



Maritime Spatial Planning Through the Years: Insights of a Decade of EMFF and EMFAF Funded Projects

Background Technical Study

JULY 2024

European Maritime, Aquaculture and Fisheries Fund (EMFAF)



Written by Christina Christoforou Livani (European MSP Platform) and Cristina Cervera Núñez (MSP Expert)
July, 2024

EUROPEAN COMMISSION

European Climate, Infrastructure and Environment Executive Agency
Unit D3 — Sustainable Blue Economy

Contact: *CINEA EMFAF CONTRACTS*

E-mail: CINEA-EMFAF-CONTRACTS@ec.europa.eu

*European Commission
B-1049 Brussels
BELGIUM*

Maritime Spatial Planning Through the Years: Insights of a Decade of EMFF and EMFAF Funded Projects

CINEA/EMFAF/2022-3.5.1/SI2.885676 – Support and expert services on maritime spatial
planning (MSP) and for the establishment of a European Blue Forum – Call

CINEA/2022/OP/0012

JULY 2024

Produced by the MSP Assistance Mechanism (AM MSP)

Written by: Christina Christoforou Livani¹, Cristina Cervera-Núñez, and Thanos Smanis² with the support of the Geographical Experts of the MSP Assistance Mechanism.

1. Application Européenne de Technologies et de Services (AETS), Brussels
2. Climazul, Athens.

Special thanks to all of the European MSP Community who supported the workshop process and provided valuable review and comments to finalise this Report.

This report should be cited as:

Christoforou Livani, C., Cervera Núñez, C., Smanis T., *Maritime Spatial Planning Through the Years: Insights of a Decade of EMFF and EMFAF Funded Projects*, Publications Office of the European Union, 2024, doi: 10.2926/69197

The information and views set out in this study are those of the author(s) and do not necessarily reflect the official opinion of CINEA or of the Commission. Neither CINEA nor the Commission can guarantee the accuracy of the data included in this study. Neither CINEA, the Commission or any person acting on their behalf may be held responsible for the use that may be made of the information contained therein.

Manuscript completed in June 2024.

This document should not be considered as representative of the European Commission's official position.

Luxembourg: Publications Office of the European Union, 2024

© European Climate, Infrastructure and Environment Executive Agency, 2024



The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39, ELL: <http://data.europa.eu/eli/dec/2011/833/oj>).

Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed, provided appropriate credit is given and any changes are indicated.

Contents

Executive Summary	5
Abbreviation List.....	6
1. Introduction.....	8
1.1. The EMFF and EMFAF.....	8
1.2. European MSP policy landscape over the last decade.....	9
2. Methodology.....	13
2.1. Objectives.....	13
2.2. Approach and Data.....	13
3. Overall findings of the analysis.....	15
3.1. General statistics of the analysis	15
3.2. Overall objectives of the projects	17
3.3. Topics and tools of the projects	19
3.4. Main challenges and best practices.....	21
3.4.1. Data.....	26
3.4.2. Governance	27
3.4.3. Ecosystem and Biodiversity Conservation	29
3.4.4. Capacity building and stakeholder engagement.....	31
3.4.5. Cross-sectoral approach in MSP	34
3.4.6. Multi-use.....	35
3.4.7. Cross-border cooperation	37
3.4.8. Socio-economic dimension in MSP.....	38
3.4.9. Land-sea interactions.....	40
3.4.10. Monitoring and Evaluation	41
4. Discussion points	43
4.1. What kind of solutions can projects provide to MSP challenges?	43
4.2. Recurrent challenges.....	45
4.3. Beyond MSP challenges – limitations in project’s implementation.....	49

5. Conclusions and recommendations	51
6. Annexes.....	54
6.1. Sea basin analysis.....	54
6.1.1. Baltic Sea	55
6.1.2. Atlantic Ocean	62
6.1.3. Black Sea	72
6.1.4. East Mediterranean	80
6.1.5. North Sea	88
6.1.6. West Mediterranean.....	94
6.1.7. Outermost regions	100
6.2. Keywords.....	104
6.3. Projects and reports analysed	105
6.4. Thesaurus.....	123

Executive Summary

This executive summary provides a comprehensive overview of the analysis conducted on Maritime Spatial Planning (MSP) initiatives funded by the European Maritime and Fisheries Fund (EMFF) and the European Maritime, Fisheries, and Aquaculture Fund (EMFAF). Spanning 32 projects and 262 project reports from 2014 to 2024, the analysis aimed to reflect on the evolution of MSP processes, understand project achievements, identify challenges, and shed light on best practices employed within the MSP community over the last decade.

The research methodology employed various approaches, including qualitative analysis, keyword-based methods, interviews with Geographical Focal Points of the MSP Assistance Mechanism, a workshop in Brussels, Belgium, with project representatives to validate key findings and provision of feedback from the Member States Expert Group (MSEG).

Projects exhibited diverse geographical scopes and objectives, addressing challenges ranging from data access to policy coherence and nature conservation, among many others. The challenges addressed by the projects manifested at local, national, regional, and European levels necessitating tailored solutions and recommendations. The interlinked nature of these challenges underscores the complexity of the MSP process, which evolves over time, requiring adaptable and context-specific approaches. At the same time, challenges persist, necessitating targeted strategies and investments in capacity building. Strengthening partnerships, enhancing policy uptake, and broader dissemination and stakeholder engagement are highly recommended for planning and implementing MSP efficiently.

While not all impacts created by the projects were tangible, and some challenges showed persistence or evolved through the years, tangible products were still delivered, fostering awareness among Competent Authorities (CAs) and strengthening interinstitutional collaboration at a national level and cross-border cooperation between EU Member States. These initiatives supported the entire stakeholder ecosystem of MSP to account for the constantly changing socioeconomic and environmental landscape and promote sustainable development and management. Intangible contributions, such as establishing a European MSP community and scientific networks, were significant achievements of the EMFF and EMFAF.

In conclusion, MSP initiatives funded by EMFF and EMFAF have made significant progress, fostering collaboration, enhancing capacity, and addressing complex challenges. However, continued efforts are needed to navigate evolving challenges and ensure the sustainability of MSP initiatives.

Abbreviation List

Abbreviations	
AM MSP	Assistance Mechanism MSP
CA	Competent Authorities
CEA	Cumulative Effects Assessment
CEAF	Common Environmental Assessment Framework
CFM	Common Fisheries Policy
CIA	Cumulative Impact Assessment
CINEA	European Climate, Infrastructure and Environment Executive Agency
CLLD	Community-Led Local Development
CoPs	Communities of Practice
CPMR	Conference of Peripheral Maritime Regions
DSF	Documents Stratégiques de Façade
DTS	Developing Decision Support Tools
EASME	Executive Agency for Small and Medium-sized Enterprises
EBA	Ecosystem-Based Approach
EC	European Commission
EEZ	Exclusive Economic Zone
EGD	European Green Deal
EIAs	Environmental Impact Assessments
EMFAF	European Maritime, Fisheries, and Aquaculture Fund
EMFF	European Maritime and Fisheries Fund
EMODNET	European Marine Observation and Data Network
ES	Ecosystem Services
EU	European Union
EUSAIR	EU Strategy for the Adriatic and Ionian Region
GES	Good Environmental Status
GIS	Geographic Information System
GVA	Gross Value Added
HELCOM	Helsinki Commission
ICES	Council of Exploration of the Sea
ICZM	Integrated Coastal Zone Management
IMP	Integrated Maritime Policy
IOC-UNESCO	UNESCO's Intergovernmental Oceanographic Commission
MPA	Marine Protected Area

Maritime Spatial Planning Through the Years: Insights of a Decade of EMFF and EMFAF Funded Projects

Abbreviations	
MSFD	Marine Strategy Framework Directive
MSP	Maritime Spatial Planning
OL	Ocean Literacy
POEM	Planes de Ordenación del Espacio Marítimo
SDI	Spatial Data Infrastructure
SEA	Strategic Environmental Assessment
TEG	Technical Expert Group
TSS	Traffic Separation Scheme
UCH	Underwater Cultural Heritage
UfM	Union for the Mediterranean
UK	United Kingdom
WFS	Web Feature Services

1. Introduction

1.1. The EMFF and EMFAF

The European Maritime and Fisheries Fund (EMFF) (2014-2020)⁽¹⁾ programme has been a fundamental instrument for the sustainable management of fisheries and aquaculture sectors and maritime spatial planning (MSP) within the EU under the coordination of the Executive Agency for Small and Medium-sized Enterprises (EASME). In 2021, the successor programme to the EMFF, known as the EMFAF, was introduced under the management of the European Climate, Infrastructure and Environment Executive Agency (CINEA). The EMF(A)F⁽²⁾ has provided financial support to various initiatives to enhance these sectors' competitiveness, environmental sustainability, and socio-economic viability. Key priorities include promoting sustainable fisheries practices, fostering innovation, supporting coastal communities, and conserving marine ecosystems. The EMF(A)F has supported MSP through direct management by funding EU-wide projects and initiatives and through shared management by empowering Member States to develop and implement national and regional MSP strategies⁽³⁾.

Moreover, through the fund, the implementation of the Integrated Maritime Policy (IMP)⁽⁴⁾ has been promoted, fostering coordinated decision-making for sustainable development, economic growth, and social cohesion, especially in coastal and maritime regions⁽⁵⁾. The funding initiative has focused on enhancing the socio-economic viability of the MSP, marine resource conservation, scientific data collection, regulatory compliance, and sustainable practices. In addition, the EMF(A)F plays a pivotal role in supporting the European Union's (EU) common fisheries policy

(1) REGULATION (EU) No 508/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 on the European Maritime and Fisheries Fund and repealing Council Regulations (EC) No 2328/2003, (EC) No 861/2006, (EC) No 1198/2006 and (EC) No 791/2007 and Regulation (EU) No 1255/2011 of the European Parliament and of the Council

(2) Throughout this study, references to both the EMFF and EMFAF will be denoted as EMF(A)F.

(3) Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund and repealing Council Regulations (EC) No 2328/2003, (EC) No 861/2006, (EC) No 1198/2006 and (EC) No 791/2007 and Regulation (EU) No 1255/2011 of the European Parliament and of the Council

(4) [Integrated Maritime Policy - European Commission \(europa.eu\)](https://ec.europa.eu/euroipa/)

(5) COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL: The common fisheries policy today and tomorrow: a Fisheries and Oceans Pact towards sustainable, science-based, innovative and inclusive fisheries management.

(CFP) and international ocean governance agenda⁽⁶⁾ and has underscored the crucial role of MSP and integrated coastal zone (ICZM) management in fostering sustainable development, ecosystem-based management, and enhancing land-sea connectivity. It has supported various activities, including studies, projects, public information campaigns, coordination activities, training projects, and technical tools development, to promote collaboration and sustainable management of marine resources.

While the EMFF and EMFAF have aligned objectives, the EMFAF expands upon them by incorporating additional elements and goals tailored to address the evolving challenges and policy landscape. These enhancements reflect a more comprehensive approach to tackling issues such as climate change resilience, innovation in maritime industries, and promoting gender equality and social inclusion within the maritime sector. By integrating these new elements, the EMFAF aims to provide a more robust framework for fostering sustainable growth and resilience across Europe's maritime and fisheries sectors⁽⁷⁾. Aligned with the objectives of the European Green Deal (EGD)⁽⁸⁾, it contributes significantly to marine biodiversity protection, climate change mitigation efforts, and food security.

Moreover, it aims to improve blue skills and working conditions in the blue economy, bolster economic and social prosperity in coastal communities, drive innovation in the blue economy while ensuring maritime security and fostering international cooperation, and place importance on the development of maritime activities in the outermost regions. With a substantial budget allocation for the period 2021-2027, the fund's implementation is subject to rigorous evaluation and monitoring mechanisms, ensuring transparency and accountability at both national and EU levels.

1.2. European MSP policy landscape over the last decade

The growing recognition of the need for integrated and sustainable management of maritime activities, along with the rapid industrialisation, urbanisation, and globalisation intensifying pressures on marine ecosystems and resources, necessitating coordinated planning and governance approaches to ensure the long-term sustainability of marine environments, led to the adoption of the EU MSP

⁽⁶⁾ [International ocean governance - European Commission \(europa.eu\)](#) International ocean governance is about managing the world's oceans and their resources together so that they are healthy and productive, for the benefit of current and future generations.

⁽⁷⁾ Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund and amending Regulation (EU) 2017/1004.

⁽⁸⁾ COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. The European Green Deal.

Directive on April 17, 2014. The EU MSP Directive aims to establish a framework for MSP in EU waters. It was developed in response to the increasing demands on maritime space due to various economic activities such as shipping, fishing, renewable energy production, tourism, and conservation efforts. These activities have often competed for limited space and resources, leading to conflicts and inefficiencies in resource allocation and environmental management⁽⁹⁾.

The EU MSP Directive serves as a comprehensive governance framework for EU Member States, mandating the adoption of maritime spatial plans by 2021 in all EU marine waters. It establishes a crucial foundation for regulatory frameworks to promote sustainable management and utilising Europe's marine resources. Aligned with the EU's broader environmental protection goals, socio-economic development, and territorial cohesion, the EU MSP Directive plays a pivotal role in shaping Europe's maritime governance landscape.

Another influential regulatory framework is the Marine Strategy Framework Directive (MSFD), designed to address marine ecosystem degradation and promote the sustainable use of marine resources. By outlining a comprehensive strategy for achieving and maintaining Good Environmental Status (GES) in EU marine waters, the MSFD aligns closely with the goals of the EMFAF. Emphasising marine biodiversity conservation, ecosystem protection, and sustainable fisheries and aquaculture practices, the MSFD provides a strategic framework for coordinating conservation efforts and addressing common environmental challenges across EU marine waters⁽¹⁰⁾.

Furthermore, marine knowledge is reinforced through initiatives like the European Marine Observation and Data Network (EMODNET), which enables industries, public authorities, and researchers to access data and gain a deeper understanding of the marine environment. These efforts contribute to informed decision-making and sustainable management practices in Europe's seas⁽¹¹⁾.

Expanding beyond EU waters, international conventions and agreements further shape the policy landscape for MSP. The OSPAR Convention, focusing on the protection of the marine environment of the North-East Atlantic⁽¹²⁾, and the Helsinki Commission (HELCOM), dedicated to safeguarding the Baltic Sea, provide platforms

⁽⁹⁾ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning.

⁽¹⁰⁾ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

⁽¹¹⁾ [Home | European Marine Observation and Data Network \(EMODnet\) \(europa.eu\)](#)

⁽¹²⁾ [Convention | OSPAR Commission](#)

for cooperation and information exchange on MSP-related matters⁽¹³⁾. Similarly, the Action Plan for the Mediterranean under the Barcelona Convention and the Convention on the Protection of the Black Sea Against Pollution establish frameworks for ICZM and pollution prevention in their respective regions.

The EGD is a pivotal milestone, outlining strategic objectives to steer the EU towards a sustainable economy by leveraging climate and environmental challenges as opportunities⁽¹⁴⁾. Embedded within this framework, the EU Biodiversity Strategy targets halting biodiversity loss and restoring ecosystems by 2030, with ambitious goals like safeguarding 30% of land and sea areas⁽¹⁵⁾. Complementing this, the Farm to Fork initiative emphasises sustainable food systems, aiming to reduce pesticide and antibiotic use in agriculture⁽¹⁶⁾.

Additionally, initiatives like RePowerEU seek to expedite the adoption of renewable energy and ensure a fair transition to a climate-neutral economy⁽¹⁷⁾. Meanwhile, Fitfor55 comprises a package of legislative proposals geared towards aligning EU policies to mitigate greenhouse gas emissions by at least 55% by 2030⁽¹⁸⁾.

Though each initiative tackles distinct aspects of sustainability, they reinforce the overarching objectives of the EGD. This collective effort underscores the EU's dedication to environmental protection and climate action. Significantly, MSP intersects with these initiatives, offering a framework for conserving marine resources and ecosystems. By aligning with the goals of biodiversity conservation, renewable energy deployment, and carbon reduction outlined in the EGD and related strategies, MSP plays a crucial role in advancing sustainability within the EU.

Overall, these policy frameworks and international agreements, among many more directly or indirectly linked to the two funding mechanisms, underscore the interconnectedness of MSP with broader environmental conservation and sustainable development goals. By promoting collaboration and information exchange at regional and international levels, they support the effective implementation of MSP initiatives,

⁽¹³⁾ [HELCOM](#)

⁽¹⁴⁾ European Commission. (2019). The European Green Deal. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

⁽¹⁵⁾ European Commission. (2020). EU Biodiversity Strategy for 2030. https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en

⁽¹⁶⁾ European Commission. (2020). Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system. https://ec.europa.eu/food/farm2fork_en

⁽¹⁷⁾ European Commission. (2020). RePowerEU: European Commission sets out strategy to deliver EU renewable energy projects. https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2507

⁽¹⁸⁾ European Commission. (2021). Fit for 55 Package. https://ec.europa.eu/clima/policies/strategies/fit-55_en

ensuring the long-term health and sustainability of marine ecosystems and resources.

2. Methodology

2.1. Objectives

The objective of analysing the MSP-related EMF(A)F-funded projects is multifaceted. Firstly, it aims to reflect on the evolution of the MSP process over the past decade to provide insights into the changes, developments, and advancements that have occurred during this time frame. Secondly, the analysis seeks to understand the achievements of the projects and the broader European MSP community, highlighting successful initiatives, innovative approaches, and impactful outcomes. Additionally, the study aims to identify and articulate the challenges faced by MSP stakeholders, including **resolved, evolved, persistent, and emerging obstacles**, to inform future strategies and initiatives. Moreover, the analysis endeavours to shed light on **best practices, applied solutions, and recommendations** from project experiences, facilitating knowledge sharing and mutual learning among stakeholders. Ultimately, the overarching goal of the analysis is to foster collaboration, cohesion, and synergy within the MSP community, strengthening collective efforts towards sustainable maritime spatial planning and management in the future.

2.2. Approach and Data

The research methodology focused on collecting information from the European MSP Platform in collaboration with CINEA and DG MARE and reviewing 32 projects and 262 project reports. Firstly, a qualitative analysis was conducted, focusing on sections within the reports that elaborated on the challenges faced, lessons learned, and recommendations provided by the project teams. This qualitative analysis aimed to systematically extract relevant information about the practical difficulties encountered by projects and the corresponding proposed solutions employed, as well as policy recommendations beyond the implementation of the project.

In addition to the qualitative analysis, a keyword-based approach was implemented. A list of keywords was developed for each project based on predefined objectives and outputs. Tests were then conducted to identify these keywords within the project reports. This keyword analysis served as a complementary method to the qualitative approach, enabling the systematic identification of specific themes and topics across the reports.

Subsequently, the information extracted through qualitative and keyword-based analyses was compiled into groups. This consolidation process involved categorising the extracted data into coherent groups based on common themes, challenges, and recommendations identified across the project reports.

To further validate and strengthen the approach of the analysis, one-to-one interviews were conducted with the Geographical focal points of the MSP Assistance Mechanism covering all European sea basins: *Atlantic Ocean, Baltic Sea, Black Sea, East Mediterranean, North Sea, West Mediterranean and Outermost regions*⁽¹⁹⁾. The interviews provided valuable insights into the evolution of the challenges addressed by the projects, as well as the current condition of the policy landscape and challenges that have recently emerged.

Additionally, on March 14, 2024, representatives from projects such as e-MSP NBSR, MSP-OR, REGINA, MSP-Green, REMAP (funded under EMFAF), MSP4BIO, MPA Europe, Marineplan, PERMAGOV (funded under Horizon Europe Cluster 6), and Blue4all (funded under Mission Ocean) were invited to a workshop in Brussels, Belgium. Among other topics discussed, participants provided feedback on the results of the analysis and engaged in peer review sessions aimed at identifying best practices and the challenges that have been resolved, evolved or emerged. This collaborative effort ensured a comprehensive understanding of the insights gathered to date by the analysis of the study.

The final results of the analysis, enriched by the feedback and contributions from the workshop participants, were shared with the Member States Expert Group (MSEG) on June 7, 2024, to provide feedback, facilitating informed decision-making and future planning. This inclusive process successfully integrated diverse perspectives, enabling the capture of important lessons learned and insights from past projects. This could equip the MSP European community with valuable wisdom and experience to inform future endeavours and navigate challenges effectively.

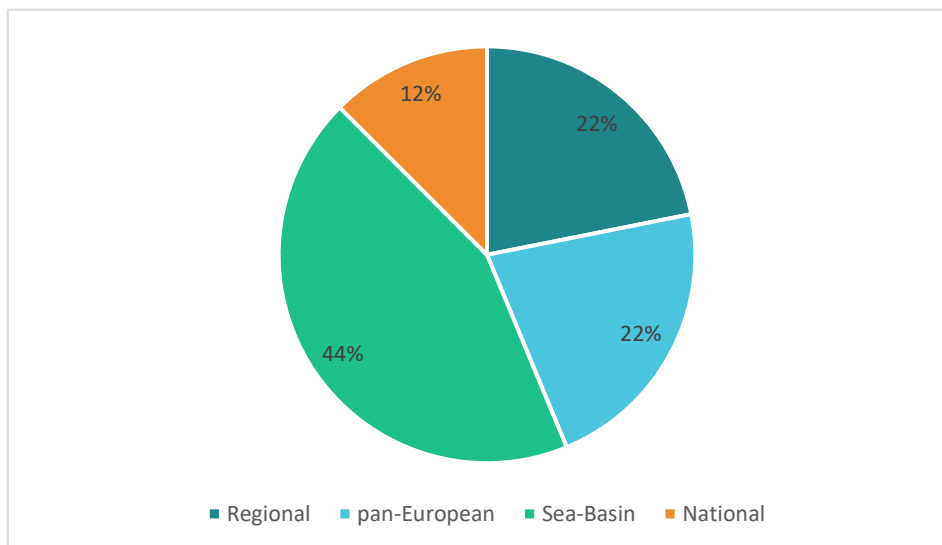
⁽¹⁹⁾ [Team | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

3. Overall findings of the analysis

3.1. General statistics of the analysis

The analysis comprehensively encompasses MSP-related projects funded by the EMF(A)F since 2014. It covers 27 completed projects under the EMFF (2014-2020) and five ongoing projects launched in 2021 under the EMFAF (2021-2027). Figure 1 illustrates the diverse geographical scope of these projects. They vary widely, from addressing specific national needs—such as initiatives within Ireland's EMFF Operational Programme under Union Priority 6—to international efforts such as the MSPglobal, which, despite its broad mandate, includes a case study focused on the West Mediterranean Sea. Additionally, some projects have a regional focus, spanning multiple countries within distinct sea basins, while others operate at a pan-European level. There are also projects explicitly dedicated to individual sea basins. Furthermore, the funded projects, including those currently under implementation, have been active across all European sea basins, as illustrated in Figure 2.

Figure 1 – The geographical scope of the EMF(A)F funded projects since 2014 (%)

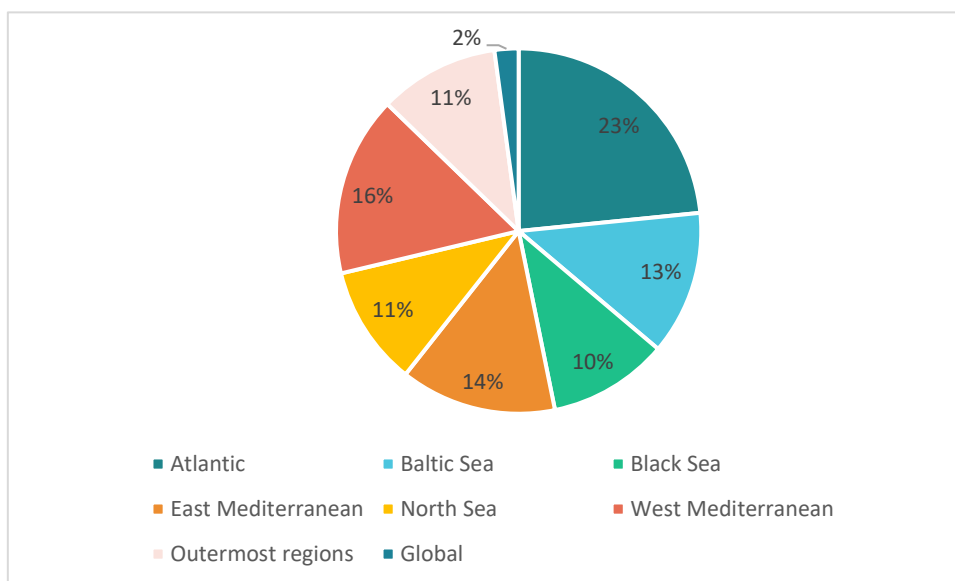


© The data presented are from our own research.

Source: European MSP Platform.

Across the 32 projects taken into account, “Regional” stands for when a project takes place in multiple countries across different sea basins, “pan-European” when the geographical scope of the project is across all the EU MSs such as the Assistance Mechanism of the MSP, “Sea basin” is for the projects that have a focus on a specific sea basin and is implemented in more than one of relevant countries, either by involving all the countries of the sea basin or some of them.

Figure 2 – The projects processed per sea basin (%)



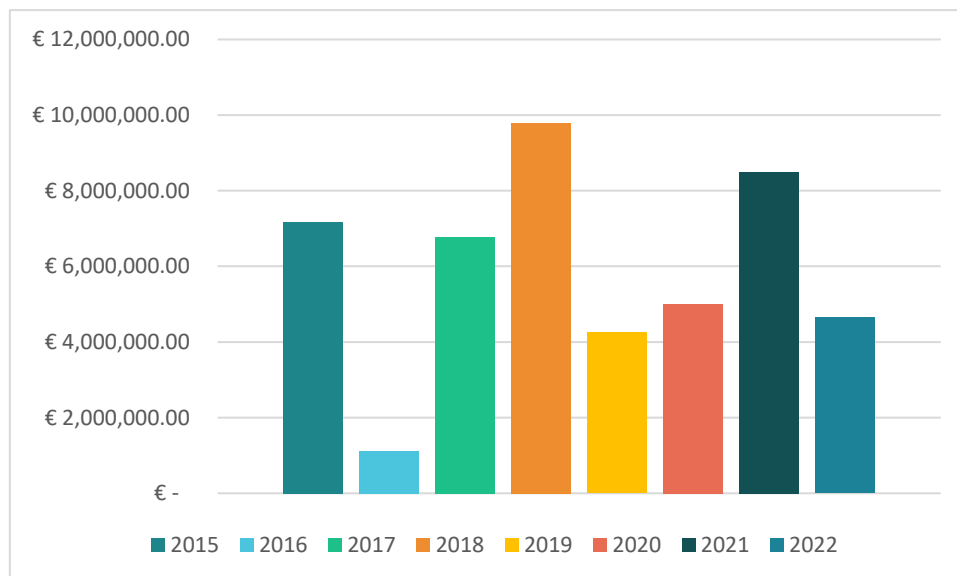
© The data presented are from our own research.

Source: European MSP Platform.

For regional projects, depicted in Figure 1, implemented across Member States spanning multiple sea basins, the percentage representation of sea basin impact creation considers their implementation in each relevant sea basin.

The total budget earmarked for MSP-related projects within the EMF(A)F since 2014 amounts to €50,186,583.96, with 80% originating from the European Commission (EC) contribution except for the Assistance Mechanism MSP (AM MSP) projects implementation that the EC contribution has been 100%, equating to a total spending of the EC of €41,918,231.54. The allocation of funds to MSP-related projects is displayed in Figure 3, considering the commencement year of each project. It's important to highlight that many projects span multiple years, leading to instances where several projects commenced simultaneously. For example, in 2018, 10 projects were launched. However, there were years such as in 2016 when only one project started, hence the variation of the budget spending in Figure 3.

Figure 3 – EMF(A)F programmes' expenditures introduced each year since 2015 on MSP projects



© The data presented are from our own research.

Source: European MSP Platform.

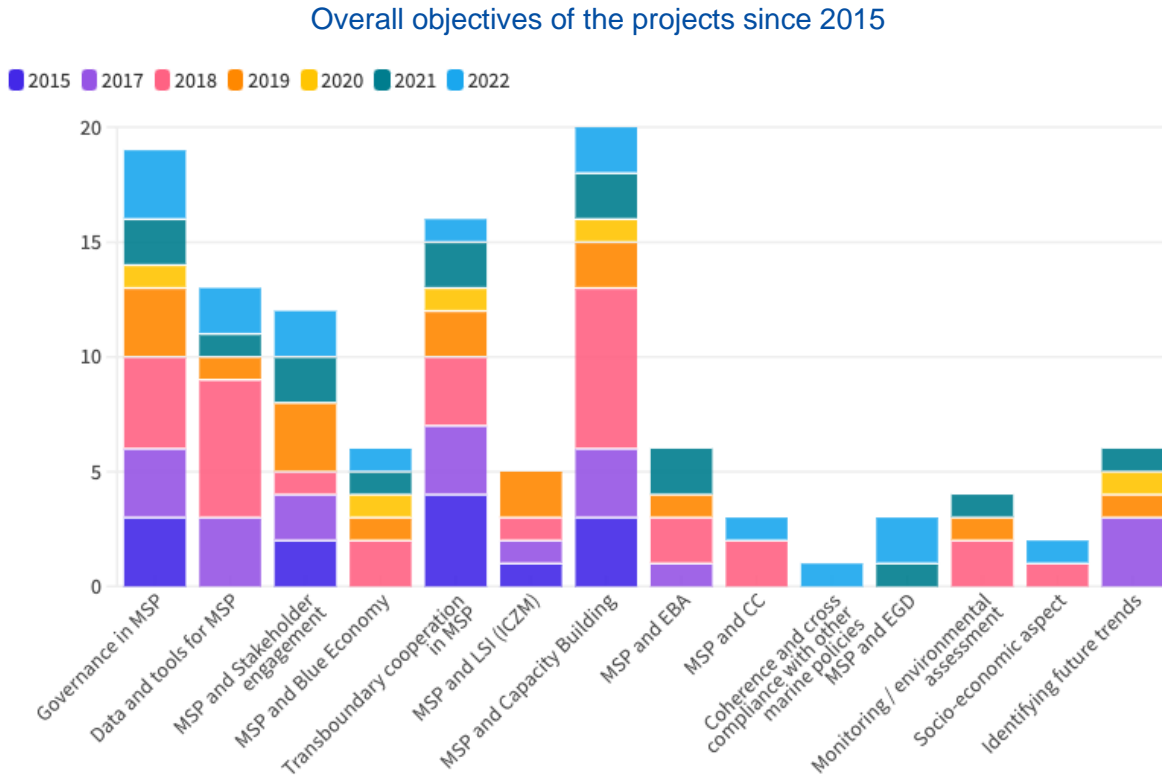
Diverse consortia have carried out the projects. Our analysis of all the projects reveals that the project partners' teams include a variety of actors, such as public authorities, private companies, NGOs, and academic or research centres and institutions. The composition of these teams varies depending on each project's specific outcomes and features. Notably, public authorities make up the largest share at 62%, highlighting the EMF(A)F's emphasis on their involvement in project implementation, a requirement part of the project calls and selection criteria. Private companies account for 32%, NGOs for 35%, and academic or research institutions for 74% of project partnerships.

3.2. Overall objectives of the projects

The Open call for tenders/Call for proposals under the EMF(A)F has focused on a variety of topics such as establishing CAs, emphasising cross-sectoral planning, and integrated governance that balances environmental preservation with economic growth, public participation, data sharing, and international cooperation as integral components, ensuring transparency, inclusivity, and harmonised approaches to maritime governance. Case studies and best practices are used to offer valuable insights, while high-level conferences are employed to facilitate knowledge exchange and collaboration, reinforcing the collaborative nature of MSP implementation and

advancing sustainable maritime development goals⁽²⁰⁾ ⁽²¹⁾ ⁽²²⁾. In alignment with these objectives, the projects funded by the EMF(A)F have focused on a diverse list of themes, as shown in Figure 4.

Figure 4 – Key objectives of the EMF(A)F funded projects over the years at a European scale



© The data presented are from our own research.

Source: CINEA.

The list of objectives is formulated based on the primary objectives outlined in the calls for proposals for each project. The inception year of each project serves as the basis for attributing the year in which a project pursued each objective. The graph illustrates the distribution of projects targeting each objective annually. CC stands for climate change. The projects with a pan-European focus were not taken into account in this graph. The starting year of a project was taken into consideration, and “2016” was exempted as no project commenced that year.

As evident from Figure 4, the overwhelming majority of projects have consistently endeavoured to enhance various aspects related to governance, data tools and infrastructure, stakeholder engagement, capacity building within the MSP framework,

⁽²⁰⁾ OPEN CALL FOR TENDERS NO MARE/2014/23. Assistance Mechanism for the implementation of Maritime Spatial Planning.

⁽²¹⁾ OPEN CALL FOR TENDERS N° MARE/2014/40. Study on international best practices for cross-border Maritime Spatial Planning

⁽²²⁾ CALL FOR PROPOSALS. For EU grants Under the European Maritime and Fisheries Fund Projects on Maritime Spatial Planning (MSP) Amended version – February 2016* EMFF Work Programme 2015 Call for Proposals EASME/EMFF/2015/1.2.1.3

and promoting cross-border collaboration. These efforts align closely with the primary objectives of the EMF(A)F and the EU MSP Directive. The emergence of particular objectives in recent years reflects an evolving landscape shaped by rapid technological advancements, climate change, and the establishment of relevant policies. Additionally, it marks a shift from EU Member States having no national Maritime Spatial Plans to adopting and implementing them. Objectives such as "MSP and Climate Change" indicate a proactive response to contemporary challenges. Moreover, there is an emphasis on integrating the principles of the EGD and addressing socio-economic dimensions within MSP initiatives. The EMFAF has effectively embraced these evolving themes and trends, demonstrating adaptability and relevance in addressing contemporary maritime challenges.

3.3. Topics and tools of the projects

As per the guidelines outlined in the EMF(A)F calls for proposals⁽²³⁾ and the EU MSP Directive, projects have employed diverse mechanisms and approaches to achieve their objectives effectively. Among the most prevalent strategies utilised is **stakeholder engagement**, which involves facilitating consultations to ensure active and meaningful participation from a wide range of stakeholders, including policymakers, planners, scientists, and citizens. These efforts often adopt **bottom-up approaches** and engage **local stakeholders and private sectors** that may typically be less involved in MSP initiatives. Stakeholders are actively included in the projects, with workshops as platforms for sharing best practices and mutual learning and fostering networking and synergies, particularly for cross-border or cross-sectoral cooperation needs.

Recognising the significance of **public consultation and awareness-raising**, projects prioritise these activities to cultivate an informed society, facilitate policy adoption and implementation, and garner political support, targeting both the general public and decision-makers. Various communication channels, including newsletters and social media platforms, are utilised for effective information dissemination. This approach and these tools lead to a significant increase in ocean literacy amongst the population.

In addressing **data management and sharing** challenges, projects focus on filling data gaps, enhancing data availability, improving data collection and management infrastructure, establishing access to databases, and advocating for standards to ensure data interoperability and harmonisation.

Furthermore, projects contribute significantly to creating and disseminating **technical knowledge and maritime skills**, offering management tools and scalable solutions.

⁽²³⁾ European Commission, GUIDANCE FOR BENEFICIARIES of European Structural and Investment Funds and related EU instruments, ISBN 978-92-79-43628-4 doi:10.2776/31954. 2014

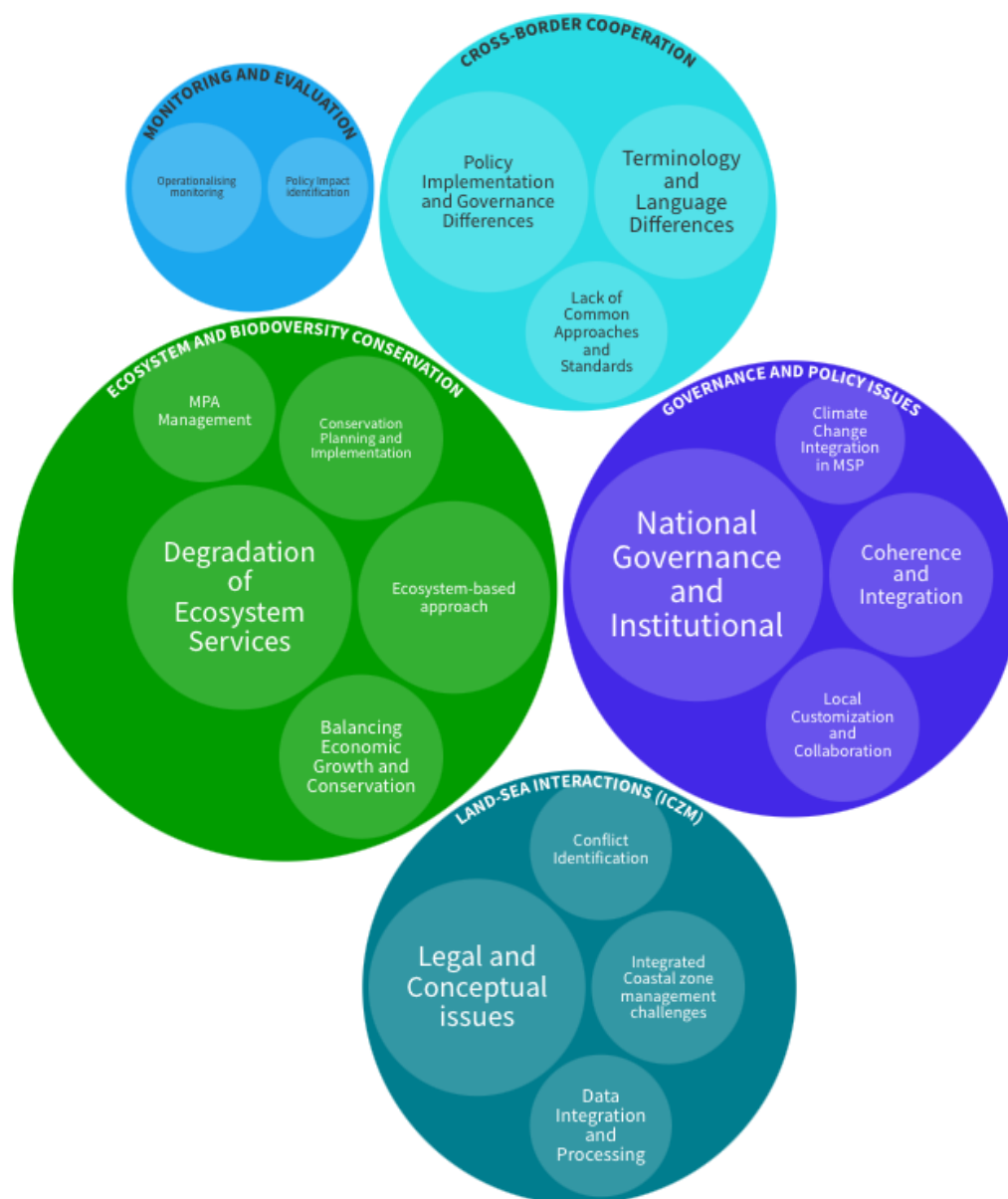
Efforts have focused on embracing and integrating an ecosystem-based approach into the national MSP plans of the EU Member States and emphasising the importance of implementing a coherent Strategic Environmental Assessment (SEA) approach and monitoring and evaluation assessments.

Lastly, projects have showcased that they have a pivotal role in **supporting EU Member States** in building trust, establishing national plans, identifying challenges in transboundary cooperation, establishing common MSP strategies for cross-border collaboration, identifying cross-sectoral synergies and fostering cooperation, and resolving user-user or user-environment conflicts.

3.4. Main challenges and best practices

Figure 5 – Challenges addressed by projects at a European scale since 2015

Part A



© The data presented are from our own research.

Source: Project reports – list available in the Annex.

The magnitude is contingent upon the number of projects that have addressed each challenge. The data come from the analysis research (see methodology).

MSP faces increasingly intricate demands due to escalating human pressures on sea spaces and ecosystems, compounded by competing policy objectives such as biodiversity preservation, climate change mitigation, and sustainable seafood

practices⁽²⁴⁾. The threat of climate change amplifies the complexity of MSP endeavours⁽²⁵⁾. As for transboundary cooperation, potential disparities between the priorities and aspirations of neighbouring nations add another layer of challenge⁽²⁶⁾.

MSP initiatives confront a diverse array of challenges during their implementation. These challenges manifest across various levels - local, national, regional, and European - and involve stakeholders spanning a spectrum of scales. Each challenge encountered prompts projects to devise tailored solutions or employ policy recommendations commensurate with the challenge's scale and the project's capacity to address it effectively. Figure 5 and Figure 6 offer a glimpse into the breadth and depth of challenges tackled by these projects.

⁽²⁴⁾ S.C. Doney, D.S. Busch, S.R. Cooley, K.J. Kroeker, The Impacts of Ocean Acidification on Marine Ecosystems and Reliant Human Communities, *Annu. Rev. Environ. Resour.* 45 (2020).

⁽²⁵⁾ Cooley, S., Schoeman, D., Bopp, L., Boyd, P., Donner, S., Ito, S. I. & Yool, A. (2022). Oceans and coastal ecosystems and their services. In IPCC AR6 WGII. Cambridge University Press.

⁽²⁶⁾ S. Jay, F.L. Alves, C. O'Mahony, M. Gomez, A. Rooney, M. Almodovar, K. Gee, J.L. S. de Vivero, J.M.S. Gonçalves, M. da Luz Fernandes, O. Tello, S. Twomey, I. Prado, C. Fonseca, L. Bentes, G. Henriques, A. Campos, Transboundary dimensions of marine spatial planning: Fostering inter-jurisdictional relations and governance, *Mar. Policy* 65 (2016).

Figure 6 – Challenges addressed by projects at a European scale since 2015

Part B



© The data presented are from our own research.

Source: Project reports – list available in the Annex.

The magnitude is contingent upon the number of projects that have addressed each challenge. The data come from the analysis research (see methodology).

Among the many issues tackled by these projects, paramount concerns include enhancing data access, interoperability, and quality, alongside the imperative for countries to share data cohesively. The projects have followed a coordinated effort to ensure policy coherence amidst many marine and environmental regulations, support

the efficient implementation of national MSP plans, and seamlessly integrate land-sea interactions within MSP frameworks. Nature protection, ecosystem conservation, the application of ecosystem-based approaches and cumulative impact assessments emerge as key issues of activities.

Recognising the significance of collaborative endeavours, these projects underscore the necessity for countries to work together simultaneously and in a coordinated manner to achieve better socio-economic outcomes, foster synergies, align strategies, and tackle common regional and international challenges. Stakeholder capacity building is also, prioritised, encompassing planners, experts, public authorities, and private actors, underlining the pivotal role of engaging stakeholders at all levels in the MSP process.

Figure 7 – Challenges addressed by projects at a European scale since 2015



© The data presented are from our own research.

Source: Project reports – list available in the Annex.

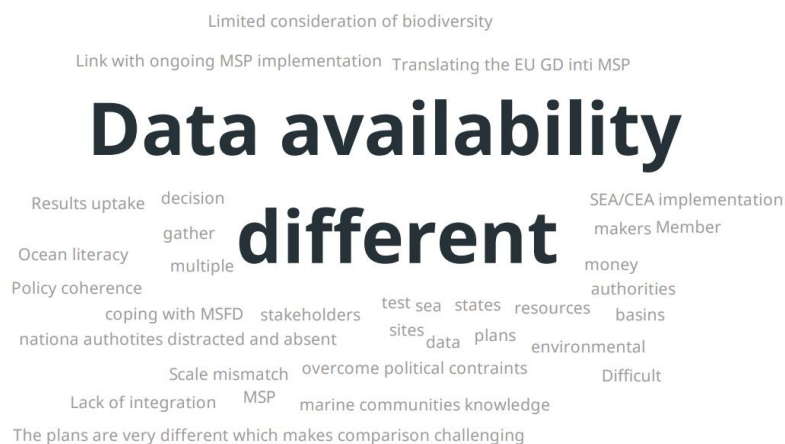
The magnitude is contingent upon the number of projects that have addressed each recommendation. The data come from our research (see section 4. Methodology).

As anticipated, project teams have diligently addressed the challenges and proposed tailored recommendations for various stakeholder groups, such as experts and planners. They have provided a comprehensive array of solutions and best practices for each challenge, as illustrated in Figure 7. Compiling challenges and best practices is a foundational tool for our analysis, facilitating the observation of trends across different years and sea basins. Moreover, it offers planners a holistic overview of navigating difficulties during policy implementation and project execution, enabling them to prepare better and streamline the planning phase.

Below, we present the **best practices** accumulated over the last decade for each of the predominant topics addressed by projects. While projects in different sea basins may have addressed some of these practices and challenges, understanding the broader context of each subject is essential. By learning from one another and leveraging the accumulated experience, policymakers and key stakeholder groups could formulate policies and strategies to address these challenges and foster successful outcomes.

Reaffirming the primary findings produced by the analysis, participants of the MSP workshop held in Brussels, Belgium, on March 14, 2024, and organised by CINEA and DG MARE, with the support of the AM MSP, shared their perspectives on the most significant challenges encountered. As illustrated in Figure 8, data availability emerged as the foremost concern, underlining its pivotal role in shaping informed policy decisions, understanding the impact of human activities on the marine environment and communities, and fostering efficient collaboration. Another prominent theme highlighted in the word cloud was "different," reflecting disparities in policies, priorities, languages, cultures, and methodologies, posing barriers to collaboration and result comparison.

Figure 8 – Challenges addressed by projects at a European scale since 2015



© The data presented are from the SLIDO word cloud generated during the workshop organised in Brussels, Belgium, on March 14, 2024.

During the MSP workshop held in Brussels, Belgium, on March 14, 2024, and organised by CINEA and DG MARE, with the support of the Assistance Mechanism of MSP, representatives from ongoing MSP projects were

invited to share their insights regarding the challenges they have faced in implementing the EMF(A)F MSP-related funded projects. The workshop policy brief can be found [here](#).

Key takeaways from the discussions include the imperative for better utilisation of research outcomes, integration of socioeconomic dimensions and land-sea interactions into MSP frameworks, and the importance of an adaptive MSP capable of addressing and accommodating emerging challenges and sectors. Additionally, there is a pressing need to raise awareness and promote ocean literacy across various levels, from local communities to informed planners and researchers, to ensure the effectiveness and significance of MSP.

Participants also emphasised the importance of ocean literacy initiatives as a potential solution to increasing public engagement and awareness.

Below, the analysis provides detailed information on each challenge mentioned in the projects and highlights the most popular best practices employed by the project teams. **Further details on each project, country, and sea basin's examples of challenges and lessons learned can be found in the Annex.**

3.4.1. Data

- **Challenges**

Pan-European initiatives, such as EMODnet data portals, the EU Blue Economy Observatory, Sea Basin Checkpoints, and SeaDataNet infrastructure, play an essential role in supporting transboundary MSP by providing access to diverse marine data across disciplines such as bathymetry, geology, habitats, chemistry, biology, physics, and human activities. Aligned with the EU MSP and INSPIRE Directives, these initiatives emphasise using the best available data to inform maritime spatial plans and environmental policies. Additionally, Spatial Data Infrastructures and geoportals complement these efforts by facilitating data sharing among stakeholders. Practical tools, such as the EU MSP Platform, further support MSP processes by offering guidance and methodologies.

MSP relies heavily on robust data for informed decision-making, which is crucial for balancing maritime activities and environmental protection. The EU MSP Directive mandates coastal EU Member States to develop maritime spatial plans by March 2021, emphasising the use of the "best available data" and ensuring accessibility to stakeholders.

However, several challenges have been addressed affecting the effective data utilisation in MSP in the last decade. These include spatial and temporal availability challenges, difficulties in data acquisition, and accessibility challenges such as limited access to non-public data and fragmented information. Cross-border cooperation has faced additional hurdles due to disparities in data harmonisation, methods employed,

and lack of national data service availability. Language and legal barriers impede data exchange across borders, along with compatibility issues and gaps.

- **Best practices**

To address these challenges, projects have recommended various strategies and best practices. These include establishing common protocols and sharing methods for data collection, promoting standardisation and harmonisation of data across countries, and enhancing accessibility through user-friendly databases and multilingual metadata, as addressed by a vast majority of projects such as SIMNorat, SIMAtlantic, SUPREME, SEANSE and MARSPLAN-BS-II among others (see details in the Annex). Ensuring data reliability through accuracy measures and verified data usage is vital, along with improving data management through knowledge sharing and collaboration among policymakers and maritime administrations. These efforts aim to overcome barriers and foster effective data-driven decision-making in MSP. CINEA and DG MARE have formed the Technical Expert Group (TEG) on data for MSP to enhance the implementation of these recommendations and guidelines and cater to specific research needs. This group is dedicated to resolving MSP data management issues, fostering knowledge exchange among practitioners, and showcasing its outputs at a public workshop for the benefit of Member States' planners and MSP practitioners⁽²⁷⁾.

3.4.2. Governance

- **Challenges**

Effective governance is vital for successful MSP efforts, recognised by the EU MSP Directive and the EMF(A)F, emphasising integrated and coherent MSP in governance structures and processes. Together, these mechanisms stress the importance of governance in promoting collaboration and sustainability in European MSP.

The challenges encountered within MSP governance are multifaceted. The need to integrate climate change considerations into MSP primarily reflects the complex task of mitigating and adapting to its impacts. This challenge is further complicated by the EGD requiring multiple ministries to address these issues and cooperate with one another. Although, MSP is an important tool in managing this complexity, facilitating coordinated efforts across various sectors and stakeholders, limited knowledge, tools, and methods to adequately address climate uncertainties pose significant barriers. Furthermore, there needs to be more clarity between planning horizons and climate scenarios to complicate adaptive management efforts. Political instability, resource constraints, and legal complexities further hinder effective governance.

⁽²⁷⁾ [Technical Expert Group \(TEG\) on Data for MSP | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

Variations in MSP implementation across countries add to the challenge of cross-border collaboration, requiring administrative coordination and social participation. The complexity of analysing maritime space necessitates efforts to enhance understanding, public access to information, and stakeholder engagement.

In addition, achieving integrated planning faces obstacles in harmonising policies across sectors, sea basins, and EU levels, exacerbated by governance integration and capacity limitations. Unclear links between MSP objectives and operational processes undermine coherence, as does inconsistent involvement of authorities in implementation processes. Establishing effective links between the MSFD and EU MSP Directive presents another governance challenge, along with regional governance disregarding local interests.

- **Best practices**

Adaptive MSP Management *(suggested by SIMAtlantic, MARSPLAN-BS-II and MSPMED, among others)*: To address the dynamic nature of climate change and its impacts on marine ecosystems, Adaptive MSP Management emerges as a crucial strategy. The SEANSE project stressed that by developing methods for long-term planning that could adapt to changing conditions, adopting adaptive planning processes, and updating mapping protocols regularly, MSP could effectively respond to evolving environmental challenges. Additionally, enhancing stakeholder engagement approaches, implementing adaptive implementation strategies, and proactively managing uncertainties are essential to fostering adaptive governance in MSP.

Enhancing Policy Coherence *(suggested by SIMCelt, BALTISCOPE, MARSPLAN BS, PANBALTIC SCOPE and SEANSE, among others)*: Achieving policy coherence is imperative for harmonising MSP efforts across different sectors, sea basins, and governance levels. In the context of the SUPREME project, challenges addressed in the Adriatic and Ionian Region stem from diverse legal frameworks and cross-border complexities. Policymakers can ensure consistency and effectiveness in MSP implementation by advocating for shared legal requirements among countries, empowering sea basin strategies, and aligning MSP plans with existing assessments and policies. Moreover, adopting coherent approaches for economic, social, and environmental assessments within maritime spatial plans further promotes policy coherence and sustainable development.

Fostering Cross-Border Collaboration *(suggested by SIMNorat, PANBALTIC SCOPE, MSPMED and MSP-OR, among others)*: Cross-border collaboration plays a pivotal role in addressing shared challenges and maximising opportunities in MSP. As highlighted by all the projects implemented in the Atlantic Ocean and explained in depth in annexe – *Atlantic Ocean Sea basin analysis*, countries can facilitate seamless collaboration and information sharing by promoting coordination across and within sea basins, establishing inclusive governance mechanisms, and simplifying licensing processes. Moreover, during the MARSPLAN BS and

MARSPLAN II implementation, collaboration and stakeholder engagement enhanced understanding of MSP processes and promoted sectoral integration, fostering common understanding. Likewise, establishing common terminology among stakeholders and encouraging cooperation across governance levels are essential to fostering cross-border collaboration in MSP.

Strengthening the MSP Plans Process (*suggested by MARSPLAN BS, SIMNorat, SUPREME, and MARSP, among others*): To strengthen the MSP planning process, it is crucial to support Member States in implementing the EU MSP Directive and promote cooperation among local, regional, and national interest groups. By ensuring the active involvement of national institutions and promoting transparency and inclusivity in MSP processes, policymakers can enhance the effectiveness and legitimacy of plans.

Integrated Management and Planning (*suggested by SIMAtlantic and REGINA-MSP, among others*): Integrated management and planning are essential for addressing complex challenges and achieving sustainable outcomes in MSP. Policymakers can foster cooperation and consensus-building in MSP decision-making processes by prioritising resolutions strategically, proactively addressing conflicts, and strengthening social participation and inter-level collaboration. Moreover, setting clear objectives, maintaining resources, and adopting a forward-thinking approach to MSP planning further enhance the effectiveness and resilience of MSP initiatives.

3.4.3. Ecosystem and Biodiversity Conservation

- **Challenges**

The ocean's expanse is becoming increasingly limited, with surging demands for renewable offshore energy facilities⁽²⁸⁾, transportation gradually transitioning from land to sea, and aquaculture emerging as a crucial component of global food security strategies⁽²⁹⁾. Concurrently, sectors like fisheries, tourism, and oil, gas, and mineral extraction compete for marine space. As for marine habitats, which provide essential ecosystem services (ES), they are deteriorating under cumulative stressors from pollution and climate change⁽³⁰⁾.

(28) European Commission, Recommendations for positive interactions between offshore wind farms and fisheries, C. DUPONT, F. HERPERS and C. LE VISAGE May 2020.

(29) Lotze, H. K., Coll, M., & Dunne, J. A. (2011). Historical changes in marine resources, food-web structure and ecosystem functioning in the Adriatic Sea, Mediterranean.

(30) Costello MJ, Coll M, Danovaro R, Halpin P, Ojaveer H, Miloslavich P (2010) A Census of Marine Biodiversity Knowledge, Resources, and Future Challenges. PLoS ONE 5(8): e12110. <https://doi.org/10.1371/journal.pone.0012110>

Balancing economic growth and conservation has been an essential challenge in MSP since the proliferation of human activities often comes at the expense of environmental and social considerations during infrastructure development. Another critical area for improvement lies in **conservation planning and implementation**, which encompasses the difficulty in delineating socio-ecological vulnerabilities for spatial integration into planning scenarios, ecosystem vulnerability stemming from phased conservation measures, and the absence of ecologically robust targets. Furthermore, **monetary values** alone often fall short of capturing the full spectrum of values attributed to natural capital and other services, complicating conservation efforts.

Mentioned frequently in projects is the challenge of **Marine Protected Area (MPA) management**, marked by the absence of approved and operational management plans, lack of clear and standardised MPA definitions, and susceptibility to damage from illegal activities. Additionally, the **degradation of ecosystem services** poses a significant concern, arising from physical loss and damage, contamination, overexploitation, acidification, biodiversity decline, and climate change impacts.

While EU policies such as the MSFD, Nature Restoration Law⁽³¹⁾, EU biodiversity strategy for 2030⁽³²⁾, EGD, Birds and Habitats Directives and Marine Action Plan Protection and Restoration⁽³³⁾ aim to give nature a voice in the competition for ocean space and reshape the landscape for maritime activities. Therefore, the need for an ecosystem-based framework to guide present and future ocean utilisation becomes increasingly urgent. However, the **Ecosystem-Based Approach (EBA)** encounters challenges rooted in the lack of common understanding and methods, limited resources and data, and the absence of standardised approaches to identify and mitigate uncertainties, hindering effective strategy development and implementation.

- **Best practices**

Enhancing global ecosystem and biodiversity conservation cooperation

(suggested by SIMNorat, PANBALTIC SCOPE and MSPMED, among others)

involves a multifaceted approach fostering understanding and awareness of socio-ecological systems. This includes integrating diverse forms of local and societal

⁽³¹⁾ European Commission, Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration, June 2022. COM/2022/304

⁽³²⁾ European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS EU Biodiversity Strategy for 2030 Bringing nature back into our lives. May 2020. COM/2020/380

⁽³³⁾ COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS EU Action Plan: Protecting and restoring marine ecosystems for sustainable and resilient fisheries. February 2023. COM/2023/102

knowledge and aligning the objectives of the MSFD with those of the MSP Directive to ensure coherence. Furthermore, efforts should be made to produce updated maps of ecosystem components and employ advanced modelling approaches to understand spatial-temporal and environmental patterns. Additionally, international protection measures should be advocated for addressing marine pollution and protecting vulnerable species. Furthermore, integrating EBA and adaptive management strategies into MSP processes can help enhance the resilience of marine ecosystems and support the sustainable co-existence of multiple activities.

Similarly, **improving MPA management** (*suggested by SIMNorat, SIMAtlantic, SIMWESTMED, PANBALTIC SCOPE and SEANSE, among others*) requires concerted efforts on multiple fronts. This entails establishing consistent definitions and standards for MPAs globally while tailoring protection levels to align with regional conservation objectives. Leveraging MPA networks can promote sustainable development within MSP frameworks while involving stakeholders in establishing and managing MPAs, which fosters community engagement and ownership. Moreover, the exchange of best practices facilitates learning and innovation, while comprehensive inventories and maps aid in conserving marine species and habitats.

The SIMAtlantic project (2019-2021), implemented in France, Ireland, Portugal, and Spain, focused on Cumulative Effects Assessment (CEA), SEA, and ecosystem services (ES) in its efforts to enhance ecosystem protection and support sustainable maritime activities. For the challenges in implementing CEA and SEA, the project identified several opportunities: developing centralised data repositories, leveraging expert inputs to mitigate model uncertainties, defining and analysing future conditions for long-term MSP predictions, creating guidelines for result interpretation, and promoting integrated analyses of cumulative impacts and ecosystem services. Additionally, it emphasised the importance of close multi-stakeholder collaboration, aligning methodologies with relevant policies, and ensuring proper dissemination and accessibility of results and actions⁽³⁴⁾.

3.4.4. Capacity building and stakeholder engagement

- **Challenges**

The EU MSP Directive and EMF(A)F emphasise capacity building and stakeholder engagement in MSP. Capacity-building initiatives aim to enhance the skills and knowledge of stakeholders involved in MSP processes, aligning with the directive's objective of fostering coherent and coordinated MSP across marine regions.

⁽³⁴⁾ Casimiro, D., Quintela, A., Matias, J., Sousa, L., Simão, A., Lopes Alves, F. 2021. Cumulative Impacts and Strategic Environmental Assessment: Literature review. In support of Deliverable 3.2 of the SIMAtlantic project (EASME/EMFF/2018/1.2.1.5/SI2.806423). 26pp

Additionally, stakeholder engagement ensures that the perspectives and interests of relevant stakeholders are considered in decision-making.

Several challenges have hindered capacity building in the context of MSP. Firstly, **challenges with knowledge and analytic tools have posed obstacles**, including a need for more tools to integrate the value of ecosystem services into MSP plans, knowledge gaps in habitat ecosystems, and difficulties in assessing dynamic ecosystem dynamics. Additionally, there is limited understanding of the complex processes underlying climate change impacts, affecting effective problem identification and response. Moreover, stakeholders, including government agencies, NGOs, and local communities, cannot often meaningfully participate in MSP processes due to limited expertise, skills, and training.

Financial considerations and resource management difficulties further compound capacity issues. These challenges include inadequate financing for MSP planning and implementation, difficulty securing funding sources, and a lack of financial, human, and technological resources. Ineffective resource management practices have exacerbated these issues, hampering the efficiency and effectiveness of MSP initiatives.

Stakeholder engagement has faced significant challenges due to utilising varied methodologies across countries, a lack of standardised approaches and coordination mechanisms, and the absence of suitable platforms for continuous learning and exchange. Limited resources, time constraints, and public participation fatigue have further hindered stakeholder engagement efforts. There needs to be more involvement of stakeholders in decision-making processes, challenges in engaging private stakeholders, and difficulties aligning objectives and priorities across stakeholders have exacerbated these challenges.

Moreover, a **general lack of public awareness** of MSP priorities and related policies has weakened public participation and political pressure, undermining MSP's prioritisation on national and regional agendas and impeding plan execution due to inadequate public understanding and involvement.

- **Best practices**

A range of best practices has been identified and compiled to address these challenges. Firstly, as suggested by the BALTIC SCOPE, MARSPLAN BS, SIMWESTMED, MARSP and SUPREME, among other projects, **enhancing public awareness** can be achieved through diverse communication channels, disseminating the benefits of the MSP process and its outcomes through success stories, lessons learned, and best practices in an accessible and engaging language. Utilising storytelling techniques and avoiding overly specialised terminology is also vital. Moreover, given that the SIMAtlantic and SUPREME projects successfully maintained an active online presence for MSP campaigns and ensured inclusive

communication reaching diverse audiences, this approach must become a key element of all national MSP processes and projects.

Secondly, MARSPLAN BS, MARSP and SIMAtlantic highlighted that **enhancing capacity and resources** entails allocating adequate human resources and information infrastructure for MSP at all levels. This involves investing in reciprocal capacity-building efforts, professional training programs, and upskilling initiatives. Prioritising resources at local scales and fostering peer-to-peer support mechanisms for knowledge sharing are essential. Establishing sustainable funding opportunities and infrastructure, addressing knowledge gaps, and enhancing literacy and capacity are crucial. Developing Decision Support Tools (DTS), as SIMCelt, SIMNorat, and SIMAtlantic projects did to strengthen the effectiveness of the MSP process and support sectors under pressure while promoting economic diversification and infrastructure improvement, are also key strategies.

Another suite of best practices revolves around **enhancing stakeholder engagement** within the MSP framework. Rather than merely establishing communication channels, it involves cultivating reliable channels that facilitate seamless information exchange among key stakeholders. This should be complemented by initiatives such as organising workshops where stakeholders can share knowledge and develop essential skills vital for effective engagement. Additionally, developing guidelines on stakeholder engagement ensures that dialogues are not only conducted but are conducted effectively, fostering meaningful exchanges of ideas. Transparency, trust, exceptional expectations management, and efforts to engage with the private sector are significant factors in an effective MSP process. The AM MSP is conducting a study that delves into best practices and stakeholder consultations across the EU. Engaging with planners and stakeholders, the study offers a comprehensive analysis of effective stakeholder engagement methods in MSP planning and implementation. The study seeks to establish a European approach that fosters better cross-border collaboration and engagement by incorporating stakeholder feedback.

Moreover, the appointment of focal points for engagement streamlines the process, ensuring designated individuals are responsible for maintaining communication and facilitating dialogue. Adopting common approaches and strengthening local involvement further solidifies stakeholder engagement efforts, fostering a sense of ownership within local communities. Furthermore, collaboration with stakeholders in evaluation approaches and increasing the participation of decision-makers adds depth to the engagement process, ensuring that decisions are informed by diverse perspectives.

Utilising participatory methods and engaging stakeholders early in the MSP process enhances the inclusivity of decision-making, allowing for a more holistic consideration of environmental and socio-economic aspects. Establishing functional networks of local stakeholders and enhancing consultation processes deepen the level of engagement, fostering collaborative relationships and partnerships. Defining success

based on stakeholder acceptability and allocating adequate resources for engagement and process monitoring are pivotal in ensuring that stakeholder involvement remains meaningful and impactful.

3.4.5. Cross-sectoral approach in MSP

- **Challenges**

The EU Member States are encouraged to coordinate across sectors to address potential conflicts and synergies and to adopt an integrated approach to marine management, promoting collaboration to optimise resource use, minimise conflicts, and enhance ecosystem health and socio-economic benefits.

However, implementing a cross-sectoral approach poses challenges that projects have identified as significant barriers to efficient implementation across Member States. The projects considered in this analysis have highlighted the main challenges of the cross-sectoral approach in MSP the overall lack of cross-sectoral assessment, differences in maturity levels among the sectors, difficulties in coordinating different activities and identifying synergies and conflicts. Additionally, emerging sectors have faced challenges in growing due to inadequate resources and coordination, exacerbated by MSP policies that do not adequately support their development.

- **Best practices**

Planners are encouraged to take proactive measures to address these challenges and support the development of national cross-sectoral coordination strategies. As provided by the analysis of SIMCelt, BALTIC SCOPE and PANBALTIC SCOPE, among other projects, these include creating matrices outlining sectoral interests, focusing on understanding and addressing cross-sectoral dependencies and interactions, establishing cross-sectoral working groups or forums, and aligning national laws and strategies with relevant directives such as the MSPD and MSFD. Furthermore, developing unified cross-sector environmental data portals, promoting horizontal coordination between sectorial policies, and fostering vertical coordination between different levels of governance are essential steps. The SUPREME and WESE projects highlighted that engaging stakeholders in conflict resolution, recognising sectoral differences impacting spatial implications, and adopting a holistic, integrated approach for sustainable ocean governance is crucial in addressing conflicts and synergies across sectors.

In navigating these multifaceted challenges and fostering the formulation of robust national cross-sectoral coordination strategies, planners are urged to take proactive and concerted action. This entails not only identifying but also proactively addressing the underlying complexities. For instance, creating matrices delineating sectoral interests provides a structured framework for understanding and mitigating cross-sectoral dependencies and interactions.

Adopting a holistic, integrated approach to sustainable ocean governance is a linchpin for addressing conflicts and fostering synergies across sectors. By embracing these proactive measures, planners could navigate the intricate landscape of cross-sectoral coordination, laying the groundwork for effective and harmonised governance strategies.

3.4.6. Multi-use

- **Challenges**

Multi-use marine spaces are increasingly critical in maximising sustainable ocean resource utilisation and fostering economic growth while ensuring environmental protection. With the expansion of maritime activities propelled by technological advancements and globalisation, traditional land-based sectors such as energy and food production are transitioning to sea-based operations. Managing human activities to enhance compatibilities and reduce conflicts among uses while considering future trends and long-term pressures such as climate change and overfishing is a key outcome of maritime spatial planning. The EU MSP Directive underscores the importance of promoting sustainable development and identifying the utilisation of maritime space for different sea uses, alongside managing spatial uses and conflicts in marine areas. In this context, multi-use marine spaces emerge as a pivotal strategy to harmonise diverse activities and interests within the marine environment.

This shift results in the simultaneous presence of multiple activities in marine areas, necessitating effective management strategies⁽³⁵⁾. Multi-use offers Member States a dual opportunity: meeting strategic objectives and EU requirements while catalysing a sustainable blue economy. Member States must establish integrated legal frameworks supporting coastal communities and private sector investment in multi-use projects to leverage these benefits. Such projects, eligible for funding from various EU sources, can optimise resource utilization and minimise conflicts⁽³⁶⁾.

Defined by the MUSES Project (2016-2018) as the joint use of resources in close proximity, multi-use accommodates diverse activities within shared marine spaces. This approach aligns with the MSP Directive's emphasis on integrated marine management to balance interests and foster sectoral synergies. Furthermore, the EMF(A)F supports multi-use initiatives by funding projects promoting innovation, collaboration, and sustainability in marine sectors.

⁽³⁵⁾ [Co-existence and multi-use of activities | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu)

⁽³⁶⁾ European Commission, Best Practice Guidance in Multi-Use Issues and Licensing Procedures. European MSP Platform under the Assistance Mechanism for the Implementation of Maritime Spatial Planning – June 2021.

To respond to the growing demand for efficient space and resource allocation and coordination, the AM MSP has initiated the creation of a **Multi-use and co-existence compendium**⁽³⁷⁾.

Multi-use is not easy and has challenges due to imbalance in sector representation as there are disparities in administrative recognition and organisation among sectors, as well as resources and space allocation. Also, identifying and managing multi-use conflicts is challenging as it has difficulties in effectively identifying and addressing conflicts to ensure sustainable and harmonious coexistence of multiple uses in marine spaces. Coherent development and compatibility of multi-use is a challenge, and there is a need for policy coherence and coordination to minimise conflicts and maximise synergies among different sectors. There is a need for strategic planning, trade-off analysis, and precise spatial policies to optimise the allocation of marine space.

- **Best practices**

The SIMCelt, MARSPLAN BS and SIMWESMED, among other projects, stressed that a multifaceted approach is required to optimise spatial design strategies for multi-use initiatives. Firstly, it's necessary to integrate insights from diverse sectors into planning and design layouts, ensuring a comprehensive understanding of spatial demands. This entails establishing cross-border consultation processes to exchange existing multi-use practices and foster knowledge sharing among stakeholders. Early-stage dialogues involving all relevant parties further ensure comprehensive engagement and alignment of interests in cross-border multi-use endeavours. Moreover, considering various facets of multi-use arrangements and identifying predefined areas suitable for multi-use are pivotal steps in the planning process, facilitating the integration of multi-use into national strategies.

In conflict minimisation and synergy development, proactive measures are indispensable. The SUPREME project identified spatial demands for maritime sectors at both basin and marine waters scales, focusing on reducing conflicts and promoting synergies, mainly through multi-use approaches within an ecosystem-based framework. Developing conflict minimisation tools and strategies is paramount, accompanied by stakeholder engagement in conflict resolution processes. Conducting scenario analyses to identify potential conflicts and synergies enables the proactive management of cohabitation between sectors.

Adopting an integrated policy and regulatory approach is essential for fostering a conducive environment for multi-use. Member states should strive to establish consistent licensing procedures for multi-use initiatives and allocate space in alignment with sectoral interests, production requirements, and market dynamics.

⁽³⁷⁾ [Multi-use and co-existence compendium | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu)

Furthermore, investing in capacity building and resources is crucial to bolstering the efficacy of multi-use initiatives. This involves implementing knowledge exchange and training schemes for stakeholders, increasing funding and investment for innovative technological solutions, and facilitating knowledge-sharing workshops among different countries. Additionally, enhancing consultation and compensation mechanisms further fortifies the foundation for sustainable multi-use development. Through these concerted efforts, stakeholders can navigate the complexities of multi-use initiatives effectively, fostering synergistic relationships and minimising conflicts for sustainable ocean governance.

3.4.7. Cross-border cooperation

- **Challenges**

With its fluid nature and boundary-crossing flows, the ocean requires cooperation among neighbouring countries to effectively manage shared marine spaces and resources. This cooperation extends to environmental fields such as nature conservation. In the context of MSP, transboundary approaches acknowledge ecological boundaries and dynamics, including impacts and risks transferring across borders and the importance of connectivity for ecosystem health. Although European and international initiatives have tried to improve the policy context of transboundary MSP, the implementation needs to be improved.

The analysis has revealed a significant obstacle to cross-border cooperation in MSP: the lack of common approaches and standards in planning, implementation, and evaluation across Member States. Harmonizing MSP products, visions, maps, and frameworks prove challenging, impeding collaborative efforts. Furthermore, the absence of a common approach to CEA exacerbates the difficulty of cross-border cooperation.

Another critical challenge affecting the efficiency of cross-border cooperation is the presence of terminology, language, and cultural differences among countries. Ambiguities in terminology and disparities in interests and planning languages contribute to this challenge.

Policy implementation and governance differences also pose substantial hurdles. Variations in MSP timeframes among countries, disparities in national governance systems and legislation, and differences in how MSP is implemented create barriers to collaboration. Political divergences, varying priorities and agendas, and a lack of transboundary collaboration further compound these challenges within the transboundary MSP context.

- **Best practices**

To effectively overcome the challenges of cross-border cooperation in MSP, several key strategies have emerged from various initiatives and projects. One approach is

the establishment of a **coherent transboundary MSP framework**. This involves creating cross-sectoral platforms at transboundary levels, allowing for adopting common planning criteria at the sea-basin level. Furthermore, stakeholder involvement in MSP processes, as a mix of formal and informal approaches for cross-border cooperation, has been employed by both the SEANSE and eMSP projects, leading to inclusive and collaborative planning processes and fostering collaboration while respecting diverse legal systems and terminology.

Enhancing platforms for intergovernmental MSP cooperation and strengthening bilateral dialogues and partnerships are also essential steps. By developing flexible scenarios and integrated approaches for MSP, stakeholders can navigate complex cross-border dynamics more effectively. Additionally, organising cross-border workshops for knowledge sharing and improving stakeholder consultation at the cross-border level promotes transparency and trust among participating parties. Establishing MSP Communities of Practice (CoPs) further facilitates ongoing collaboration and information exchange.

REGINA-MSP, MSPglobal and PANBALTIC SCOPE are some of the projects suggesting that **standardising data practices** is another critical aspect of overcoming cross-border cooperation challenges. This includes facilitating spatial data and information sharing, exchanging data aggregation and interpretation practices, and implementing standardised data collection methodologies. Utilising standardised symbology for cross-border discussions and fostering collaboration among Geographic Information System (GIS) specialists, data experts, and marine spatial planners are integral to ensuring consistent and reliable data exchange across borders. By implementing these strategies, stakeholders can address the complexities of cross-border cooperation in MSP more effectively and foster greater collaboration for sustainable ocean governance.

3.4.8. Socio-economic dimension in MSP

- **Challenges**

Addressing the socio-economic dimension in MSP presents several challenges that must be navigated to ensure comprehensive and effective planning. One primary challenge lies in the **limited availability of quantitative data** on the economic effects of marine activities. Extracting marine components from existing socio-economic datasets for MSP purposes proves challenging, further compounded by the lack of standardised data collection methods in this domain. As a result, data on socio-economic aspects are often fragmented, hindering a holistic understanding of the economic landscape.

Integration and analysis of socio-economic factors within MSP also face obstacles. There is a lack of comprehensive understanding of the complex interactions between human activities and marine ecosystems. Moreover, MSP

studies often fail to adequately capture the socio-economic dimensions of marine ecosystems, focusing more on ecological aspects. The dynamic nature of marine industries adds another layer of complexity, making it challenging to assess their economic impacts accurately. Additionally, monetary values may not fully capture all the values attributed to natural capital and ecosystem services, leading to an incomplete picture of the socio-economic landscape.

Standardising data collection methods, promoting interdisciplinary research collaboration, and considering alternative valuation approaches are crucial steps towards overcoming these obstacles. By addressing these challenges, MSP can better incorporate socio-economic considerations, leading to more informed and sustainable marine spatial plans.

- **Best practices**

Addressing the challenges of integrating socio-economic data into MSP involves utilising existing datasets to gain insights into economic impacts, bridging quantitative data gaps, and promoting collaboration among diverse data sources to improve analysis. Solutions also include updating INSPIRE specifications for MSP, expanding EMODnet portals to encompass socio-economic factors, and aligning data policies with standard licensing practices.

Additionally, advancing accurate geographical definitions within the EU's MSP framework contributes to better representation of socio-economic activities in MSP. This facilitates precise mapping and analysis, aiding decision-making. Addressing challenges through case studies offers practical applications, identifying best practices and solutions for socio-economic integration in MSP. MSP-OR comprehensively addressed key socio-economic themes such as fishing, aquaculture, yachting, commercial ports, maritime networks, mineral resources, and marine renewable energies. This involved collecting, formatting, and spatialising data to create geographic information layers in a dedicated GIS, offering stakeholders a holistic view of the sea basin's socio-economic dynamics and fostering public awareness and discussion on maritime issues.

The development of cumulative socio-economic assessment methods is suggested to support MSP practitioners in understanding aggregate activity effects. Fostering multi-stakeholder collaborations promotes collective decision-making. Integrating social and economic dimensions into MSP maximises local benefits, contributing to sustainable development.

Furthermore, the eMSP NBSR project advocated for evidence-based analysis, impact assessments, and recognition of ecosystem service values to balance the increasing pressures from activities like fishing and shipping. Conducting comprehensive economic assessments provides insights into MSP's broader socio-economic implications. Additionally, increasing awareness of the complexity of socio-

ecological systems can enhance cultural sensitivity. Potential socio-economic impacts across sea basins are identified through value-chain analysis.

Understanding long-term socio-economic changes enables MSP practitioners to anticipate future trends and adaptively manage marine resources, ensuring long-term sustainability and effectiveness. By implementing these recommendations, MSP stakeholders can enhance the integration of socio-economic dimensions into MSP processes, leading to more informed decision-making and equitable management of marine resources.

3.4.9. Land-sea interactions

- **Challenges**

The EU MSP Directive mandates the consideration of LSI throughout the MSP process, emphasising the importance of collaborative efforts among Member States to address the complex interplay between land and sea. Furthermore, it underscores the need for coherence and integration in planning policies and decisions across marine and terrestrial spaces, aligning closely with the overarching goal of achieving sustainable development and effective environmental protection in coastal areas.

Addressing LSI within MSP presents various challenges stemming from legal, conceptual and methodological perspectives. Legally and conceptually, there is a notable absence of LSI in national legal frameworks across the Member States, lacking a clear official definition or exact conceptualisation. This absence affects the integration of LSI into the MSP process, making it challenging to adopt an integrative and holistic view of LSI.

Additionally, the non-alignment of marine planning with terrestrial systems at the land/sea interface exacerbates these challenges. Methodologically, integrating data from both land and sea proves difficult, as does assessing LSI within MSP. There is no one-size-fits-all methodology for managing LSI, and the lack of adaptive approaches to address uncertainties in LSI areas further complicates the process.

Identifying and managing conflicts and determining the number of sectors and industries on land linked to the sea present additional methodological difficulties. ICZM faces its own set of challenges, including fragmented approaches and a lack of clarity on how to deliver sustainable development in coastal areas within the MSP framework. Furthermore, addressing climate change adaptation in coastal infrastructure planning adds complexity to the already challenging task of managing land-sea interactions in MSP.

- **Best practices**

Several recommendations have been proposed to address the challenges associated with LSI in MSP effectively. Firstly, there is a need for policy coherence and

procedural improvements, emphasising the holistic integration of LSI into the MSP framework as suggested by the PANBALTIC SCOPE project. This involves planning across different spatial scales and coordinating coastal management instruments with marine plans to ensure a comprehensive approach. Additionally, involving stakeholders from inland areas and collaborating with inland-focused administrative authorities are essential steps. Empowering local collaborations and synergies can further enhance the integration of LSI into MSP processes, and improving data gathering to support concrete LSI analysis is crucial for informed decision-making and effective planning.

Furthermore, transboundary MSP and cooperative mechanisms for LSI are vital for addressing cross-border challenges. Establishing forums and common monitoring and evaluation frameworks can facilitate collaboration among stakeholders across borders, ensuring a coordinated approach to managing LSI. These mechanisms promote information sharing, best practices exchange, and joint decision-making, ultimately enhancing the effectiveness of MSP initiatives in addressing LSI.

3.4.10. Monitoring and Evaluation

- **Challenges**

“MSP operates in an environment exposed to constant change. It is based on data and information likely to vary over time. The planning process must be flexible enough to react to such changes and allow plans to be revised in due course. To meet these two requirements, a transparent regular monitoring and evaluation mechanism should be part of MSP (European Commission 2008)⁽³⁸⁾.

Addressing monitoring and evaluation challenges in MSP requires careful consideration of various factors. Firstly, **attributability and causality challenges** arise due to overlapping policy objectives and the interconnected nature of policies. External socio-economic and environmental dynamics further complicate the identification of policy impacts, making it difficult to assess the effectiveness of MSP initiatives.

Establishing a **comprehensive monitoring system** in MSP poses significant difficulties. There is a lack of structured mechanisms or frameworks for systematically collecting, analysing, and interpreting relevant data for impact assessment. Evaluating coordination structures proves challenging, as does incorporating relevant data into monitoring plans. Formulating monitoring indicators to assess plan achievements and articulating indicators related to specific policies adds to the complexity.

⁽³⁸⁾ As cited in SUPREME: Evaluation of the maritime spatial planning process Deliverable C.1.4

Moreover, developing a **regional integrated monitoring programme** grounded in indicators and targets presents further challenges. Coordinating data collection efforts and establishing consensus on indicators and targets across different regions require careful planning and collaboration among stakeholders. Overall, addressing these monitoring and evaluation challenges is essential for ensuring the effectiveness and sustainability of MSP initiatives.

- **Best practices**

To address the challenges associated with monitoring and evaluation in MSP, several key recommendations can be implemented. Firstly, there is a need to **increase knowledge and understanding** by fostering a deeper understanding of policy interactions and developing robust evaluation methodologies. Research and innovation efforts should focus on the development of joint monitoring and management tools to streamline monitoring processes and enhance data integration.

Clear and actionable **monitoring indicators** should be developed to evaluate MSP plans effectively. This involves including experts and stakeholders in the evaluation process to untangle the web of influences and attribute impacts to specific policy interventions. Tailoring evaluation approaches for each region, particularly to the MSP context, is crucial, along with devoting adequate resources to support monitoring and evaluation efforts.

Furthermore, implementing monitoring at various stages of the MSP process is essential for assessing progress and identifying areas for improvement. Adopting a **Cumulative Impact Assessment (CIA)** methodology across borders can enhance the effectiveness of monitoring and evaluation practices, promoting transparency and accountability in MSP initiatives. By implementing these recommendations, MSP stakeholders can overcome challenges and ensure the successful monitoring and evaluation of MSP plans.

4. Discussion points

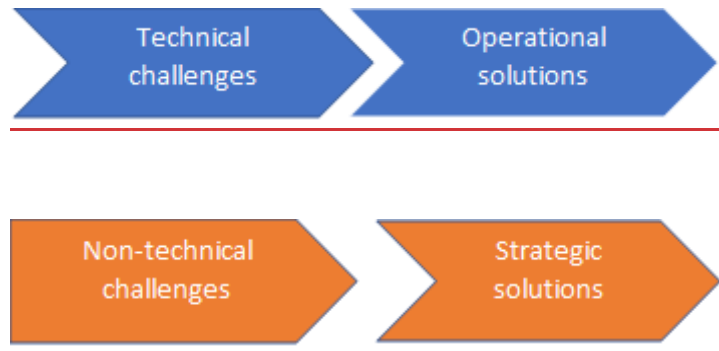
As underscored by the findings of this study, MSP challenges present themselves in a highly diverse spectrum characterized by variations in nature, profundity, and extent. Accordingly, recommendations emanating from projects may vary significantly in their nature, depth, and scope. Such variance is further influenced by the inherent characteristics of the projects themselves, as well as the array of implementation challenges and constraints they encounter.

4.1. What kind of solutions can projects provide to MSP challenges?

MSP challenges may vary from limitations created by national governance and institutional frameworks to the need for data availability. The source and essence of these challenges are completely different; therefore, projects will answer differently to them. Some challenges regard, for instance, the need for methodological developments, which is the right scope of a research project. For this kind of technical challenge, projects can provide operational-specific solutions (i.e. develop methodologies for some specific needed analysis). On the other hand, some other challenges relate to the way institutions work, how some concepts are integrated into legislation or policies, or how they are dependent on political will. This last “category” of challenges may fall beyond the scope of research activities, entering an arena in which projects can provide recommendations that are not directly operational, reaching only the levels of guidelines or suggestions.

Certainly, given the interconnected and complex nature of challenges, many aspects of a single challenge may be effectively addressed as part of a project, while others may fall outside the project's scope. This is particularly evident in the case of multi-use activities. While projects can offer methodological approaches for multi-use, operational implementation may be hindered by licensing issues that require the reformulation of laws and procedures, for instance. Following this rationale, projects have predominantly provided two types of solutions to the various challenges encountered by MSP.

Figure 9 – Categorisation of challenges and recommendations taken into account in the analysis



For operational solutions (methods, processes, provision of data and knowledge) their effectiveness can be tested in the framework of the project providing a result that can be directly incorporated into the formal MSP process: For instance, the project MarSP developed an MSP INSPIRE Data Model and tested it in the Macaronesia region.

Strategic solutions often take the form of guidelines or recommendations; they provide “guidance” to approach the challenge. However, the real development of these guidelines requires a step beyond the project’s implementation, normally in the arena of policy, governance and regulatory frameworks. For instance, MSPglobal, as also explained in detail under annexe 7 – West Mediterranean Sea *basin analysis* of the study, designed Roadmaps on MSP and Sustainable Blue Economy for its two first Pilot Projects in the Western Mediterranean and the Southeast Pacific. These roadmaps are the result of a strong collaboration from a pool of experts from all the countries in the two regions, many of them part of national institutions involved in MSP. However, the final uptake and implementation of these recommendations by decision-makers surpass the capabilities of a pilot project. Even upon implementation, evaluating the efficacy of the results achieved with the application of the recommendations may be challenging.

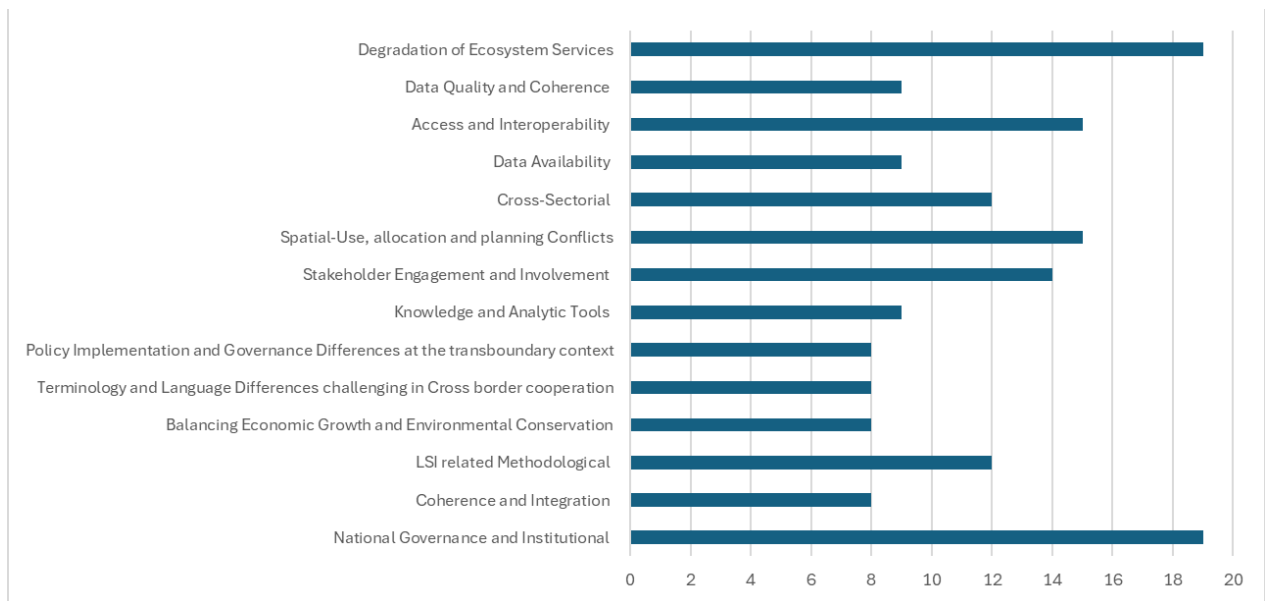
In summary, all solutions proposed by projects are designed to have a potential impact on certain challenges, however, the real impact that they may ultimately have might be influenced by (1): their nature (strategic or operational) but also (2) their posterior uptake by decision makers.

This classification of solutions is not intended to be exhaustive or rigid. The two categories are interconnected, and in some instances, they complement each other. This differentiation exercise has been undertaken to establish a connection between the types of challenges and the corresponding solutions provided. This may help understand whether answers that projects provide to certain challenges are appropriate or otherwise some challenges require different approaches.

4.2. Recurrent challenges

Despite the wide array of challenges identified, some can be categorized as "recurrent" as they have appeared at least 8 times over the projects included in throughout the study

Figure 10 – Level B – challenges addressed by the EMF(A)F-funded projects
The 14 most popular challenges among the 39 challenges addressed



© The data presented are from our own research.

Source: Project reports – list available in the Annex.

The analysis of 32 projects categorized the challenges addressed and recommendations employed into three levels of detail. Level C represents the original extraction from each project, which was then aggregated into Level B and Level A for ease of analysis. Level A challenges encompass 10 categories, including Governance issues, Land-sea interactions, Ecosystem and Biodiversity conservation, Monitoring and Assessment, Cross-border cooperation, Socio-economic dimensions in MSP, Capacity, Resources and Stakeholders, Multi-use, Cross-sectorial approach, and Data. The analysis further utilized Level B, comprising 42 challenges, with the most frequently addressed challenges presented in the graph.

The two challenges with the highest number of occurrences are the *Degradation of Ecosystem Services* and *National Governance and Institutional Challenges*. It is logical that the degradation of ecosystem services is one of the most recurrent challenges, given that one of the driving forces behind the establishment of MSP was the necessity to pursue sustainable development in the marine environment. For this type of challenge, projects can provide methodologies for the valorisation of ES and the development of impact assessments, which will improve decision-making related to the distribution of activities consequently reducing the degradation of ecosystem services. This is the type of challenge for which projects certainly have provided first approximations, however, there is still a long way to undertake, which makes this challenge, as it is defined in the study, recurrent.

On the other hand, *National Governance and Institutional Challenges* are the kinds of challenges in which research projects have a small range of direct impact. This challenge involves issues related to legal and administrative constraints, for instance, lack of resources, governance complexity, lack of policy harmonization etc. In these cases, projects could only provide suggestions or recommendations on how some elements that are part of the challenge can be improved (strategic solutions).

Access and Interoperability Challenges and Spatial-Use, Allocation and Planning Conflicts follow in the list of most mentioned challenges. The first one may include challenges that projects can directly address, for instance, designing methodologies for data harmonization, however, they may not be able to change the reluctance of countries and/or institutions to make data accessible. In the same sense as for Ecosystem Services degradation, Spatial-Use, Allocation and Planning Conflicts lay at the very heart of MSP. This is exactly the main challenge that MSP aims to tackle. Projects may provide operative solutions pertaining to zoning or conflict resolution methods. SIMAtlantic project produced a methodology to approach activities' interaction by building scenarios⁽³⁹⁾, a systematic approach to define and characterize uses in time and space, identifying where the conflict lies and allowing to consider the weight attached to the various considerations of the final decision. A more operative approach was provided by the MARSPLAN-BS-II which developed a case study on the concept of multi-use in the Bulgarian MSP.

Stakeholder Engagement and Involvement challenges are one of these types of challenges that can present aspects that can be directly addressed by projects while others may fall outside their scope. Difficulties in engaging stakeholders may relate to a lack of proper methodologies. Projects can help with this, for instance developing and testing methods for stakeholder involvement. SIMNorat project investigated different methodologies that encompassed interviews, role games and workshops. This activity provided, on one hand, first-hand experience to partners involved which are endorsed by CAs, ultimately enriching the national processes with this acquired *know-how*⁽⁴⁰⁾. On the other hand, the report itself is a source of knowledge based on proven experience in three different countries at national level, also considering the transboundary context. Finally, this activity also provided a product for dissemination that was translated into French, Portuguese and Spanish and can be used directly by CAs as for ocean literacy purposes in the framework of MSP.

⁽³⁹⁾ Cervera-Núñez, C., Campillos-Llanos, M., Dilasser, J., Gómez-Ballesteros, M. Approaching activities' interaction by building scenarios: a proposed method to strategic thinking. Deliverable 1.2 of the SIMAtlantic project (EASME/EMFF/2018/1.2.1.5/SI2.806423).

⁽⁴⁰⁾ Henry, S., Likhacheva, K., Matyas, D., Nys, C., Alloncle, N., Bailly, D. 2019. Potential approaches for stakeholder engagement on MSP and outcomes of pilot testing. EU Project. Grant No: EASME/EMFF/2015/1.2.1.3/03/ SI2.742089. Supporting Implementation of Marine Spatial Planning in the Northern European Atlantic (SIMNORAT). Agence Française pour la Biodiversité – Université de Bretagne Occidentale, UMR 6308 AMURE. 188pp. DOI: 10.5281/zenodo.2597520.

However, there are some aspects of this same challenge that projects may not be able to address. Sometimes challenges related to stakeholder engagement in MSP processes revolve around the lack of human and monetary resources but also around the difficulty (or reluctance) to change some procedures and institutional arrangements that are not adapted to properly accommodate useful and fair stakeholder engagement procedures.

Cross-Sectorial Challenges and *LSI-related Methodological Challenges* appear both 12 times in this study. Here the former relates to the lack of a cross-sector approach in maritime planning and management to date. The different degrees of planning in the different sectors also makes difficult this cross-sectoral approach. This includes the integration of emerging sectors in the current picture of our ocean. No doubt this is also one of the main challenges MSP is committed to address. In the same way that for *Stakeholder engagement and involvement challenges*, there are aspects of this challenge that can be addressed by projects and some others that go beyond their scope. Projects can suggest the aspects needed for a swift from sectoral to wholistic approach to take place in the management of maritime activities however this swift from the sectoral to the wholistic approach will require a deep institutional and legal transformation. In the case of *LSI methodological challenges*, projects can provide a lot of knowledge as was the case of SIMWESTMED and its study on the Relationship between LSI and ICZM⁽⁴¹⁾ which proposed a methodological guideline to perform LSI analysis within an MSP process.

Data Availability Challenges and *Data Quality and Coherence Challenges* on one side, and *Knowledge and Analytic Tools Challenges* on the other, although related to the management and use of information for MSP, are of different natures. In the former cases (*Data Availability and Data Quality*), the issues are sometimes not even dependent on the MSP process. Projects may propose that MSP processes incorporate standardized research or monitoring programs aimed at providing MSP-specific data for subsequent cycles. However, the latter recommendation is beyond the capacity of the projects and often beyond the capacity of the MSP process itself.

Projects can develop methodologies to improve data coherence for MSP as was the case of MarSP, a project that developed data specification for MSP, an INSPIRE data model⁽⁴²⁾. They can also directly collate data that was scattered (i.e. MSP-OR

⁽⁴¹⁾ Ramier, E., Bocci, M., Markovic, M. (2018). Relationship between LSI and ICZM. EU Project Grant No.: EASME/EMFF/2015/1.2.1.3/02/SI2.742101. Supporting Implementation of Maritime Spatial Planning in the Western Mediterranean region (SIMWESTMED). Priority Actions Programme Regional Activity Centre (PAP/RAC). 44pp. DOI: 10.5281/zenodo.2592147.

⁽⁴²⁾ Abramic A, Garcia A, Tello Antón O, Agudo LM, Bruque Carmona G, Zanella A, Norton C, Haroun R. 2019. Data specification for Maritime Spatial Planning INSPIRE data model. Deliverable - D.5.1., under the WP5 of MarSP: Macaronesian Maritime Spatial Planning project (GA n° EASME/EMFF/2016/1.2.1.6/03SI2.763106).

work on the Canary Islands Geographical Information System⁽⁴³⁾) or even punctually provide some of the missing data, as is the case of works that are being carried out in the framework of REGINA-MSP and MSP-OR.

Knowledge and Analytic Tools Challenges are more related to the lack of methodologies and knowledge in general and the lack of skills to apply these methodologies (i.e. the methodology may exist but there are no specialised personnel to conduct it). There are two ways in which projects can contribute to overcoming these challenges: (1) developing the methodology, as it was done in SIMAtlantic with the Transboundary impact assessment in the north-western Iberian Peninsula⁽⁴⁴⁾ or (2) fostering capacity-building activities by exchanges of knowledge between CA (MSPMED Technical workshops⁽⁴⁵⁾) or by direct training activities as the ones carried out by MSPglobal or the ones planned in the framework of the REGINA-MSP project.

The next two groups of challenges were mentioned the same number of times in this study, 8.: *Policy implementation and Governance Differences in the transboundary context* and *Terminology and Language Differences* challenging in cross-border cooperation. Both relate to the transboundary dimension although to different strands of the challenge. In addressing the differences in how policies are implemented and governance is conducted across various countries, a project can identify connections or "bridges" between these different approaches. SIMNORAT project explored this possibility in a transboundary case study between Spain and Portugal. In this case, the potential to define a cross-border MPA between the two countries was explored, considering governance and legislative aspects in both countries. The cross-border MPA Galicia bank – Vigo and Vasco da Gama seamounts Case Study provided strategic recommendations for this to be eventually facilitated⁽⁴⁶⁾.

Finally, from identified recurrent challenges, *Balancing Economic Growth and Environmental Conservation and Coherence and integration Challenges* can also be considered in the core nature of MSP. The first one relates to the huge task MSP has at hand, reconciling the intensification of economic maritime activities while

⁽⁴³⁾ Bezic-Alpeñes, C.; Trapero, G. 2023. Canary Islands Geographical Information System (MS23). MSP-OR project, European Climate, Infrastructure and Environment Executive Agency Grant Agreement no. GA 101035822 — MSP-OR — EMFF-MSP-2020.

⁽⁴⁴⁾ Fernandes, M.L., Quintela, A., Cervera-Núñez, C., Campillos-Llanos, M., Sousa, L.P., Casimiro, D., Matias, J.O., Simão, A.P., Gómez-Ballesteros, M., Alves, F.L., Transboundary Impact Assessment in the north-western Iberian Peninsula. In support of Deliverable 2.3. of the SIMAtlantic project (EASME/EMFF/2018/1.2.1.5/SI2.806423-SIMAtlantic)

⁽⁴⁵⁾ MSP-MED: D2.21 (Internal numbering D24), WP2 – Setting up Maritime Spatial Plans, 2.7 – Sharing experiences among countries, MSP-MED | 3rd Technical Workshop.

⁽⁴⁶⁾ [c1.3.6. case study 2 cross border mpa galicia bank vigo and vasco da gama seamounts d 17.pdf \(europa.eu\)](#)

preserving ecological sustainability. The Pan Baltic Scope project guided how to assess economic, social, cultural and ecosystem service impacts in the context of MSP⁽⁴⁷⁾. With regards to *Coherence and Integration Challenges*, the MSP-GREEN project (ongoing at the time of the development of this study) aims to align maritime spatial plans to the ambition of the EGD by creating a framework for MSP to approach the different policies included in this overarching EU policy.

4.3. Beyond MSP challenges – limitations in project's implementation

Examining the recurring challenges and the solutions put forth by projects, a question arises as to whether these solutions are sufficient. MSP is inherently complex, with its challenges presenting diverse aspects that evolve and intersect with emerging issues, such as climate change. Consequently, resolving these challenges often requires patience, as well as additional resources, to develop comprehensive solutions.

However, there may be other reasons for the persistence of some challenges. In some cases, it may indeed derive from projects' inherent limitations that prevent them from providing specific types of answers or solutions. Some limitations inherent to projects can be eligibility criteria for project partners, project duration, scope, objectives, or simply its nature (e.g., serving as a research pilot activity rather than an official process). Some challenges persist because they require solutions that fall beyond the scope of action of projects, thus exceeding their capacity to address them effectively. It is not that they cannot address these challenges but that they may only be capable of addressing specific features of them, constrained by their nature and scope.

Furthermore, projects encounter their own set of challenges, some of which overlap with those faced by CAs during the implementation of MSP processes. One of these common challenges is the difficulty in finding skilled MSP specialists. In the case of projects, there is the added issue of retaining team members if their salaries are supported by project resources with a specific life span. Resource constraints in general present yet another obstacle, limiting the capacity for comprehensive planning and execution of MSP initiatives.

Another significant challenge encountered by projects, and occasionally by national MSP processes, is the reluctance of CAs and stakeholders to participate. This lack of willingness to engage can undermine the effectiveness of project activities, as collaboration and engagement serve as the foundation of MSP.

(47) PanBaltic Scope: Assessing economic, social, cultural and ecosystem service impacts in maritime spatial planning (MSP) in the Baltic Sea region.

Sustaining long-term activities can pose considerable challenges, particularly when reliant on project financial resources, a limitation stemming from the finite lifespan of projects. "Scale mismatch" is a persistent challenge in MSP projects when their scope and timing don't match larger environmental or governance frameworks.

Moreover, the idiosyncrasies inherent to each maritime basin introduce further complications, demanding adaptable and context-specific approaches to MSP implementation and the consideration of geopolitical implications.

Engaging non-EU Member States at the sea basin level is often challenging due to various factors, including limited resources, reluctance or incapacity to participate in project activities and administrative or geopolitical hurdles such as visa requirements or political conflicts. This may also be limited by the project's call requirements regarding consortium eligibility criteria.

It is difficult to overcome political constraints and gather sustained support for MSP initiatives amid shifting policy landscapes. Some challenges may extend beyond MSP's scope, intertwining with the cultural landscape of specific regions.

Furthermore, fostering ocean literacy among stakeholders and engaging diverse interest groups present ongoing challenges, necessitating robust communication strategies and inclusive participatory processes. Several challenges persist due to the time-consuming nature of raising awareness and enhancing literacy. Insufficient communication and inadequate involvement of CAs contribute to a lack of implementation of project outcomes.

Additional challenges arise in some cases from the inability of CAs to effectively integrate and leverage project outcomes, deriving from factors such as resource constraints, mismatch in timelines, or lack of skills. National authorities may be also distracted or absent, lacking proactivity and therefore posing additional barriers to the effective uptake of the project's results. This is a critical challenge, as the successful integration of findings into formal MSP processes revolves around effective knowledge transfer and institutional collaboration. The integration of proposed solutions by authorities is often delayed, if achieved at all, posing a significant hurdle. Central to these obstacles is the need to drive CAs to adopt project recommendations.

Finally, it is important to highlight that occasionally, there exists an overestimation of the capabilities and outcomes expected from MSP, and therefore, projects. Projects possess the capacity to propose solutions to challenges; however, it is important to acknowledge that they cannot inherently independently resolve issues straightforwardly. It's crucial to clearly and realistically define project objectives to ensure alignment with desired outcomes.

5. Conclusions and recommendations

Challenges evolve over time, often interacting with emerging issues or becoming more urgent. As a result, the initial generation of projects tended to be more generalist in their approach while, in contrast, recent project batches have adopted a significantly more focused approach, targeting specific elements of the MSP process with greater precision. Initially, projects emphasized the concept of MSP, along with the foundational steps of the process, particularly focusing on the early stages such as pre-planning and analysis of conditions, as well as organizational aspects. This emphasis was relevant for MSP CAs to grasp how to structure themselves to initiate the process and what resources would be required. However, given that many CAs were just embarking on the MSP journey with limited resources, some were unable or perhaps failed to recognize the importance of fully capitalizing on the results generated by these projects.

The most recent generation of projects, on the other hand, has generally been more oriented towards delivering tangible products. This shift occurred because CAs who were already progressing in the process had a better understanding of the inputs they required from projects and were more aware of what they could obtain from them. These projects have focused on providing specific analyses tailored to address issues within their planning areas, developing methodologies applicable to particular steps of the process, or directly producing information that was previously missing in the MSP process.

However, it is imperative to recognize that projects extend beyond the mere resolution of specific challenges; their value transcends tangible deliverables, encompassing intangible contributions that relate to the broader context of maritime planning and management. One significant but intangible output from projects has been the awareness provided to CAs by those involved in the projects. The requirement for project partners to be either MSP CAs or institutions endorsed by them assures the transfer of knowledge from research institutions, normally owners of the most up-to-date knowledge, and those that are going to use it in decision-making. However, despite formal endorsement, it needs to be acknowledged that the effectiveness of this knowledge transfer often rests on the real relationships forged between the work teams in both institutions.

Indeed, another intangible value of transboundary projects lies in their capacity to foster community building at the European level. Science diplomacy offers a viable approach to tackling challenges that inherently transcend borders. Direct engagement with CAs is crucial, involving them directly in initiatives aimed at addressing transboundary challenges, particularly to achieve targets that cannot be reached by each country individually.

MSP is instrumental in fostering geopolitical cooperation at a diplomatic level by providing a framework for dialogue and collaboration among nations with shared

maritime interests. While MSP projects themselves may not directly achieve geopolitical peace and cooperation, they serve as catalysts for these outcomes by facilitating information exchange, promoting mutual understanding, and building trust among stakeholders. By offering a platform for discussing common challenges, identifying shared objectives, and jointly developing solutions, MSP initiatives contribute to building a foundation for peaceful and cooperative relations in the maritime domain.

Some challenges still need time to be solved, others will evolve, and new ones will arise. However, projects have provided numerous sets of solutions of different natures, extents, and effectiveness to date. At the centre of the matter lies the willingness and capacity of CAs to effectively utilise the results of projects. Enhancing policy uptake requires targeted strategies aimed at fostering a useful environment for integration. CAs are more likely to integrate solutions that align with their existing mandates, capabilities, and resource availability. Solutions that offer practical, feasible implementation pathways are more likely to be assimilated into policy frameworks. Additionally, CAs are inclined to adopt solutions that address urgent challenges and have clear benefits for stakeholders. Building strong partnerships between project teams and CAs, providing tailored capacity-building initiatives, and facilitating ongoing dialogue can enhance CAs' willingness to adopt project outcomes and translate them into tangible policy actions. Ultimately, solutions that are realistic, adaptable, and aligned with CAs' objectives and capacities may stand a greater chance of being embraced and implemented.

A common challenge encountered by both research projects and national processes is the lack of skilled professionals. Addressing this issue needs investments in formal education tailored to MSP and related domains, such as offering PhD and master's degree programs.

Indeed, the EMF(A)F-funded projects have achieved significant milestones, including fostering community building at the European level, facilitating the exchange of best practices, enhancing capacity building, and raising awareness among stakeholders—both within sectors and among government and political authorities. These projects have also provided valuable guidance on processes, methodologies, and networking opportunities, contributing to the growth of expertise within the community. Additionally, they have offered support in navigating the implementation of sometimes contradictory policies.

Global challenges necessitate collaboration: Climate change catalyses seeking solutions that transcend borders, enabling us to address uncertainty, enhance the adaptability of plans, and design plausible scenarios together. We have initiated and established the foundation for dialogue among experts; however, there is a need to strengthen the connection between experts and planners despite the progress made thus far.

The validity of recommendations made years ago can vary depending on the context and evolving circumstances within countries. While some recommendations may remain relevant for certain countries, others may have become obsolete or less applicable due to changes in policies, priorities, or socioeconomic conditions. It is essential to consider the different realities across countries when assessing the continued relevance of past recommendations. What may be pertinent for one country might no longer be necessary for another.

There is a need for a broader dissemination of MSP and MSP projects outside the MSP Community. The current discussions are often developed within the same circles. One potential solution lies in enhancing ocean literacy for MSP. Targeted initiatives are required to engage civil society and policymakers effectively.

Recognising the significance of mobilising the public is vital for bolstering political will. Targeted communication plays a pivotal role in this process, requiring the identification of stakeholders who need specific information and the effective dissemination coming from the MSP Community as a whole.

6. Annexes

6.1. Sea basin analysis

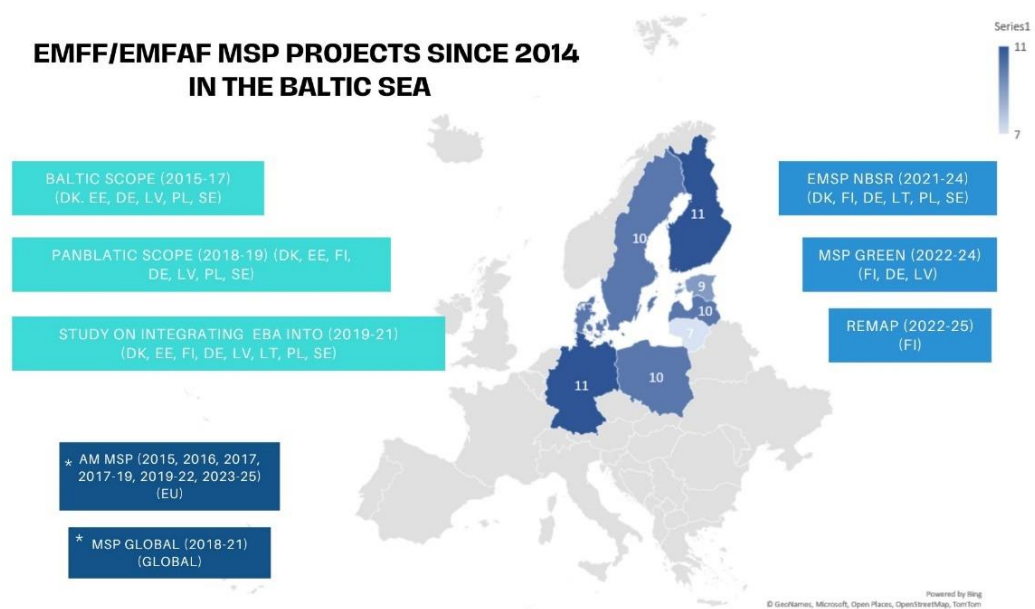
As highlighted by Böhme (2002)⁽⁴⁸⁾, spatial planning is deeply intertwined with a nation's historical, geographical, cultural, and political context, as well as its economic and urban development trajectory. Similarly, each sea basin is shaped by the unique characteristics of the EU Member States within it, encompassing specific socio-economic and environmental ecosystems, cultural nuances, and policy frameworks. Consequently, every project endeavours to account for these distinct features, resulting in diverse practices, challenges, and evolution across sea basins.

Through the analysis, a comprehensive understanding emerges of how MSP has progressed within each sea basin, delineating project objectives, achievements, and the spectrum of challenges encountered. By examining how these challenges have been navigated—whether resolved, evolved, or newly emerged—valuable insights are gleaned, offering lessons applicable not only to planners but to all stakeholders involved in MSP and shaping future national, regional, and European policies.

⁽⁴⁸⁾ Böhme, K. (2002). *Nordic echoes of European spatial planning: discursive integration in practice*. Stockholm: Nordregio.

6.1.1. Baltic Sea

Figure 11 – Map of the EMFF/EMFAF projects related to MSP, Baltic Sea



© The data presented are from our own research.

Source: EU MSP Platform.

The Baltic Sea spans approximately 397,978 km² and is semi-enclosed, bordered by eight EU member states (Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Finland, Sweden) and Russia. Its subdivisions include the Gulf of Finland, the Gulf of Bothnia, the Gulf of Riga, the Baltic Proper (encompassing the Gulf of Gdansk), the Danish Straits, and the Kattegat. Despite its vast expanse, the Baltic Sea maintains an average depth of just 54 meters, resulting in a brackish water ecosystem renowned for its high biological productivity. Coastal areas serve as critical breeding and nursery grounds for numerous fish and invertebrates, while deeper waters harbour pelagic species like herring and sprat. However, the region's significance extends beyond its ecological richness, as it experiences growing pressures from diverse activities such as shipping, fisheries, wind farms, aquaculture, tourism, and mineral extraction, all competing for limited sea space. This competition for resources occurs against the backdrop of a fragile ecosystem, rich cultural heritage, and mounting climate change threats, underscoring the need for a balanced, multi-sectoral approach to ensure sustainable management of the Baltic Sea's resources amidst its status as one of the world's busiest seas⁽⁴⁹⁾.

⁽⁴⁹⁾ Furman, E., Pihlajamäki, M., Välipakka, P., & Myrberg, K. (2013). The Baltic Sea: Environment and Ecology. Presentation, Helsinki // BaltSeaPlan

Figure 12 – Baltic Sea: Adoption status of the national MSP plans

	DK	EE	FI	DE	LV	LT	PL	SE
Year of adoption of the MSPs	2021	2022	2020	2009*	2019	2015**	2021	2022

© The data presented are from our own research.

Source: EU MSP Platform.

The source of the information is the European MSP Platform ⁽⁵⁰⁾. See the footnote ⁽⁵¹⁾ for *, and the footnote ⁽⁵²⁾ for **.

In response to the unique challenges faced by the region and to aid Member States in maritime spatial planning, a range of projects has been implemented under the EMF(A)F over the past decade, marking significant strides in addressing these issues.

6.1.1.1. Projects' objectives and achievements

Commencing with the **Baltic SCOPE** initiative (*total budget € 2,638,828.00*), launched in 2015 and completed in 2017, this project was crafted to foster enhanced collaboration and coordination among national authorities and key stakeholders. Its primary aim was to devise common strategies to address transboundary challenges and promote alignment of national maritime spatial plans across the Baltic Sea region. Notably, Baltic SCOPE served as a unique platform for cooperative learning, engaging planning authorities from Baltic Sea nations concurrently as they pursued their respective national planning endeavours. At its inception, a glaring absence of a shared planning platform and informal channels for information exchange prompted the project's creation. Split into two case study areas, it focused on the Central (CB) and Southwest Baltic (SWB) regions, involving Estonia, Latvia, Sweden, Germany,

⁽⁵⁰⁾ [Baltic Sea | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu)

⁽⁵¹⁾ Germany established its initial maritime spatial plan for its Exclusive Economic Zone (EEZ) in the North Sea and Baltic Sea in 2009. Subsequently, a second plan, encompassing both the EEZ and the territorial sea areas under the jurisdiction of three coastal federal states (Lower Saxony, Schleswig-Holstein, and Mecklenburg-Vorpommern), was enacted in September 2021.

⁽⁵²⁾ Lithuania's first maritime spatial plan was elaborated as a part of the Comprehensive Plan for the Republic of Lithuania by including a section on "Maritime territories". The "Maritime territories" section, which complements the terrestrial spatial plan, was adopted by the Parliament of the Republic of Lithuania, on 11 June 2015. This plan expired in 2020, and a new Comprehensive Plan for the Republic of Lithuania was adopted on 29 September 2021, integrating components of Maritime Spatial Planning.

Denmark, and Poland. The project delved into key sectors like fisheries, shipping, environment, and energy, pioneering new data collection methods⁽⁵³⁾.

Key achievements of the project include the development of a common understanding across the Baltic region and common data sources, alongside the formulation of EBA checklists and policy recommendations, facilitating the harmonisation of EBA understanding across diverse countries. Additionally, efforts were directed towards enhancing MSP through the provision of tools like shipping density maps spanning a decade (2005-2016) and the development of an evaluation framework equipped with criteria and indicators for future assessments. Notably, the application of EBA in the Latvian Maritime Spatial Planning case exemplified the project's efficacy in assessing marine environmental conditions, identifying sea uses and trends, and devising alternative scenarios with due consideration for environmental impact assessment. Despite progress being made, opportunities for further exploration in transboundary dimensions were identified, highlighting the project's commitment to continuous improvement and alignment of approaches across nations⁽⁵⁴⁾.

On this framework, after the completion of Baltic SCOPE, the **Pan Baltic Scope (2018-2019)** (total budget € 3,315,108.00) emerged as a collaboration between 12 planning authorities and organisations around the Baltic Sea working towards bringing better maritime spatial plans for the Baltic Sea Region and managing to respond to the needs addressed and fully progressed during the Baltic SCOPE (2015-2017). The objective of the Pan Baltic Scope (2018-2019) initiative was to attain synchronised national maritime planning within the Baltic Sea region while establishing enduring macro-region frameworks for cross-border cooperation in MSP. The project sought to bolster the execution of the MSP Directive, aligning with the goals outlined in the EU Baltic Sea Region (BSR) Strategy, Blue Economy, EU2020 strategy, as well as the HELCOM Baltic Sea Action Plan and VASAB Long Term Perspective for the Territorial Development of the Baltic Sea⁽⁵⁵⁾.

The Pan Baltic Scope (2018-2019) made significant strides in promoting cross-border cooperation and supporting national planning solutions. Through collaborative efforts, trust among partners has been strengthened, laying a solid foundation for future initiatives. Other key achievements include the Finland-Åland-Sweden case's role in providing stakeholder expertise and knowledge alongside innovative online tools. The project has produced valuable recommendations and guidelines, enhancing decision-making in MSP through comprehensive case studies and a handbook on

⁽⁵³⁾ Baltic Scope report; Sharing the Baltic Sea: How Six Countries Improved Their Maritime Spatial Planning.

⁽⁵⁴⁾ Baltic SCOPE Better Together, Sharing the Baltic Sea: How Six Countries Improved Their Maritime Spatial Planning 2017

⁽⁵⁵⁾ Pan Baltic Scope Bringing Better Plans, Collaboration of Pan Baltic Scope 2019

EBA and SEA. Innovative tools like the green infrastructure concept and cumulative impact assessment (CIA) apps have been introduced, along with the PlanWise4Blue tool for economic and cumulative impact assessment. The BASEMAPS service offers a comprehensive overview of planning progress across states. Overall, these efforts led to new tools, critical recommendations, stakeholder understanding, and improved trust within the MSP community. The establishment of a dedicated forum as a necessity pointed out during the implementation of the Baltic SCOPE (2015-2017) further fostered collaboration and knowledge exchange among planners and allowed for stronger partnerships built among key stakeholders⁽⁵⁶⁾.

Starting in 2021 and having just completed its actions in February 2024, the **eMSP NBSR** (*total budget € 3,123,394.41*) project focused on facilitating collaboration among Maritime Spatial Planners and policymakers in the North and Baltic Sea Regions, fostering mutual learning, and collectively addressing challenges within MSP. The overarching vision and goals of the project encompassed supporting the coherent implementation of marine plans across borders, facilitating the ongoing development of MSP to tackle present and future challenges, enhancing the capacity and capabilities of responsible authorities, establishing structures for cross-border collaboration, and providing practical solutions and recommendations on pressing issues such as ocean governance, ecosystem-based management, sustainable blue economy, data technology, and monitoring and evaluation of MSP. The project has focused on five main topics: *ocean governance, sustainable blue economy, data sharing, EBA, and monitoring and evaluation*, aiming to identify critical areas for future work in MSP⁽⁵⁷⁾.

Two additional projects, the **MSP-GREEN (2022-2024)** (*total budget € 1,933,490.03*) and **REMAP (2022-2025)** (*total budget € 1,917,104.00*) projects extend their implementation to the Baltic Sea alongside broader geographical scopes. The MSP-GREEN (2022-2024) initiative aims to harmonise maritime spatial plans with the EGD objectives across five sea basins, including the Baltic Sea. It emphasises critical EGD themes like climate change and circular blue economy, tailoring recommendations and communication strategies to each basin's specifics⁽⁵⁸⁾.

Concurrently, the REMAP project (2022-2025) enhances MSP's monitoring and assessment capabilities across three sea basins. Utilising innovative frameworks and data infrastructures, REMAP develops models and tools to bolster interoperability, data sharing, and evaluation. The project prioritises usability, testing its framework in various contexts, including the Baltic basin (Finland), where a centralised regional

⁽⁵⁶⁾ Pan Baltic Scope Bringing Better Plans, Collaboration of Pan Baltic Scope 2019

⁽⁵⁷⁾ [Emerging ecosystem-based Maritime Spatial Planning topics in North and Baltic Seas Region \(eMSP NBSR\) | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁵⁸⁾ [Scope and objectives – MSP GREEN](#)

approach is adopted. Stakeholder involvement is pivotal, ensuring sustainable outcomes that bolster effective MSP implementation⁽⁵⁹⁾.

6.1.1.2. Challenges addressed and lessons learnt

The challenges identified and solutions proposed in each project are interconnected, reflecting the iterative nature of MSP improvement efforts in the Baltic Sea Region. While Baltic SCOPE laid the groundwork for collaboration and knowledge exchange, subsequent projects built upon these foundations, addressing emerging challenges and refining strategies over time.

The Baltic SCOPE project (2015-2017) navigated a range of hurdles inherent in transboundary MSP efforts across the Baltic Sea, including language barriers, varying MSP development stages among countries, institutional reorganisation, and the project's short duration affecting the continuity of partnerships among stakeholders. These obstacles underscored the need for continuity and enhanced collaboration infrastructure⁽⁶⁰⁾. Baltic SCOPE (2015-2017) employed physical meetings, workshops, and bilateral dialogues to facilitate cross-border coordination, emphasising tailored case responses and area-based approaches. Notably, the project addressed the integration of an EBA and cross-sectoral collaboration through common maps and stakeholder engagement. Furthermore, the Baltic SCOPE (2015-2017) made efforts to tackle data availability and quality challenges by proposing harmonised collection methods and emphasising better data visualisation. Stakeholder engagement, despite differing governance systems and resource constraints, was prioritised through various methods such as conferences and thematic workshops⁽⁶¹⁾.

While the project significantly enhanced understanding of national institutional structures and promoted transboundary integration, **challenges such as sector integration and harmonised data sharing were persistent**. To address these, recommendations at the end of the project included establishing permanent transboundary frameworks, early stakeholder involvement, and adopting an EBA in MSP⁽⁶²⁾. Looking ahead, the project also identified future challenges such as mobilising political decision-makers, engaging marine sectors more widely,

⁽⁵⁹⁾ [Reviewing and Evaluating the Monitoring and Assessment of Maritime Spatial Planning | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁶⁰⁾ Baltic SCOPE - Lessons Learned: Obstacles and Enablers When Tackling the Challenges of Cross-Border Maritime Spatial Planning

⁽⁶¹⁾ Baltic SCOPE - Lessons Learned: Obstacles and Enablers When Tackling the Challenges of Cross-Border Maritime Spatial Planning

⁽⁶²⁾ Baltic SCOPE - Recommendations on Maritime Spatial Planning Across Borders

enhancing regional and local participation, and involving citizens in MSP. These challenges highlight the evolving nature of MSP initiatives and the ongoing need for adaptive strategies to foster sustainable development in the Baltic Sea region.

Building upon the groundwork laid by the Baltic SCOPE project (2015-2017), Pan-Baltic SCOPE (2018-2019) encountered its own set of cross-border cooperation challenges, including differing planning levels among countries, competing national interests, and, as forecasted by the Baltic SCOPE (2015-2017), low stakeholder participation. To overcome these difficulties, the project tried to engage stakeholders at national and local levels, fostering a deeper understanding of challenges and facilitating improved cooperation among countries⁽⁶³⁾.

The Pan-Baltic SCOPE (2018-2019) also addressed monitoring and evaluation challenges by implementing evaluation frameworks in case studies, identifying qualitative and quantitative indicators, and emphasising a clear objective setting for effective evaluation. The project highlighted the importance of involving experts and stakeholders to comprehend the impact of MSP on maritime sectors, the marine environment, and society. Furthermore, the project focused on enhancing the implementation of an EBA in MSP across the Baltic Sea Region, capitalising on the work done during the implementation of each predecessor project. By synthesising research on EBA, developing tools, and promoting a modular EBA concept, Pan-Baltic SCOPE (2018-2019) aimed to harmonise EBA implementation and promote a holistic perspective in MSP.

Additionally, the Pan-Baltic SCOPE (2018-2019) tackled socio-economic analysis challenges by developing frameworks for evaluating the economic impacts of MSP and addressing gaps in knowledge and resources. The project produced a national model for economic impact evaluation in Estonia, offering coherent approaches across countries. Moreover, the project's recognition of the persistent challenges in cross-border cooperation prompted the establishment of an MSP Data expert group and the creation of a common data portal. These initiatives streamlined data access, enhanced cross-border collaboration, and enabled early detection of discrepancies between plans⁽⁶⁴⁾. Moreover, the project addressed the integration of LSI in MSP by developing a framework and emphasising stakeholder engagement. The project highlighted the importance of LSI in structuring planning efforts and suggested utilising digital platforms for interactive collaboration⁽⁶⁵⁾.

As for the eMSP NBSR project (2022-2024), it focused on ocean governance in the region as it has been impeded by fragmentation across sectors and scales, resulting

⁽⁶³⁾ Baltic SCOPE - Recommendations on Maritime Spatial Planning Across Borders

⁽⁶⁴⁾ Pan Baltic Scope Bringing Better Plans 2019 Authors: Collaboration of Pan Baltic Scope 2019

⁽⁶⁵⁾ Study on Integrating an Ecosystem-based Approach into Maritime Spatial Planning. Project case-study reports. 2021

in ineffective management. The project proposed solutions such as transboundary hydrosphere approaches, cross-basin collaboration platforms, harmonised data sharing, and promoting OL to address these challenges⁽⁶⁶⁾. According to the eMSP NBSR (2022-2024), balancing the interests of various sea users while safeguarding marine ecosystems is paramount for achieving a sustainable blue economy. The project advocated for evidence-based analysis, impact assessments, and recognition of ecosystem service values to strike this balance amidst increasing pressures from activities like fishing and shipping⁽⁶⁷⁾.

The project also emphasises the importance of harmonised data for informed decision-making in MSP. To overcome challenges related to data heterogeneity and inconsistency, it is recommended that international data standards be adopted, aligned with FAIR principles, enriching data-sharing platforms, and employing reference lists for coherence. Integrating nature, social, and economic considerations into MSP is crucial, yet challenges persist in implementation and policy coherence⁽⁶⁸⁾. The project suggests linking MSP with nature protection processes, integrating EBA into directives, and enhancing stakeholder engagement through Communities of Practice (CoP) to address these challenges effectively⁽⁶⁹⁾. Lastly, The EMSP NBSR (2022-2024) suggests overcoming challenges associated with political and environmental changes, as well as resource allocation by tailoring monitoring and evaluation concepts to context, integrating monitoring and evaluation into planning processes, and ensuring adequate resourcing⁽⁷⁰⁾.

6.1.1.3. Conclusions – next steps

These projects have made significant strides in promoting cross-border cooperation, enhancing stakeholder engagement, and advancing MSP implementation across the region. However, despite these achievements, persistent challenges remain, and new ones have emerged. Data harmonisation and sharing, fostering cross-sectoral synergies, addressing ecosystem degradation from human activities and climate change, and enhancing stakeholder participation continue to challenge effective MSP.

⁽⁶⁶⁾ eMSP NBSR - Policy Brief Addressing the fragmentation of Ocean Governance across borders

⁽⁶⁷⁾ eMSP NBSR - Policy Brief Towards a sustainable blue economy

⁽⁶⁸⁾ eMSP NBSR - Policy Brief Strengthening Data sharing for informed decision-making in Maritime Spatial Planning

⁽⁶⁹⁾ eMSP NBSR - Policy Brief An ecosystem-based approach delivers future-proof maritime spatial planning

⁽⁷⁰⁾ eMSP NBSR - Policy Brief Monitoring and Evaluation in MSP – Always aim for better plans

The three major projects analysed in the Baltic Sea basin have primarily focused on strengthening MSP at both national and transboundary levels. The initial efforts laid the groundwork for subsequent projects to delve deeper into the complexities and leverage the experience gained to implement more efficient and holistic solutions. For instance, the evolution of EBA application progressed from establishing a theoretical framework to addressing practical challenges during the Pan-Baltic SCOPE, building upon lessons learnt from the Baltic SCOPE.

Similarly, data-related challenges have evolved, from identifying gaps in data availability and collection methods to recognising the importance of data sharing and interoperability. However, challenges in data acquisition persist, with emerging issues such as integrating data for LSI in MSP and a lack of socio-economic data availability.

As LSI becomes a more prominent topic, additional efforts are needed to transition from identifying conflicts to effectively managing them. Moreover, the dynamic nature of MSP challenges necessitates adaptive strategies to address emerging issues, such as mobilising political decision-makers, engaging a wider range of marine sectors, and involving citizens in MSP processes.

Looking ahead, the eMSP NBSR (2022-2024) have identified key areas for future MSP work, including ocean governance, sustainable blue economy, data sharing, ecosystem-based management, and monitoring and evaluation. Collaboration, innovation, and ongoing commitment to improvement will be crucial in overcoming these challenges and unlocking the full potential of MSP in the region.

6.1.2. Atlantic Ocean

The European (North East) Atlantic encompasses diverse ecosystems bordering Ireland, France, Spain, and Portugal. These ecosystems are generally divided into the Celtic Seas, the Bay of Biscay, and the Iberian Coast. This vast region exhibits significant variations in physical and biological conditions. The Celtic Seas in the north feature relatively shallow waters and a gently sloping continental shelf, with sea lochs, estuarine systems, and maerl beds that support cold-water fish, seabirds, and cetaceans like dolphins and basking sharks. Conversely, the Bay of Biscay and the Iberian Peninsula have steep waters plunging over 5000 meters deep, home to cold-water corals, sponges, and various pelagic species.

Figure 13 – Atlantic Ocean: Adoption status of the national MSP plans

	FR	IE	PT	ES
Year of adoption of the MSPs	2022	2021	2019	2023

© The data presented are from our own research.

Source: EU MSP Platform.

Fishing remains a major industry in the Atlantic, while coastal tourism and shipping are crucial to all bordering Member States. Key shipping routes such as the Gibraltar Strait and the English Channel connect Europe with global markets. Although oil and gas production is limited, the European Atlantic's physical and climatic conditions favour offshore renewable energy development. Since 2022, offshore wind energy has accelerated, with several wind farms already operational and new projects underway in the four Member States.

All five Atlantic Member States, including the UK, have defined their EEZs. MSP has significantly progressed in this sea basin, with national MSPs adopted by the four European Member States. France, for instance, adopted four plans (DSF) for its sea basins in 2022, addressing the MSFD and MSP Directive, with ongoing public consultations to integrate offshore renewable energy and biodiversity protection⁽⁷¹⁾. Ireland's MSP, adopted in 2021, provides a consistent, evidence-based framework for sustainable marine development, actively implementing initiatives such as establishing MPAs and developing OWFs⁽⁷²⁾. Portugal adopted its MSP in December 2019, and the MSP for the subdivision of the Azores is expected to be completed very soon. The country covers the mainland, Madeira, and the Extended Continental Shelf⁽⁷³⁾. The last country but not least of the Atlantic Ocean is Spain, which, having adopted its plan in 2023, emphasises implementing measures to achieve objectives related to environmental assessments and plan revisions⁽⁷⁴⁾.

Moreover, MSP progress in the region is fostered through ongoing cooperation in transboundary projects like TPEA, SIMCelt, SIMNorat, and SIMAtlantic. Despite Brexit, the UK continues collaborating on MSP to ensure transboundary compliance. The Atlantic Action Plan 2.0, endorsed in 2020, promotes a sustainable blue economy with MSP as a key enabler, particularly for marine renewable energy and environmental initiatives. The OSPAR Commission, established in 1992, facilitates cooperation on marine environmental protection, while the Atlantic Strategy Committee (ASC), the Atlantic Arc Commission, and the Conference of the Atlantic Arc Cities (CAAC) play pivotal roles in governance and regional cooperation. The British-Irish Council further supports positive relationships and collaborative efforts across priority areas, including marine and environmental issues⁽⁷⁵⁾.

⁽⁷¹⁾ [France | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

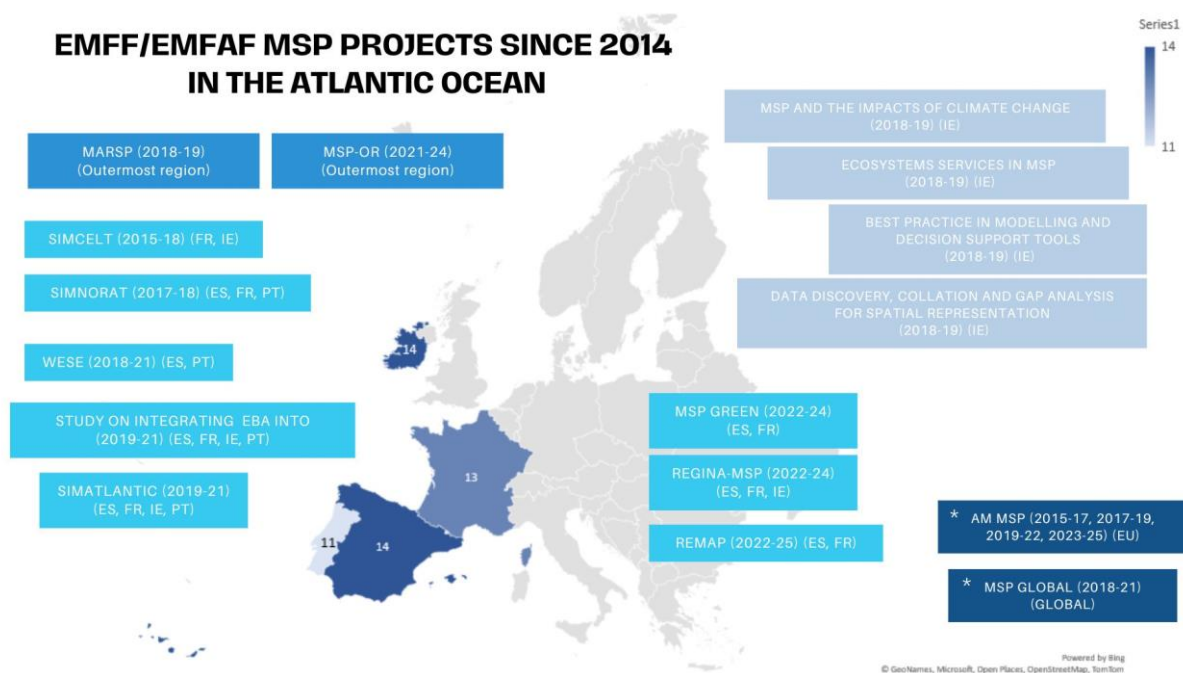
⁽⁷²⁾ [Ireland | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁷³⁾ [Portugal | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁷⁴⁾ [Spain | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁷⁵⁾ [Atlantic Ocean | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

Figure 14 – Map of the EMFF/EMFAF projects related to MSP, Atlantic Ocean



© The data presented are from our own research.

Source: EU MSP Platform.

6.1.2.1. Projects' objectives and achievements

Projects in the Atlantic Ocean have aimed at supporting MSP processes and the Member States of the sea basin. They have emphasised cross-border cooperation and addressed transboundary cross-cutting issues such as ecosystem-based approaches, data interoperability and management, LSI, and tool development.

To be more specific, the **Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt) (2015-2018)** (total budget: € 2,264,400.00) project targeted the implementation of the MSP Directive within the Celtic Seas (OSPAR Region III) and fostered cross-border cooperation among France, Ireland, and the UK. It engaged both academic and government partners, aiming to enhance cooperation, reduce conflicts, and improve spatial efficiency. **SIMCelt** developed spatial scenarios for maritime sectors and marine conservation, validated by stakeholders, and established an MPA database for informed decision-making. Additionally, the project addressed technical challenges in data analysis and infrastructure, creating a Spatial Data Infrastructure (SDI) based on Web Services. Stakeholder engagement was prioritised, employing innovative methods like the Netherlands' "MSP Challenge games". This facilitated collaboration across multiple sectors and borders, notably in crafting a Regional Marine Plan for the Clyde Estuary.

Furthermore, **SIMCelt** (2015-2018) conducted case studies focusing on examining issues and opportunities such as shipping, navigational safety, and offshore renewable energy, integrating CEA into MSP and planning across borders while utilising available datasets. Finally, the project proposed tailored evaluation frameworks, exemplified by the development of an evaluation framework for Northern Ireland's MSP processes⁽⁷⁶⁾.

Supporting the Implementation of Maritime Spatial Planning in the North Atlantic Region (SIMNorat) (2017-2018) (*total budget: € 1,768,973.00*) had dual objectives: supporting the implementation of MSP in the Atlantic Ocean and achieving concrete cross-border MSP activities among these states. Led by Shom, the consortium united seven partners from governmental bodies and research institutes across France, Spain, and Portugal alongside the Conference of Peripheral Maritime Regions (CPMR). Operational activities encompassed literature and desk research, future trend analysis, collaborative scenario development, practitioner/stakeholder interviews, case study development, and the formulation of stakeholder engagement mechanisms providing a platform for dialogue and knowledge exchange, especially in the context of cross-border collaboration. The project outcomes were strategically geared towards addressing technical, scientific, and social facets of MSP implementation, including data management, ecosystem-based management, and stakeholder engagement processes.

Following the conclusion of SIMCelt (2015-2018) and SIMNorat (2017-2018), the **Supporting Implementation of Maritime Spatial Planning in the Atlantic region (SIMAtlantic) (2019-2021)** (*total budget: € 1,470,625.00*) emerged deep diving into fostering collaboration among stakeholders engaged in MSP across Atlantic basin countries, including France, Ireland, Portugal, Spain, and the UK. The project focused on establishing an overarching 'Atlantic vision' for MSP, drawing insights from interconnected case studies and thematic analyses. This vision took into account the distinctive geographical characteristics of the Atlantic region, existing spatial utilisation patterns, and governance frameworks.

The project primarily sought to facilitate the development and implementation of MSP plans in accordance with the EU MSP Directive. While engaging in transboundary knowledge exchange and forging enduring partnerships, the project also placed emphasis on four pivotal cross-cutting themes: governance structures, cumulative effects/impacts assessment, data management, and LSI. This work aimed to enhance country-level understanding between neighbouring Atlantic Member States, focusing on progress made in MSP, objectives, priorities, and potential for cooperation. Managing marine activities across transboundary water bodies presents

⁽⁷⁶⁾ SIMCelt: Transboundary Cooperation in the Celtic Seas. Reflections from the SIMCelt project.

inherent complexities, highlighting the need for improved cross-border cooperation mechanisms⁽⁷⁷⁾.

SIMAtlantic's (2019-2021) activities resulted in the production of methodologies, practical guidance documents, communication tools, and a catalogue of relevant information to support the work of MSP authorities. Case studies delved into various aspects of cross-boundary planning and management, such as marine activity management in transboundary ecosystems, communication of MSP initiatives, impact assessment between neighbouring countries, and land-sea interactions in the Irish Sea. Methodologies such as CEA and stakeholder-led approaches were explored, also by SIMAtlantic to evaluate and analyse the pressures and impacts of maritime activities⁽⁷⁸⁾.

From 2018 to 2019, four projects with a national geographical scope were implemented as part of the Blue Growth & Marine Planning Scheme under Ireland's EMFF Operational Programme. The first project, "**MSP AND THE IMPACTS OF CLIMATE CHANGE**" (*total budget: € 250,000.00*), focused on collecting, modelling, and mapping potential spatial changes to Ireland's marine ecosystem services and activities due to climate change. It identified vulnerabilities and opportunities for marine provisioning, regulating, maintenance, and cultural services, as well as for marine-based activities. Additionally, it assessed the implications of sea-level rise on coastal infrastructure, providing best practices for incorporating climate change into marine spatial planning and insights into vulnerabilities and opportunities for ecosystem services⁽⁷⁹⁾. The second project, "**ECOSYSTEM SERVICES IN MARINE SPATIAL PLANNING**" (*total budget: € 475,250.00*) addressed the lack of information on Ireland's marine ecosystem services, aiming to improve marine data and knowledge for informed MSP. It characterised marine ecosystem services, evaluated the value of natural capital, mapped ecosystem services and natural capital, and identified threats and opportunities related to ecosystem services⁽⁸⁰⁾. The third project, "**INTEGRATING MARINE SPATIAL DATA: BEST PRACTICE IN MODELLING AND DECISION SUPPORT TOOLS**" (*total budget: € 200,000.00*), focused on spatial data management and integration in the context of MSP. It evaluated and identified best practice models and tools for data management and integration, enhancing the value of spatially represented data through the

⁽⁷⁷⁾ [Supporting the Implementation of Maritime Spatial Planning in the North Atlantic Region | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁷⁸⁾ SIMAtlantic: Final brochure

⁽⁷⁹⁾ [MSP and the Impacts of Climate Change | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁸⁰⁾ [Ecosystems Services in Marine Spatial Planning | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

development of relevant models and tools⁽⁸¹⁾. Lastly, the fourth project, "**DATA DISCOVERY, COLLATION AND GAP ANALYSIS FOR SPATIAL REPRESENTATION**" (*total budget: € 300,000.00*), concentrated on identifying and mapping relevant datasets, reviewing their validity and providing up-to-date information on marine ecosystems and human activities in Ireland's maritime domain. It contributed to marine knowledge, supported ecosystem-based planning, and improved existing marine data programs by delivering spatial data required for the MSP Directive, such as marine activities and key species distribution⁽⁸²⁾.

The more recent initiatives, the MSP Green and REMAP, are also described in section 8.1.1. Baltic Sea. The **MSP-GREEN (2022-2024)** initiative aimed to harmonise maritime spatial plans with the EGD objectives across five sea basins, emphasising critical themes like climate change and circular blue economy. Meanwhile, the **REMAP (2022-2025)** project enhances the monitoring and assessment capabilities of MSP across three sea basins, prioritising usability and stakeholder involvement to ensure sustainable outcomes. As for the **REGINA-MSP (2022-2024)** (*total budget € 1,957,909.00*), still under implementation, its primary goal has been to enhance the engagement of regions (level 2 units in the NUTS classification), local authorities, and stakeholders in national MSP, in line with the objectives of the EGD. This involves a comprehensive approach that integrates discussions at the European level with detailed examinations of regional case studies in the Atlantic and Mediterranean regions, such as France, Greece, Ireland, Italy, and Spain. By conducting thorough analyses, fostering stakeholder participation, and providing policy suggestions, the project aims to bolster regional participation in MSP, foster alignment with the EGD objectives, and strengthen the coordination between MSP efforts and European cohesion policies.

6.1.2.2. Challenges addressed and lessons learnt

The projects undertaken in the Atlantic Ocean basin primarily aimed to assist Member States in developing their MSP plans and addressing crucial cross-cutting issues like ecosystem services, land-sea interactions, and data management. This section explores the key challenges identified by these projects and the major solutions and lessons learned.

One significant challenge highlighted by all three projects with sea basin geographical scope, SIMCelt (2015-2018), SIMNorat (2017-2018) and SIMAtlantic (2019-2021) projects, is **data interoperability and harmonisation** in transboundary

⁽⁸¹⁾ [Integrating Marine Spatial Data: Best Practice in Modelling and Decision Support Tools | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽⁸²⁾ [Data Discovery, Collation and Gap Analysis for Spatial Representation | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

MSP implementation. Differences in software, diffusion protocols, and licensing policies among countries affect seamless data exchange and integration⁽⁸³⁾. Harmonising data across borders is complex and resource-intensive, causing delays in MSP initiatives⁽⁸⁴⁾. Additional issues include difficulties in visualising data and selecting reliable sources among inconsistent official producers. For instance, submarine cables and pipeline data from sources like Shom, UKHO, and the KIS-ORCA project often contain inconsistencies, making prioritising one source challenging⁽⁸⁵⁾. Initiatives like the Marine Spatial Data Infrastructure (MSDI) demonstrator have effectively promoted data interoperability and stakeholder collaboration across the Celtic Seas region. Harmonised datasets from organisations such as the International Council for the Exploration of the Sea (ICES) and EMODNET have been particularly useful⁽⁸⁶⁾. In the Northern Atlantic, the SIMNORAT project noted the availability of meaningful and comparable information at European, OSPAR IV, and national scales. It also suggested several actions to enhance **MSP data sharing** in a transboundary context, including providing metadata in multiple languages, enhancing web quality, harmonising data using symbology and content harmonisation issues, as done by the West Mediterranean, and organising data so that official data is published and comparable datasets are produced using the same classification and common definitions⁽⁸⁷⁾.

Methodological challenges in **CEA** add complexity to MSP, especially in transboundary contexts. These challenges, including stakeholder involvement, dataset integration, and policy alignment across jurisdictions, were addressed by the SIMCelt, SIMNorat, and SIMAtlantic projects. Their focus on common principles and

⁽⁸³⁾ Kato, Y., Abjean, M., Jarno, R., Carval, D..2018. Data Management Guidance Document. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). Shom. 61 pp

⁽⁸⁴⁾ Kato, Y., Carval, D..2017. SIMCelt Analysis of Data Needs and Existing Gaps – Specifically Relating to Transboundary Working. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). Shom. 61 pp

⁽⁸⁵⁾ Kato, Y., Abjean, M., Jarno, R., Carval, D..2018. Data Management Guidance Document. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt).

⁽⁸⁶⁾ Kato, Y., Abjean, M., Jarno, R., Carval, D..2018. Data Management Guidance Document. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). Shom. 61 pp.

⁽⁸⁷⁾ De Magalhaes, A., Alloncle, N., Campillos-Llanos, M., Cervera-Núñez, C., Gómez-Ballesteros, M., Marques, M., Sousa, L., Quintela, A., Lopes Alves, F. (2019). Taking Marine Protected Areas into account in the Context of Marine Spatial Planning. EU Project. Grant No: EASME/EMFF/2015/1.2.1.3/03/SI2.742089. Supporting Implementation of Marine Spatial Planning in the Western Mediterranean (SIMWESTMED). Agence Française pour la Biodiversité. 57pp. DOI: 10.5281/zenodo.2597160

decision support tools development aimed to streamline the CEA process and enhance its effectiveness in guiding MSP initiatives⁽⁸⁸⁾. The SIMAtlantic project's study on "**Cumulative impacts and MPAs**" faced limitations due to varying spatial data availability, format differences, and limited expert input, impacting data coherence and robustness. Solutions included using European models for consistency, gathering detailed habitat data, and enhancing expert involvement for precise MSP guidance⁽⁸⁹⁾. Recommendations involve improving baseline analysis, pressure evaluation, and considering future activities for accurate assessments. Once again, it is clear that high-quality data on human activities and habitats are indispensable for effective MSP. As suggested by the SIMCelt project, MPAs play a crucial role in balancing human activities and conservation efforts facilitated by CEA. Accessible CEA results demonstrated through tools like web-based Story Maps in the Irish Sea pilot project are essential for informed management decisions⁽⁹⁰⁾.

SIMNorat (2017-2018) emphasised that overlapping MPA designations do not necessarily ensure better protection without effective management measures. The governance processes in each country significantly influence MPA management, emphasising coherence between MPA networks and MSP processes to address conservation objectives and economic targets effectively. MSP provides opportunities for community involvement in ecosystem management and serves as a governance tool for inclusive stakeholder representation, increasingly applied in MPA management worldwide, exemplified by UNESCO's Best Practice Guide for Marine World Heritage Sites⁽⁹¹⁾. SIMCelt (2015-2018) suggested that effective MPA

⁽⁸⁸⁾ Quemmerais-Amice Frédéric, Vanhoutte-Brunier Alice, Alloncle Neil (2017). Mapping risk of cumulative effects – Recommendations from the approach tested within French Celtic Sea waters. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). French Agency for Biodiversity. 49 pp.

⁽⁸⁹⁾ Cumulative impacts and Marine Protected Areas Fernandes, M.L., Quintela, A., Cervera-Núñez, C., Campillos-Llanos, M., Sousa, L.P., Casimiro, D., Matias, J.O., Simão, A.P., Gómez-Ballesteros, M., Alves, F.L., Transboundary Impact Assessment in the north-western Iberian Peninsula. In support of Deliverable 2.3. of the SIMAtlantic project (EASME/EMFF/2018/1.2.1.5/SI2.806423-SIMAtlantic). 27pp

⁽⁹⁰⁾ Quemmerais-Amice Frédéric, Vanhoutte-Brunier Alice, Alloncle Neil (2017). Mapping risk of cumulative effects – Recommendations from the approach tested within French Celtic Sea waters. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). French Agency for Biodiversity. 49 pp

⁽⁹¹⁾ De Magalhaes, A., Alloncle, N., Campillos-Llanos, M., Cervera-Núñez, C., Gómez-Ballesteros, M., Marques, M., Sousa, L., Quintela, A., Lopes Alves, F. (2019). Taking Marine Protected Areas into account in the Context of Marine Spatial Planning. EU Project. Grant No: EASME/EMFF/2015/1.2.1.3/03/SI2.742089. Supporting Implementation of Marine Spatial Planning in the Western Mediterranean (SIMWESTMED). Agence Française pour la Biodiversité. 57pp. DOI: 10.5281/zenodo.2597160

management requires specific spatial measures and participatory governance, underlining the importance of cross-border cooperation for successful marine conservation efforts.

Spatial efficiency and the anticipation of increased maritime activities are key considerations in the Atlantic Ocean, particularly with the ongoing prioritisation of ports and shipping for their economic significance in the region. While collaboration in the offshore wind sector is expected to expand, it remains somewhat detached from MSP processes, presenting opportunities for enhanced integration. SIMCelt (2015-2018) highlighted in one of its case studies the prospects for sectoral coexistence and recommended the encouragement of Cross-Sectoral Working Groups to address operational cross-border issues. SIMCelt identified the challenge of duplicated sectoral interests across borders, emphasising the necessity for systematic approaches and flexible maritime plans to accommodate emerging activities efficiently⁽⁹²⁾. As far as addressing aquaculture growth is concerned, particularly concerning species like salmon, mussels, and oysters in the Atlantic, the MSP needs to address authorisation processes and consider the impacts of climate change on water conditions, highlighting the necessity of proactive planning within the MSP framework⁽⁹³⁾.

SIMNorat's and SIMAtlantic's analysis of **LSI** approaches across countries revealed varying definitions, with Spain lacking a clear definition beyond legal framing. Identifying a specific LSI framework within MSP processes is critical to optimise LSI integration, encompassing environmental, socioeconomic, and governance aspects, with a standardised EU framework enhancing transboundary cooperation while considering subsidiarity principles⁽⁹⁴⁾ ⁽⁹⁵⁾.

⁽⁹²⁾ Ansong, J., MacMahon, E. and O'Hagan, A.M. 2018. Case Study 1 – Understanding specific cross border issues and opportunities: Offshore Renewable Energy and Shipping & Navigation (Deliverable 10). EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). University College Cork. 59pp.

⁽⁹³⁾ SIMCelt: Component 1.2.1 Spatial Demands and Scenarios for Maritime Sectors and Marine Conservation

⁽⁹⁴⁾ Sousa, L.P., Dilasser, J., Ganne, M., Cervera Nuñez, C., Quintela, A., Marques, M., Silva, A., Alves, F.L., Sala, P., Campillos-Llanos, M., GómezBallesteros, M., Alloncle, N. and Giret, O. (2019). Land-Sea interactions and relationships with Integrated Coastal Zone management. EU Project Grant No.: EASME/ EMFF/2015/1.2.1.3/03/SI2.742089. Supporting Implementation of Maritime Spatial Planning in the European Northern Atlantic (SIMNORAT). Cerema - UAVR. 12 pp. DOI: 10.5281/ zenodo.259472

⁽⁹⁵⁾ Jones, H. 2022. Overview Report on Maritime Spatial Planning and Land-Sea Interactions in the European Atlantic. Deliverable 3.4 of the SIMAtlantic project, 35pp

6.1.2.3. Conclusions – next steps

The marine policies of Ireland, France, Portugal, Spain, and the UK exhibit diverse objectives for maritime activities, posing challenges to achieving transboundary MSP goals. Collaboration among international bodies like OSPAR and ICES is essential, fostering cooperation between EU and non-EU Member States and ensuring outcomes from international cooperation mechanisms are effectively communicated to stakeholders. Engagement with international sectors such as fisheries, shipping, and nature conservation is vital for MSP consultations, necessitating involvement from relevant sectoral authorities to understand shared interests and their implications for MSP.

Established communication channels between national MSP contact points are crucial for effective cross-border MSP. This facilitates timely notifications and details of MSP processes between neighbouring CAs, enabling the exchange of experiences on plan-making, upcoming projects, and transboundary issues. Joint stakeholder engagement and alignment of efforts, coupled with sharing consultation results in a universally understandable format during the drafting stage of maritime spatial plans, are imperative for fostering collaboration and coherence in cross-border MSP initiatives⁽⁹⁶⁾. Vertical coordination between existing cooperation mechanisms at various governance levels is urged to support MSP effectively, requiring political commitment to ensure a coordinated process across different structures and mechanisms⁽⁹⁷⁾.

While the SIMAtlantic project (2019-2021) facilitated transboundary cooperation, the need for a sustainable model for such cooperation arises as MSP progresses into implementation phases, prompting consideration of future navigation strategies. A bottom-up approach focusing on stakeholder engagement legitimises MSP plans, enhances social acceptance, and fosters mutual understanding and conflict resolution. Varied engagement methods, including interviews, workshops, and serious games, promote understanding and facilitate MSP implementation, emphasising the importance of context-specific, flexible approaches and local governance involvement⁽⁹⁸⁾.

⁽⁹⁶⁾ Kato, Y., Abjean, M., Jarno, R., Carval, D..2018. Data Management Guidance Document. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt).

⁽⁹⁷⁾ Ansong, J., O'Hagan, A.M. and MacMahon, E. 2018. Existing Mechanisms for Cooperation on MSP in the Celtic Seas (Deliverable 14). EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). University College Cork. 74 pp.

⁽⁹⁸⁾ The SIMAtlantic Partners. 2022. 'Atlantic Vision' for MSP Roadmap. Deliverable 1.3 of the SIMAtlantic project, 35pp

However, it should be noted that while localised MSP implementation can be more effective, it may pose challenges for public participation and engagement, necessitating additional support in terms of human and financial resources and innovations in communication and technology. As stressed by the SIMAtlantic project (2019-2021), formalising and standardising data and methodologies between states and sub-national levels is imperative for effective MSP data management. Utilising existing web tools like EMODnet for data pooling at an EU scale can facilitate information sharing and foster a common understanding of marine issues across Member States and cross-border areas⁽⁹⁹⁾.

Greater cross-sectoral and multi-level coordination between different authorities, engaging stakeholders, and building capacity, particularly where MSP is a new process, are imperative ingredients. Such tools and pathways provide a long-term focus for MSP that transcends political cycles and jurisdictional borders, accounting for future uses and achieving better land-sea integration of planning, a key feature for integrated transboundary MSP⁽¹⁰⁰⁾.

6.1.3. Black Sea

The Black Sea stands as a testament to both its natural allure and the complex challenges it faces. This vast body of water, bordered by six coastal states including Bulgaria, Romania, Turkey, Georgia, Ukraine, and Russia, is a unique regional sea almost entirely isolated from the world's oceans. Its distinctiveness lies not only in its geographical features, such as its deep abyssal basin and wide continental shelf, but also in its rich biodiversity and historical significance as a crossroads of civilisations. However, alongside its natural beauty, the Black Sea grapples with a myriad of issues stemming from intensive anthropogenic pressures and the impacts of climate change. Decades of pollutants, overfishing, and the introduction of invasive species have strained its delicate ecosystem, leading to phenomena like eutrophication and hypoxia.

Despite these challenges, the Black Sea remains a crucial hub for various economic activities such as tourism, shipping, oil and gas exploitation, and fisheries. As the region faces the looming threats of climate change and sea-level rise, there is increasing recognition of the need for coordinated efforts to preserve its ecological integrity while fostering sustainable development. In this context, initiatives for regional cooperation and integrated maritime spatial planning have emerged as vital

⁽⁹⁹⁾ Souf, A., Dilasser, J., Quentric, A., Abjean, M., 2021. Proposal for tools to improve data sharing and stakeholder engagement – French Maritime Spatial plans (DSF) use case: Final report: 3,3 of the SIMAtlantic project (EASME/EMFF/2018/1.2.1.5/SI2.806423). 27pp

⁽¹⁰⁰⁾ The SIMAtlantic Partners. 2022. 'Atlantic Vision' for MSP Roadmap. Deliverable 1.3 of the SIMAtlantic project, 35pp

strategies for navigating the complexities of managing the Black Sea's resources and promoting its long-term resilience.

In Bulgaria and Romania, progress in MSP was driven by projects like MARSPLAN BS I and II, with notable advancements between 2019 and 2021. Romania's approval of the draft Offshore Energy Law in December 2023 indicates further steps toward sustainable development. Meanwhile, Bulgaria has incorporated the EU MSP Directive into national law and integrated MSP measures into coastal district development strategies.

The exclusive economic zones (EEZs) of Bulgaria and Romania extend beyond territorial sea waters, granting each country sovereign rights over natural resources.

Figure 15 – Black Sea: Adoption status of the national MSP plans

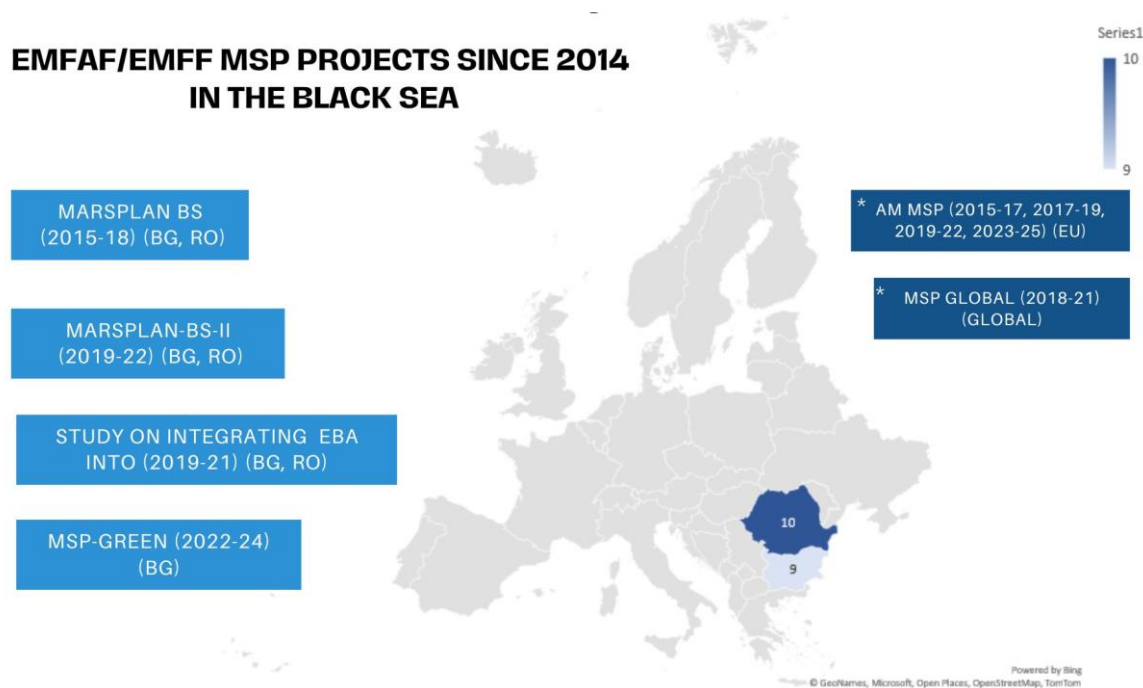
	BG	RO
Year of adoption of the MSPs	2023	2023

© The data presented are from our own research.

Source: EU MSP Platform.

While maritime boundaries between Black Sea countries are partially unresolved, Bulgaria and Romania have delineated their EEZs along their respective coastlines.

Figure 16 – Map of the EMFF/EMFAF projects related to MSP, Black Sea



© The data presented are from our own research.

Source: EU MSP Platform.

6.1.3.1. Projects' objectives and achievements

The **MARSPLAN-BS I (2015-2018)** (*total budget € 2,048,921.00*) project was a pioneering effort aimed at supporting the implementation of the EU MSP Directive in the Black Sea region. Its primary focus was to facilitate **cross-border maritime spatial planning between Romania and Bulgaria**, the only EU Member States in the Black Sea Basin. To achieve this, the project forged partnerships with other Black Sea countries, aided by the Black Sea Commission and identified observer partners, marking a significant step in regional collaboration.

One of the project's key achievements was the development of a comprehensive MSP methodology, along with the formulation of MSP indicators and legislative frameworks to guide implementation in both countries. This laid the groundwork for the creation of MSP plans, including a groundbreaking cross-border plan for Romania and Bulgaria, aiming to manage marine resources sustainably, taking into account ecological and economic considerations and incorporating a holistic approach that considered the land-sea interface. In addition, the project went beyond theoretical frameworks, conducting thorough analyses of marine areas in Romania and Bulgaria to provide valuable insights for decision-making. This involved assessing various aspects, including GIS, oceanography, coastal geomorphology, biology, ecology, and marine chemistry. By integrating data from both countries and utilising common maps, the project aimed to ensure a unified approach to maritime planning across the Black Sea region.

Furthermore, MARSPLAN-BS I (2015-2018) addressed critical issues through pilot case studies in specific areas. For instance, the Eforie Case Study delved into coastal erosion and its impacts on tourism, maritime space, and the environment ⁽¹⁰¹⁾. Through stakeholder engagement and thorough research, the project identified causes of erosion, quantified risks, and proposed solutions for sustainable development. Similarly, the Burgas Case Study examined the challenges arising from recreational scuba diving tourism in Bulgaria and proposed solutions to mitigate conflicts between diving activities and maritime traffic ⁽¹⁰²⁾. Also, the project effectively tackled morpho-hydrographical dynamics, waste management, and fishing regulations within the Sfantu Gheorghe Case Study. Employing an interdisciplinary approach, it integrated land planning with biodiversity, social, and economic aspects, fostering potential territorial development and coastal protection in accordance with the MSP Directive ⁽¹⁰³⁾. The “Elaboration of a detailed study on the establishment of a new ship routing system in territorial seas of the Republic of Bulgaria”, focuses on evaluating vessel traffic in the waters of the Bulgarian Black Sea, examining factors like traffic volume, types of cargo, environmental risks, and concentrations of fishing vessels, the project established criteria for assessing the traffic separation scheme (TSS), evaluating the current TSS, proposing enhancements, suggesting a new TSS, and illustrating the safety advantages of the proposed system ⁽¹⁰⁴⁾. The Aquaculture and Fisheries Case Study elaborated on integrating marine fisheries and aquaculture into MSP in the Black Sea region.

Stakeholder engagement was a cornerstone of the project, with efforts focused on fostering dialogue and understanding of MSP among various stakeholders, including national, transnational, and regional bodies, as well as non-EU members and organisations. Thematic workshops and events provided platforms for discussions and debates, emphasising the transnational nature of the endeavour and facilitating knowledge exchange.

⁽¹⁰¹⁾ Cross border maritime spatial planning in the Black Sea – Romania and Bulgaria (MARSPLAN – BS) EASME/EMFF/2014/1.2.1.5/2/SI2.707672 MSP LOT 1/Black Sea/ WP1, Activity 1.1, Component 1.1.2. Case studies with major challenges within the Romanian and Bulgarian maritime space. CASE STUDY 1 EFORIE (COASTAL EROSION) Authors: Razvan Doru Mateescu, Alina Daiana Spinu, Mihaela Laurenta Alexandrov, Victor Nita.

⁽¹⁰²⁾ Case study 3 BURGAS: Land-sea interactions. Cross-border maritime spatial planning in the black sea-Romania and Bulgaria.

⁽¹⁰³⁾ Cross-border maritime spatial planning in the Black Sea – Romania and Bulgaria (MARSPLAN – BS). EASME/EMFF/2014/1.2.1.5/2/SI2.707672 MSP LOT 1/Black Sea/. WP1, Activity 1.1, Component 1.1.2. Case studies with major challenges within the Romanian and Bulgarian maritime space. CASE STUDY 2 SFANTU GHEORGHE.

⁽¹⁰⁴⁾ Cross border Maritime Spatial Planning for Black Sea Bulgaria and Romania - MARSPLAN-BS II. EASME/EMFF/2018/1.2.1.5/01/SI2.806725 - MARSPLAN-BS II. SYNTHESIS REPORT ON MARITIME USES WP 1, Activity 1.1, Sub-activity 1.1.1.

Building on the previous MARSPLAN BS I (2025-2028) project, the **MARSPLAN BS II (2019-2021)** (*total budget € 1,562,096.00*) aimed to facilitate further the development of maritime spatial Plans in Bulgaria and Romania and a common cross-border strategy between the two countries, linking European and Black Sea regional levels. Despite challenges posed by the COVID-19 pandemic, stakeholders collaborated effectively to increase capacity and promote stakeholder involvement in the planning process.

The project explored **LSI and multi-use concepts within MSP and cross-border cooperation contexts**, providing frameworks and methodologies applicable to the entire Black Sea coastline. A key achievement of the project was the development of a unified GIS database for both Bulgaria and Romania, addressing spatial delimitation issues and producing numerous maps illustrating various analytical aspects. Additionally, it supported the development of maritime spatial plans in both countries, facilitating consultations with CAs and drafting a plan for Romania.

The project also developed a **comprehensive framework for a common strategy for MSP in the cross-border area of Bulgaria and Romania**, outlining priority areas such as governance, GES, and blue economy. Methodologies for analysing and integrating LSI into MSP were successfully tested, leading to the completion and publication of case study reports and best practice recommendations.

To enhance dissemination and raise awareness of MSP in the Black Sea region, the project organised four thematic workshops covering coastal and marine tourism, coastal protection against erosion, ecological protection of coastal areas, and oil spill response capabilities. Additionally, peer-reviewed papers were published.

6.1.3.2. Challenges addressed and lessons learnt

The Black Sea region has been facing a plethora of challenges, both natural and anthropogenic, jeopardising its coastal areas and marine ecosystems. Coastal erosion, floods, landslides, and earthquakes, compounded by industrial development and urbanisation, pose significant risks. Human activities contribute to technological risks such as industrial emissions, wastewater spills, oil discharges, and shipping accidents, further impacting coastal waters and marine life.

Anthropogenic pressures from tourism, agriculture, shipping, petrochemicals, mining, and nuclear energy sectors exacerbate ecosystem degradation. Rapid population growth and extensive infrastructure development intensify these pressures, aggravating environmental challenges. Marine contaminants like heavy metals, pesticides, and hydrocarbons further degrade marine environments, endangering marine life and human health. Additionally, fishing activities impact marine ecosystems, necessitating regulation and management measures to ensure sustainable fisheries management and mitigation of environmental damage. Furthermore, military sonar activities pose a threat to marine mammals like dolphins,

emphasising the need for stricter regulations and measures to mitigate negative impacts on protected areas and marine biodiversity⁽¹⁰⁵⁾.

Addressing these challenges has required a solid understanding of the marine environment's status, emphasising the establishment of a suitable national framework for marine research and monitoring activities. MARSPLAN BS I and II tried to address and mitigate the impacts of these challenges by establishing a strong MSP framework and engaging in cross-country collaborations, as we describe below.

The Eforie case study within the MARSPLAN BS I initiative concentrated on **tackling coastal erosion**, aiming to mitigate the impacts exacerbated by human activities like urban development and infrastructure projects. Although the strategic coastal Master Plan for Coastal Protection, developed in 2011 by Halcrow Romania, the Romanian Waters National Administration, and the Dobrogea Littoral Water Basin Directorate (ANAR - ABADL), proposed protective strategies such as dikes and beach nourishment, it didn't acknowledge unintended consequences, such as sediment accumulation. The Eforie case study **identified conflicts between fishing and navigation activities, as well as between marine protected areas and economic interests**. To address these issues, stakeholders engaged in a Sketch Match exercise to explore conflict resolution strategies, suggesting actions like establishing clear fishing routes and relocating mussel farms. The same exercise was employed in the Sfantu Gheorghe case study to foster cooperation among various stakeholders and experts and raise awareness about sustainable coastal area use and landscape preservation⁽¹⁰⁶⁾. An additional tool to mitigate conflicts and improve coordination is developing an **interaction matrix**, which, in the case of the MARSPLAN BS I project, was devised to designate functional zones, including those dedicated to nature conservation⁽¹⁰⁷⁾.

The Burgas Case Study revealed the challenges of integrating **LSI into MSP**. It revealed that challenges such as inadequate data, the legal foundation for MSP, insufficient resource issues, and stakeholder mobilisation were persistent. The study emphasised that conflicts from activities like oil pipelines and wastewater discharge impact water quality and protected areas. To address these challenges, the project suggested using GIS and mapping for informed decision-making and emphasised stakeholder engagement. Despite hurdles, the project provided reliable data and

⁽¹⁰⁵⁾ Deliverable of Interim Report 3, WP1, Activity 1.1, Component 1.1.1. Elaboration of detailed studies for a complete analysis of the Romanian and Bulgarian maritime areas

⁽¹⁰⁶⁾ Cross border maritime spatial planning in the Black Sea – Romania and Bulgaria (MARSPLAN – BS). EASME/EMFF/2014/1.2.1.5/2/SI2.707672 MSP LOT 1/Black Sea/. WP1, Activity 1.1, Component 1.1.2. Case studies with major challenges within the Romanian and Bulgarian maritime space. CASE STUDY 2 SFANTU GHEORGHE

⁽¹⁰⁷⁾ Cross border Maritime Spatial Planning for Black Sea Bulgaria and Romania - MARSPLAN-BS II. EASME/EMFF/2018/1.2.1.5/01/SI2.806725 - MARSPLAN-BS II. SYNTHESIS REPORT ON MARITIME USES WP 1, Activity 1.1, Sub-activity 1.1.1.

guided land-sea interaction models, leading to environmental improvements and conflict mitigation⁽¹⁰⁸⁾.

The challenge of proper data available and collection methods was also revealed in the “Elaboration of a detailed study on the establishment of a new ship routing system in territorial seas of the Republic of Bulgaria”. The study underscored the importance of interagency coordination and backing for implementing a new system that would significantly improve both navigation safety and environmental conservation. The project emphasised the necessity of collaboration with defence and interior ministries, undertaking measures against maritime mines, delineating military zones, enacting the new system, and ensuring the availability of adequate technical resources for monitoring and oversight. **The aquaculture and fisheries case study addressed overfishing, coordination gaps among Black Sea nations, and insufficient scientific data for effective fishery management.** The MARPSLAN BS I (2015-2018) project focused its actions on harmonising methodologies, establishing fishing-free zones, and enhancing stakeholder cooperation. It also emphasised the importance of joint action between the two countries against illegal fishing. It highlighted the need for a regional fisheries management body and standardised data collection. Overall, the study stressed the importance of scientific research, information sharing, and ongoing consultation for sustainable Black Sea fishing.

Expanding on the challenges tackled in MARSPLAN BS I, the MARSPLAN II project delved into the integration of Tourism, Underwater Cultural Heritage (UCH), and Environmental Protection within MSP. It aimed to develop sustainable solutions for addressing conflicts between sectors and mitigating the impacts of human activities on the ecosystem. This case of multi-use has been highly specific to each site and is contingent upon the physical and natural characteristics of the maritime area. The solutions suggested involved viewing UCH and MPAs as global concerns; necessitating governance focused on sustainability rather than national economic interests. This would require adherence to environmental principles, public participation, and capacity building. As highlighted by the MARSPLAN BS II (2019-2021) project, future efforts should focus on facilitating multi-use through regulatory authorities, capacity building, legal frameworks, funding structures, and multidisciplinary approaches, aligning with MSP and other area-based management strategies.

⁽¹⁰⁸⁾ Cross border Maritime Spatial Planning for Black Sea Bulgaria and Romania - MARSPLAN-BS II. EASME/EMFF/2018/1.2.1.5/01/S12.806725 - MARSPLAN-BS II. SYNTHESIS REPORT ON MARITIME USES WP 1, Activity 1.1, Sub-activity 1.1.1.

6.1.3.3. Conclusions – next steps

The two projects shared common objectives: to establish an MSP framework and adopt national plans that not only address current challenges but also anticipate emerging ones. By fostering collaboration between the two countries, they introduced a transboundary context for MSP, facilitating cooperation in resolving shared challenges. The MARSPLAN BS I and II have significantly advanced MSP practices in the Black Sea region, laying a solid foundation for sustainable maritime development.

While the MSP national plans align with the EU MSP Directive and the projects have closely engaged with national authorities, **ongoing support for both countries is imperative**. This support is vital to ensure alignment with international standards, successful plan implementation, and enhanced cross-border collaboration. Both projects emphasised **collaboration and stakeholder engagement**, enhancing understanding of MSP processes and promoting sectoral integration. By convening key institutions and stakeholders, effective transboundary planning was fostered, however, efforts should continue to implement interactive MSP platforms and graphic tools for stakeholders to visualise spatial interactions and the cumulative impacts of various activities.

Addressing **persistent challenges**, such as environmental data availability, required efficient collaboration between Romanian and Bulgarian authorities. However, as new sectors emerge and attention shifts towards LSI and multi-use concepts, **identifying and addressing data gaps remains a constant need**. Developing GIS infrastructure and databases in both countries as well as conducting further research and stakeholder engagement is recommended to facilitate this process.

As emphasised by the MARSPLAN BS II (2019-2021) project, the next steps for the Black Sea region should focus on further developing cross-border MSP in the Black Sea, including mapping cross-border synergies and conflicts, identifying common issues at the national political level, and establishing planning evidence within cross-border and national contexts. Prioritising areas such as governance, environmental status, and the blue economy are essential for future progress.

Moving forward, inventorying and mapping marine protected areas, species, habitats, and human activities is essential. This includes evaluating **conflicts and compatibilities between existing and emerging uses and their environmental impacts**. Capacity building for key stakeholders is essential in coordinating sustainable development plans aligned with the Blue Growth Economy and other international and European strategies. Enhancing scientific knowledge and decision-making tools and further detailing the localisation of MSP plans would bolster the MSP process.

6.1.4. East Mediterranean

The East Mediterranean basin encompasses a diverse and geographically complex region, including the Adriatic, Ionian, Aegean, and Levantine Seas, each with its unique characteristics and challenges. From the Adriatic Sea, separating the Italian and Balkan peninsulas, to the deep soundings of the Ionian Sea, reaching depths of up to 16,000 feet, and the Aegean Sea, boasting over 700 islands and islets, this area is rich in natural resources and biodiversity. Bordered by a multitude of countries, both EU and non-EU, including Italy, Greece, Cyprus, Turkey, Syria, Lebanon, and Egypt, among others, the East Mediterranean faces various transboundary issues. These include the potential exploitation of submarine natural gas and oil resources, the imperative for environmental conservation, crucial for sustaining coastal tourism - a major economic driver in the region, and the urgent need for collaboration in ensuring maritime safety amidst the ongoing migratory crisis. These shared challenges underscore the importance of coordinated maritime spatial planning efforts across borders to promote sustainable development and address pressing environmental and socio-economic concerns⁽¹⁰⁹⁾.

Figure 17 – East Mediterranean: Adoption status of the national MSP plans

	HR	CY	GR	IT	SI
Year of adoption of the MSPs	Ongoing process	2023	Ongoing process	Ongoing process	2021

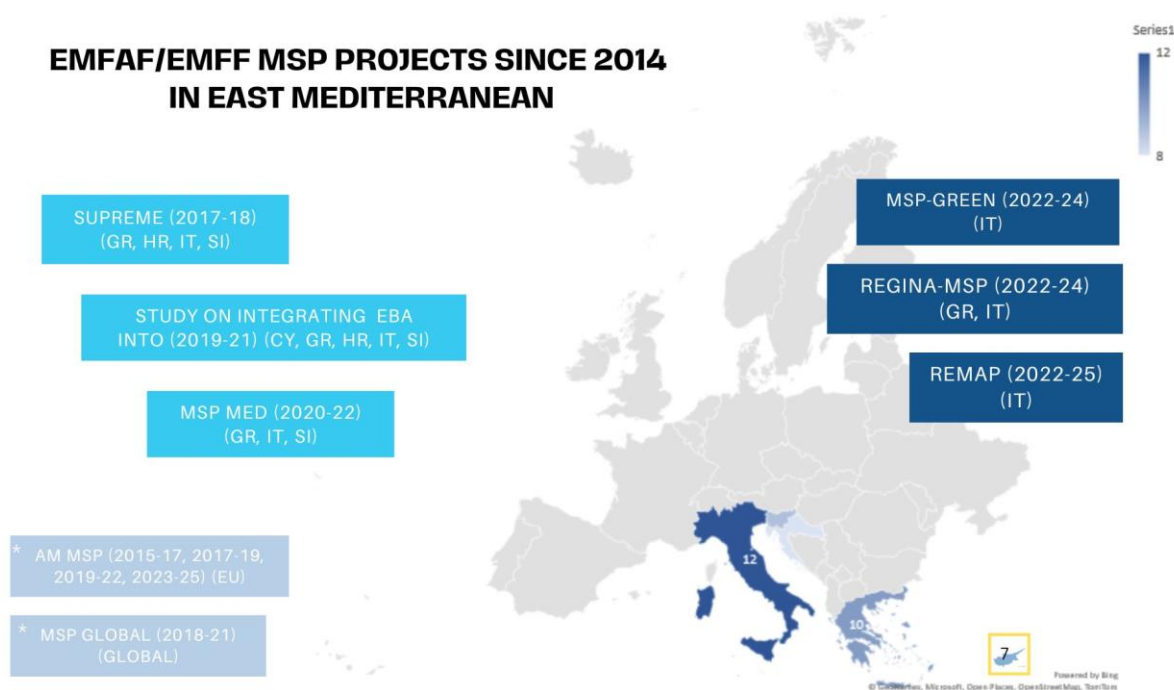
© The data presented are from our own research.

Source: EU MSP Platform.

Cooperation among Member States in the eastern Mediterranean region has been facilitated through various initiatives and projects aimed at promoting MSP and addressing common challenges. Initiatives such as the EU Strategy for the Adriatic and Ionian Region (EUSAIR) and projects like REGINA-MSP, MSP-GREEN, and MSP-MED have aimed at fostering collaboration and coordination in activities related to Blue Growth and marine environment protection. Additionally, projects like THAL-CHOR I and THAL CHOR II INTERREG Projects, ADRIPLAN, and SUPREME have contributed to cross-border cooperation for MSP development in the region. In this analysis, we have taken into consideration only the projects funded under the EMF(A)F. Lastly, the establishment of the MED-MSP-CoP further strengthens collaboration by providing a platform for experts from EU and non-EU countries to engage in continuous dialogue, exchange knowledge, and enhance cooperation in MSP across the Mediterranean basin.

⁽¹⁰⁹⁾ [East Mediterranean | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu)

Figure 18 – Map of the EMFF/EMFAF projects related to MSP, East Mediterranean



© The data presented are from our own research.

Source: EU MSP Platform.

As shown in Figure 17, the region presents a varied landscape in terms of MSP adoption among EU countries. Croatia is still in the process of adopting its MSP, with initiatives underway for the EEZ based on legislative amendments⁽¹¹⁰⁾. Cyprus approved its plan in December 2023, aligning with the requirements of the EU MSP Directive and addressing key priorities outlined in the Policy Statement on MSP⁽¹¹¹⁾. Greece, while yet to finalise its plan, addresses MSP-related issues through sectoral plans covering aquaculture, tourism, and industry⁽¹¹²⁾. Italy is in the final stages of adopting its plan, with a draft and associated SEA undergoing public consultation⁽¹¹³⁾, while Slovenia stands out as the first country in the region to adopt its national MSP plan, with ongoing efforts to develop a new Spatial Development Strategy for 2050⁽¹¹⁴⁾.

⁽¹¹⁰⁾ [Croatia | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽¹¹¹⁾ [Cyprus | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽¹¹²⁾ [Greece | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽¹¹³⁾ [Italy | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽¹¹⁴⁾ [Slovenia | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

6.1.4.1. Projects' objectives and achievements

As the analysis has taken into account all the projects focusing their activities on MSP since 2014, the EMFF project distinguished for its contribution to establishing a great foundation for strengthening the Member States coordination activities in the region was the **SUPREME (2017-2018)** (*total budget € 2,499,995.00*). The project involved CAs from Croatia, Greece, Italy and Slovenia and aimed to support the implementation of the EU MSP Directive in the Eastern Mediterranean region. Its overarching objective was to launch and carry out concrete, cross-border MSP cooperation initiatives among Member States.

Through a great number of tasks, the project achieved the production of a great analysis of the region's spatial, socioeconomic and environmental features and a great deal of recommendations for each of the involved Member States. Specifically, it enhanced awareness and understanding of the myriad factors and activities impacting the marine environment in the Eastern Mediterranean, including their cumulative environmental effects and projected future trends, especially for the Adriatic, Ionian, and Aegean-Myrtoon Seas, highlighting fish and shellfish harvesting, oil and gas extraction, aquaculture, shipping, shipbuilding, renewable energy generation, and maritime tourism⁽¹¹⁵⁾. Secondly, SUPREME identified spatial demands for maritime sectors at both basin and marine waters scales, with a focus on reducing conflicts and promoting synergies, particularly through multi-use approaches within an ecosystem-based framework.

The project also focused on addressing significant data gaps and promoting data coherence across marine boundaries, advocating for data sharing and joint utilisation through platforms like EMODnet and ADRIPLAN, with an emphasis on transboundary issues. It delved into data and information requirements for MSP, analysing existing gaps and weaknesses while considering challenges in cross-border integration and transboundary interoperability. Efforts were made to investigate and test tools designed to effectively support maritime spatial planning processes, evaluating their capability to support the ecosystem-based approach, understanding interactions between maritime activities and the marine environment, and aiding in the planning and optimal location of uses. Furthermore, the project established a group working on "data and tools" to share information, discuss technical issues, and connect with similar initiatives like the SIMWESTMED "Task group on data"⁽¹¹⁶⁾.

Moreover, the project focused on harmonising available information to prepare for the MSP process and organising knowledge on priorities, concerns, and critical issues.

⁽¹¹⁵⁾ SUPREME: Spatial demands, future trends for maritime sectors and related cumulative impacts. Deliverable C.1.3.1

⁽¹¹⁶⁾ SUPREME: Analysis of data, portals, tools and methods supporting the MSP process. Deliverable Nr. 1.3.2 and 1.3.3.

This analysis considered various aspects of the East Mediterranean, including the marine environment, maritime activities, emerging pressures, legal frameworks, and governance structures, to frame subsequent MSP implementation phases⁽¹¹⁷⁾.

Recognising the importance of monitoring and evaluation in the MSP process, the SUPREME project developed a comprehensive proposal of evaluation criteria and indicators to assess the MSP process at various phases and scales, including transnational, national, and local levels. Additionally, the project provided recommendations for a suitable monitoring & evaluation (M&E) process, enhancing existing approaches and offering specific criteria and indicators tailored to different phases and scales of MSP. The proposed MSP M&E framework of the SUPREME project remained theoretical during the project implementation and allowed for flexibility for adjustment according to the specific needs and priorities of individual plans⁽¹¹⁸⁾.

Facilitating mechanisms for transboundary cooperation in MSP implementation and engaging all relevant stakeholders in planning and subsequent management phases was also crucial. The project promoted the harmonised implementation of MSP and ICZM under the Barcelona Convention Strategies and Protocols frameworks, with consistent application of the ecosystem approach at regional and sub-regional levels. Lastly, SUPREME aimed to address specific MSP-related issues in selected case study areas, including the Northern Adriatic, Dubrovnik-Neretva County, Slovenian coast, North-Eastern Ionian, and Aegean Sea, to provide concrete solutions and insights into local and transboundary challenges.

In a rather similar framework, the following project, the **MSP-MED initiative (2020-2022)** (*total budget € 3,495,701.00*), with a geographical scope expanded to both the West and East Mediterranean, focused on advancing MSP within the Mediterranean Sea by fostering cohesive planning efforts across marine regions and Member States, aligning with the EU MSP Directive. Its core objectives included assisting CA in formulating national MSP objectives, facilitating cross-border collaboration with neighbouring nations, and ensuring access to comprehensive data essential for MSP through initiatives like INSPIRE and EMODNet as suggested by its predecessor project, SUPREME (2017-2018).

Employing a nested approach, the project targeted both national MSP implementation and harmonised basin-wide execution through transboundary strategies. The participating countries, Italy, France, Spain, Greece, Malta, and Slovenia, tailored activities to their specific requirements, enhancing national processes and promoting dialogue on MSP methodologies, tools, and solutions for cross-border planning challenges. The project further advanced facilitating

(117) SUPREME: Develop a basin-scale analysis strongly MSP oriented Deliverable C.1.1.1.1.

(118) SUPREME: Evaluation of the maritime spatial planning process Deliverable C.1.4

cooperation among Member States and third countries, addressing transboundary concerns, establishing collaboration frameworks, and fostering synergies. To achieve its objectives, the project relied heavily on strong stakeholder engagement, capacity-building initiatives, and knowledge dissemination, organising approximately 25 workshops encompassing technical, national, bilateral, and pan-Mediterranean themes⁽¹¹⁹⁾.

As for the most recently funded project, still under implementation, **REGINA-MSP (2022-2024)** (total budget € 1,957,909.00), as explained in the annexe – *Atlantic Ocean Sea basin analysis*, aims to enhance regional and local stakeholder engagement in national MSP to align with the EGD objectives. The project integrates European-level discussions with regional case studies in the Atlantic and Mediterranean regions of France, Greece, Ireland, Italy, and Spain, focusing on thorough analyses, stakeholder participation, and policy recommendations to strengthen MSP coordination and European cohesion policies.

6.1.4.2. Challenges addressed and lessons learnt

The region has encountered significant challenges related to data and information requirements for MSP, particularly in cross-border integration and transboundary interoperability. A **lack of data**, especially concerning socioeconomic aspects and coastal defence, was noted in the Aegean Sea and other parts of the Eastern Mediterranean during the implementation of the SUPREME project (2017-2018). Spatial information often existed in document-based maps rather than readily usable GIS layers, and many datasets lacked clear licensing information, hindering access and reuse. To address these challenges, the project recommended promoting joint data collection programmes and defining guidelines for standardised monitoring.

The projects SUPREME (2017-2018) and MSP-MED (2020-2022) advocated for collecting and standardising data through basin-based portals and including essential spatial layers for MSP. Additionally, the projects suggested defining a minimum common data structure, supporting the availability of spatial datasets through web services, and raising awareness of data policies and accessibility issues. Solutions also include revising INSPIRE specifications for MSP, extending EMODnet portals to cover socio-economic factors, and harmonising data policies with standard licenses⁽¹²⁰⁾. Efforts to improve interoperability and implement a versioning system for tracking data evolution were also recommended to enhance MSP implementation,

⁽¹¹⁹⁾ MSP-MED: Towards the operational implementation of MSP in our common Mediterranean Sea. A common planning framework in the Mediterranean Sea Outcomes of the MSP-MED project. Final Publication. Deliverable 55.

⁽¹²⁰⁾ SUPREME: Definition of the most appropriate geographical scale for MSP plans at national scale Deliverable. Recommendations

also by the REGINA-MSP project (2022-2024), revealing the persistence of the challenge in the region⁽¹²¹⁾.

Workshops and consultation sessions were organised to collect transnational data and foster collaboration among the Mediterranean countries⁽¹²²⁾. The MED-MSP-CoP was set up in the Mediterranean to promote alignment of MSP efforts across the basin foster connections between different MSP actors in the region, and encourage cooperation, knowledge exchange, and consistency among sub-basin initiatives⁽¹²³⁾.

In the context of the SUPREME project (2017-2018), the Adriatic and Ionian Region challenges stemming from diverse legal frameworks and cross-border complexities have been addressed, and transboundary marine spatial planning was proposed as a solution to harmonise planning objectives and balance conservation with economic interests. Four spatial prioritisation strategies were developed and tested to conserve biodiversity while minimising impacts on users. The project emphasised the importance of balancing conservation with socioeconomic objectives and the fact that future planning efforts should focus on identifying national and transboundary areas of significance, carefully considering the trade-offs between conservation and industry impacts⁽¹²⁴⁾.

The SUPREME project also revealed **transboundary challenges** in MSP due to institutional, conceptual, and geopolitical complexities. Fragmented responsibilities and diverse institutional frameworks across Mediterranean Basin countries hindered harmonisation efforts. Varying planning approaches and governance procedures exacerbated these challenges, requiring close cooperation and data exchange among stakeholders. Geopolitical conflicts over territorial waters and EEZs further complicated MSP initiatives, limiting the scope for collaborative planning. To address these challenges, the project recommends promoting harmonisation through understanding neighbouring planning systems, establishing common planning goals, and fostering cross-border cooperation. Additionally, establishing transnational committees, defining common planning areas, and managing geo-data compatibility are recommended to facilitate effective cross-border MSP coordination and governance. Engaging stakeholders and cooperating internationally on activities with

⁽¹²¹⁾ SUPREME: Analysis of data, portals, tools and methods supporting the MSP process. Deliverable Nr. 1.3.2 and 1.3.3.

⁽¹²²⁾ MSP-MED: Towards the operational implementation of MSP in our common Mediterranean Sea. A common planning framework in the Mediterranean Sea Outcomes of the MSP-MED project. Final Publication. Deliverable 55.

⁽¹²³⁾ MSP-MED: Towards the operational implementation of MSP in our common Mediterranean Sea. A common planning framework in the Mediterranean Sea Outcomes of the MSP-MED project. Final Publication. Deliverable 55.

⁽¹²⁴⁾ SUPREME: Addressing transboundary conservation challenges through marine spatial prioritization.

significant transboundary implications are vital for promoting equitable resource management and preventing environmental degradation⁽¹²⁵⁾.

The MSP-MED initiative (2020-2022) expanded upon the SUPREME project by emphasising the significance of integrating the **EBA** and transitioning to area-based management for sustainable MSP implementation. This included establishing baseline principles, merging environmental quality management with MSP, and outlining core implementation strategies. The initiative highlighted the importance of transboundary Ecosystem-Based MSP (EB-MSP), which requires coordinated management measures across borders. Nevertheless, ensuring adequate financial resources within a broader framework of integrated ocean management has been deemed essential for sustaining these efforts⁽¹²⁶⁾.

The SUPREME project emphasised the importance of **stakeholder engagement** in the MSP process, recommending strategies to integrate stakeholders effectively. Stakeholders should have established roles, objectives, and monitoring mechanisms, with public awareness and consultation to be considered throughout the MSP implementation. Key steps include identifying and mapping stakeholders, initiating communication through databases and calendars, and conducting workshops to establish common understanding and define actions. Engagement should be tailored to stakeholders' specificities and objectives, with continuous monitoring and feedback loops to ensure inclusivity and effectiveness in MSP implementation⁽¹²⁷⁾.

The importance of integrating **M&E** into the overall management process of MSP, the need for clear objectives, SMART indicators, and stakeholder involvement from the planning stage was also emphasised. M&E should be ongoing and adaptable, revisited throughout the MSP process to steer and adapt management. Effective M&E also requires realistic resource allocation and a focus on outcomes rather than just inputs and outputs. Indicators and targets should be identified and understood by stakeholders to ensure their endorsement of the M&E process and its results, ultimately contributing to better planning outcomes and decision-making⁽¹²⁸⁾.

The SUPREME project elaborated on proposing a methodological guideline for **LSI analysis with the MSP** process while accounting for the fact that there are many heterogenous planning contexts by dividing the entire process of LSI into three phases, starting from the context definition to evaluation and then incorporation of

⁽¹²⁵⁾ SUPREME: Develop and propose a conceptual methodology for transboundary MSP aspects Deliverable C.1.1.3

⁽¹²⁶⁾ MSP-MED: D9 Underwater noise studies in the Gulf of Lions region. Anthropogenic contributions to underwater noise due to maritime traffic and offshore windfarm operation

⁽¹²⁷⁾ SUPREME: Report on potential approaches for stakeholder engagement on MSP and the evaluation of the outcome of stakeholder involvement in the pilot areas. Deliverable C 1.3.4.

⁽¹²⁸⁾ SUPREME: Evaluation of the maritime spatial planning process Deliverable C.1.4

analysis outcomes into the coastal and marine plans. A key outcome of the analysis is that there is no “one-size-fits-all” approach as the specific physical, geographical, legal, administrative, and cultural characteristics of a given context have to be taken into consideration. The project also provided an analysis of how the proposed methodology for LSI analysis can be embedded into the MSP process⁽¹²⁹⁾.

6.1.4.3. Conclusions – next steps

In the East Mediterranean region, the MSP process exhibits considerable variation, encompassing diverse aspects such as the authority responsible for MSP, methodologies for marine space division, legislations, and the status of national MSP plans contributing to the complexity of the MSP landscape⁽¹³⁰⁾. The projects funded by EMF(A)F have recognised the imperative of bridging differences and fostering stronger and more efficient collaboration among countries in the Mediterranean region.

Moving forward, it is evident that further development of evaluation approaches tailored to the Eastern Mediterranean region is essential, necessitating collaboration with marine authorities. However, assessing the impacts of MSP plans remains challenging due to attribution and causality issues similar to those encountered in other sea basins. Adopting a transboundary approach to sea planning is imperative to mitigate user conflicts, ensure the sustainability of marine economic activities, prevent overexploitation of marine resources, and preserve marine ecosystems effectively. This approach also aids in addressing pollution from both sea and land-based activities, along with potential technological disasters arising from them⁽¹³¹⁾.

Long-term focus is crucial for the MSP process, facilitating sectoral coordination, stakeholder involvement, capacity building, ocean literacy, and awareness-raising on emerging issues. Integrating adaptive management principles into MSP processes is essential, emphasising the importance of stakeholder involvement in monitoring and planning adaptation.

However, numerous **challenges persist, particularly in data management and harmonisation**. Ensuring the availability of metadata is crucial, and while transboundary data sharing has commenced, it remains complex and not always straightforward. Although several portals exist within EU Mediterranean Member

⁽¹²⁹⁾ SUPREME: Land Sea Interactions in the framework of ICZM and MSP

⁽¹³⁰⁾ MSP-MED : D50 - TASK 4.1 MSP Plans in MSPMED: main facts

⁽¹³¹⁾ MSP-MED: Develop and propose a conceptual methodology for transboundary MSP aspects
Deliverable C.1.1.3

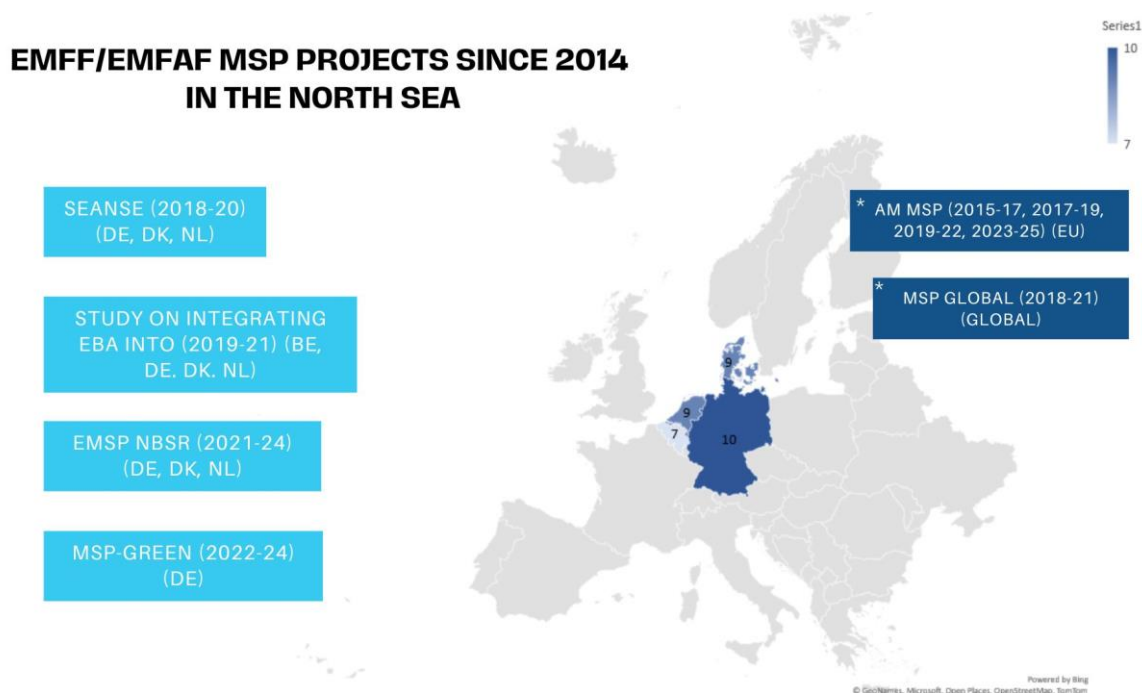
countries, they primarily serve multiple purposes rather than being dedicated solely to MSP, highlighting the need for common visual outputs. Overcoming language barriers is also a persistent challenge.

Alignment between maritime and terrestrial planning is vital for integrated management, necessitating consistency in policies, plans, and decisions. LSI analysis in MSP requires gathering quality data, determining appropriate scales, engaging diverse stakeholders, and underscoring the importance of context-based, multi-scalar approaches. Coastal areas, characterised by their rich LSI, present both opportunities and challenges, with conflicts arising between socio-economic activities and marine ecosystems. Holistic management approaches supported by existing commitments and regulations are crucial for safeguarding natural and cultural heritage, as REGINA-MSP (2022-2024) has stressed. Tailored regulations addressing various activities, such as aquaculture and maritime transport, should strive to strike a balance between development and conservation efforts, and legislative amendments should facilitate coherence and transparent decision-making for the management of the MPAs.

6.1.5. North Sea

The North Sea region stands out as an active maritime hub in Europe, with multiple shipping, fishing, and energy production activities. Comprising Member States like Belgium, Denmark, Germany, and the Netherlands, alongside Norway and the UK, it hosts three of the world's largest ports - Rotterdam, Antwerp, and Hamburg. Key sectors driving the region's economy include offshore wind and oil & gas, aquaculture, shipping, shipbuilding, cruise tourism, and coastal protection. Given the intensive maritime traffic, shipping and port activities dominate the region's economic landscape, necessitating significant offshore infrastructure like pipelines and cables. The North Sea's temperate climate, shaped by Atlantic currents and westerly air circulation, fosters rich and diverse biological systems, with vital spawning grounds and habitats for seabirds and marine mammals, highlighting its importance for conservation and ecological sustainability.

Figure 19 – Map of the EMFF/EMFAF projects related to MSP, North Sea



© The data presented are from our own research.

Source: EU MSP Platform.

National initiatives in the North Sea region focus on MSP, spanning jurisdictional boundaries, implementation, and evaluation. Collaborative efforts among North Sea countries, facilitated by the MSP Collaboration Group, aim to align with OSPAR 2030 strategy and operational programs. Additionally, trilateral cooperation, exemplified by the Wadden Sea Forum, fosters integrated coastal zone management and MSP coordination⁽¹³²⁾.

Figure 20 – North Sea: Adoption status of the national MSP plans

	BE	DE	NL	DK
Year of adoption of the MSPs	2014	2009	2009	2021

© The data presented are from our own research.

Source: EU MSP Platform.

Belgium implemented its first legally binding maritime spatial plan, the Maritime Spatial Plan for the Belgium Part of the North Sea, in 2014⁽¹³³⁾. Germany established its inaugural plan in 2009, covering both the North Sea and Baltic Sea, with a

⁽¹³²⁾ [North Sea | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu/north-sea)

⁽¹³³⁾ [Belgium | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu/belgium)

subsequent update in 2021 encompassing territorial sea areas⁽¹³⁴⁾. The Netherlands initially adopted its North Sea Policy Document in 2009, with subsequent updates culminating in the comprehensive North Sea Programme 2022-2027, focusing on ecosystem enhancement and sustainable energy provision. Denmark, relatively new to the MSP landscape, launched its inaugural plan in 2021, embracing digitalisation and addressing offshore energy and biodiversity targets.

6.1.5.1. Projects' objectives and achievements

The North Sea basin has seen significant progress with all its Member States adopting their MSP plans. This advancement has been further enhanced by the implementation of the EMF(A)F funding initiatives such as the **SEANSE project (2018-2020)** (total budget € 1,364,135.00), **eMSP NBSR project (2021-2024)** (total budget € 3,123,394.41), and **MSP-Green (2022-2024)** (total budget € 1,933,490.03). These endeavours have primarily concentrated on enhancing cross-border planning, fostering stakeholder engagement, and promoting EBA, thus contributing to the sustainable management of the region's maritime space.

Amidst the rapid developments in the North Sea, particularly in offshore wind park construction, the imperative for comprehensive cross-border planning has become increasingly apparent. Central to this undertaking is the SEA, serving as a pivotal decision-making instrument throughout the establishment of MSP plans, facilitating stakeholder engagement and the execution of cross-border initiatives in targeted areas.

At its core, the SEANSE project (2018-2020) created a coherent framework for SEAs, specifically tailored to the context of renewable energy validated through practical case studies, to strengthen the formulation and effective implementation of MSP plans. Also, it fostered knowledge dissemination and collaborative exchange among North Sea nations, nurturing a shared understanding of the strategic application of SEA in MSP decision-making processes. The project facilitated the smooth execution of the "Political Declaration on Energy Cooperation among the North Seas Nations", which was established as a follow-up to the Paris Climate Agreement and embodied a collective effort aimed at navigating the complexities and seizing the opportunities inherent in renewable energy development across the North Sea region.

During the project's implementation, several significant activities were undertaken to enhance understanding and address key challenges in MSP and renewable energy development in the North Sea. Three baseline studies were conducted: a comparison of planning criteria for offshore wind farms, an analysis of North Sea SEAs and Environmental Impact Assessments (EIAs), and the development of the Common Environmental Assessment Framework (CEAF). The study examined MSP practices

⁽¹³⁴⁾ [Germany | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

related to offshore wind farm siting across North Sea countries, revealing conflicts with shipping routes, fisheries, and conservation areas. The analysis of SEAs and EIAs focused on assessing ecological impacts and cumulative effects of offshore wind farm development, highlighting differences in methodologies and the need for improved coordination. The CEAF initiative aimed to provide a unified approach for evaluating the cumulative effects of wind farm development on sensitive species and habitats, promoting transparency and consistency in decision-making processes.

As part of the SEANSE project (2018-2020), case studies were conducted to assess the cumulative effects of offshore wind energy development on selected species in the North Sea region. These studies utilised various modelling approaches to evaluate the impact of different wind farm development scenarios on five target species. The assessment methodologies were refined through discussions within the environmental subgroup of the MSP support group of the North Sea Energy Cooperation and further evaluated in an expert workshop. These case studies provided valuable insights into the potential ecological consequences of offshore wind energy projects, contributing to informed decision-making and sustainable development practices in the region. Moreover, a workshop focusing on addressing MSP challenges in the North Sea fostered discussions on MSP implementation, land-sea interactions, data sharing, and refining assessment methodologies for better MSP decision-making. Lastly, SEANSE assessed MSP data availability in Denmark, France, Germany, the Netherlands, and Scotland, focusing on interoperability, metadata, and web services stability for MSP implementation and setting up an SDI to share transboundary MSP knowledge and solve data-related challenges identified.

MSP-Green (2022-2024), with its pan-European focus, has assisted EU Member States in aligning their plans with the goals of the EGD, as elaborated further in the *Baltic Sea Sea basin analysis* in the annexe. On the other hand, eMSP NBSR (2021-2024) focused on supporting the implementation of national MSP plans and delved into key areas like ocean governance, blue economy, data sharing, ecosystem-based management, and monitoring and evaluation. It offered practical solutions to challenges encountered in both the North and Baltic Seas. All these efforts signified a comprehensive endeavour to harmonise MSP practices and facilitate sustainable development in the North Sea region.

6.1.5.2. Challenges addressed and lessons learnt

MSP, as in all the other sea basins and the North Sea, presents a complex landscape of challenges necessitating innovative solutions for effective implementation and cooperation. Among the biggest challenges encountered in the region was related to data sharing, as revealed during the SEANSE project (2018-2020). The project successfully proved that MSP is a national process with cross-border implications, and collaborative efforts among states are imperative. However, the vast amounts of data processed by the countries posed **challenges for**

harmonisation. Despite resource constraints limiting the feasibility of universal harmonisation, recommendations emerged to streamline **MSP data sharing**. These included advocating for the management of diverse data formats through Geoportals, prioritising the provision of harmonised data, and fostering collaboration between GIS specialists and marine spatial planners through transboundary working groups. Similarly, the eMSP NBSR project focused on interoperability and the necessity for the re-usability, preservation and integration of data by establishing data sharing and harmonisation through official consultation mechanisms for the North and Baltic Sea countries and urging the usage of the TEG recommendations (2021) and international data standards such as ISO, INSPIRE, directives, International Hydrographic Organisation's Standards (S-57)⁽¹³⁵⁾.

Furthermore, the development of assessment tools for MSP plans faced difficulties in obtaining up-to-date, accurate, and openly licensed data. The variability in data accessibility and standards across countries underscored the need for functional coherence and standardised methodologies. Enhanced cooperation and exchange between CAs were introduced, particularly concerning cross-border issues, to overcome these challenges and foster a broader, more coherent assessment framework. Stakeholders involved in the SEANSE project addressed that besides enhancing data accuracy, refining assessment methodologies and adopting adaptive management approaches are also important for MSP decision-making. Key recommendations included improving monitoring and research cooperation, developing guidance for authorities, and institutionalising dialogue among stakeholders to effectively assess and manage the cumulative environmental effects of offshore wind energy developments.

Spatial data portrayal harmonisation emerged as another critical area for improvement. For both terrestrial and maritime boundaries, harmonising portrayal styles and providing clear conditions of use in metadata proved to enhance consistency and facilitate cross-border collaboration. Transboundary cooperation challenges were further compounded by symbology issues, language barriers, and technical limitations in visualising data. Among the most efficient recommendations suggested by the SEANSE project team was the standardisation of symbology and multilingual metadata records to bridge gaps and facilitate cross-border discussions effectively. Taking these efforts a step further, the eMSP NBSR demonstrated investment in geospatial visualisation technologies and resources to improve the policy-science dialogue within the context of MSP, embracing innovations such as artificial intelligence and digital twin technology and involving creative artists and

⁽¹³⁵⁾ eMSP NBSR: Strengthening Data sharing for informed decision-making in Maritime Spatial Planning 2024

designers, which will play a key role in the creation of adaptable, mathematically sophisticated maps⁽¹³⁶⁾.

Lastly, stakeholder involvement in MSP processes, as a mix of formal and informal approaches for cross-border cooperation, has been employed by both the SEANSE and eMSP projects, leading to inclusive and collaborative planning processes. Formal frameworks of stakeholder involvement via multi-sectoral and level involvement, coherent engagement and CoPs were developed by the eMPS NBSR project to validate further and strengthen the planning and implementation of the MSP process. Capacity building focusing on promoting OL and training for the younger generations of MSP experts and planners were also employed to ensure an appropriate pool of experts and future planners to respond to the increasing concerns concerning needs and changing ecological conditions and sea uses and to tackle the crises of climate change and biodiversity loss in the region and use resources responsibly.

6.1.5.3. Conclusions – next steps

To effectively address the evolving demands of diverse marine activities in the North Sea within the framework of the EU's energy and climate targets, it is deemed crucial to recognise the region's spatial limitations and increasing pressures. Member states in the area have demonstrated a keen understanding of these dynamics, fostering **proactive collaboration** to implement viable solutions. Integral to this effort is the acknowledgement and consideration of the spatial implications and ecological consequences associated with large-scale wind development. Projects like eMSP NBSR have underscored the importance of enhancing the implementation of EBA principles, offering recommendations such as incorporating socio-economic aspects into MSP planning, embracing adaptive management and integrative governance, and integrating assessments of both nature and human activities' impacts. Moving forward, there is a pressing need to strengthen linkages with spatial nature protection processes to leverage synergies effectively, integrate MSP into the MSFD to enhance policy coherence and enhance the practical application of the precautionary principle. Furthermore, developing a joint SEA framework for impact assessments and conducting transnational impact assessments will provide invaluable insights into cumulative effects across borders. Sharing methodologies to address climate change in MSP and utilising platforms like CoPs for stakeholder engagement are significant steps towards fostering collaboration and informed decision-making⁽¹³⁷⁾.

⁽¹³⁶⁾ eMSP NBSR: Strengthening Data sharing for informed decision-making in Maritime Spatial Planning 2024.

⁽¹³⁷⁾ eMSP NBSR: Strengthening Data sharing for informed decision-making in Maritime Spatial Planning 2024.

Establishing Maritime Spatial Data Infrastructures has emerged as a cornerstone for facilitating **data sharing** among North Sea countries. While initiatives like INSPIRE aim to promote data exchange across Europe, defining priorities for data sharing and harmonisation remains paramount. North Sea countries are encouraged to address these priorities through a dedicated working group supported by relevant EC initiatives and prioritise collaborative efforts to **address existing data gaps**.

As the assessment of **cumulative impacts from offshore wind energy** development gains traction, achieving coherence among different assessment methods becomes imperative. Collaborative efforts in further developing assessment tools will not only enhance decision-making in MSP but also contribute to environmental preservation. Continuous evaluation and alignment of research and tool development with evolving conditions are recommended to ensure their effectiveness.

Stakeholder engagement, spanning governmental entities and other relevant stakeholders, is fundamental to successful maritime spatial planning. Enhanced cooperation and exchange between CAs, particularly on cross-border issues, are highly advisable. Institutionalised mechanisms like the environmental subgroup of the North Sea Energy Cooperation can facilitate dialogue at the international level, fostering greater collaboration. Strengthening cooperation between authorities responsible for energy, maritime spatial planning, and the environment is vital for maximising the energy potential of the North Seas sustainably.

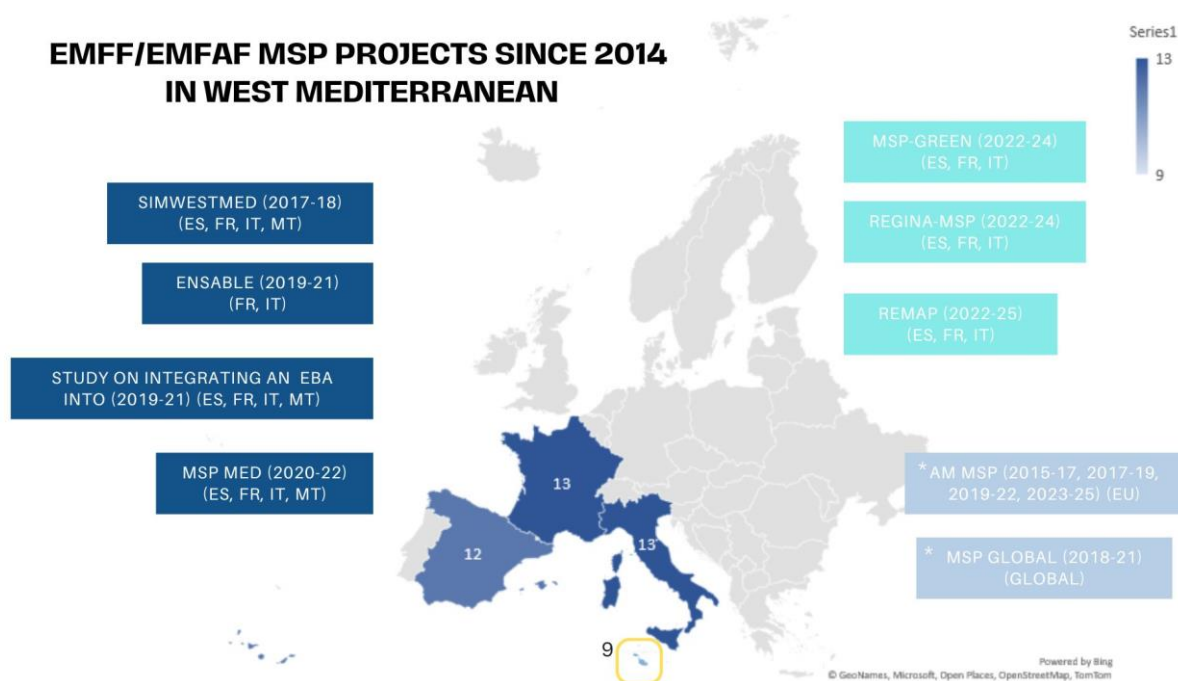
6.1.6. West Mediterranean

The Western Mediterranean Sea spans Spain, France, Malta, and the Italian coastlines along the Tyrrhenian Sea and Strait of Sicily, serving as a crucial maritime corridor. However, a specific political framework for cross-border maritime spatial planning is lacking. The region boasts a vibrant tourism industry and substantial fisheries and aquaculture sectors. Significant goods transport occurs, comprising almost 40% of Mediterranean traffic. Human activities in the Western Mediterranean lead to high environmental pressures, including pollution and habitat loss. Overexploitation of fishing resources and biodiversity decline are key concerns. Cross-country collaboration has been needed to address these challenges and promote sustainable development.

Efforts for MSP cooperation in the Western Mediterranean region have been bolstered by initiatives led by organisations like UNEP/MAP and the IMP-MED working group. Projects such as SIMWESTMED, WESTMED Assistance Mechanism, MSP-MED and AMPAMED have furthered cross-border cooperation in the region. Additionally, the establishment of the MED MSP CoP has provided a platform for dialogue and collaboration among experts from EU and non-EU countries. This voluntary group has aimed since its inception in 2023, to facilitate continuous communication and knowledge exchange on MSP-related topics, fostering

cooperation across borders and enhancing the overall coordination in the Mediterranean⁽¹³⁸⁾.

Figure 21 – Map of the EMFF/EMFAF projects related to MSP, West Mediterranean



© The data presented are from our own research.

Source: EU MSP Platform.

In contrast to most East Mediterranean countries that are yet to finalise their national MSP plans, the West Mediterranean countries, with the exception of Italy, have made considerable progress. France, for instance, has adopted four maritime spatial plans known as the Documents Stratégiques de Façade (DSF) between April and May 2022, each tailored to a specific marine subdivision. Similarly, Spain adopted its MSP plan, the Planes de Ordenación del Espacio Marítimo (POEM), in February 2023, comprising five plans corresponding to its marine subdivisions. Malta, having adopted its plan in 2015, is currently in the process of revising it to align with the EU MSP Directive and incorporate an ecosystem-based approach.

Figure 22 – West Mediterranean: Adoption status of the national MSP plans

	FR	IT	MT	ES
Year of adoption of the MSPs	2022	Ongoing process	2015	2021

⁽¹³⁸⁾ [West Mediterranean | The European Maritime Spatial Planning Platform \(europa.eu\)](https://europa.eu)

© The data presented are from our own research.

Source: EU MSP Platform.

6.1.6.1. Projects' objectives and achievements

The **SIMWESTMED project (2017-2018)** (*total budget € 2,802,300.00*) made a significant effort to enhance cross-border cooperation in the Western Mediterranean region. The project focused on the countries of the sea basin and aimed to address key objectives such as the establishment of comprehensive baselines to understand better the cross-border challenges and opportunities inherent in the region's MSP landscape. Additionally, the project facilitated the exchange of data crucial for effective MSP implementation, sharing best practices across various MSP domains, such as engaging stakeholders, conducting foresight exercises, and evaluating interactions between different maritime activities.

Furthermore, SIMWESTMED (2017-2018) provided support and assistance to Member States as they navigated the complexities of implementing the EU MSP Directive at the national level. By fostering collaboration, information sharing, and capacity building, the project enhanced the coherence and effectiveness of MSP initiatives in the Western Mediterranean. Through its multifaceted approach, it promoted sustainable and inclusive maritime governance practices, ultimately contributing to the overarching goals of the MSP Directive and advancing the collective vision for integrated ocean management in the region⁽¹³⁹⁾.

SIMWESTMED provided a comprehensive overview of the established MPAs, underscored the complexities in aligning national categorisations of MPAs and emphasised the need for coherence in managing overlapping designations⁽¹⁴⁰⁾.

In response to the global need for support in MSP adoption, UNESCO's Intergovernmental Oceanographic Commission (IOC-UNESCO) and the European Commission's DG MARE collaborated on the **MSPglobal Initiative (2018-2021)** (*total budget € 1,750,000.00*). The project aimed to enhance cross-border cooperation and promote MSP processes worldwide, particularly in the EU and non-EU Mediterranean countries. The initiative focused on key priorities such as transboundary MSP and Sustainable Blue Economy. Through activities like developing an international guide on MSP and implementing pilot projects in the West Mediterranean, MSPglobal sought to triple the marine area benefiting from effectively implemented MSP by 2030. This effort aimed to support broader international commitments, including the United Nations Decade of Ocean Science

⁽¹³⁹⁾ [Supporting Maritime Spatial Planning in the Western Mediterranean region | The European Maritime Spatial Planning Platform \(europa.eu\)](#)

⁽¹⁴⁰⁾ SIMWESTMED - Component 1.3.2 – Spatial demands and future trends for maritime sectors and marine conservation

for Sustainable Development⁽¹⁴¹⁾. The project also addressed the conflicts between the environment and human uses, such as maritime traffic and priority areas for the conservation of cetaceans, offshore oil and gas exploitation, MPAs, and aquaculture, and identified multi-use opportunities in the West Mediterranean. The analysis highlighted the fact that as maritime sectors surge, competition over marine space intensifies, and for that reason, it focused on supporting transboundary MSP and elaborated on projecting future scenarios¹⁴². The project developed a methodology that could be used at regional workshops with stakeholders in exploring the compatibility of different sea uses while aligning with the objectives of the sustainable blue economy⁽¹⁴³⁾.

In a similar context of trying to provide platforms and support cross-border collaboration between EU and non-EU countries in the region and facilitate the coordination and activities of different sectors, **ENSABLE (2019-2021)** (*total budget € 447,913.00*) established a network connecting fishermen communities in Tunisia, France, and Italy, fostering a participatory approach to develop Community-Led Local Development (CLLD) strategies. By leveraging the expertise of established CLLD initiatives in Italy and France, the project sought to empower local communities in North Africa for sustainable coastal development. Through a participatory process involving both private and public stakeholders, the project established a collaborative framework to devise local development strategies aligned with the needs of coastal communities. Targeted training activities were designed to engage fishermen, youth, and women, facilitating knowledge and skill transfer through twinning activities between North and West Mediterranean coastal regions, with a focus on diversifying economic activities linked to fishing to promote sustainable development. The project also promoted sustainable tourism by leveraging local territorial, environmental, and cultural resources, including sea-related traditions, through community involvement.

The subsequent projects, including MSP-MED (2020-2022), MSP-GREEN (2022-2024), REGINA (2022-2024), and REMAP (2022-2025), primarily focus on supporting EU Member States in the region to operationalise their national MSP plans. They aim to strengthen regional and European agendas, foster collaborations for transboundary MSP, enhance infrastructure and capacity for data management and sharing and align objectives and strategies with evolving policies and priorities. Specifically, the MSP-MED initiative (2020-2022) focused on integrating the EBA and transitioning to area-based management to ensure sustainable MSP. It emphasised principles, merged environmental quality management with MSP, and outlined key implementation strategies. Transboundary EB-MSP was highlighted as crucial,

⁽¹⁴¹⁾ [MSPglobal | The European Maritime Spatial Planning Platform \(europa.eu\)](https://mbspglobal.europa.eu/)

⁽¹⁴²⁾ MSPglobal: Technical Report Current Conditions and Compatibility of Maritime Uses in the Western Mediterranean

⁽¹⁴³⁾ Technical report Future Conditions and Scenarios for Marine Spatial Planning and Sustainable Blue Economy Opportunities in the Western Mediterranean

necessitating coordinated measures across borders, as demonstrated by examples from Spain and Italy. Centralised oversight by national ministries was underscored as essential. European research projects played a vital role in fostering cooperation and building an international community of experts for EB-MSP implementation, which is essential for promoting equitable resource management and preventing environmental degradation.

More detailed information about MSP-MED (2020-2022), MSP-GREEN (2022-2024), and REGINA (2022-2024) can be found in the study the annexe - *East Mediterranean Sea basin analysis*, while details about REMAP (2022-2025) are available in the annexe – *Baltic Sea basin analysis*.

6.1.6.2. Challenges addressed and lessons learnt

SIMWESTMED (2017-2018) analysed key factors influencing MSP implementation in the Western Mediterranean and proposed solutions to enhance facilitators and address barriers within the framework outlined by the Barcelona Convention⁽¹⁴⁴⁾ and the EU MSP Directive. The project, alongside other activities, addressed the primary obstacles of transboundary MSP. These obstacles included **institutional and conceptual fragmentation** arising from significant disparities in planning cultures and institutional frameworks within the region, or as the MSP-MED highlighted, differences in updating MSP plans, ranging from 6 to 10 years, with France and Spain aligned to MSFD. Such disparities often lead to divergent economic and environmental objectives, complicating the harmonisation of national plans in shared marine regions. Additionally, the diversity in governance structures among countries results in varying degrees of MPA protection, harming conservation endeavours. The study also recognised challenges in evaluating MPA effectiveness due to methodological concerns and a dearth of definitive indicators. To face these challenges, the project has suggested that countries engage in adapting to neighbouring planning systems, establishing common objectives, aligning conservation with economic objectives and enhancing collaboration in data sharing and exchange.

Moreover, geopolitical conflicts further exacerbate **transboundary MSP** implementation, particularly in shared regional seas where disputes over territorial waters or EEZ borders impede cooperation and neglect ecosystem conservation.

The SIMWESTMED project (2017-2018) also advocated for the transition from sectoral to EB-MSP, promoting planning within marine regions to ensure holistic

⁽¹⁴⁴⁾ The Barcelona Convention focuses on sustainable management of marine and coastal resources, integrating environmental considerations into socio-economic development, and safeguarding marine and coastal areas from pollution. It also aims to protect natural and cultural heritage, promote solidarity among Mediterranean coastal states, and improve the quality of life in the region.

management of marine and terrestrial uses. This approach emphasises area-based planning, ecological boundary considerations, and achieving GES within management units. Regional Seas Conventions were also proposed as vital platforms for facilitating transboundary cooperation in MSP.

The SIMWESTMED project (2017-2018) tackled various data-related challenges in the Western Mediterranean, including issues with coherence, homogeneity, and accessibility. It addressed disparities in data specification and terminology interpretations among partners, striving to harmonise information for a unified understanding of the region's environmental and socio-economic aspects. By bridging cross-border challenges and filling data gaps, the project marked initial progress in fostering cooperation among France, Spain, Italy, and Malta for shared maritime planning and management strategies. Specifically, the project analysed inconsistencies in metadata compliance, language barriers affecting data access, web service instability, and lack of harmonisation in transboundary datasets. Proposed solutions aimed at producing complete metadata, developing harvestable catalogues, offering multilingual metadata, ensuring web service stability, and prioritising vector formats like Web Feature Services (WFS). Additionally, efforts focused on improving dataset homogeneity, organising official data, creating standardised license documents, and ensuring technical interoperability. These measures sought to enhance data accessibility, interoperability, and usability, ultimately facilitating effective MSP in the region, while the MSPglobal stressed that the data scarcity and limited exchanges among the southern countries set an obstacle to sustainable development. Capitalising on the work done from these projects and other European and national initiatives, MSP-MED led to improvements to the Italian National Geoportal for MSP to enhance data sharing and Open-source software tools were developed to analyse spatial plans efficiently. The project also supported the revision of Maltese national datasets and the development of a data inventory to inform the preparation of the second MSP plan.

In addition to the challenges addressed during the implementation of the MED-MSP and REGINA-MSP, mentioned in the *East Mediterranean Sea basin* in the annexe. Similar to the case of the East Mediterranean region, collaboration between MSP and ICZM has been highlighted as crucial for sustainable coastal and marine management. Lastly, SIMWESTMED emphasised the importance of tools for the Environmental assessment of MSP, such as SEA, to evaluate environmental impacts and ensure sustainability. The project suggested that SEA should start early, involve public consultation, and integrate with EIAs for project licensing, especially for Member States with Natura 2000 sites.

6.1.6.3. Conclusions – next steps

Reflecting on the Mediterranean context, the MSP-MED project has highlighted the limitations of solely relying on the EBA to encompass all aspects addressed by MSP

processes. The project underscored the need for a **comprehensive approach that integrates both scientific and cultural dimensions**, given the historical and cultural significance of the region. To **foster collaboration** among Mediterranean countries, providing a platform for sharing experiences and expertise is essential. Collaboration with key stakeholders such as the EC, the WestMED initiative, and the Union for the Mediterranean (UfM) is crucial in defining an agenda for future steps in Mediterranean maritime management and development.

Moreover, the advancements in national plans mark a new phase in exploring the broader potential of MSP, with MSP-MED laying the groundwork for future projects and partnerships to advance maritime management and development in the region.

A critical aspect of successful MSP implementation is **public participation and awareness**. The West Mediterranean countries must prioritise and allocate resources to enhance stakeholder engagement, particularly considering the outcomes of the MSP user survey conducted in Malta during the MSP-MED project. The survey revealed a **general lack of awareness and willingness among the public to engage** in policy-making, emphasising the community's high value placed on the recreational aspect of the sea. Last but not least, recognising the socio-economic potential of the sea for Blue Growth, leveraging OL in stakeholder engagement for MSP is imperative, especially in archipelagos where maritime history is rich, but awareness is lacking.

Finally, considering the significant **variation in socio-economic, cultural, and governance** aspects, achieving coherent planning and cross-border cooperation requires careful consideration. The West Mediterranean countries exhibit diverse frequencies in updating their MSP plans and varying strategies for stakeholder engagement, underscoring the need for tailored approaches to address regional dynamics effectively.

6.1.7. Outermost regions

The outermost regions, including the Azores, Canary Islands, Madeira, and French Guiana, are characterised by diverse maritime environments and strategic positions in the Atlantic Ocean. The Azores archipelago, with its nine volcanic islands, boasts a rich maritime ecosystem supporting traditional sectors like fisheries and shipping, as well as emerging industries such as scientific research and coastal tourism⁽¹⁴⁵⁾. Similarly, the Canary Islands feature rugged coastlines and diverse marine life, with key maritime sectors like fisheries and tourism thriving in the region's subtropical waters influenced by the Canary Current⁽¹⁴⁶⁾.

⁽¹⁴⁵⁾ [MSP-OR - A Sustainable Ocean Uniting us. Come and meet us! » Azores](#)

⁽¹⁴⁶⁾ [MSP-OR - A Sustainable Ocean Uniting us. Come and meet us! » Canary Islands](#)

In Madeira, a strong historical connection to maritime activities is evident, with a growing tourism sector and emerging industries like aquaculture tapping into the region's vast EEZ. The blue economy contributes significantly to the regional Gross Value Added (GVA), with tourism leading the way and promising sectors like biotechnology and blue renewable energy showing potential for future growth⁽¹⁴⁷⁾. French Guiana's coastal region, characterised by dynamic mud banks and diverse wetlands, supports a rich marine ecosystem, although maritime activities in the region remain relatively modest compared to other sectors like port infrastructure management and fishing, which play vital roles in the regional economy⁽¹⁴⁸⁾.

6.1.7.1. Projects' objectives and achievements

The **MarSP project (2018-2019)** (*total budget € 2,155,303.00*) aimed to develop MSP schemes in the Outermost Regions of Macaronesia (Azores, Madeira, and Canary Islands), aligning with the EU MSP Directive and adopting an EBA. It addressed specific challenges unique to these regions, such as remoteness and oceanic features, by developing tailored approaches and reducing implementation asymmetries. By reinforcing MSP in the Azores, Madeira, and Canary Islands, the project assisted Portugal and Spain in promoting MSP development, fostering cross-border cooperation, and providing management tools suited to the region's environmental and socio-economic contexts. This initiative strengthened the position of Macaronesia globally, acknowledging its significant maritime area and economic potential while addressing the growing demand from Blue Growth sectors and environmentally sensitive activities.

Specifically, the **MarSP project (2018-2019)** achieved significant milestones in enhancing awareness, public participation, and stakeholder engagement across the Macaronesian maritime space. Over 1500 stakeholders were identified, with more than 435 participants involved in workshops and targeted interviews, fostering collaboration between local and regional perspectives. In addition, the project identified potential uses in the maritime space, utilising biophysical data and a constraint matrix to inform decision-making. Furthermore, it developed MSP INSPIRE data models and conducted capacity-building workshops on data management.

Building on previous initiatives like MarSP (2018-2019), which focused on the Macaronesian regions, the **MSP-OR (Advancing Maritime Spatial Planning in Outermost Regions) project (2021-2024)** (*total budget € 1,906,307.52*) extended support to French Guiana and further advanced MSP processes in Azores, Madeira, and the Canary Islands. Through an innovative Ocean Governance Platform, the project has facilitated knowledge exchange, stakeholder involvement, and capacity

⁽¹⁴⁷⁾ [MSP-OR - A Sustainable Ocean Uniting us. Come and meet us! » Madeira](#)

⁽¹⁴⁸⁾ [MSP-OR - A Sustainable Ocean Uniting us. Come and meet us! » French Guiana](#)

building tailored to the specific needs of each region. Key activities include addressing knowledge gaps, fostering stakeholder engagement, adopting a sectoral and ecosystem-based planning approach, and establishing monitoring mechanisms for MSP efficacy and impacts. By consolidating integrated ocean governance and promoting MSP principles, MSP-OR drove MSP implementation across these European outermost regions, fostering sustainable marine management.

6.1.7.2. Challenges addressed and lessons learnt

Public participation and stakeholder engagement are essential for successful MSP, as emphasised in the MarSP project (2018-2019), and that is why the project used these tools to ensure inclusive and transparent decision-making. As demonstrated, effective engagement involves multiple levels, from information supply to active involvement, with clear communication and feedback mechanisms to prevent barriers. Also, guided by principles of representativeness, equity, transparency, legitimacy, and accountability, MSP initiatives can build trust and credibility, leading to more sustainable outcomes⁽¹⁴⁹⁾.

Identifying key socio-economic themes such as fishing, aquaculture, yachting, commercial ports, maritime networks, mineral resources, and marine renewable energies, MSP-OR addressed these aspects comprehensively. To achieve this it is imperative to collect, format, and spatialise data, creating geographical information layers within a dedicated geographic information system. These endeavours provide stakeholders with a holistic understanding of the socio-economic dynamics of the sea basin, fostering public awareness and discourse on maritime matters. Moreover, they play a pivotal role in guiding decision-making processes concerning the introduction of new activities or the establishment of marine protected areas.

Furthermore, the spatialisation of strategic objectives contributes to the development of a vocational map, which outlines the intended future trajectory of MSP implementation in the region. This process involves creating summary maps that depict both the current situation and the envisioned future, thereby guiding sustainable development and management for years to come⁽¹⁵⁰⁾.

⁽¹⁴⁹⁾ MarSP - Macaronesian Maritime Spatial Planning : Calado H, Hipólito C, Cândido B, Caña Varona M, Vergílio M. 2019. Public Participation Guidelines. Deliverable - D.2.3., under the WP2 of MarSP: Macaronesian Maritime Spatial Planning project (GA n° EASME/EMFF/2016/1.2.1.6/03SI2.763106).

⁽¹⁵⁰⁾ Jobin M., Laroussinie O., Quentric A. 2022. Synthesis map of socio-economic issues at sea in French Guiana. MSP-OR project, European Climate, Infrastructure and Environment Executive Agency Grant Agreement no. GA 101035822 — MSP-OR — EMFF-MSP-2020. Deliverable D.3.12 Synthesis map of socio-economic issues at sea in French Guiana.

6.1.7.3. Conclusions – next steps

Effectively addressing the challenges encountered in outermost regions demands a comprehensive and collaborative approach to ocean governance that integrates social, environmental, and economic factors. Stakeholder engagement, capacity building, and transparency should be prioritised to overcome obstacles and achieve sustainable MSP implementation.

Projects such as MarSP and MSP-OR serve as exemplars of cutting-edge participatory and transdisciplinary ocean governance, fostering trust among stakeholders through ongoing interaction and dialogue. These projects play a crucial role by providing platforms for collaborative knowledge exchange, enabling a deeper appreciation of the collective potential of marine regions and facilitating the implementation of pragmatic policy measures. Furthermore, aligning with international sustainable development policies is paramount for MSP projects, supplemented by thorough studies on social impact and ecosystem services assessment.

Moreover, continuous evaluation and adaptation processes are vital for ensuring the sustainability of MSP governance efforts. Promoting OL is a key component of this approach, aiming to enhance the effectiveness of MSP implementation and foster a culture of informed decision-making. By embracing these principles, MSP initiatives can navigate the complexities of ocean governance more effectively, paving the way for a more resilient and sustainable future for outermost regions and beyond.

6.2. Keywords

As described in Section 4.2, the challenges addressed, as well as the respective solutions employed and the recommendations made by the project teams in the reports produced, within the deliverables list of each project, were extracted using keywords approached across the reports analysed.

Table 1 – Keywords

List
Blue economy, Blue growth, Capacity building, Challenge, Circular blue economy, Climate change, Cohesion policy, Conflicts, Cross-border collaboration, Cross-border cooperation, Cultural heritage, Cumulative impact assessment, Data, Data acquisition, Data interoperability, Data sharing platform, Data tools, Decision support tools , EBA, Ecosystem-based approach, Ecosystem-based management, EGD, European Green Deal, EMODnet, Energy production, Environment, Environment aspects, Environmental conservation, EU maritime strategy, Fisheries, Governance, Innovation, Integrated Coastal Zone Management, International cooperation, Land-sea interactions, Land-sea interface, Legislation, Local development, Marine biodiversity, Marine environment, Marine renewable energies, Maritime resources, Monitoring and evaluation, MSP, MSP Directive, Multi-use, National plans coordination, Nature protection, Network, Ocean governance, Ocean literacy, Offshore renewable energy production, OSPAR Convention, Public policy, Risk, Security, Shipping, Socio-economic development, Socio-economic trends, Stakeholder engagement, Strategic Environmental Assessment, Sustainable blue economy, Sustainable development, Sustainable food provision, TEG, Transboundary cooperation, Transboundary data, Transboundary MSP, Transboundary zones

6.3. Projects and reports analysed

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
-----------------------------	--------------	---------	------------------	----------------	----------------------------

link	Supporting Implementation of Maritime Spatial Planning in the Celtic Seas	SIMCELT	2015	2018	<ol style="list-style-type: none"> 1. Transboundary Cooperation in the Celtic Seas: Reflections from the SIMCelt project 2. Overview Assessment: Summary Information on Marine Aspects of the Celtic Seas (D1) 3. Series of “Maritime Sector Briefing Notes” (D2) on Aquaculture; cables and pipelines; offshore wind; ports and shipping; and wave and tidal energy 4. “Comparative Analysis of National Strategies for Marine Conservation in the Celtic Sea Region” 5. “NEA MPA Database” report. 6. “Overview Report on the Current State and Potential Future Spatial Requirements of Key Maritime Activities” 7. Analysis of Data Needs and Existing Data Gaps – Specifically Relating to Transboundary Working 8. Initial Activity to Address Data Needs (D6) 9. Data Management Guidance Document (D7) 10. Report on Potential Approaches for Stakeholder Engagement on MSP – Pilot Testing at Local Transboundary Scale (D9) 11. CS#1: Issue Specific Analysis – Practice Focused and Policy Relevant – “Understanding specific cross border issues and opportunities: Offshore Renewable Energy and Shipping & Navigation” (D10) Final version December 2017, UCC 12. CS#2: Recommendations on Cumulative Effects Assessment Methodology (D11 – two reports, one Story Map, one video, please contact Anne Marie O’Hagan – E: a.ohagan@ucc.ie). Mapping risk of cumulative effects – Recommendations from the approach tested within French Celtic Sea waters (D11A) final version January 2018, AFB and Assessment of Cumulative Effects in Marine Spatial Planning: Irish Sea Pilot Project Methodology (D11B), final version March 2018, Marine Institute 13. CS#3: Case Study Report on Approaches to Cross-Border Cooperation Including Stakeholder Engagement Mechanisms (D12 – consisting of five reports) 14. D12.1: Initial comparison of requirements of, and differences between, primary UK legislation pertinent to marine planning 15. D12.2: References to marine and coastal planning within Local Development Plans relevant to the Solway Firth 16. D12.3: Report on Sectoral Interactions around the Solway Firth in relation to marine planning 17. D12.4: Particular cross border issues for the Solway Firth
----------------------	---	---------	------	------	---

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
					18. D12.5: Options for the Solway Marine Region in terms of marine planning 19. CS#4: Understanding and Applying Ecosystem Services to Transboundary MSP (D13 – Story Map, please contact Anne Marie O’Hagan – E: a.ohagan@ucc.ie) Overview Report on SIMCelt case studies (D16) 20. Existing Mechanisms for Cooperation on MSP in the Celtic Seas (D14) 21. Evaluation of the Maritime Spatial Planning Process (D15)
link	Towards coherence and cross-border solutions in Baltic Maritime Spatial Plans	BALTIC SCOPE	2015	2017	1. Sharing the Baltic Sea: How Six Countries Improved Their Maritime Spatial Planning 2. Recommendations on Maritime Spatial Planning Across Borders 3. Lessons Learned: Experiences from Baltic SCOPE 4. Coherent Cross-border Maritime Spatial Planning for the Southwest Baltic Sea Results from Baltic SCOPE 5. Towards Coherent Cross-Border Maritime Spatial Planning in the Central Baltic Sea 6. The Ecosystem Approach in Maritime Spatial Planning A Checklist Toolbox 7. Mapping maritime activities within the Baltic Sea 8. Evaluation and Monitoring of Transboundary Aspects of Maritime Spatial Planning: a Methodological Guidance 9. Development of a Maritime Spatial Plan: The Latvian Recipe
link	Cross-Border MARitime Spatial PLANning in the Black Sea	MARSPLAN BS	2015	2018	1. bulgarian_and_romanian_maritime 2. case_study_2_sfantu_gheorghe 3. elaboration_of_detailed_study_on_the_ 4. marine_spatial_plan_for_the_cross-bor 5. marsplan-bs-burgas_lsi 6. study_case_eforie

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	ASSISTANCE MECHANISM FOR THE IMPLEMENTATION OF MARITIME SPATIAL PLANNING	AM MSP (2015)	2015	2016	<ol style="list-style-type: none"> 1. 20170105_data_study_published_ 2. FinalReport_Year2_ MSP_Assistance_Mechanism 3. Study on specific challenges for a sustainable development of coastal and maritime tourism in Europe 4. Final Inception report 5. maritime spatial planning msp for blue growth-EA0118377ENN
link	STUDY ON INTERNATIONAL BEST PRACTICES FOR CROSS-BORDER: INTERNATIONAL MSP BEST PRACTICES	INTERNATIONAL MSP BEST PRACTICES	2015	2017	<ol style="list-style-type: none"> 1. Cross-border cooperation in Maritime Spatial Planning
link	ASSISTANCE MECHANISM FOR THE IMPLEMENTATION OF MARITIME SPATIAL PLANNING	AM MSP (2016)	2016	2018	

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	Supporting the Implementation of Maritime Spatial Planning in the North Atlantic Region	SIMNORAT	2017	2018	<ol style="list-style-type: none"> 1. Initial Assessment (D1) 2. Annex 1 to Initial Assessment: Marine Environment (D1) 3. Annex 2 to Initial Assessment: Pressures/Impacts (D1) 4. State-of-play of MSP directive implementation process - Focus on the role of the regions (D2) 5. Conceptual method: major steps (D3) 6. The definition and application of MSP by the OSPAR Convention (D4) 7. Coordination of sectorial policies (D5) 8. Land Sea Interactions and Relationships with Integrated Coastal Zone Management (D6) 9. Most appropriate geographical scale for MSP at national scale (D7) 10. Spatial demands and future trends for maritime sectors (D8) 11. Taking Marine Protected Areas into account in the context of Maritime Spatial Planning (D9) 12. Marine protected areas in the Bay of Biscay and Iberian Coasts - Database completion and analysis (D10) 13. Analysis of Data needs and existing gaps (D11) 14. Data Management Guidance Document (D12) 15. Interactions between uses, between uses and environment, including cumulative impacts. Review of evaluation methods carried out in France, Spain and Portugal (D13) 16. Potential approaches for stakeholder engagement on Marine Spatial Planning and outcomes of pilot testing (D14) 17. Stakeholder Perception on Maritime Spatial Planning (D15) 18. Bay of Biscay case study - Mapping exposure risk of marine megafauna to concomitant pressures (D16) 19. Case Study Cross Border MPA Galicia Bank – Vigo and Vasco da Gama Seamounts (D17)

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	Supporting Maritime Spatial Planning in the Western Mediterranean region	SIMWEST MED	2017	2018	<ol style="list-style-type: none"> 1. Initial Assessment MSP oriented (R1) 2. State-of-play of the Maritime Spatial Planning Directive Implementation process - Focus on the role of the Regions (R2) 3. Recommendations on the procedural steps to follow for the development of cross-border MSP (R3) 4. Recommendations to support common understanding on a regional scale on MSP, including synergic implementation of regionally relevant policy instruments (R4) 5. Coordination of sectoral policies - Background document (R25) 6. Relationship between LSI and ICZM (R5) 7. Most appropriate geographical scale for MSP at national scale (R6) 8. Taking Marine Protected Areas into account in the context of Marine Spatial Planning (R7) 9. Marine Protected Areas in the Western Mediterranean Region – Mediterranean database completion and analysis (R27) 10. Spatial demands and future trends - Maritime sectors briefing notes (R8-R15) 11. Analysis of data needs and existing gaps (R16) 12. Data management guidance document (R17) 13. MSPGI: A Geoportal Feasibility Study - Planning Authority MSP Geoportal MSP Implementation Initiative (R26) 14. Interactions between uses, between uses and environment, including cumulative impacts. Review of evaluation methods carried out in France, Spain and Italy - Western Mediterranean Sea (R18) 15. Cumulative Effects Assessment using DESEASION - In the Var County area, France (R19) 16. Case study #1 Var (R20) 17. Tyrrhenian Case Study (R21) 18. Gulf of Lion case study - Mapping exposure risk of marine megafauna to concomitant pressures (R22) 19. Case Study #4 "Strait of Sicily - Malta" (R23) 20. Case Study #4 Strait of Sicily – Malta Part II – Regulating Maritime Uses (R24)

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	Supporting Maritime Spatial Planning in the Eastern Mediterranean	SUPREME	2017	2018	<ol style="list-style-type: none"> 1. C 1.1.1 INITIAL ASSESSMENT 2. C 1.1.1 SUMMARY 3. C 1.1.2 BARCELONA 4. C 1.1.3 METHODOLOGY 5. C 1.2.1 OBJECTIVES 6. C 1.3.1 SPATIAL DEMANDS 7. C 1.3.2 and C 1.3.3 DATA AND TOOLS 8. C 1.3.4 STAKEHOLDER 9. C 1.3.5 METHODOLOGY 10. C 1.3.5 RECOMMENDATIONS 11. C 1.3.6 SECTORIAL POLICIES 12. C 1.3.7 LSI 13. C 1.3.8 Dubrovnik-Neretva 14. C 1.3.8 Myrtoon Sea 15. C 1.3.8 North Adriatic 16. C 1.3.8 Slovenia 17. C 1.3.8. Inner Ionian Corinthian Gulf 18. C 1.4 EVALUATION
link	ASSISTANCE MECHANISM FOR THE IMPLEMENTATION OF MARITIME SPATIAL PLANNING	AM MSP (2017)	2017	2019	<ol style="list-style-type: none"> 1. Maritime Spatial Planning:Addressing Land-Sea Interaction_A briefing paper 2. 20170927_conferencereportmalta_msp_lsi_010 3. Maritime Spatial Planning (MSP) for Blue Growth 4. FinalReport_MSP_Assistance_Mechanism_Year3 5. 20190604_conflicts_study_published_0 6. Cross-border Consultation on Maritime Spatial Plans 7. addressing conflicting spatial demands in msp-EA0319245ENN 8. Inception_Report_Year_2_MSP_Assistance_Mechanism 9. overview effects off shore wind farms

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	MACARONESIAN MARITIME SPATIAL PLANNING	MARSP	2018	2019	<ol style="list-style-type: none"> 1. MarSP Final Conference - Report 2. MarSP booklet 3. Proposing Pilot projects on relevant spaces or issues for cross-border 4. Integrated and synthetic diagnosis of the marine spatial planning in the Macaronesia 5. Regional reports on MSP objectives 6. Public Participation Guidelines for MarSP Project
link	PANBALTIC SCOPE	PANBALTIC SCOPE	2018	2019	<ol style="list-style-type: none"> 1. Project Summary: Pan Baltic Scope – Bringing Better Plans 2. Project recommendations for bringing better maritime spatial plans in the Baltic Sea Region 3. The Planning Forum – Experiences from Pan Baltic Scope 4. Lessons Learned in Cross-border Maritime Spatial Planning 5. Cumulative Impact Assessment for Maritime Spatial Planning in the Baltic Sea Region 6. Ecosystem-Based Approach in MSP – a Sub-basin SEA Inclusive Handbook 7. Assessing economic, social, cultural and ecosystem service impacts in MSP in the Baltic Sea region 8. Recommendations on Developing a Framework for Economic and Social Analyses in MSP 9. Mapping of Green Infrastructure: Pan Baltic Scope Approach 10. Green Infrastructure Concept for MSP and Its Application Within the Pan Baltic Scope Project 11. Climate Refugia in the Baltic Sea: Modelling Future Important Habitats by Using Climate Projections 12. Assessment of Application of Baltic Sea Common Regional MSP Framework 13. Lessons, Stories and Ideas on How to Integrate Land-Sea Interactions into MSP 14. Pilot Thematic Plan for Salacgriva (Latvia) 15. Planning Marine Coastal Waters and the Adjacent Land Areas at Local Level 16. Monitoring and Evaluation of Maritime Spatial Planning 17. Synthesis Report on the Ecosystem-Based Approach to Maritime Spatial Planning 18. Brochure on Legally Binding Digital Maps (Denmark)

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	MSP AND THE IMPACTS OF CLIMATE CHANGE	MSP AND THE IMPACTS OF CLIMATE CHANGE	2018	2019	1. MSP and the Impacts of Climate Change
link	OCEAN METISS	OCEAN METISS	2018	2020	1. comprehensive framework for building 2. Dynamics of marine predators 3. OCEAN METISS FINAL REPORT V1
link	Strategic Environmental Assessment North Seas Energy	SEANSE	2018	2020	1. Baseline study on SEA 2. Data need and gap analysis 3. Annex with data layers 4. Minutes workshop Antwerp on knowledge sharing (22nd May 2019) 5. Presentations of Antwerp workshop 6. SEANSE Summary Report
link	ECOSYSTEMS SERVICES IN MARINE SPATIAL PLANNING	ECOSYST EMS SERVICES IN MSP	2018	2019	1. Ecosystems Services in Marine Spatial Planning

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	INTEGRATING MARINE SPATIAL DATA: BEST PRACTICE IN MODELLING AND DECISION SUPPORT TOOLS	BEST PRACTICE IN MODELLING AND DECISION SUPPORT TOOLS	2018	2019	1. Integrating Marine Spatial Data: Best Practice in Modelling and Decision Support Tools
link	DATA DISCOVERY, COLLATION AND GAP ANALYSIS FOR SPATIAL REPRESENTATION	DATA DISCOVERY, COLLATION AND GAP ANALYSIS FOR SPATIAL REPRESENTATION	2018	2019	1. Data Discovery, Collation and Gap Analysis for Spatial Representation

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	Maritime Spatial Planning GLOBAL	MSP GLOBAL	2018	2021	<ol style="list-style-type: none"> 1. D1.1 – Study of existing and emerging cross-border and transboundary MSP 2. D1.2 – Report on recommendation for the promotion of knowledge exchange on MSP worldwide 3. D1.3 – Joint EC-MARE / IOC-UNESCO Guidance on cross-border MSP in English 4. West Mediterranean: D2.1 – Technical report on current conditions and compatibility of maritime uses of the coastal and marine environment of the mapping exercise 5. West Mediterranean: D2.2 – Technical report on future conditions and scenarios for MSP and blue growth opportunities in the area of the mapping exercise 6. West Mediterranean: D2.4 – Roadmap for transboundary MSP and blue growth in Western Mediterranean 7. D2.4 – Roadmap for transboundary MSP and blue growth in Western Mediterranean

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	WAVE ENERGY IN SOUTHERN EUROPE	WESE	2018	2021	<ol style="list-style-type: none"> 1. D1.9 Final Report 2. D2.1 Monitoring plans for Noise, EMF and seabed integrity 3. D2.2 EMF monitoring plans 4. D2.3 Noise monitoring plans 5. D2.4 Seafloor integrity monitoring plans 6. D2.5 Data Validation 7. D2.6 Data results and analysis towards impacts' evaluation and understanding 8. D2.7 Guidelines on EMF, noise and seabed integrity monitoring planning for wave energy 9. D3.1 EMF modelling 10. D3.2 Sound propagation modelling 11. D3.3 Marine dynamics modelling 12. D3.4 Synthesis of knowledge acquired and gap analysis 13. D4.1 Stakeholders database 14. D4.2 Review of consenting processes for wave energy in Spain and Portugal focusing on risk-based approach and adaptive management 15. D4.3 Feasibility for the implementation of wave energy licensing based on a risk-based approach and adaptive management in Spain and Portugal 16. D4.4 Guidance for a risk-based and adaptive management consenting of wave energy projects in Spain and Portugal 17. D5.1 Report on available and gathered information 18. D5.2 DSTs for MSP development 19. D5.3 Suitability maps 20. Galparsoro, I., M. Korta, I. Subirana, Á. Borja, I. Menchaca, O. Solaun, I. Muxika, G. Iglesias, J. Bald, 2021. A new framework and tool for ecological risk assessment of wave energy converters projects. <i>Renewable and Sustainable Energy Reviews</i>, 151: 111539.

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	EXPERTISE AND NETWORKING TO SUSTAIN ACTIONS IN MED THROUGH BLUE AND LOCAL ECONOMY	ENSAMBLE: EXPERTISE AND NETWORKING TO SUSTAIN ACTIONS IN MED THROUGH BLUE AND LOCAL ECONOMY	2019	2021	<ol style="list-style-type: none"> 1. ENSAMBLE – leaflet 2. Final report ENSAMBLE 3. Final Narrative Report ENSAMBLE
link	SIMATLANTIC	SIMATLANTIC	2019	2021	<ol style="list-style-type: none"> 1. d1.1-description-of-msp-relevant-informat 2. D1.2-Current-and-future-uses-and-n 3. D1.3-SIMAlantic-Atlantic-Vision-Fi 4. D2.1-Carlingford-Lough-Guidance 5. D2.2-Stakeholder-ownership 6. D2.3-Transboundary-impact-assessment 7. D2.4-Irish-Sea-Pilot-Case-Study-Report 8. D3.1-Processes-and-procedures 9. D3.2-Cumulative-impacts-and-SEA-li 10. D3.3Proposal-for-tools-to-improve- 11. D3.4-Overview-of-MSP-and-LSI-in-th 12. Final-Brochure-SIMAtlantic 13. SIMAtlantic_final_technical_report_29112021.pdf

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	Cross-border Maritime Spatial Planning for Black Sea, Bulgaria and Romania	MARSPLAN-BS-II	2019	2021	<ol style="list-style-type: none"> 1. Annex 1_Synthesis Report 1.1.1-Final consolidated 2. Coordinator_Corss border Maritime Spatial Planning for Black Sea Bulgaria and Romania.pdf (2) 3. mu_case_study_ccms_bulgaria_1 4. synthesis_report_1.1.1
link	ASSISTANCE MECHANISM FOR THE IMPLEMENTATION OF MARITIME SPATIAL PLANNING (2019)	AM MSP (2019)	2019	2021	<ol style="list-style-type: none"> 1. AM 2019 Access to space and water 2. AM 2019 best practice guidance in multi-use 3. review on how to preserve space for the future uses-HZ0322307ENN 4. best practice guidance in multi-use issues and licensing-HZ0221805ENN 5. communicating msp webinar_eventreport 6. Communicating MSP: An inspiring era of cooperation between institutions 7. recommendations for positive interactions between-EA0320493ENN
link	STUDY ON INTEGRATING AN ECOSYSTEM-BASED APPROACH (EBA) INTO MARITIME SPATIAL PLANNING	EBA INTO MSP	2019	2021	<ol style="list-style-type: none"> 1. Infographics summary 2. Guidelines presenting the practical, stepwise approach for incorporating EBA in MSP 3. Study on integrating an ecosystem-based approach into maritime spatial planning 4. Analytical review 5. Final Report

link	<p>Toward the operational implementation of MSP in our common Mediterranean Sea</p>	<p>MSPMED</p>	<p>2020</p>	<p>2022</p>	<ol style="list-style-type: none"> 1. D55 Final Publication 2. D54 Final Infographic 3. D53 Final review of communication practices 4. D48 MSP oriented report 5. D40 Report on selected areas (Pan-Med) 6. D39 Report on selected areas (Bilateral) 7. D36 Slovenia: Study on selected environmental/socio-economic issue 8. D31 Malta: Technical Report for administrative procedures 9. D30 Malta: Evaluation Report on status of marine database 10. D29 Italy: modules implementation 11. D27 Analysis and methodological guidance on sharing data and information 12. D26 MSP knowledge catalogue implementation 13. D20 Slovenia: Development programme for Koper bay 14. D18 Slovenia: Development vision and objectives for Koper bay 15. D17 Malta: Document on recommended procedures to support synergies in plan making for MSP 16. D15 Greece: Guidelines for the implementation of MSP 17. D10 Spain: Knowledge synthesis and scenario testing 18. Italy: Vocation maps, with specific objectives and proposed key measures 19. D4 Italy: Visioning and strategic objectives 20. D16 – Evaluation Report Malta: Governance for MSP 21. Report D14 Greece: Workshops evaluation and lessons 22. D12 of the pilot case for maritime spatial planning in the Region of Murcia 23. D52 – the transboundary workshop between Italy, France & Spain about Underwater noise assessment 24. D6 – Italy: System of Indicators to Monitor Plan Implementation and Performance 25. Gulf of Lion– France and Spain: Planning the offshore Gulf of Lions 26. D50: overview of MSP plans in Italy, France, Spain, Greece, Malta, Slovenia and Spain 27. Report on the cross border workshop on MSP and maritime surveillance 28. D8: interactions between Mediterranean ecosystems and maritime uses 29. D43 - 5th Technical Workshop: Stakeholder Engagement in MSP 30. D35 Slovenia: Report on priority needs for data creation (Workshop report) 31. Governance MSP scheme in Greece
----------------------	---	---------------	-------------	-------------	---

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	ASSISTANCE MECHANISM FOR THE IMPLEMENTATION OF MARITIME SPATIAL PLANNING (2021)	AM MSP (2021)	2021	2023	<ol style="list-style-type: none"> 1. access_to_space_and_water 2. AM MSP Final Report 3. best practice guidance in multi-use issues and licensing-HZ0221805ENN 4. The Implications of the Ocean Governance Framework established by the United Nations for the Implementation of the EU MSP Directive 5. How to incorporate Underwater Cultural Heritage into Maritime Spatial Planning: Guidelines and Good Practices
link	Advancing Maritime Spatial Planning in Outermost Regions	MSP-OR	2021	2024	<ol style="list-style-type: none"> 1. Brochure of the MSP-OR Project 2. Synthesis map of socio-economic issues at sea in French Guiana 3. Report on Needs, Barriers and Enablers for MSP and Capacity Building 4. D.3.1. MARSP LEGACY MATRIX
link	Emerging ecosystem-based Maritime Spatial Planning topics in North and Baltic Seas Region	EMSP NBSR	2021	2024	<ol style="list-style-type: none"> 1. Policy Brief Addressing the fragmentation of Ocean Governance across borders 2. Policy Brief Towards a sustainable blue economy 3. Policy Brief Strengthening Data sharing for informed decision-making in Maritime Spatial Planning 4. Policy Brief An ecosystem-based approach delivers future-proof maritime spatial planning 5. Policy Brief Monitoring and Evaluation in MSP – Always aim for better plans!

European MSP platform	Project Name	Acronym	Starting year	Ending year	List of documents analysed
link	Maritime Spatial Planning as enabler of the European Green Deal	MSP-GREEN	2022	2024	<ol style="list-style-type: none"> 1. DELIVERABLE N°2.1.: The Green Deal component of the EU MSP Plans 2. D2.1 The Green Deal component of the EU MSP Plans – Infographic 3. DELIVERABLE N°2.1.: The Green Deal component of the EU MSP Plans Appendix 4 - Summaries of key findings at country level 4. D2.2 First Policy Brief 5. D3.1 Sharing valuable practices for boosting the Green Deal through MSP 6. Valuable Practices 7. New Actions fostering MSP contribution to Green Deal
link	Regions to boost National Maritime Spatial Planning	REGINA-MSP	2022	2024	<ol style="list-style-type: none"> 1. NEWSLETTER#1 April 2023_2 2. NEWSLETTER#2_0
link	Reviewing and Evaluating the Monitoring and Assessment of Maritime Spatial Planning	REMAP	2022	2025	<ol style="list-style-type: none"> 1. Use cases: Galicia, Spain 2. Use cases: West Mediterranean 3. Use cases: Baltic

6.4. Thesaurus

As described in section 4.2, the challenges addressed by the project teams in the report were analysed as well as the respective solutions employed, and the recommendations made were extracted and added in three-level groups based on the deepness of detail. Level A shaped the main categories of challenges and recommendations shown in Figure 5, Figure 6 and Figure 7. The creation of Level B (the most 14 popular challenges illustrated in the Figure 10) and Level C, was created in combination with a Thesaurus that contains the links and references from each report that guided the creation of each category. The thesaurus is available upon request to info@maritime-spatial-planning.ec.europa.eu.

Getting in touch with the EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (european-union.europa.eu/contact-eu/meet-us_en).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696,
- via the following form: european-union.europa.eu/contact-eu/write-us_en.

Finding information about the EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (european-union.europa.eu).

EU publications

You can view or order EU publications at op.europa.eu/en/publications. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (european-union.europa.eu/contact-eu/meet-us_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (eur-lex.europa.eu).

EU open data

The portal data.europa.eu provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

