoring indicators and metadata sheets. D.5.3. Pilot test and baseline from a set of

						monitoring indicators selected. D.5.4. Model for monitoring plans.
	Task 3.6. Identifying risks and developing contingency plans.		Risk assessment and development of contingency plans.			
Step 4 Organizing stakeholder participation	Task 4.1. Defining who should be involved in marine spatial planning.	How to set the scene	Identifying key stakeholders.	• Stakeholder Engagement Strategy (D.2.1). • Public Participation Guidelines (D.2.3). • Implementation guidelines II - Stakeholder-oriented to provide guidance for long-term stakeholders' participation (D.4.12).	(D.2.1)https://marsp.eu/result/30 (D.2.3)https://marsp.eu/result/31 (D.4.12)https://marsp.eu/result/39	D.3.13. Report from public debate for the French Guiana sea basin strategy. D.6.6. Networking activities.
	Task 4.2. Defining when to involve stakeholders.			• General reports on the stakeholder's workshops held in each archipelago (D.4.7 & D.4.9). • 9 stakeholders workshops held in the European Macaronesia (D.2.2).	• Azores: (General report) https://www.marsp.eu/result/34 (Sectorial reports): https://marsp.eu/result/10 https://marsp.eu/result/17 https://marsp.eu/result/21 • Madeira: (Sectorial reports): https://marsp.eu/result/11 https://marsp.eu/result/18 https://marsp.eu/result/23 • Canary Island:	

					(General report) https://www.marsp.eu/result/36 (Sectorial reports): https://marsp.eu/result/12 https://marsp.eu/result/27 https://marsp.eu/result/22	
	Task 4.3. Defining how to involve stakeholders.			• 4 Macaronesian MSP bulletins (D.6.2). • The MarSP project from the stakeholders' perspective (video). • How MarSP contributed to the Macaronesian MSP process (booklet). • MarSP Final Conference. • European Maritime Day (2019) workshop: Innovative Tools and Transferability in MSP projects	https://marsp.eu/result/1 https://marsp.eu/result/13 https://marsp.eu/result/16 https://marsp.eu/result/26 (video)https://marsp.eu/result/20 (booklet)https://marsp.eu/result/48 (FC)https://marsp.eu/result/25 (EMD)https://marsp.eu/result/46	D.6.2. Visual Identity & Graphic Materials. D.6.3. Website. D.6.4. Policy Briefs infographics. D.6.5. Madeira short documentary.
Step 5 Defining and analyzing existing conditions		Assessments for planning	Defining the different scales of planning.	• MSP governance analysis of the European Macaronesia (D.6.5)	https://marsp.eu/result/42	
				• The Macaronesian Geopolitical Atlas, its web visor and complementary infographics on the "states, maritime boundaries and International cooperation"	(Atlas)https://marsp.eu/result/44 (viewer)https://marsp.eu/result/45 (Infographics) https://marsp.eu/result/6 https://marsp.eu/result/7	

				and “land-sea Interactions” (D.6.9).		
	Task 5.1. Collecting and mapping information about ecological, environmental and oceanographic conditions.		Identifying existing conditions.	• List of areas of ecological and biological significance (EBSAs) and vulnerable marine ecosystems (D.3.2). • List of marine protected areas (MPAs) (D.3.3). • Spatial distribution maps of species, habitats and impacts (D.3.5).	(D.3.2)https://marsp.eu/result/28 (D.3.3)https://marsp.eu/result/29	D.3.4. Report on coastal seabed mapping survey in the Azores archipelago. D.3.6. Reference state characterization for marine habitats and biocenosis of Madeira. D.3.7. Hydrographic Survey and characterization of the seabed structure in Madeira Island. D4.1. Integrating Green Infrastructure in MSP. A methodology for outermost regions.
	Task 5.2. Collecting and mapping information about human activities.			• Mapping current maritime uses, activities and constraints in Macaronesia (D.2.5) • Matrix of constraints applied to maritime space of Macaronesia (D.3.6).	(D.2.5)https://marsp.eu/result/33	D3.10. Sectorial analysis- Canary Islands: renewable energies and Tourism and recreational activities.
	Task 5.3. Identifying current conflicts and compatibilities			• Characterization of the socio-ecological system of the European Macaronesia in support of MSP (D.6.1)	https://marsp.eu/result/49	D.3.12. Synthesis map of socio-economic issues at sea in French Guiana.

Step 6 Defining and analyzing future conditions	Task 6.1. Projecting current trends in the spatial and temporal needs of existing human activities.		Identifying future conditions.			D.3.5. Roadmap for licensing process under MSP in the Azores. D.3.11. Madeira road map of licencing under MSP, using sectorial Approach: Aquaculture and Tourism, recreational and leisure activities.
	Task 6.2. Estimating spatial and temporal requirements for new demands of ocean space.			• Potential distribution maps for other maritime sectors (D.3.4)	(D.4.8) https://www.marsp.eu/result/35	
	Task 6.3. Identifying possible alternative futures for the planning area.			• Manual of scenarios for MSP in the Azores (D.4.6)	[Not available for dissemination]	
	Task 6.4. Selecting the preferred spatial sea use scenario.					
			Developing a public information system.			
		The plan	The spatial plan.			

Step 7 Preparing and approving the spatial management plan	Task 7.1. Identifying alternative spatial and temporal management measures, incentives, and institutional arrangements.			• Pilot projects for cross-border cooperation in MSP (D.6.8)	https://marsp.eu/result/51	D.2.2. Platform Manual D.2.3. Report on main discuss issues on the Platform
	Task 7.2. Specifying criteria for selecting marine spatial management measures.		Management actions, including their economic impact on those measures linked with sustainable blue economy strategies.			
			Spatial allocation of uses.	• Geographic dataset corresponding to the Situation Plan (D.4.2).		
	Task 7.3. Developing the zoning plan.		Developing the spatial plan.	• The process of MSP in Madeira: The situation Plan (D.4.8). • Report describing the Situation Plan (D.4.1). • Final report defined as a proposal for a law document on the MSP in the Azores, corresponding to the Situation Plan (D.4.3).	(D.4.8)https://www.marsp.eu/result/35	

				Model for the Maritime Spatial Plan of the Azores report (D.4.4).		
	Task 7.4. Evaluating the spatial management plan.		Evaluating the draft marine spatial plan and strategic environmental assessment.			
	Task 7.5. Approving the spatial management plan.		Endorsing and approving the marine spatial plan.			
			Defining the implementation process.			
			Developing MSP capacity – aspects to be considered following the first marine plan.			
Step 8 Implementing and enforcing the spatial management plan	Task 8.1. Implementing the spatial management plan.	Enabling implementation of the marine spatial plan	Establishing regulation to refer to the implementation of the marine spatial plan.			
			Establishing a regular dialogue with sectors and other actors to follow up and support the implementation.			
			Training competent authorities and			

			maritime sectors on the implementation of the plan.			
	Task 8.2. Ensuring compliance with the spatial management plan.		Compliance with the marine spatial plan.			
	Task 8.3. Enforcing the spatial management plan.		Enforcing the marine spatial plan			
Step 9 Monitoring and evaluating performance	Task 9.1. Developing the performance monitoring program.	Monitoring, evaluation and adaptation	Evaluating the planning process and stakeholder engagement.			
	Task 9.2. Evaluating performance monitoring data.		Evaluating the plan and its relevance			
			Evaluating implementation			
			Evaluating the results of MSP – the outcome evaluation.			
	Task 9.3. Reporting results of performance evaluation.		Reporting and using the evaluation and monitoring results			
Step 10 Adapting the marine	Task 10.1. Reconsidering and redesigning		Adaptation: Review and revision of the plan			

spatial management process	the marine spatial planning program.					
	Task 10.2. Identifying applied research needs.					
	Task 10.3. Starting the next round of marine spatial planning.					

MSP-OR
Advancing Maritime
Spatial Planning
in Outermost Regions

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