



Deliverable D1.1 – Benchmarking Institutional and Policy Frameworks for MPAs

WP1 – State of the Art Knowledge to underpin the Living Labs and Development of the Blueprint Platform

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Acronyms

BHDs: Birds and Habitats Directives

BBNJ: Marine Biodiversity of Areas Beyond National Jurisdiction

CBD: Convention on Biological Diversity

CFP: Common fisheries policy

CPS: Contracting Parties

CoP: Conference of the Parties

EEA: European Environment Agency

EEZ: Exclusive Economic Zone

EIA: Environmental Impact Assessment

EMFF: European Maritime and Fisheries Fund

EU: European Union

FAO: UN Food and Agriculture Organization

GES: Good environmental status

GFCM: General Fisheries Commission for the Mediterranean

HSMPA: High Seas Marine Protected Areas

ICES: International Council for the Exploration of the Sea

IUCN: International Union for Conservation of Nature

MAB: Man and the Biosphere Programme

MPA: Marine Protected Area

MSFD: Marine Strategy Framework Directive

NEAFC: North-East Atlantic Fisheries Commission

OECM: Other Effective Conservation Measures

RFMOs: Regional Fisheries Management Organisations

RSCs: Regional Seas Conventions

SAC: Special Area of Conservation

SCI: Site of Community Importance

SPA/RAC: Specially Protected Areas Regional Activity Centre

SPAMI: Specially Protected Areas of Mediterranean Importance

SPA: Special Protected Areas

STECF: Scientific, Technical and Economic Committee for Fisheries

UN: United Nations

UNCLOS: UN Convention on the Law of the Sea

VMS: Vessel Monitoring System



Glossary

Term	Definition used in the framework of this report
Policy	A policy is a set of ideas or plans that is used as a basis for decision making by a government or party.
Legislation	Legislation consists of a law or laws passed by a government (European Union, 2023).
Regulation	In European Union (EU) law, a regulation is a binding legislative act which must be applied in its entirety across the EU (European Union, 2023)
Directive	In EU law, a directive is a legislative act that sets out the goal that EU countries must achieve. However, it is up to the individual countries to devise their own laws on how to reach these goals (European Union, 2023).
Decision	In EU law, a decision is binding on those to whom it is addressed and is directly applicable In the OSPAR Convention, OSPAR Commission's decisions are binding on Member States after a period of 200 days after its adoption, provided, among others, that Contracting Parties have not within that period notified the Executive Secretary in writing that they are unable to accept the decision (OSPAR Commission, 1992).
Recommendation	In EU law, a recommendation is not binding and has no legal consequences. A recommendation allows the institutions to make their views known and to suggest a line of action without imposing any legal obligation on those to whom it is addressed (European Union, 2023). The term has the same meaning in Regional Seas Conventions such as OSPAR and HELCOM.
Designation	For the purpose of this deliverable, designation refers to the act of formally adopting an MPA.
Designation type	Designation type refers to the specific MPA types (e.g. national parks, regional MPAs, Natura 2000 sites...).



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1. Executive Summary

At both the international and European level, targets have been set to expand the number of marine protected areas (MPAs) in European seas. To facilitate achieving these targets, one of the tasks of the BLUE4ALL project is to gain a better understanding of the policies, responsible bodies and instruments in place for the various phases of the MPA process. This deliverable gives an overview and description of the policies and institutional settings at international, regional, EU and national level.

Four phases of the MPA process are defined: planning, implementation, site management, reviewing and financing, which are all influenced by public participation and stakeholders. To guide information collection for this deliverable, a questionnaire about the MPA process was produced, including questions for each level (international, regional, European and national) and for each phase within the MPA process. BLUE4ALL project partners were identified to answer the questions for each level, and national level responses were prepared for Italy, France, Belgium, Ireland, Croatia, Montenegro, Finland and Estonia, representing the three sea basins studied.

The MPA designation types defined at international, regional, European or national level are described, including their responsible bodies and the steps that need to be taken for a site to be selected and designated as an MPA. Initiatives in place to enable site management, the review of the MPA effectiveness and the financing are also explained. Perspectives on public participation were discussed for the different operational levels.

The identified policy landscape was found to be highly complex, where designations operating at different levels interact and overlap, leading to areas with multiple designations. At the international level, protected area requirements are defined and then used by parties to develop MPAs. Regional Seas Conventions were identified as a crucial platform for increasing the coverage of MPAs in the associated sea basins. For the Habitats and Bird Directives, the EU Commission assesses and validates sites eligible for MPA status, but the management of sites is carried out at the national level. For the different countries, it was often a ministry responsible for planning and implementation of MPAs. In different cases a scientific body was specified that helps to prepare the report describing the eligibility of a site for MPA status. MPA management is typically delegated to local authorities/municipalities.

This deliverable report can be used as a guide for navigating the MPA policy landscape in Europe and to compare approaches across countries and institutional levels. D1.1 will also be used as a reference for further work within the BLUE4ALL project.



2. Introduction

The Blueprint Demonstration for co-created Effective, Efficient and Resilient Networks of MPAs (Blue4All) is an EU project under the HORIZON Europe Mission Ocean and Waters, which will provide socio-economic and ecological tools for developing effective, efficient, and resilient networks of marine protected areas (MPAs). The project brings together twenty-two partners from across Europe, ranging from national administrations, research institutes, universities and NGOs. Work package 1, '*State of the Art Knowledge to underpin the Living Labs and Development of the Blueprint Platform*' will provide a strong knowledge basis on socio-economic and ecological aspects of MPAs. Specifically, Task 1.1 aims at providing a comprehensive overview of the governance of MPAs, with a focus on selected geographical areas relevant to the project (resulting in this deliverable D1.1).

MPAs and MPA networks are considered valuable tools to halt the global deterioration of marine ecosystems across the planet and preserve marine biodiversity. Protected areas are defined by the International Union for the Conservation of Nature (IUCN) as '*clearly defined geographical spaces, recognized, dedicated, and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services*' (IUCN, 2012). MPA networks are a collection of MPAs working in synergy to fulfil ecological and social aims more efficiently (WCPA/IUCN, 2007). IUCN defines six protected areas categories based on management objectives: Ia. Strict Nature Reserve, Ib. Wilderness area, II. National Park, III. National monument or feature, IV. Habitats/species management area, V. Protected landscape or seascape and VI. Protected area with sustainable use of resources (Day *et al.*, 2019).

International and European institutions increasingly call for the expansion of MPAs and MPA networks. The Convention on Biological Diversity Aichi Target 11 aimed to conserve 10% of coastal and marine areas by 2020; this objective has since been updated through the recently adopted Kunming-Montreal Global Biodiversity Framework in 2022, with an increased target of 30% of marine areas to be protected in 2030 (30x30). The international community reinforced the importance of protected areas and the 30x30 target through both the IUCN World Conservation Congress of 2020, held in Marseille, France, and the 5th International Marine Protected Areas Congress (IMPAC) in Vancouver, Canada in February 2023. Similarly, the European Union Biodiversity Strategy for 2030 sets a target of 30% of EU waters to be protected by 2023, with at least 10% under strict protection. As a result of such incentives, a worldwide increase in spatial coverage of MPAs can be witnessed (Brander *et al.*, 2020). However, most of those MPAs lack effective governance and can be considered 'paper parks' (Rife *et al.*, 2013; Araújo and Bernard, 2016; Cadoret and Beuret, 2016; Ramirez, 2016; Dehens and Fanning, 2018; Claudet *et al.*, 2020; Devillers *et al.*, 2020; Claudet, Loiseau and Pebayle, 2021).

Indeed, a large portion of MPAs is established without enough careful planning and allocated financial and human resources, and as a result cannot be differentiated from the surrounding areas (Rife *et al.*, 2013; Zupan *et al.*, 2018). Management plans are often lacking, and when developed they are rarely implemented effectively (WWF, 2019; Roessger, Claudet and Horta e Costa, 2022). Broadly speaking, the main challenges for MPA effectiveness highlighted in the scientific literature are poor governance, lack of financial resources and capacity, weak



enforcement and compliance and conflicts with local communities, stemming from a lack of sense of ownership by local actors (Guidetti *et al.*, 2008; Rife *et al.*, 2013).

MPAs can be established through a myriad of policies at different levels. Although it is commonly accepted that single authorities with a well-established and clear competence for MPAs are more likely to be efficient (Marine Protected Area Advisory Group, 2020), various sectoral institutions play a role in the process and the institutional landscape is often challenging to navigate. This deliverable provides knowledge to gain a better understanding of this complexity, giving an overview of policies and institutions at play for each of the phases to establish new MPAs and MPA networks, at different levels (international, regional, European Union (EU) and national level). The regional level encompasses three regions: North-East Atlantic, the Baltic Sea and the Mediterranean Sea, whereas the national level focuses on seven EU countries and one non-EU country: Italy, France, Belgium, Ireland, Croatia, Finland, Estonia and Montenegro.

The aim of this deliverable is threefold: a) to understand the management and governance processes for MPAs in Europe; b) to give an overview of policies and institutional settings in force at different levels and c) to determine whether bodies and institutions that form the governance structure are mutually well-coordinated, with clear and agreed upon roles and relationships. The deliverable will describe the involvement of bodies and institutions in the different stages, from planning to implementation and active management. The report will also point out some of the challenges faced and provide recommendations on how to overcome them.



3. Methods

3.1 Phases in a systematic conservation planning process

The institutional frameworks for MPAs are different for each phase in the establishment of new protected areas. In order to provide a clear overview of the governance and institutional setting, four main phases were used in this deliverable based on the systematic conservation planning process presented in the report of the Irish Marine Protected Area Advisory Group (Marine Protected Area Advisory Group, 2020). The conservation planning process for planning, establishing and managing MPAs is illustrated in Figure 1.

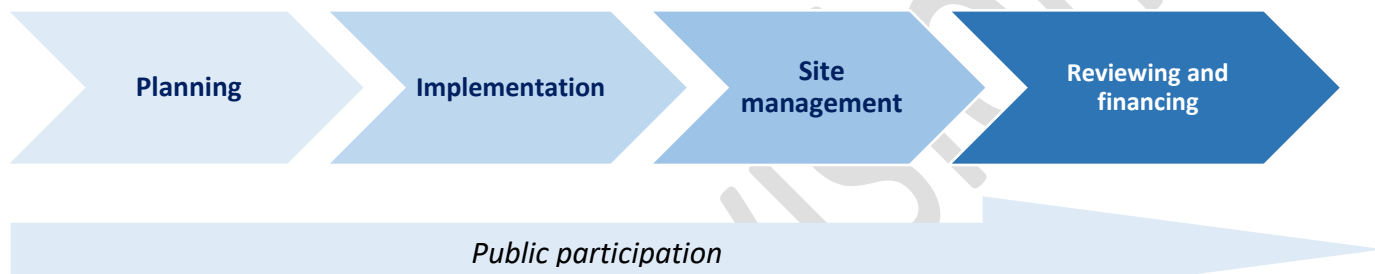


Figure 1: Phases in a systematic conservation planning process (Source: adapted from the Irish MPA Advisory Group report (Marine Protected Area Advisory Group, 2020))

The phases of the conservation planning process, as used in this deliverable, are:

1. **Planning** refers to the broader legal and institutional framework regulating the development of protected areas (Marine Protected Area Advisory Group, 2020). The planning sections in this deliverable explore both the different policies and legislations in place for MPAs, and the associated institutions as well as their roles and responsibilities, aiming to determine how coherent this framework is throughout the international, EU, Regional Seas and national level.
2. **Implementation** is the phase through which a proposed MPA comes into force. The first step is the site selection, which describes how specific areas are deemed worthy of protection. The implementation sections in this deliverable will give an overview of which knowledge underpins the selection of sites and which selection criteria are used. Sites can either be selected on a case-by-case basis, or together as part of a network. Following this, conservation objectives are defined by the relevant institution, which are then used to propose a set of management measures. Once conservation goals and potential regulations are agreed upon, the MPA is designated. Designation refers to the creation of the protected area through a legal act of the competent authority (i.e., signed into force) (Marine Protected Area Advisory Group, 2020). This can be done through specific procedures.
3. **Site management** explores the concrete functioning of the newly created MPA. It will look at how management works in practice, i.e., which are the relevant stakeholders, which measures are in place within the site, and which can be taken as a response to pressures to the marine environment, as well as how the site is monitored. A crucial aspect to effective

MPAs is whether the regulations in place is respected. Thus, this phase will expand on compliance and enforcement.

4. Reviewing refers to the regular assessment of the MPA, i.e., whether conservation goals are attained and if management measures should be modified. This phase also explores financing strategies for the site.

Moreover, throughout each phase, the deliverable will list which stakeholders are involved in what capacity. This part will also include information on:

- stakeholder engagement: whether and how actors directly affected by protected areas are involved;
- public participation: whether and how the broader stakeholders, being the public at large, are engaged;
- transparency: whether the overall process, the decision-making, and the availability of necessary information is clear for external actors.

3.2 Scope and geographic coverage of the study

Relevant levels for the scoping exercise and analysis were identified in close dialogue with the project partners involved. The analysis focused on four levels: the international, regional, European Union (EU) and national level, including a set of targeted countries, representing the three sea basins studied (Table 1). Depending on the level, the relevant regulations were listed as a starting point.

Table 1. Scope and geographic coverage of the study.

Level	Scope
International level	<i>International multilateral agreements:</i> UN Convention on the Law of the Sea (UNCLOS), Convention on Biological Diversity (CBD), treaty on conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (BBNJ), RAMSAR Convention on Wetland of International Importance, UNESCO Man and Biosphere programme.
Regional level	<i>Baltic Sea:</i> Helsinki Convention, Baltic Marine Environment Protection Commission
	<i>Mediterranean Sea:</i> Barcelona Convention, General Fisheries Commission for the Mediterranean
	<i>North-East Atlantic:</i> OSPAR Convention, North-East Atlantic Fisheries Commission
EU level	Habitats and Birds Directives Other relevant EU Directives: Marine Strategy Framework Directive, Water Framework Directive, Marine Spatial Planning Directive, Integrated Maritime Policy Recommendation, and the Common Fisheries Policy.
National level	France, Belgium, Italy, Croatia, Montenegro, Ireland, Estonia, Finland.

3.3 Data collection

A questionnaire was developed for data collection including questions for each level and exploring all phases of the MPA process, to allow for a harmonised data collection. The questionnaire was developed by VLIZ based on scientific literature (Pomeroy, Parks and Watson, 2004; Marine Protected Area Advisory Group, 2020; Grorud-Colvert *et al.*, 2021). Clear guidelines were developed, agreed on and distributed. Relevant Blue4All partners were directly contacted and asked to provide answers to these specific questions based on their expertise. Partners affiliated to national institutions were responsible for data collection at the national level (i.e., French Office for Biodiversity, Estonian Environmental Board, Italian MPAs direct managers, MEDSEA, WWF Adria), partners from regional organisations were responsible for the regional level (i.e., HELCOM) and partners from international organisations for the international level (i.e., IUCN). Universities and research institutes (i.e., Wageningen University, University of Palermo, University College Dublin, Finnish Environmental Institute) also substantially contributed to data collection. Table 2 details the questions asked to the partners.

Table 2. Questionnaire for Blue4All partners for data collection purposes.

Phase of the process	Associated questions
Planning	<p><i>International and regional levels:</i></p> <ul style="list-style-type: none"> - Which agreements provide a framework for MPAs? What are the specific designation types that can be used? - How many protected areas are in place? What is the objective of such areas? - Which are the relevant bodies? - Which stakeholders have a say in the process, and at what step?
	<p><i>EU level:</i></p> <ul style="list-style-type: none"> - What are the relevant policies for the creation and establishment of MPAs and MPA networks? - What are the main authorities responsible and what is their role?
	<p><i>National level:</i></p> <ul style="list-style-type: none"> - What is the rationale for marine protection? - What is the relevant legislation for MPAs? - Is there a formal definition of an MPA in national law? With what levels of protection? - Who are the different agencies that have a role in managing national waters? - Who are the relevant stakeholders when planning for MPAs? Who should be considered? - What tools are used for engaging with stakeholders?
Site selection	<p><i>International and regional levels:</i></p>



Phase of the process	Associated questions
	<p>What criteria are used for designation?</p> <p><i>EU level:</i> Which criteria are used to select Natura 2000 (N2000) sites? Which knowledge is important?</p> <p><i>National level:</i></p> <ul style="list-style-type: none"> - Which data is collected when selecting a site for protection? Which criteria are used? - Who is involved in this?
Implementation	<p><i>International and regional levels:</i></p> <ul style="list-style-type: none"> - What is the procedure to establish such areas? - Overall, how transparent is the procedure? <p><i>EU level:</i></p> <ul style="list-style-type: none"> - What is the process for creating and establishing a new MPA under the relevant EU policies? - Are the other sectors having an impact on the marine environment (e.g., fisheries, transport, oil and gas industries, dredging and dumping, tourism...) involved in the process? At what stage and at what capacity? - Does civil society have a role in the process? How so? - Is there a mechanism to deal with conflicts between marine users when developing and implementing an MPA? <p><i>National level:</i></p> <ul style="list-style-type: none"> - Who is responsible for developing the MPA site objectives? For developing the management measures? What is the process to do so? - Is there a requirement for developing management plans when planning for MPAs? - Are management plans required? - What authorities are responsible for developing management measures for MPAs? Which stakeholders are involved in this process?
Site management and monitoring	<p><i>International and regional level:</i></p> <ul style="list-style-type: none"> - What are the obligations for Contracting Parties/States once one is established? - What is said in the convention about implementation and management? Are there any specific requirements for management? <p>What is the compliance mechanism?</p> <p><i>EU level:</i></p> <ul style="list-style-type: none"> - Who is responsible for the implementation and management of MPAs and associated networks? <p>Are there any relevant provisions within EU regulations for implementation and management? Or guidance documents?</p>

Phase of the process	Associated questions
	<p><i>National level:</i></p> <ul style="list-style-type: none"> - What are some common management measures within existing MPAs? Are management measures linked to specific sites' objectives? - Are there measures to restrict fisheries within existing MPAs? - Is there a procedure for compliance with MPA regulations? Who is responsible for compliance and enforcement within MPAs? - Is there enough capacity for monitoring, control and surveillance? (VMS, port measures...) - Are there monitoring programmes for existing national MPAs (both to assess the efficiency of MPAs and to review management measures)? Is there a requirement to develop monitoring programmes? Who is responsible for that?
<p>Reviewing and financing</p>	<p><i>International, regional, EU and national levels:</i></p> <ul style="list-style-type: none"> - Are existing MPAs regularly reviewed? - Is there a procedure to review existing MPAs? Who is responsible for reviewing? - Is there a procedure to address conflicts between the different users within an MPA? - Do existing MPAs have a long-term financing strategy?

3.4 Compilation of results

VLIZ coordinated the harmonisation and comparison of the data collected, across the different phases of the MPA process and the different levels, resulting in this deliverable report.



4. Results

4.1 International frameworks for the establishment of MPAs

4.1.1 Overview of relevant conventions

At the international level, several agreements have relevant provisions for area-based management tools, including MPAs¹.

The United Nations Convention on the Law of the Sea (UNCLOS) (UN, 1982), adopted in 1982, provides a first legal basis for conservation of the marine environment. Article 194 requires States to take measures to prevent, reduce, and control pollution and other environmental impacts, while Article 192 requires states to protect and preserve rare or fragile ecosystems, as well as the habitat of depleted, threatened, or endangered species and other forms of marine life, and to take measures to restore such habitats. Through Article 123, coastal States have a right to establish MPAs within their exclusive economic zone (EEZ) - up to 200 nautical miles from countries' baseline - as well as within their continental shelf. Article 194 pushes for cooperation between States on the establishment and management of MPAs.

The Convention on Biological Diversity (CBD) and its post-2020 biodiversity framework (Secretariat of the United Nations Convention on Biological Diversity, 2021), adopted at the 15th meeting of the Conference of the Parties in 2021-2022 sets a target of protecting at least 30% of the global ocean through MPAs and other effective area-based conservation measures (OECMs).

More recently, the newly adopted international treaty for the conservation and sustainable use of marine biological resources beyond national jurisdiction (BBNJ treaty (UN, 2023)) provides a new framework for the establishment of MPAs in areas beyond national jurisdiction. States will be able to propose high seas MPAs (HSMPAs) which after review by the Scientific and Technical Body are adopted either by consensus or a $\frac{3}{4}$ majority vote. Proposals must include a management plan as well as measures for monitoring and review.

Other sectoral conventions, such as the Convention on Wetlands of International Importance (RAMSAR Convention) and the UNESCO World Heritage Convention are also strong incentives for Contracting Parties to establish protected areas.

4.1.2 Planning and designation of sites

World Heritage Sites (WHS) and Biosphere Reserves are designated through the UNESCO World Heritage Convention and the Man and the Biosphere Programme respectively. They are granted protection at a national scale or a regional scale if transboundary. World Heritage Sites designations encourage the identification and protection of cultural and natural heritage and can apply to both marine and terrestrial sites. The designation label provides support and status from UNESCO, but it is the Contracting Parties' (CP) responsibility to protect and manage the site. To

¹ It should be noted that the authors chose to focus only on international and regional agreements relevant to the scope of the Blue4All project, i.e., to Europe. As such, institutional frameworks such as the International Seabed Authority have not been included in this report.



establish an area as a World Heritage Site, the CP must nominate the area and the area needs to meet the Criteria of the Operational Guidelines to the World Heritage Convention. The criteria are separated into six cultural (criteria i-vi) and four natural criteria (criteria vii-x). Biosphere reserves promote the conservation and sustainable use of terrestrial and marine ecosystems and can also apply to both marine and terrestrial sites. As is the case with World Heritage Sites, the designation label provides support and status from UNESCO, but it is the party's responsibility to protect and manage the site. Unlike World Heritage Sites, Biosphere Reserves do not fall under a convention, but under a statutory framework (UNESCO, 2019).

RAMSAR sites aim at preserving coastal and inland wetlands, and their resources, that are of international importance. To be listed as a Ramsar Site, the wetland must meet at least one out of the nine criteria for Identifying Wetlands of International Importance developed by the RAMSAR Convention. A Ramsar Information Sheet (RIS) is to be completed by national authorities prior to designation. RIS must be regularly updated after designation and a management plan and a management committee must be established.

Table 3 summarises the relevant international designations detailing the geographic areas in Europe covered and the main responsible bodies.

Table 3. International designations relevant for MPAs detailing the geographic areas covered in Europe and the main responsible bodies.

Designation type	Geographic areas covered (in Europe)	Responsible bodies
World Heritage Sites	<ul style="list-style-type: none"> ➤ Ibiza Biodiversity and Culture World Heritage Site (Spain) ➤ Kvarken Archipelago (Finland) 	<ul style="list-style-type: none"> • World Heritage Convention <ul style="list-style-type: none"> ○ General Assembly ○ World Heritage Committee ○ 3 advisory bodies: ICCROM and ICOMOS for cultural sites, and the IUCN for natural sites ○ Contracting parties
Biosphere reserves	<ul style="list-style-type: none"> ➤ 32 reserves in Europe 	<ul style="list-style-type: none"> • UNESCO – Man and Biosphere (MAB) • World Network of Islands and Coastal Biosphere Reserves
RAMSAR sites	<ul style="list-style-type: none"> ➤ 1,126 sites in Europe (including overseas territories) 	<ul style="list-style-type: none"> • Ramsar Convention <ul style="list-style-type: none"> ○ Ramsar Convention Secretariat ○ Contracting parties ○ International Organisation Partners (IOPs) ○ 2 advisory bodies: STRP and CEPA Oversight Panel ○ Management Committee per RAMSAR site

4.1.3 Management and compliance

Sites are given a specific status (i.e., Ramsar site, Biosphere Reserve, World Heritage Site) by decision of the relevant responsible bodies. Although the responsible bodies set general

requirements, implementation and management is left to parties themselves. Should management of established World Heritage sites or Biosphere Reserves by the relevant parties be lacking, labels may be resigned. For World Heritage Sites and Biosphere reserves, parties are required to produce an annual state report and to submit it to the World Heritage Committee and the Advisory Committee for Biosphere Reserves respectively. The management of Ramsar sites is done by CPs through both their Administrative Authority, acting as the government agency responsible for the national application of the Convention, and the National Focal Point, to coordinate national implementation and serve as the contact point.

Compliance with the conventions/statutory framework relies mainly on performance review: parties are required to provide regular information to the Convention's Commission or relevant body, which is used to assess national responses to international commitments. CBD targets, for example, are to be reached through annual and mandatory National Biodiversity Strategies and Action Plans (NBSAPs), the main instrument to implement the Convention under article 26. Similarly, CPs to the UNESCO Convention are obligated to publish an annual state of conservation report to the World Heritage Committee.

4.1.4 Challenges of international frameworks

International agreements rely on voluntary commitments of Contracting Parties, and as such, lack enforcement powers. UNESCO Biosphere Reserves and World Heritage Sites, as well as Ramsar sites are designated on a voluntary basis, and the decisions taken by the associated agreements (conventions/statutory framework) are not binding. Self-reporting by parties is often weak, with documents in some cases hardly comparable due to lack of standardised formatting and irregular submission (Landry *et al.*, 2022).

World Heritage Sites and Biosphere Reserves are mainly designated in terrestrial areas, with very little marine and coastal sites. There is currently one World Heritage Site found in Europe with coastal and marine characteristics: the Ibiza Biodiversity and Culture World Heritage Site, in Spain. The other World Heritage Sites in Europe are terrestrial in nature. Thirty-two island and coastal Biosphere Reserves exist in Europe (UNESCO, 2023).

The responsible bodies often face lack of financial resources which can impair proper functioning. Implementation of MPAs at national levels is challenging and inconsistencies across countries make it difficult to assess the overall effectiveness of established sites.

The IUCN Green List is an international Standard for measuring and improving the performance of area-based conservation at site level, as well as at the national and transboundary networks level. It is a certification programme that aims to recognize and increase the number of fairly governed and effectively managed Protected and Conserved Areas around the world, that achieve successful conservation outcomes. It has 4 components: Good governance, Sound design and planning, Effective management and Successful conservation outcomes. A set of 17 criteria and 50 indicators further defines these components (see Annex 1 of this deliverable for more information on the IUCN Green list).



4.2 Regional frameworks for the establishment of MPAs

4.2.1 Overview of Regional Seas Convention approaches to MPAs

Regional Seas Conventions (RSCs) provide an important framework for regional cooperation towards conservation and sustainable use of marine resources. Some RSCs are developed under the United Nations Environment Programme (UNEP). RSCs function as a platform for cooperation and coordination among States on a range of issues and require their Contracting Parties to take measures to protect the marine environment.

European waters are covered by several regional conventions providing a framework for MPA establishment:

- The Convention for the Protection of the North-East Atlantic (OSPAR Convention) (OSPAR Commission, 1992), setting a comprehensive regime for the protection of the North-East Atlantic ² (this RSC was established independently of UNEP);
- The Convention for the Protection of the Baltic Sea Area (Helsinki Convention) (HELCOM, 2023a) in the Baltic Sea ³ (this RSC was established independently of UNEP);
- The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean ⁴ (Barcelona Convention), and in particular through the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol) (SPA/RAC, 2013). This Protocol recommends setting up Specially Protected Areas (SPAs) and Specially Protected Areas of Mediterranean Importance (SPAMIs), including transboundary areas. SPAs refer to MPA established by CPs in their national waters, that are to be reported to the Convention; SPAMI is a specific label MPAs can be given under a detailed protocol of SPA/RAC, with requirements for management and regular evaluation processes (this RSC is administered by UNEP);
- As well as these three conventions, the Convention on the Protection of the Black Sea against Pollution covers the Black Sea area, which is not part of Blue4All's study area, and is thus not further considered here (and it is not administered by UNEP).

All three conventions oblige their respective Contractive Parties to take measures to protect the marine environment (HELCOM, 1994, 2021; OSPAR, 2010, 2022). The Helsinki Convention

² The OSPAR Convention combined the 1972 Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (Oslo Convention) and the 1974 Convention on Land-Based Sources of Pollutions (Paris Convention) and currently has 16 Contracting Parties: Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the European Union.

³ The Helsinki Convention was first signed in 1974 and revised in 1992. All nine riparian states – Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden – are Contracting Parties to the 1992 Convention, as is the European Community (i.e., the EU).

⁴ The Barcelona Convention, first signed in 1976 and amended in 1995, constitutes the principal legally binding agreement in the Mediterranean Sea. It currently has 22 Contracting Parties: Albania, Algeria, Bosnia, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syrian Arab Republic, Tunisia, Türkiye, and the European Union.

regulatory area covers the entire Baltic Sea, including internal and territorial waters of Contracting Parties. In the Mediterranean, States claimed smaller EEZs to leave a significant part of the sea as high seas; the Barcelona Convention covers countries' territorial seas, EEZs and high seas. The OSPAR Convention covers both Contracting Parties' EEZ and part of the high seas of the North-East Atlantic. It is the only convention with a specific mandate to establish MPAs in the high seas, and to date eight were established protecting different features of the marine environment (OSPAR, 2023).

Table 4 summarises the different types of MPAs under Regional Seas Conventions detailing the geographic areas covered and the main responsible bodies.

Table 4. Overview of different types of MPAs under Regional Seas Conventions detailing the geographic areas covered and the main responsible bodies.

Designation type	Geographic areas covered	Responsible bodies
OSPAR MPAs	<ul style="list-style-type: none"> ➤ Territorial Seas and Exclusive Economic Zones of Contracting Parties ➤ High Seas (North-East Atlantic) 	<ul style="list-style-type: none"> • OSPAR Commission (for adoption and designation) based on inputs from the Biodiversity Committee (BDC) and the Intersessional Correspondence Group on MPAs (ICG-MPA) • National governments (for implementation and management) • ICES (for scientific inputs and support)
HELCOM MPAs	<ul style="list-style-type: none"> ➤ Territorial Seas and Exclusive Economic Zones of Contracting Parties (Baltic Sea) 	<ul style="list-style-type: none"> • HELCOM Commission (for designation as HELCOM MPAs) • National governments (for adoption, designation, implementation and management)
Barcelona Convention SPAMIs	<ul style="list-style-type: none"> ➤ Territorial Seas of Contracting Parties ➤ High Seas (Mediterranean Sea) 	<ul style="list-style-type: none"> • UNEP/MAP (Mediterranean Action Plan) Coordinating Unit • Regional Activity Centre for Specially Protected Areas (SPA/RAC) (for designation of SPAMIs) • National governments (for adoption, designation, implementation and management)

RSCs adopt either decisions and recommendations (OSPAR, with binding decisions and non-binding recommendations) or solely recommendations (HELCOM, non-binding). The implementation of regulations is left to States. Under both the SPA/RAC Protocol and the Helsinki Convention, MPAs are designated at the national level and then reported to the Convention's coordinating body through a particular procedure to count as SPAMIs, SPA and HELCOM MPAs. Under the OSPAR framework, States propose MPAs which are then adopted and designated by

the OSPAR Convention. It is important to note that the scope of activities that the conventions mentioned above can regulate is very limited. There is uncertainty as to which activities can be regulated in areas beyond national jurisdiction (ABNJ) under OSPAR: only cable-laying, scientific research, dumping, and deep-sea tourism are listed as examples of activities that could be regulated (OSPAR Commission, 1992). Fisheries are clearly stated as being outside of OSPAR's remit.

4.2.2 Implementation

MPAs designated by RSC are mainly based on ecological criteria, with both HELCOM and OSPAR developing lists of threatened species and habitats which are used as a basis for protection measures. All three Regional Seas programmes use CBD criteria for identifying sites needing protection, namely uniqueness or rarity, special importance for life history stages of species, importance for threatened, endangered or declining species and/or habitats/biotopes, vulnerability, fragility, sensitivity, or slow recovery, biological diversity, naturalness, and coherence at MPA network level (HELCOM, 2019, 2023b). A lack of socio-economic and cultural considerations can be noted. Only SPA/RAC includes a criterion of cultural representativeness, taking into consideration the existence of traditional activities related to nature (SPA/RAC, 1995).

Of the three conventions detailed below, the SPA/RAC protocol provides stricter requirements for management of MPAs. OSPAR formally establishes MPAs through a Commission decision. Once this is done, a recommendation for their management is made, not binding on CPs. The development of a management plan for the established MPAs as well as its implementation is left to Member States, which are responsible for enforcing the regulations on vessels flying their flag. In the Baltic Sea, HELCOM Contracting parties notify the Executive Secretary of the organisation once they designate new MPAs or enlarge existing ones. Coastal and marine areas may be designated as HELCOM MPAs if they meet either a specific aim of protection⁵ or are managed in a certain way⁶. In the Mediterranean, under SPA/RAC, nationally established MPAs can become SPAMIs when included in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List). This is made at the request of CPs, provided that the proposed marine and coastal protected area meets a certain number of criteria. Indeed, there is a requirement for clearly defined conservation and management objectives for MPAs to be included in the SPAMI List. Areas must have a management plan in place. If this condition isn't met yet (at the time of inclusion in the list), a detailed management plan must be provided within three years. Failure to respect this obligation entails its removal from the List. A monitoring is also required for assessing

⁵ *Aim of protection*: In a HELCOM MPA particular protection should be given to the species and natural habitats/biotopes and nature types of the marine and coastal ecosystems of the Baltic Sea Area in order to conserve biological and genetic diversity and to protect ecological processes.

⁶ *Management of HELCOM MPAs*: Management of HELCOM MPAs should be oriented on HELCOM BSEP No.105 Planning and management of Baltic Sea Protected Areas: guidelines and tools (or successor of this document) or for sites which are also Natura 2000 or MSFD MPA sites that they are managed according to the relevant EU directive.

the state and evolution of the area, as well as the effectiveness of protection and management measures implemented, and adaption if needed. It is essential for the eligibility of the area to have a monitoring programme in place to identify and monitor the area. The aim is to evaluate the protective measures that need to be adapted for the management of the area. Alongside with further necessary studies that must be commissioned. Mediterranean SPAMIs are reviewed every 6 years by a technical independent commission.

4.2.3 Management and compliance

The management of regionally established MPAs is left to the CPs. Despite guidance and technical support provided by RSC's Commissions, many MPAs under OSPAR, HELCOM and SPA/RAC lack management plans, and when plans are in place, they are in many cases not implemented. According to HELCOM's MPA database, out of a total of 188 MPAs, 98 were reported to have management plans in place (HELCOM, 2013). In most of the self-reporting done by CPs in the framework of OSPAR, MPA measures are poorly implemented (North-East Atlantic Fisheries Commission, 2023). In the case of high seas MPAs of the North-East Atlantic, although OSPAR designates such MPAs there is no responsible management body. To date, no HSMMPA under OSPAR has a management plan (OSPAR, 2021). For MPAs overlapping with NEAFC closures, the RFMO scheme for protecting bottom fisheries was the only regulation in place. The only key management actions found in such areas were awareness-raising and information-building activities (North-East Atlantic Fisheries Commission, 2023).

Both HELCOM and SPA/RAC developed the following tools for helping achieve efficient MPA management:

- The **Management Effectiveness Assessment Method** for the Baltic Sea Region developed by HELCOM allows for assessing how efficient Baltic MPAs are, and how much progress is made towards MPAs objectives (HELCOM, 2021). Findings can be used to inform other relevant stakeholders at different levels. Furthermore, the assessment of the management effectiveness can be used as a tool for managers to identify potential shortcomings and highlight if resources can be used more efficiently, important information which can, and should, be used in iterative updates of management plan;
- The **SPAMI Twinning Programme** aims at developing and strengthening effective management of SPAMIs, promoting networking and best practices/experience sharing among managers, building capacities, and involving the civil society organisations (CSOs) in marine and coastal protected areas management. Exchange between MPA managers is facilitated through the SPAMI Collaborative Platform.

As RSCs' mandate does not extend to fishing activities, fishing restrictions adopted by regional fisheries management organisations (RFMOs, established under UNCLOS) often provide the only effective regulations when overlapping with established MPAs (see Box 1).



Box 1: Fisheries closures within RSC's regulatory areas.

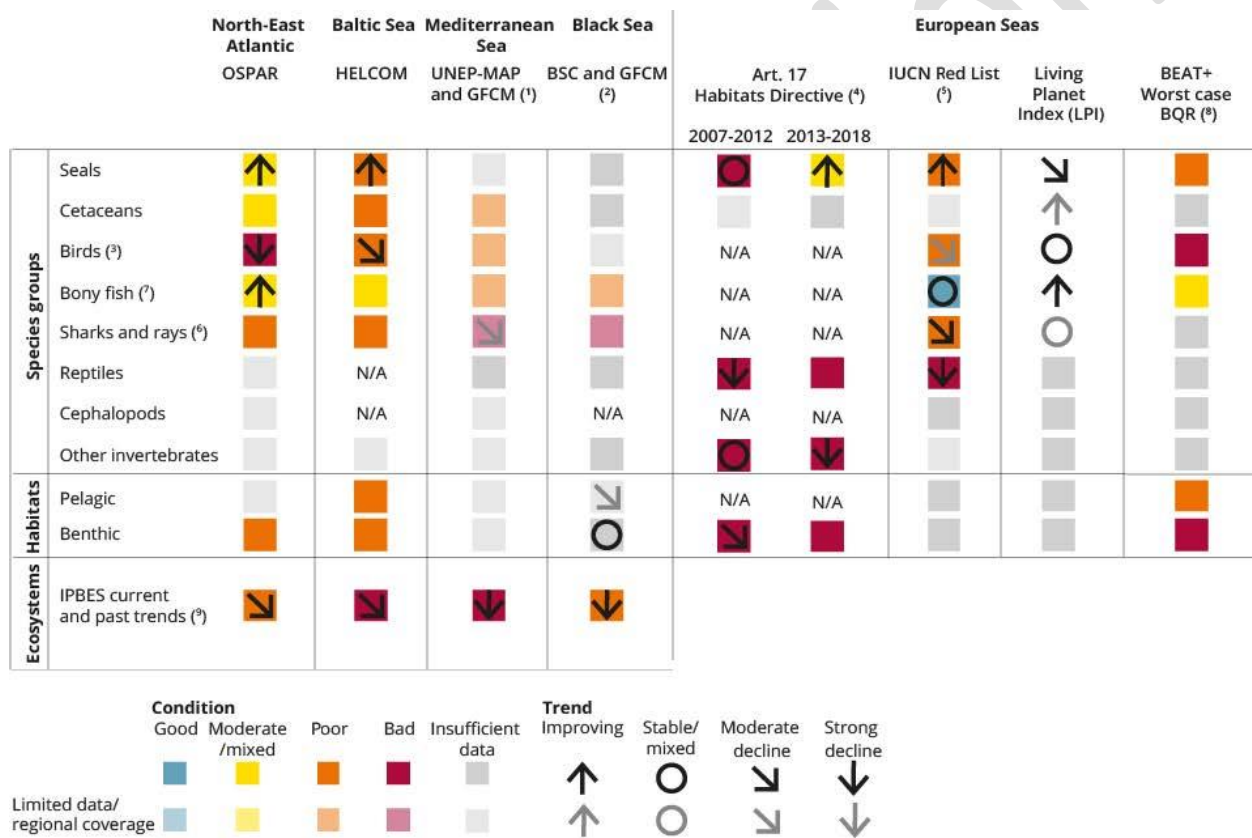
- In the Mediterranean Sea, the General Fisheries Commission for the Mediterranean (GFCM) adopted ten fisheries restricted areas (FRA) aiming at protecting vulnerable marine ecosystems (VMEs) and Essential Fish Habitats (EFHs). In those areas, the use of towed dredges and trawl nets in all waters deeper than 1,000 meters is prohibited.
- In the high seas of the North-East Atlantic, OSPAR MPAs strongly overlap with fisheries closures established by the North-East Atlantic Fisheries Commission (NEAFC). Both organisations signed a Memorandum of Understanding (MoU) in 2008, to allow for cooperation. NEAFC then closed several areas to bottom fishing to protect VMEs. Providing the very limited scope of human activities OSPAR can regulate, this overlap allows for effective protection within OSPAR MPAs.
- Compliance with RFMO measures is the responsibility of Member States for vessels sailing under their flag, as the RFMOs do not hold enforcement powers. NEAFC developed strict regulations for Member States regarding control measures, monitoring of fisheries, arrangement for inspections at sea and follow up of infringements, and inspection of non-Contracting Parties (NCP) vessels in ports (North-East Atlantic Fisheries Commission, 2023). Contracting Parties are required to implement vessel monitoring systems (VMS) and all vessels fishing outside of EEZs are required to have such devices on board since January 2000. They also must notify the Secretariat of vessels authorised to fish in international waters and report catches. NEAFC Secretariat sends alerts to Contracting Parties if vessels in the Regulatory area outside of fishing areas exhibit behaviour inconsistent with NEAFC's regulations (North-East Atlantic Fisheries Commission, 2023).

Contracting Parties of RSCs are required to regularly report to RSC's coordinating body on the national measures taken to implement decisions and recommendations adopted (Article 22 of the OSPAR Convention; Article 16 of the Helsinki Convention; Article 23 of the SPA/RAC Protocol). As in international agreements mentioned in section 3.1, this reporting is the primary way of Conventions to ensure implementation at national level. Indeed, the three regional organisations have very little competence and power to enforce regulations, and this relies exclusively on flag state jurisdiction. Both compliance by CPs and third-party States are very challenging to ensure, and subnational organisations do not have powers of enforcement. It is up to the CPs to ensure that vessels flying their flag comply with MPA regulations. Regional organisations mainly rely on cooperation with relevant bodies to ensure compliance.



4.3 European frameworks for the establishment of MPAs

Despite the comprehensive European Union’s (EU) policy framework in place to protect the marine environment, marine life in European seas is under threat due to multiple pressures and cumulative impacts affecting species, habitats and ecosystems (EUROPARK Federation, 2018; European Court of Auditors, 2020; EEA, 2021) Figure 2. The EU framework relies on MPAs as an important tool to manage and enhance marine ecosystems (Álvarez-Fernández *et al.*, 2020). Over the last decade, the total area covered by MPAs in Europeans seas increased considerably. At present, MPA coverage in the EU is 12.1% of the sea area, with approximately 1% falling under strict protection (EEA, 2023).



N/A = Not applicable

Figure 2: Overall summary of the state and trends in European marine biodiversity trends and status assessed by Regional Seas Conventions (RSCs) and European assessments. Where assessments are based on limited data or restricted regions, grey colors are used (Source: EEA 2021 (EEA, 2021) based on Vaughan *et al.* (Vaughan *et al.*, 2019))

4.3.1 Overview of the Natura 2000 network

The main legal instruments for the designation and implementation of MPAs in Europe are the EU Birds (2009/147/EC) and Habitats (92/43/EEC) Directives – the so-called Nature Directives.

Areas designated under the Nature Directives constitute the Natura 2000 network. Natura 2000 is an ecological network aiming to ensure conservation of endangered species and habitats. Within Natura 2000 areas, the Habitats Directive supports the designation of specific Sites of Community Interest (SCIs) and Special Areas of Conservation, while the Birds Directives outlines Special Protected Areas (SPAs). In most Member States, the majority of MPAs are part of the Natura 2000 network, with complementary national designation in some Member State's networks (EEA, 2023) (Figure 3).

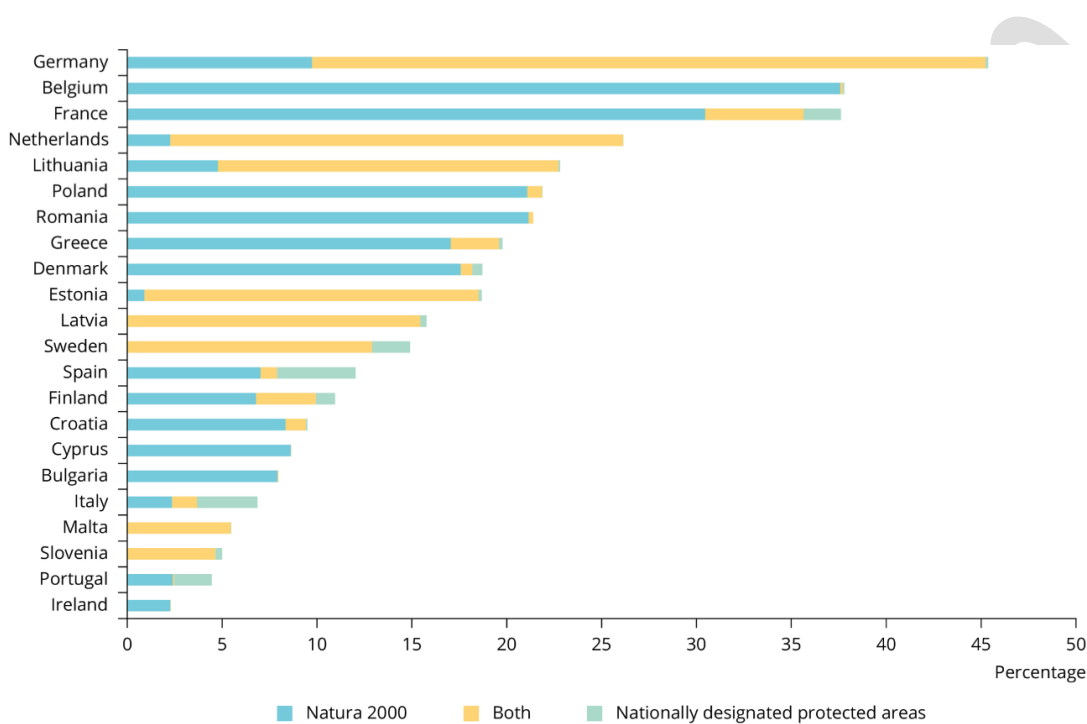


Figure 3: Marine protected area coverage in EU Member States in 2021 (Source: EEA, 2023)

4.3.2 Other relevant EU legislation on marine protected areas

The **Marine Strategy Framework Directive (MSFD)** (2008/56/EC), adopted in 2008, requires Member States to take spatial protection measures to achieve good environmental status (GES), notably through MPA networks (Article 13(4)). The MSFD covers marine waters within 12 nautical miles and takes into consideration social and economic impacts of any measures to be implemented (including spatial measures) (Braun, 2017). Given that MSFD is a *framework* Directive, it does not define specific environmental targets and measures (Van Leeuwen, Van Hoof and Van Tatenhove, 2012). Instead, Member States need to identify measures that will achieve or maintain GES and establish evaluation and monitoring programs to assess ecological quality status (European Commission, 2008). The **MSFD Decision** (COMMISSION DECISION (EU) 2017/848 of 17 May 2017) lays down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment.

The **Water Framework Directive (2000/60/EC)** (European Commission, 2000) was developed to protect and restore ecological quality within estuarine and coastal waters within 1 nautical mile. Member states are to register protected areas, including Natura 2000 areas, for the protection of habitats and species dependent on surface and groundwater. It sets a base for the monitoring program for ecological and chemical status, including the mapping and identification of protected areas.

The **Common Fisheries Policy (CFP) (1380/2013/EU)** (European Commission, 2013b), together with the **Fisheries Control Regulation (1224/2009/EC)** (European Commission, 2009) and the **Technical Regulations (2019/1241/EC)** (European Commission, 2019), aim to conserve fisheries resources and protect marine ecosystems, with expert opinions provided by the Scientific, Technical, Economic Committee for Fisheries (STECF) and ICES.

Foreign fishing activities within national Natura 2000 sites can only be restricted through Joint Recommendations under Article 11 of the Common Fisheries Policy. The reason for this is that the EU, through the CFP, has exclusive competence over the management and conservation of marine biological resources. Article 11 states that a member State establishing an MPA can take unilateral conservation measures within such MPA to fulfil their obligations under the Birds and Habitats Directive and the Marine Strategy Framework Directive as long as such measures do not affect fishing vessels of other Member States (Article 11, para 1). The country proposing such measures needs approval from the EU Commission for measures to apply to other Member States' fishing vessels. The Member State responsible for the MPA provides the Commission with the relevant information and must cooperate with the Member States whose fishing is likely to be affected by the proposed measures to reach a joint recommendation (Art 11, para 3). Due to the complexity of such procedure and the fact that other States can block the process, fisheries from other Member States in MPAs located in the EEZ of a European country are unlikely to be efficiently regulated (See Annex 2 of this deliverable for more information on the Joint Recommendation).

The **Data Collection Framework (DCF) Regulation (2017/1004/EU)** (European Commission, 2017) includes a monitoring system of fisheries' bycatch species that are also mentioned as protected species under the Habitats Directive. MSFD indicators can also be established with data collected under the DCF (ICES, 2014). Data collected under the DCF can therefore provide information relevant for Nature Directives and the establishment of MPAs.

The **Marine Spatial Planning (MSP) Directive (2014/89/EU)** (European Commission, 2014) was established as a framework for maritime planning and a tool that facilitates decision-making processes. The MSP Directive requires countries to adopt an ecosystem-based management approach. However, the Directive states that Member States "may include nature and species conservation sites and protected areas" (Article 8) yet are not obligated to. Natura 2000 is mentioned in these documents to support environmental assessments, linking to MSFD (2001/42/EC) and Habitat Directive (92/43/EEC), when maritime plans are likely to affect the environment.



The Integrated Maritime Policy (IMP) (European Parliament, 2023) has been seen as a key driver for Maritime Spatial Planning (MSP). The EU Commission created IMP strategies for each sea basin, and Member States are responsible for designing and determining how human activities and uses are divided in the marine space, including conservation. Article 6 of the Habitats Directive links land uses of industrial sectors with the conservation of habitats and species. Member States are to “(1) take appropriate conservation measures to maintain and restore the habitats and species for which the site has been designated to a favourable conservation status; (2) avoid damaging activities that could significantly disturb these species or deteriorate the habitats of the protected species or habitat types.” (Article 6 of the Habitats Directive).

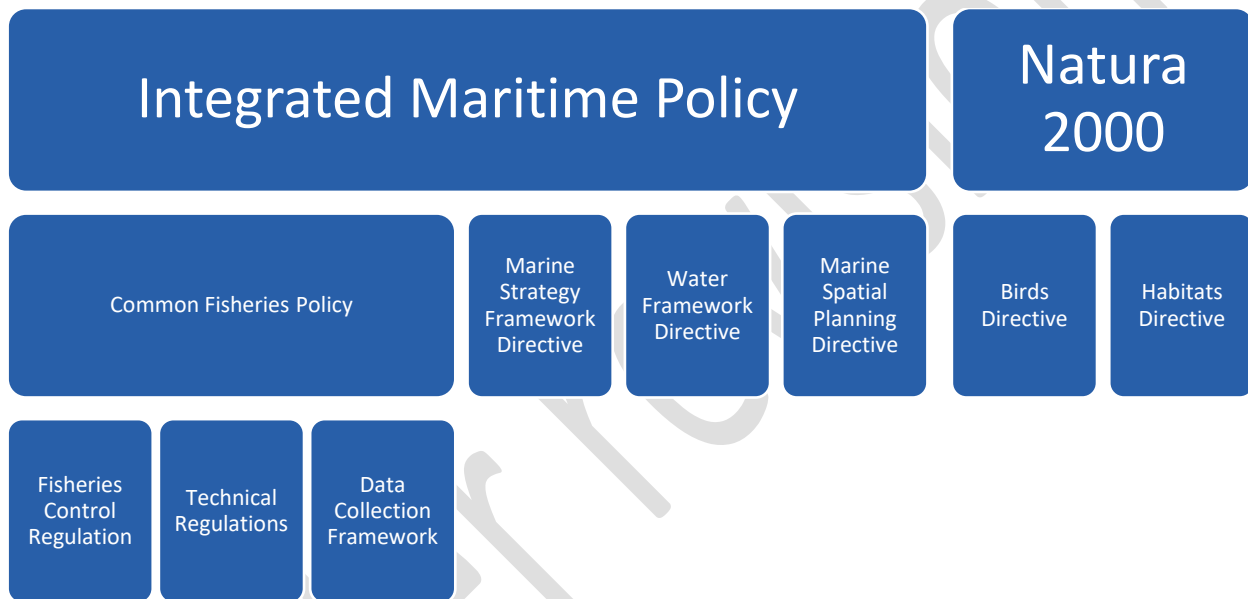


Figure 4: Relevant European policies in the context of the MPA process.

Despite the existing legal framework for marine protection (Figure 4), implementation and effective management of MPAs and MPA networks has been challenging. Challenges include the lack of resources for MPA managers for the development of management plans, conflicts with stakeholders and regional cooperation. Moreover, MPAs have been criticized for not affording real protection, with industrial activities, like fishing with destructive techniques, still allowed within their borders (Bogaert, Cliquet and Maes, 2009; European Commission, 2023e, 2023a).

In addition, the dominance of the Blue Growth discourse in the EU over the last few years created a situation wherein the problems to be addressed by MSP no longer related to good environmental governance (including marine conservation), but rather, the focus seemed to be on creating the appropriate conditions for the rapid expansion of particular industries (Flannery, Clarke and McAteer, 2019). The Blue Growth strategy has the potential to exacerbate existing sustainability issues (Leposa, 2020; Bennett *et al.*, 2021). In 2021, the EU approved “A new approach for a sustainable blue economy in the EU Transforming the EU’s Blue Economy for a

Sustainable Future” (European Commission, 2021). This updated the Blue Growth Strategy to include the role of the European Green Deal, include marine conservation and restoration and make the transition from ‘Blue Growth’ to a ‘sustainable Blue Economy’.

As a way forward, the EU Green Deal and the European Union’s Biodiversity Strategy for 2030 (EUBDS2030) have articulated highly ambitious, long-term plans for the protection of (marine) ecosystems in Europe (European Commission, 2023a). The EUBDS2030 sets out to protect at least 30% of European seas, with 10% being strictly protected, by 2030 (Cliquet *et al.*, 2023). Moreover, the European Commission (EC) has put forward the Marine Action Plan to protect and restore marine ecosystems for sustainable and resilient fisheries. The plan proposes, among other measures, to phase out bottom fishing in MPAs by 2030 (European Commission, 2023e). Finally, the EC’s proposal for a Nature Restoration Law calls for legally binding targets to restore degraded ecosystems, to cover at least 20% of sea areas by 2030, and all ecosystems requiring restoration by 2050 (European Commission, 2023d).

4.3.3 Roles and responsibilities in the establishment of MPAs

Multi-level governance based on collaboration and coordination between competent authorities beyond the field of fisheries and conservation and across policy sectors is needed to successfully include Natura 2000 objectives into the MSP process (Simeonova *et al.*, 2017).

The **European Commission** has multiple responsibilities in terms of nature protection. The EU has to update Annex I and II in the Habitats directive, assess Sites of Community Interest (SCIs) proposed by Member States, and confirm Special Protection Areas (SPAs) designated by Member States under the Birds Directive (Figure 5).

Member States propose Sites of Communities Interest (SCIs) according to criteria described in Annex III of the Habitats Directive and designate Special Protection Area (SPAs) according to the Birds Directive. While Member States are solely responsible for the designation of SPAs, the Commission designates SCIs proposed by Member States. While here are no requirements for levels of protection set out by the EU Commission in the Birds and Habitat Directive, Member States must describe site-specific conservation objectives for smaller areas within Natura 2000 sites. There are also cases where SCIs designation is delegated to regional or autonomous province authorities (Lai, 2020). SCIs can be designated to be Special Areas of Conservation (SACs) by the Member States (Figure 5).

EU Member States are responsible and competent for designing and determining, within their marine waters, the format and content of the maritime spatial plans, including institutional arrangements and, where applicable, any apportionment of maritime space to different activities and uses respectively. The MSP Directive should not impinge on Member States’ competences (European Commission, 2014), and Member States remain responsible for the development of environmental assessments within the MSP process according to the Habitat Directive and MSFD.



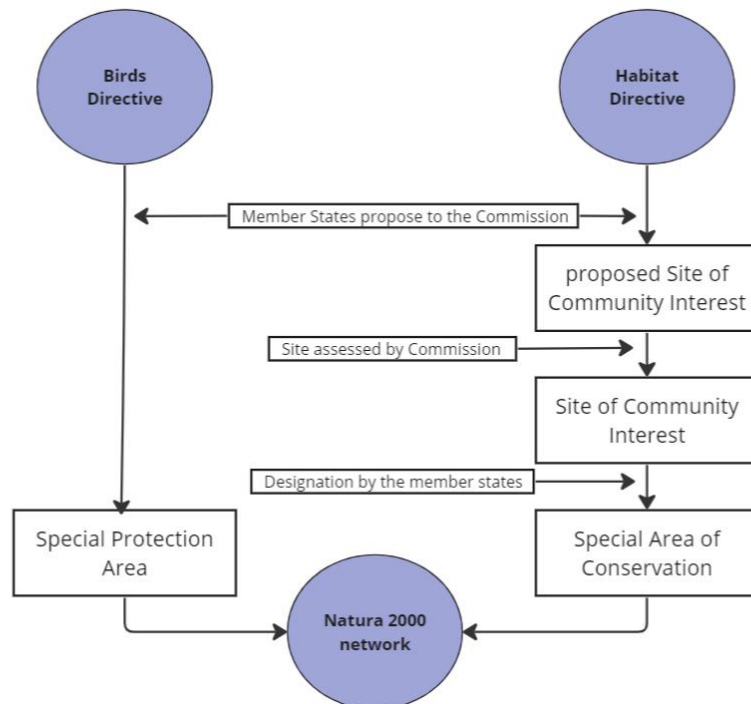


Figure 5: Responsibilities in the process of designating SPAs and SAC under the EU Birds and Habitats Directives.

The **Scientific, Technical, Economic Committee for Fisheries (STECF)** is a consulting body that provides the EU Commission with expert opinions based on scientific knowledge for all EU sea basins through the Joint Recommendation Process under the Common Fisheries Policy. STECF thereby advises the EU Commission once Joint Recommendations have been submitted on limiting fishing access. The International Council for the Exploration of the Sea (ICES) also has an advisory role to the EU Commission, and proposes lists of measures based on scientific knowledge, created in working groups of experts.

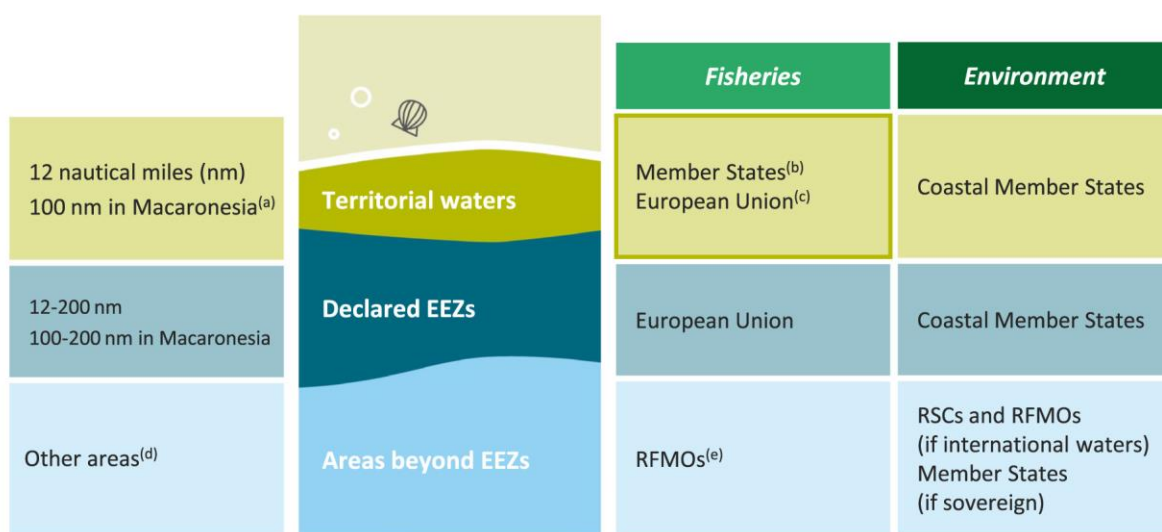
Regionalization of marine governance is supported by both the MSFD and CFP. Member States need to coordinate the implementation of the MSFD through the Regional Seas Conventions. Since the MSFD does not define what this coordination should look like, negotiations in the Regional Sea Conventions will lead to different implementations of the MSFD across the European Sea Basins and Member States (Van Leeuwen, Van Hoof and Van Tatenhove, 2012).

Regional Advisory Councils, Regional Fisheries Management Organizations and Regional Coordination Groups exist for the Baltic Sea, North Sea, North-Western waters, South-Western waters, the High Seas and the Mediterranean Sea. They play an important role in providing space for collaboration and decision making in the context of fisheries management (Long, 2010). During these meetings, participants are allowed to reflect on responsibilities of the European Commission, national governments and their agencies (Fock, 2011). Figure 7 gives an overview

of the responsibilities for environmental and fisheries policies across territorial waters , declared EEZs and areas beyond jurisdiction (European Court of Auditors, 2020).

In addition to the European Commission and Member States, the **European Environment Agency (EEA)** is an important actor, assisting the European Commission in analysing sites proposals and maintaining a public database on Natura 2000 sites (European Environment Agency, 2023), providing an overview of the network at EU level.

The EU Commission has also set up a specific body, **the Marine Expert Group** - a consultative body composed of scientists and independent experts - to support the implementation of the marine Natura 2000 network.



- ^(a) This rule applies to all EU outermost regions.
- ^(b) Member States regulate access of fishing vessels to these waters under a temporary exception
- ^(c) The CFP gives competences to the EU all over EU waters
- ^(d) CFP rules apply to EU vessels and EU nationals in international waters
- ^(e) The GFCM is competent for territorial, EEZ and international waters in the Mediterranean and Black seas

Figure 6: Responsibilities for environmental and fisheries policies across territorial waters, declared EEZs and areas beyond jurisdiction (European Court of Auditors, 2020). Actors linked to the context surrounding Nature Directives (Environment) and Common Fisheries Policy (Fisheries) are (coastal) Member States, the European Union, Regional Fisheries Management Organizations and Regional Coordination Groups.

4.3.4 Planning and scientific knowledge underpinning site selection

Under the Habitats Directive, specific habitats are to be protected. Annex I provide a list of 189 habitat types, for which Member States should designate SACs and where EU legislation applies (i.e., salt marshes, sandbanks, submarine structures and reefs). Annex II gives a list of species whose habitat should be designated as SACs, and Annex III details criteria used to select sites that could be recognized as SACs or as important for Europe. The process under Annex III is based on

the habitats and species listed in Annex I and II. Annex IV list specific species to which a strict protection regime must be applied, and Annex V species for which Member States must ensure favourable conservation status. Similarly, the Birds Directive provides a list of bird species particularly threatened and for which Member States must designate SPAs.

4.3.5 Implementation of N2000 sites

The EU must update Annexes I and II in the Habitats Directive and assess SCIs proposed by Member States, as well as confirming SPAs designated by Member States under the Birds Directive. Member States designate SCIs according to criteria described in Annex III of the Habitats Directive and designate SPAs according to the Birds Directive. While Member States are solely responsible for the designation of SPAs, the Commission designates SCIs proposed by Member States. Once SCIs have been approved by the European Commission, Member States have six years to designate SCIs as SACs. While there are no requirements for levels of protection set out by the EU Commission under the Birds and Habitats Directives, Member States must describe site-specific conservation objectives for smaller areas within Natura 2000 sites. There are also cases where SCI designation is delegated to regional or autonomous province authorities (Lai, 2020).

According to Article 4 of the Habitats Directive, SCIs are to be identified by Member States on scientific grounds only. For SACs, site-specific “necessary conservation measures involving, if need be, appropriate management plans specifically designed for the site or integrated into other development plans” must be established (Article 6.1); such measures need to take “account of economic, social, and cultural requirements and regional and local characteristics” (Article 2.3). Member States also must report every six years to the Commission on the state of conservation of birds (under Article 12 of the Birds Directive) and the species and habitats listed in the Habitats Directives (Articles 11 and 17).

Under the MSP Directive, EU Member States are responsible and competent for designing and determining, within their marine waters, the format and content of the maritime spatial plans, including institutional arrangements and, where applicable, any apportionment of maritime space to different activities and uses respectively.

Also relevant to spatial protection measures is the Joint Recommendations as described in Article 11 of the CFP, which is a process whereby a Member State can propose measures to be taken by the EU Commission in consultation with other Member States in the Community (see also Annex 2 of this deliverable for more details). In the context of MPAs, the Joint Recommendation process allows Member States to implement protective measures for Natura 2000 sites.

Article 15 of the MSFD allows a Member State to enact Community action at the regional level by informing the Commission on an issue that affects the environmental status of its waters. Recommendations on appropriate measures are then negotiated by other Member States in the Community, and will be forwarded to the Council and Parliament.



4.3.6 Management requirements

As mentioned above, the management of Natura 2000 sites is left to States. Article 6 of the Habitats Directive requires States to take appropriate conservation measures within sites and to avoid damaging activities that could significantly disturb or affect protected species and habitats. It also requires planned activities within the site to undertake an appropriate assessment to determine the likely consequences. Failure of Member States to do so can lead to prosecution at the European Court of Justice, which in practice has been done at several occasions in the past (European Environmental Bureau, Birdlife Europe and Central Asia, 2020).

The Commission provides guidance regarding management and highlights good practices within the Union. It also can take EU Member States to the European Court of Justice to address the failed/poor application of the Directives. This is in both the context of establishing Natura 2000 and managing fisheries pressures on species within these sites (European Commission, 2020). Several EU member states have for instance failed to meet the deadline for the establishment of maritime spatial plans and are currently under infringement procedures by the European Commission (European Council, 2022). Moreover, studies by WWF reported on the lack of an ecosystem-based approach in MSP plans already in place (WWF, 2022b, 2022a, 2022c). The EU supports Member States in the implementation of the MSP Directive through the MSP Assistance Mechanism (e.g. by creating The European MSP Platform) and by providing a toolbox for monitoring, evaluation and revision of MSP (European Commission and European Climate, Infrastructure and Environment Executive Agency, 2022). An important step in the MSP process is also monitoring and evaluation, which is recommended to be participatory and enable learning across sectors and borders (Van Den Burg *et al.*, 2023).



4.4 Transposition of supra-national agreements into national legislation

Once international and regional environmental agreements are ratified by parties, a crucial step for ensuring the fulfilment of such agreements is their transposition into national laws. Parties need to either develop new domestic legislations or amend existing laws in order to reflect the obligations and requirements of multilateral environmental agreements.

Adopted EU Directives must be transposed into national legislation of Member States, for regulations to be implemented, in a timeline specified in each directive. Member States have a certain flexibility in how EU Framework Directives are transposed into national laws; once this is done, they shall communicate measures taken to the EU Commission (Toporek, 2010). The Habitats and Birds Directives, respectively adopted in 1992 and 2008, were required to be transposed into national law two years after their adoption. For Regional Seas Conventions (RSCs), Contracting Parties should establish national obligations to meet RSC requirements.

Sites with multiple designations

In the different sea basins, existing Natura 2000 sites have often been given HELCOM or OSPAR MPA status providing they are fit within at least one of the six categories developed by IUCN (see introduction section). HELCOM Contracting Parties that are also EU Member States are encouraged to designate, when feasible, all Natura 2000 and MSFD sites⁷ as HELCOM MPAs. If such areas fulfil HELCOM requirements for MPAs, Contracting Parties are under no obligation to take further action. Similarly, in the North-East Atlantic, existing Natura 2000 sites can be considered as OSPAR MPAs without further requirements on the CPs responsible for such sites: *'Where Natura 2000 sites are also reported as OSPAR MPAs, CP should be under no obligation to take any further action. When management plans for Natura 2000 sites exist, they should be sufficient'* (OSPAR, 2022). HELCOM and OSPAR regulatory areas overlap in Kattegat, and the protected sites in this area are protected by both Regional Seas Conventions at the same time. A joint target and work programme for these two networks was agreed upon at the HELCOM/OSPAR Bremen Ministerial Meeting in 2003 (HELCOM, 2016).

The overlap of EU Natura 2000 sites and HELCOM and OSPAR MPAs poses challenges in terms of reporting. Article 17 of the Habitats Directive require States to report established sites to the European Commission and to regularly update the Natura 2000 database, and both HELCOM and OSPAR MPA databases are regularly updated; but countries sometimes fail to report overlapping MPAs to the relevant databases (WWF, 2019). Reporting is essential to assess MPA coverage and effectiveness, and this gap could impair future research.

⁷ Within the Baltic Sea, MSFD MPAs are included exclusively in Danish national legislation, alongside Natura 2000 sites, to protect features not included in the Natura 2000 Annexes.



4.5 National frameworks for the establishment of MPAs

This section explores the different phases of the MPA process in the countries selected for analysis. Table 5 provides an overview of MPA designation types and total coverage per country. Numbers were retrieved from the MPAtlas website and refer to formally adopted sites, independently from protection levels associated to those sites.

Table 5. Overview of MPA coverage in selected European countries (Marine Conservation Institute, 2023).

Country	MPA designation type	Total coverage in km ²
Italy	National MPAs	2,280 km ² of marine area 700km of coastline
	Marine Parks	
France	OSPAR sites	168,628 km ² in metropolitan France (representing 45.29 % of French maritime area)
	Natura 2000 sites	
	Ramsar sites	
	Biotope/geotope/natural protection area	
	Public maritime domain site	
	National Park	
	Nature marine park	
	National hunting and wildlife reserve	
	National, Regional and Corsica nature reserves	
	Corsica reserve	
Belgium	Natura 2000 sites	1,309 km ²
	Ramsar site	
	National marine reserve	
Ireland	Natura 2000 sites	488,725 km ²
	OSPAR sites	
	Ramsar sites	
	UNESCO Biosphere Reserve	
Croatia	Natura 2000 sites	5,105.63 km ²
	Nature parks	
	National parks	
Montenegro	Nature parks	47.61 km ²
Finland	Natura 2000 sites	12,240 km ²
	HELCOM MPAs	
	UNESCO World Heritage Site	



Country	MPA designation type	Total coverage in km ²
	Ramsar sites	
	Private nature reserves	
	Seal protection areas	
	Other State nature reserves	
	Nature Reserves in Åland	
Estonia	Nature conservation areas	6,794 km ²
	Landscape conservation areas	
	Limited-conservation areas	
	Species protection sites	

4.5.1 Planning

This section will explore the existing policies for marine conservation, their scope and the different authorities involved in the different countries chosen in this study.

Planning - Italy

Italy currently has 29 marine protected areas and 2 parks that protect a total of about 228,000 hectares of sea ⁸ and about 700 kilometres of coastline. Each area is generally divided into three types of zones with different degrees of protection: zone A is designated as a no-take area, zone B as a general protection zone where more activities are allowed and zone C allows many human activities.

The relevant laws in Italy for MPA designations are Laws No. 979 of 1982 and No. 394 of 1991, in which the criteria and programs of nationwide planning of MPAs are defined. MPAs are established through a Decree of the Minister of the Environment, which contains the name and delimitation of the area, the objectives as well as protection levels. Italian law No. 394 of 1991 defines the classification of protected natural areas and establishes the Official List of Protected Areas, in which all areas that meet the criteria established at the time by the National Committee for Protected Areas are entered.

Several different agencies are involved in managing Italian waters and MPAs:

- The Italian Ministry of Environment and Energy Security (MASE, previously Ministry of Environment, Land and Sea - IMELS) is the primary agency responsible for managing MPAs. MASE is responsible for developing policies and regulations related to marine conservation, as well as overseeing the management and enforcement of MPAs.

⁸ Updates on Italian MPAs can be found here: <https://www.mase.gov.it/pagina/aree-marine-istituite>



- Within MASE, the National Institute for Environmental Protection and Research (ISPRA) is responsible for scientific research, monitoring, and assessment of marine ecosystems and conservation efforts. ISPRA provides technical support and advice to MASE on marine conservation issues and collaborates with other agencies and stakeholders to promote sustainable use of marine resources.
- In addition to MASE and ISPRA, other agencies and organizations play a role in managing Italian waters and MPAs. The Italian Coast Guard is responsible for enforcing marine conservation regulations and responding to environmental emergencies, while regional and local authorities may have jurisdiction over specific MPAs and related activities. Management of MPAs is usually assigned to local governments and entities that establish a “Commissione di riserva”.

Planning - France

In France, there are currently 355 MPAs under different designations, divided among the different French sea basins (Table 6).

Table 6. Overview of MPAs in metropolitan France.

Geographic scope		MPA number
Seafront	Atlantic	186
	English Channel – North Sea	75
	Mediterranean	94
Total number of MPAs in Metropolitan France		355

The French MPA network uses a myriad of designations and levels of protection.

Table 7 highlights those designations and the associated protection purposes (PANACHE, 2015).

There is no formal definition of an MPA in national law, the IUCN definition of a protected area is used (see also Introduction section). Article L334-1 of the French ‘Code de l’Environnement’ lists 19 categories of marine protected areas, descriptions of which are found in linked articles. This listing of categories is not exhaustive and can therefore be subject to change, illustrated with the different amendments of the article through the years (2006, 2016, 2017, 2019 and 2021).

In France, the policy on MPAs is under the authority of the Ministry in charge of the environment, which relies on its regional services: The “Direction Inter Régionale de la Mer (DIRM)” (Interregional Directorate for the Sea, responsible for the management of human activities at sea and marine spatial planning), the “Direction Régionale de l’Environnement, de l’Aménagement et du Logement (DREAL)” (Regional Directorate for the Environment, Development and Housing, responsible for the management and protection of terrestrial and coastal ecosystems). The Ministry also relies on technical organizations:



- The “Office Français de la Biodiversité (OFB)” (French Office of Biodiversity), technical referent;
- The “Le Musée National d’Histoire naturelle (MNHN)” (National Museum of Natural History), scientific referent;
- The “Conservatoire du littoral” (Conservatory of coastal areas and lakeshores);
- Local collectives, NGOs and associations, which can be managers of marine protected areas (PANACHE, 2015).

Table 7. Specific French MPA designations and associated protection purposes based on the typology of the Technical Paper n°88 of the OFB on management plans of natural spaces (Office Français pour la Biodiversité, 2021) (F1: Good ecological status of species and habitats; F2 Good status of non-status species and habitats; F3 Rendering of ecological functions; F4 Good status of waters; F5 Sustainable use of resources; F6 Sustainable development of uses; F7 Maintenance of cultural heritage; F8 Social, economic, scientific or educational added value; F9 Landscape value).

MPA type	Purpose of the creation
National/Regional/Corse nature Reserve	F1; F2; F3; F8
(National) hunting and wildlife/Corsica Reserve	F1; F2; F3; F5; F6; F9
Nature marine park (NMP)	F1 to F9
National Park (NP)	F1 to F9
Biotope/geotope/natural habitat protected area ruling (B/G/NHPA)	Decree of Protection of the Biotope (DPB): F1; Decree of Protection of the Geotope (DPG): protect a landform of particular scientific, aesthetic or cultural value; Decree of Protection of the Natural Habitats (DPNH): protect a natural habitat, without the need to establish that it is also a habitat for protected species.
Specially protected areas of Mediterranean interest (SPAMI)	To protect sites that are important for the conservation of the components of biological diversity in the Mediterranean Sea. Sites which contain ecosystems specific to the Mediterranean region or habitats of species threatened with extinction. Sites of particular scientific, aesthetic, cultural or educational interest.
Public maritime domain (Conservatoire du littoral) (PMD)	F1; F2; F3; F4; F7; F8; F9
Listed in the list of the World Heritage of UNESCO	F1; F2; F3; F7; F8
Biosphere reserve	F1; F2; F3
Natura 2000 (Special Protection Area (SPA) /Special Conservation Area (SCA)/Site of Community Importance (SCI))	F1 (species and habitats justifying the designation of the site)



Ramsar	F1; F2; F3; F4
OSPAR	F1; F2; F3; F4

Planning - Belgium

The Belgian EEZ is relatively small (3,454 km²) and concentrates many human activities. To date, five marine Natura 2000 sites have been established, as well as a marine reserve – Baai van Heist – and a Ramsar site, Westelijke kustbanken. Vlaamse Banken and SBZ 1, 2 and 3 have also been designated as OSPAR MPAs.

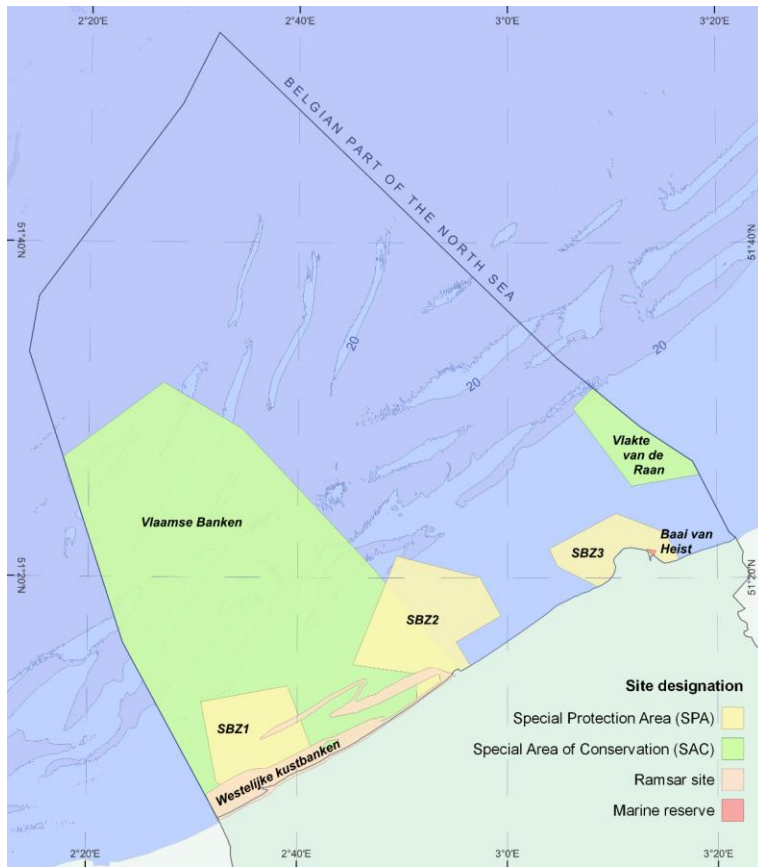


Figure 7: Existing Belgian MPAs (Withouck et al., 2023).

The main instrument for the creation of MPAs in Belgium is the Habitats and Birds Directives, which requires the country to maintain or achieve favourable conservation status for the following two habitat types, which are classified as being in an unfavourable status: 1110 – sandbanks permanently flooded with seawater and 1170 – reefs (Pecceu & Paoletti, *et al.*, 2021). Sandbanks are the most represented habitat in the Belgian part of the North Sea, and host a rich and productive benthic ecosystem playing a fundamental role in food webs and ecosystems



functioning (Pecceu & Paoletti, *et al.*, 2021). EU Birds and Habitats Directives were transposed into national law through the Belgian Marine Environmental Protection Act (MEPA) in 1999.

Competences for the marine environment are divided between the federal government and the Flemish regional government. The designation of MPAs fall within the federal jurisdiction, but several maritime activities such as fisheries are competencies of the Flemish government. The main authorities responsible for the development of MPAs are:

- The department for the Marine Environment at the FPS Public Health, who designates MPAs, and grants permits for activities at sea, and who oversees Maritime Spatial Planning;
- The Kabinet Noordzee, which sets the policy;
- The Royal Belgian Institute of Natural Sciences (RBINS), including the Marine Ecology and Management team (MARECO) and the MUMM Scientific Service, provides scientific advice, monitoring and environmental impact assessments.

Planning - Ireland

Existing MPAs in Ireland cover approximately 8.3% of the maritime area, which comprises approximately 488,726 km². These MPAs are primarily designated and managed as Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) – Natura 2000 sites - under the EU Birds and Habitats Directives respectively.

Ireland uses the RAMSAR Convention to establish protected areas (currently 22 Irish Ramsar Sites include marine and/or coastal elements), the UNESCO Biosphere Reserve programme (to date one reserve has been established, the Dublin Bay Reserve) and the OSPAR Convention (currently 19 sites). Such protected areas often overlap with Natura 2000 sites under the EU Birds and Habitats Conventions. National designations are detailed in Table 8.

The development of Irish MPAs is mostly based on supra-national frameworks such as the OSPAR Convention and the EU Birds and Habitats Directives. However, such frameworks often lack respective legislation in Ireland to legally underpin protected areas (e.g., OSPAR MPAs do not ensure any legal protection to the respective areas on their own). Importantly, international law does not automatically become part of Irish domestic law until it is incorporated through national legislation. The Wildlife Acts 1976-2021 provide legal protection to wild animals, birds, and plants, and regulate various activities related to hunting, trapping, and management of wildlife. They do, however, have limitations in terms of providing designations for areas beyond the 12 nautical mile (nm) limit, encompassing land and the foreshore only.

Beyond 12 nm, MPAs can be only designated under EU Birds and Habitats Directives. The national law also does not have any provisions for the creation of National Parks. Another important piece of legislation is the National Marine Planning Framework (NMPF), i.e., Ireland's Marine Spatial Plan, prepared by the Department of Housing, Local Government and Heritage. Ireland was obligated under the EU Maritime Spatial Planning Directive to develop an ecosystem-based maritime spatial plan, which was adopted by the Irish Government in 2021. The NMPF provides a policy framework for marine planning, however, it does not specify where activities will take



place at sea and therefore does not currently give sufficient support towards effective MPA governance. Moreover, the NMPF does allow, to some extent, for proposed developments to have adverse impacts on existing protected sites.

Considering that the Irish government has committed to expanding the network of MPAs to protect 30% of its maritime area by 2030, but current (2023) network covers only 8.3% of Irish waters, there is a need to significantly expand the MPA coverage. The process of developing and drafting Ireland's new MPA legislation is underway. The National Parks and Wildlife Service (NPWS), which falls under Department of Housing, Local Government and Heritage, is responsible for ensuring Ireland's nature conservation requirements are met.

Table 8. Irish designations for terrestrial and marine protected areas.

MPA type	Definition and purpose of the area	Number of currently existing marine sites
Natural Heritage Areas (NHAs)	Selected based on criteria such as the contribution to conservation of vulnerable, rare, or endangered species or habitats in Ireland or the Atlantic biogeographical region, representation of typical Irish habitats or ecosystems, and contribution to the conservation of geological, geomorphological, or fossil features as determined by the Geological Survey of Ireland.	No NHA has been established to date for marine habitats.
Refuges for Fauna and Flora	Designated on lands where the Minister of Housing, Local Government and Heritage considers that particular species of fauna or flora require special protection.	7 refuges having significant importance for seabirds.
Wildfowl sanctuaries	Areas over which shooting of wild birds is prohibited.	68 sites.
Nature Reserves	Areas of importance to wildlife that are protected under the Wildlife Acts. The criteria for Nature Reserve status include the habitat or ecosystem being of scientific interest, likely to benefit from protection measures, and being on state-owned or private land.	13 sites with marine elements.
National parks	Selected based on IUCN criteria, such as the presence of ecosystems minimally impacted by human exploitation, the presence of significant plant and animal species, geomorphological sites, and habitats of scientific, educational, and recreational interest or natural beauty.	No national park currently includes marine features.

Planning - Croatia

Croatia has 409 protected areas, of which 19 are coastal-marine (Maestro *et al.*, 2022). The total surface of MPAs is 5,105.63 km², with national statute MPAs covering 12% of MPAs and Marine Natura 2000 sites cover 99% (SPA/RAC, 2021), with sites overlapping with one another. There are



three national parks (Brijuni, Kornati and Mljet) and two nature parks (Telašćica and Lastovo, which are also Blue4ALL Information Sites). The Natura 2000 network covers 16.26% of the coastal sea.

There is no special legal instrument for protected marine areas. Therefore, the state uses wider existing legal policy implementation instruments and tools for protected areas and biodiversity conservation. The Ministry of Economy and Sustainable Development and administrative bodies of regional self-government units are responsible for nature protection affairs and the immediate implementation of the Nature Protection Act. Public institutions are responsible for the management of national parks and nature parks, as well as for other protected areas under regional and local governments administration.

Other ministries directly or indirectly have administrative competences within protected areas:

- The Ministry of Agriculture, implementing the Marine Fisheries Act, plays an important role in the establishment and management of marine fisheries protected areas.
- The Ministry of Maritime Affairs, Transport and Infrastructure is responsible for maritime transport, ports and navigation safety on the Adriatic Sea.
- The Ministry of Spatial Planning, Construction and State Property is the central body of state administration responsible for the implementation of the Spatial Planning and Construction act (spatial planning system, protected coastal zone, location and construction permits, and related supervision).
- The Ministry of Regional Development and EU Funds, whose task is the sustainable development of the Adriatic Sea, islands and coasts.

Planning - Montenegro

Unlike the other countries in this deliverable, Montenegro is not a member of the European Union, thus EU Nature Directives do not apply. Nevertheless, Montenegro is a candidate country for EU membership working on aligning its legislation and complying with the EU directives and standards. The process of mapping and identifying Natura 2000 areas is ongoing.

The country only recently started establishing protection zones for its national waters. To date three MPAs have been established: the Nature Parks “Platamuni”, “Katič” and “Stari Ulcinj”, proclaimed in 2021 by the government.

The relevant legislation in Montenegro is the Nature Protection Law which is already significantly aligned with Habitat and Bird Directives and which defines the procedure for establishing MPAs (under Article 28 and 32) and which authorities are responsible for managing such areas (Article 34). There is no specific body in Montenegro with a clear and well-established competence for marine protection and management, but multiple agencies are involved. Responsibilities are distributed among the different agencies, emphasizing the need for coordination and collaboration. The key institutions involved in the management of Montenegrin marine waters and MPAs are:



- The Ministry of Ecology, Spatial Planning and Urbanism, Directorate for Nature Protection, responsible for overall nature protection and policy development. It plays a significant role in the management and protection of Montenegrin waters, including the designation, establishment and coordination of management of MPAs.
- The Environmental Protection Agency is responsible for environmental monitoring, assessment, and enforcement of environmental regulations. It plays a role in monitoring the ecological status of Montenegrin waters, and monitoring in Protected areas, including MPAs.
- The Institute for Marine Biology conducts research, monitoring, and conservation activities. It provides scientific expertise and advice for the management of Montenegrin waters and the establishment and management of MPAs.
- The Public Enterprise for Coastal Zone Management of Montenegro is responsible for the management and protection of the coastal zone, including coastal waters. The institution is delegated under the Nature Protection Law from 2016 as the manager of Protected Areas in the coastal and marine part of Montenegro.
- The Ministry of Agriculture, Forestry and Water Management is involved in the management of fisheries and aquaculture activities in Montenegrin waters, including within MPAs. It formulates policies and regulations related to sustainable fisheries management and works closely with other agencies to ensure the conservation of marine resources.
- The Maritime Safety and Port Management Administration is responsible for maritime safety, navigation, and prevention of marine pollution. It ensures compliance with international regulations on maritime affairs.

Planning - Finland

Approximately 11% of Finland's sea area is protected by different types of MPAs (Virtanen *et al.*, 2018), with 924 protected areas at sea (Arnkil, Hoikkala and Sahla, 2019).

Most of the protected areas are overlapping with other types of MPA, especially with Natura 2000 sites. Only some portions of HELCOM MPAs, UNESCO world heritage site, Ramsar areas and national parks do not belong to the network of Natura 2000 sites. All HELCOM MPAs are included in the Natura 2000 network. State protected areas encompass a diverse group of protected areas designated by a separate designation of the Council of State and Ministry of the Environment. Measures of such areas are defined individually. Åland is a semi-autonomous province in the Southwest of Finland with its own nature conservation legislation that applies also to protection of marine habitats and species in Åland. The jurisdiction covers territorial waters, while Åland does not have its own EEZ. Table 9 gives an overview of MPAs in Finland.

The relevant legislation for nature conservation is the newly updated Nature Conservation Act (9/2023) that gives an overall legal basis for nature conservation, sets responsibilities for authorities and stipulates processes for nature conservation planning, management and reviews. In addition to the Nature Conservation Act, designation and setting of conservation measures for



protection can be based on other legislation such Water Act, Environmental Protection Act and Land Use and Building Act, as well as on agreements with owners of the land or water areas.

National nature protection programmes, including a programme for the Natura 2000 network, direct designation of nature reserves and protected areas on a national level giving a consistent, protection targets to the sites included in the programmes.

Table 9. Types of MPAs in Finland

MPA type	IUCN category ¹	number	km ²	Means of designation
National parks	II	5	1 655,7	Designation based on Nature Conservation Act (and respective law for the Åland)
Private nature reserves ²	I – IV	619	1 728,5	
Seal protection areas	IV	7	188,3	
Other state nature reserves	I – V	42	116,3	
Nature reserves in Åland	(I – V)	29	355,1	
Natura 2000 (SAC, SCI, SPA)	(IV)	170	8 831,4	Other ³
HELCOM MPAs	(IV – V)	34	7 827,1	International designations
UNESCO world heritage	(V)	1	1 962,1	
Ramsar areas	(IV - V)	17	2 098,1	

¹ Only the four first types of MPAs have an official IUCN category. For the others, the respective categorization is given in brackets.

² Coastal waters up to 500 metres from the shoreline are in private ownership

³ Only some of the Natura 2000 sites designated based on the nature conservation legislation

The ministry of the Environment has the overall responsibility of nature conservation in Finland, while there are two state nature conservation authorities, namely nationally operating Parks and Wildlife Service and Centers for Economic Development, Transport and the Environment (ELY Centre) that operate on regional level. The Parks and Wildlife Finland, a specific unit of Metsähallitus (the State-owned enterprise under the responsibility of the Ministry of Agriculture and Forestry and of the Ministry of the Environment (Metsähallitus, 2023b)). The Parks and Wildlife Service has the responsibility of conservation planning and management on state-owned land and water areas, while the ELY Centres has the similar responsibilities on privately owned land and water areas, in cooperation with landowners. The two authorities work in close collaboration at regional level, because large protected areas such as large marine Natura 2000 sites can consist of a mosaic of smaller nature reserves or protected areas both on state owned and private water areas.



Planning - Estonia

Currently, 27.3% of Estonian territorial waters are protected through MPAs. Estonia uses a set of designation types such as nature conservation areas, landscape conservation areas, limited-conservation areas and species protection sites to preserve the marine environment.

In addition to EU Directives, the relevant legislation is the Nature Conservation Act, whose objective is the preservation of biodiversity and the sustainable use of natural resources. This is mostly done by restricting or regulating the access to areas with important biodiversity features and the resources they hold. More specific guidelines for protecting the nature are set out in various sectoral legislative acts. In Estonia, nature conservation is carried out at the ecosystem level. In addition to the Nature Conservation Act, there are other regulations that support nature conservation. Legislation regarding sustainable use of natural resources include the [Fishing Act](#), [the Hunting Act](#), the [Forest Act](#), and the [Water Act](#), which emphasise the need to use resources sustainably and without harming the ecosystem as a whole.

The agencies responsible for managing Estonian waters are the Environmental Board, the Ministry of the Environment, and the Transport Administration. The Estonian Environmental Board has exclusive competence for management but are seeking to increase the competence of decision makers in MPAs and assess the need for additional protection in marine areas in Estonia.

4.5.2 Implementation

This section expands on the criteria used to select sites deemed worthy of protection, formal procedures for designating MPAs, as well as the requirements for MPA management.

Implementation - Italy

Site selection

The establishment of an MPA is preceded by the identification of a "marine finding area", pursuant to Laws No. 979/1982 and No. 394/1991. The data collected during the selection of a particular site is both social and ecological. Scientific data includes species information (identification, their position and deep in which is possible to find them, seasonality, size, presence of flag species), habitat structure (characteristics, if is a particular habitat of scientific interest); socio-economic data includes opinions of the key local administrators and categories, issues, and who are the principal associations in the site. The indexes used to propose an MPA are economic factors (culture, economic state, food safety), governance factors (management plane, legislation) and biophysics (habitat, species, trophic net, environmental quality) (Pomeroy, Parks and Watson, 2004). The consideration of one or more criteria varies depending on the type of protected area and its objectives. Ecological aspects are the most important, followed by socio-economic aspects aimed at promoting sustainable development of local activities of the site. The



Ministry of the Environment calls on scientific institutes, laboratories and research institutions for the collection of knowledge and data.

Designation procedure for Italian MPAs

In Italy, MPAs are established through a Ministerial Decree, by the Minister of the Environment in agreement with the Minister of Economy and Finance. The Decree indicates the name and spatial delimitation of the area, the conservation objectives and the protection regulations to which it is subject. As well as that, the perimeter of the area is defined (the outer boundaries), the zoning within it (the different zones A, B and C), and the protection in place through the different degrees of restrictions in the three zones. The regional and local authorities are consulted on in the process of MPA designation, as well as the opinion of the Unified Conference ('Conferenza Unificata', a permanent body that represents the Central Government, Regions, Provinces and Municipalities).

Management of marine protected areas, pursuant to Laws 979/82, 394/91 and 426/98, is entrusted by the Ministry of the Environment to public bodies, scientific institutions or recognized environmental associations, including consortia among themselves. In Italy, the management measures of a marine protected area are developed collaboratively by different authorities and organizations. The main parties involved include: MPA management entity, local and regional authorities, Ministry of the Environment and Land and Sea Protection, local communities and stakeholders and scientific experts. Management plans for Italian MPAs differ on a case by case basis, but a few basic principles should be present in all of them: it should provide a practical instrument to the management body, create a programme of management effectiveness and identify the right process to achieve the MPA goals. The stakeholders involved in this process have to be compatible with the interests of the activities, demonstrate an interest and effort in the management, and, finally, have a connection with the area under protection.

Implementation - France

Site selection

Most Regional and international MPAs (SPAMIs, RAMSAR sites, Biosphere Reserves, Natura 2000 sites) use mainly ecological criteria, focusing on aspects of exceptional heritage or representability. Territories of "Conservatoire du littoral" consider the safeguarding of the coastline. Biotope/geotope/natural habitat protected area rulings are implemented to answer to threats to protected biodiversity or heritage, as well as national hunting and wildlife reserves, nature reserves and OSPAR areas. World Heritage sites, Marine nature parks and National parks take the socio-economic and cultural contexts much more into account. A certain number of MPAs aim to protect or conserve specific species and/or habitats, which have been assigned a conservation status or are listed in EU Directives. It is possible to protect the entire marine environment on a part of the territory (NNR, RNP, BPD/HNPD...). The status 'Zone de Protection Forte' (Strongly Protected Area) is a label used to certify that, in certain defined areas the pressures generated by human activities are either absent, avoided, eliminated or severely



limited to not compromise the environment (Decree n° 2022-527 of April 12, 2022, taken in application of the article L. 110-4 of the code of the environment and defining the concept of strong protection as well as methods to implement it).

Designation procedure for French MPAs

There is no procedure for designating an MPA defined at a national level. The State, through the Ministry of Environment, is responsible for developing the objectives of the MPA. Areas chosen generally have one or several of the following characteristics: increase in anthropic pressures, loss of functional areas (such as feeding zones), presence of species and/or habitats in a poor state of conservation, protected and/or of community interest. For the MPAs with international or regional designation types, the procedure of designation follows international and regional conventions. For other types of MPAs, the authorities responsible for the designation are usually local institutions or authorities. The first step is to complete a designation file. This file is composed of a map presenting the geographical delimitation of the MPA, a synthesis of the state of the ecological heritage, the aims of this MPA in connection with the directives or the law corresponding to the type of MPA desired, and finally the list of members of the management body. Depending on the type of MPA desired, additional documents may be requested to be attached to the file. For example, for a Marine Nature Park, proposals for a management guideline about the knowledge, the conservation and the uses of heritage, are also requested. The second step is consultation and/or advice requests from relevant stakeholders on the MPA designation file, and then a formal creation of the MPA as such. These steps are presented in Table 10.



Table 10. Designation procedure and stakeholder involvement for French MPAs.

MPA type	Authorities responsible for designation	Consultation and advice from public structures	Scientific advice	Advice and consultation of citizens	Advice and consultation of relevant actors	Official documents for MPA designation
Natura 2000	Prefect of the relevant department and Maritime prefect	For a site to be established, consent must be given by the local representative of the Ministry of Defense. Consultation: local authorities (municipalities, Public Institutions of Inter-municipal Cooperation) and Inter-ministerial	Technical and scientific support: OFB	Public Consultation	Meetings with relevant stakeholders	SCI: Notification of the SCI to the European Commission, who validates it or not (publication of SCI) then Inter-Ministerial ruling. SPA: Inter-ministerial decree and decision notified to the European Commission (Figure 5)
National Park	Prefect of the relevant department and Maritime prefect	Advice: local State representatives (Maritime prefect, regional prefect), local authorities (communities, municipalities, Public Institutions of Inter-municipal Cooperation, department, region) and public establishments (Consular chambers, General Environmental	Advice: Regional Scientific Council of the natural heritage, National Conservation Council	Public inquiry	Advice: representative of fishers (Regional Committee for Maritime Fisheries, Aquaculture, Regional Committee of Shellfish Farming)	Ruling of the prefect of the region – recognition of the adhesions to the charter of the National Park Ministerial decree



MPA type	Authorities responsible for designation	Consultation and advice from public structures	Scientific advice	Advice and consultation of citizens	Advice and consultation of relevant actors	Official documents for MPA designation
		Inspection and Sustainable Development Environmental Authority)				
Nature marine park	Prefect of the relevant department and Maritime prefect	Advice: local representatives of state, local authorities (coastal municipalities, Public Institutions of Inter-municipal Cooperation, department, region) and public establishments (Territorial Chambers of Commerce and Industry, Natural Space Management Organizations) Consultation: OFB Board of Directors (by deliberation)	Not consulted	Public inquiry	Advice: representative of fishers (Regional Committee for Maritime Fisheries, Aquaculture, Regional Committee of Shellfish Farming)	Ministerial decree



MPA type	Authorities responsible for designation	Consultation and advice from public structures	Scientific advice	Advice and consultation of citizens	Advice and consultation of relevant actors	Official documents for MPA designation
National Nature Reserve	Prefect of the department	Advice: States (Ministry of Civil and military administrations), local representatives of state (Seafront Council, Maritime prefect), territorials' communities Inform: President of Regional Council	Advice: Regional Scientific Council of the natural heritage, National Council of the protection of nature, Departmental Commission of nature, landscapes and sites in formation nature	Public inquiry	Advice: Owners and Rights Holders Departmental Commission for Nature Sports Spaces, Sites and Routes	Ministerial decree Decree in Council of State in case of disagreement of the owners
Regional Nature Reserve	President of Regional council	Advice: local representative of state (Prefect of the region, Seafront Council), territorials' communities	Advice: Regional Scientific Council of the natural heritage	Public consultation Public inquiry in the absence of agreement of all owners	Agreement: owners and holders of real rights (individual, state, department, municipality, public establishment)	Deliberation of Regional council Decree in Council of State in case of disagreement of the owners
Corsica Nature Reserve	President of Executive council of Corsica	Advice: local representative of state (Prefect of Corsica, Seafront Council), territorials' communities	Advice: Regional Scientific Council of the natural heritage	Public consultation Public inquiry in the absence of agreement of all owners	Agreement: owners and holders of real rights (individual, state, department, municipality, public establishment)	Deliberation of Executive council of Corsica Decree in Council of State in case of disagreement of the owners



MPA type	Authorities responsible for designation	Consultation and advice from public structures	Scientific advice	Advice and consultation of citizens	Advice and consultation of relevant actors	Official documents for MPA designation
National Reserve of hunting and wildlife	Ministry of hunting and Ministry in charge of sea OFB or establishment managing a Reserve of hunting and wildlife	Consultation: OFB Board of Directors (deliberation)	Not consulted	Not consulted	Advice: National Hunters Federation	Ministerial ruling
Biotope / geotope / natural habitat protected area ruling	Prefect of the department, Maritime prefect, and Regional prefect (if measures concerned the fishing)	Agreement: relevant military authorities	Advice: Regional Scientific Council of the natural heritage, Departmental Commission of nature, landscapes and sites in formation nature	Public consultation	Advice to the users concerned: Regional Committee for Maritime Fisheries, Aquaculture, Regional Committee of Shellfish Farming	Inter-prefectural ruling
Conservatoire du littoral	Prefect of the department	local representative of state (Direction of Sea and coastal, Regional Directorate for the Environment, Development and Housing)	Not consulted	Not consulted	Consultation meeting	Convention of attribution of the DPM between the prefect of the department and the Conservatoire du littoral



Implementation - Belgium

Site selection

When selecting a site for protection in the Belgian MPA framework, the data collected is ecological (species and habitats distribution, importance of the area for specific species and ecosystem functioning) as well as data on other users, to anticipate conflicts. For Habitat Directives areas, the selection of sites is made following criteria listed in Annex III of the Habitat Directive. For the Birds Directive, areas are selected depending on the number and surface that are best suited for conservation of the species listed in both the Annex I of the Birds Directive for species that are present in marine space under Belgian jurisdiction; and migrating birds not listed in the Annex I of the Birds Directive, but that are often found in marine space under Belgian jurisdiction.

Designation procedure for Belgian MPAs

The process for MPA designation and management in Belgium is described and enforced by a decree established under national law (Etat Belge, 2016)). The Federal Department of Environment is responsible for making a proposal for an area to be designated as Natura 2000 zone, including a map, geographical delimitation and a scientific description. After the completion of this proposal, the Ministry submits it to the adoption procedure for Belgian MPAs as defined by Article 5bis of the law of 20 January 1999 regarding the protection of the marine environment and the spatial planning of marine space under Belgian jurisdiction. The King then designated the areas to be considered as Natura 2000. The designation proposal must include the Natura 2000 code, the name of the site, the delimitation of the area and a scientific description, as well as species and/or habitats to be protected. For Birds Directive Natura 2000 sites, the designation is permanent. For Habitats Directive Natura 2000 sites, the Minister then notifies the zone to the European Commission. At the latest 6 years after the site being designated by the European Commission as Site of Community Importance, the King designates the site as definitive Habitats Directive site (SAC). A Natura 2000 site can only lose its status if natural evolution justifies it (Etat Belge, 2016; NADEG, 2019).

The conservation objectives are set by the Minister, for each Natura 2000 site and are expressed in terms of maintaining and improving quality, surface and size of population or distribution of species and habitats, that are categorized as in need of protection on a European level. Conservation objectives must be adopted in the 6 years following the area's definitive designation; they are legally binding for the federal authority. Such objectives must be reviewed and evaluated at the latest six years after adoption. Conservation measures are set by the King and must follow rules set by the Habitats directive (art.6) and by the Birds directive (art. 8 and 4) regarding ecological requirements for listed species and habitats' conservation objectives. These measures can forbid a specific activity or set the conditions for an activity to take place. A draft management plan is submitted to public consultation by the Minister, with the possibility to comment on it. Afterwards, the Minister must produce a declaration indicating if and how opinions and remarks were integrated in the management plan, as it is a requirement that such opinions are taken into account.



Implementation - Ireland

Site selection

As MPAs in Ireland as mainly established through the EU Birds and Habitats Directives, the deliverable will focus solely on Natura 2000 sites. SPAs are selected in Ireland according to four criteria:

- A site regularly supporting 20,000 waterbirds or 10,000 pairs of seabirds,
- A site regularly supporting 1% or more of the all-Ireland population of a species listed in Annex I of the Birds Directive,
- A site regularly supporting 1% or more of the biogeographic population of a migratory species,
- A site considered to be one of the most suitable sites in Ireland for an Annex I species or a migratory species (number of sites depends on the importance of the Irish territory for the international conservation of the species).

Following EU regulations, SACs are designated based on the following criteria:

- The importance within Ireland of the site for its habitats or species,
- How representative is the example of the relevant habitat present on the site,
- How isolated is the population of the relevant species on the site,
- The intactness of the habitat on the site,
- Other factors, including the need to ensure a good geographic spread of sites, the total number of habitats and species listed in the Annex to the Habitats Directive present on the site, whether it is a priority habitat (i.e., in danger of disappearance) on the site and if the site contains habitats or species for which Ireland is especially important.

Designation procedure for Irish MPAs

Once sites are selected, relevant coastal landowners are notified in writing and provided with information packs explaining the scientific reasons for proposed designation and activities requiring consent. Next, a three-month period is allowed for lodging objections/appeals to proposed designation or activities requiring consent. Objections are assessed on scientific grounds and adjustments to boundaries can only be considered on scientific grounds. If internal review is unsuccessful, an appeal can be made to the Designated Areas Appeals Advisory Board (DAAAB). The Board considers scientific reports from both parties and makes a recommendation to the Minister of Housing, Local Government and Heritage. If no objections are lodged or on the conclusion of any internal reviews or appeals, the Minister's decision is communicated to the appellant.

The Minister of Housing, Local Government and Heritage is responsible for the implementation of SPAs and SACs. The National Parks and Wildlife Service (NPWS) under the Department of Housing, Local Government and Heritage is also in charge of implementation of other forms of environmental protection, including the ones based on international or regional conventions. There is a process for developing comprehensive conservation objectives that are specific to individual Natura 2000 sites, known as Site Specific Conservation Objectives (SSCOs). SSCO targets are typically developed by the NPWS, based on scientific assessments, ecological monitoring, and expert knowledge. They may include habitat restoration, species management, and habitat management measures. To date, SSCO have been published for almost all marine SACs, as well as for 39 marine SPAs. NPWS is working towards establishing Site Specific Conservation Objectives (SSCOs) for all Natura 2000 sites.



Implementation - Croatia

Site selection

A reference list of species and habitats requiring protection through the implementation of ecological network areas has been established by the “Regulation on the Ecological Network and the Competencies of Public Institutions”, including priority wild species and natural habitats. Areas of this network are selected based on expert criteria for area selection for each natural habitat type as well as wild species and priority natural habitat types.

Designation procedure for Croatian MPAs

The values and characteristics of the proposed protected area as well as management method are determined based on expertise. Such expertise contains a detailed description of the features, values of the area (geodiversity, biodiversity and cultural-historical values), assessment of the state of the area, the way the area is used, the consequences that will result from the declaration of protection, especially with regard to property rights and economic activities found, as well as the assessment and sources of the necessary funds for the implementation of the act on the declaration of a protected area. This expertise is carried out by the State Institute for Environmental and Nature Protection, based on the request of the Directorate for Nature Protection - both bodies within the Ministry of Economy and Sustainable Development. A proposal for declaration is then developed based on this, as well on the possibility of funding for management and the unique geodetic basis for entering the legal regime in the cadastre and land register. The public is informed on this proposal, which is then subject to public inspection (lasting 30 days). Depending on the category of the proposed protected area, public inspection is organised either by the Ministry (for national parks, nature parks, strict and special reserves) or by a unit of regional self-government (for all other categories of protection). Depending on the category of protection, the protected area is declared by the Croatian Parliament, the Government of the Republic of Croatia or the representative body of the competent regional self-government unit. The creation of an expert base for protection is an extensive and multidisciplinary process, and in addition to the employees of the Ministry (Institute), experts and scientists from various fields often participate as external collaborators. The expert base is a report made at the request of the Ministry, which gathers evidence about an area and its ecological significance, based on predefined ecological criteria. This report should indicate whether or not an area fulfils the criteria and can be proclaimed a protected area. Based on the collected data and analysis, the expert report proposes the protection of the area in a certain category. Except for the protection of new areas, the expert base is prepared when changing the category and/or borders of an existing protected area.

Currently, 20 public institutions operate in the Republic of Croatia at the state level (12 public institutions of nature parks and 8 public institutions of national parks), 21 at the county level and 5 at the local level. Management plans are adopted by the management council of the competent public institution. The management plan for the area of the ecological network, which extends over the area of several regional self-government units, is jointly adopted by the administrative councils of all public institutions that manage it. Public institutions can also adopt special “Action plans” related to a certain segment of management, if that segment of management is extremely important, emphasized, or complex.



Implementation - Montenegro

Site selection

The process of declaring a protected area begins with a request based on available data, information and findings to the Environmental Protection Agency (EPA), which is then responsible to conduct a protection study. This request can be submitted by the Ministry of Ecology, Spatial planning and Urbanism or the competent authority of the Local Municipality. The protection study includes, amongst other elements: a description of the site and its natural characteristics as well as the resources it provides; the proposed boundaries of the area and protection regimes; proposed management methods and measures and which activities are to be allowed or not; an assessment of the consequences of the designation of a new MPA on coastal owners and existing economic activities and options for funding. State administration bodies, local self-government bodies, and other legal entities are obliged, upon the request of the administration body, to provide available data necessary for the preparation of the Protection study. In case of missing data, EPA is in charge of organizing field surveys and data collection for the preparation of a comprehensive study. Proposed protected areas are then evaluated based on their specific natural characteristics⁹, functions and significance in terms of ecology, culture and history, education, and development and on their vulnerability.

Designation procedure for Montenegrin MPAs

When defining the protection goals of a certain area, several institutions are in charge. The Institute of Marine Biology proposes protection objectives in accordance with scientific research. Such objectives are then part of the Protection Study prepared by the Environmental Protection Agency. In line with the findings of the Protection Study, the Ministry prepares a proclamation act – Decision – and submits it to the Government of Montenegro for adoption. The proclamation act for the protected area includes: the name, type, and category of the protected area, spatial boundaries of the protected area with zones and protection regimes, description of the basic target values of the area, method of protection and development of the protected area, actions, activities, and operations that are prohibited and allowed within the protected area, measures and conditions for area protection, cartographic representation with marked boundaries of the area, and the name of the manager. The Proclamation act for the protected area is published in the “Official Gazette of Montenegro” or in the “Official Gazette of Montenegro – Municipal Regulations.”

Management plans are prepared by the manager Public Enterprise for Coastal Zone Management of Montenegro and adopted by the Ministry based on the expert opinion of the Environmental Protection Agency. All relevant stakeholders (i.e., the civil sector, local communities, and national and local organizations and institutions) are involved in the development of management plans through workshops, public hearing and meetings. The requirement of the developing of the management plan for all Protected areas, including MPAs is defined by the Article 58 of the Nature Protection Law. The article defines management plans as strategic documents that plan measures and activities for the protection and conservation of a protected natural asset. Article 59 defines the specific content of management plans.

⁹ Authenticity and autochthony, representing the degree of originality, reliction representing the degree of uniqueness, endemism, uniqueness in its kind, rarity, diversity, richness of natural phenomena, phenomena and processes, integrity representing functional unity, landscape attractiveness, age, and preservation of the area.



Management plans should include, inter alia, a description of natural resources in the protected areas and the pressure applying to it, the overall goals and means to achieve them including methods of local stakeholder engagement as well as funding sources (See Annex 3 for a description of management plans). Management plans run for a period of five years and are implemented through annual management programmes. The government approves the management plan for national parks, and the Ministry approves the management plan for strict and special reserves. The competent authority of the local self-government unit, with the consent of the Ministry, approves the management plan for nature parks, natural monuments, and areas of exceptional features.

Implementation - Finland

Site selection

Finnish Natura 2000 sites are selected based on the species and habitats listed in the Annex I (for marine habitats, see Table 11) and II, IV and V (for marine species) of the EU Habitats Directive, and on Annex I of the Birds Directive.

Table 11. Annex I marine habitats in Finland (Virtanen et al., 2018)

Code	Habitat	Area (km ²)
1110	Sandbanks which are slightly covered by sea water all the time	735
1130	Estuaries	767
1150	Coastal lagoons	697
1160	Large shallow inlets and bays	498
1170	Reefs	2,450
1610	Baltic esker islands with sandy, rocky and shingle beach vegetation and sublittoral vegetation	65
1620	Boreal Baltic islets and small islands	601
1650	Boreal Baltic narrow inlets	369

Nature inventory programmes provide basic information of state and condition of nature in Finland. For the sea areas an inventory of underwater marine diversity – through the so called [VELMU-programme](#) – has been running already since 2014 covering all coastal and marine waters in Finland. It has created a valuable database for nature conservation planning at sea. It was also used to guide Finland's Maritime Spatial Planning process and formed the core data for Finland's contribution to the Baltic Sea EBSA process.

Designation procedure

Each MPA type has its specific designation procedure:

- **National parks** are designated through a dedicated law for each park that gives specific provisions and restrictions, although the overall protection regulation is given in the Nature Conservation Act (§49). National parks are designated for raising citizens' environmental awareness and for recreation use; thus, they are not as strictly protected as nature reserves (Arnkil, Hoikkala and Sahla, 2019).

- **Natura 2000** sites are mainly sites that were already designated as national protected areas through legislation other than the Natura 2000 legislation. Protection of the Natura 2000 sites can be based on legal designations, on administrative decisions by authorities or they can be contract based. Most of the Natura 2000 sites are protected by nature conservation or wilderness laws, but legal protection can also be based on other laws, such as Water Act, Building and Land Use Act or Land Extraction Act. In general, the designation of the area protects the site against human activities that may threaten the habitats or species that are being protected by the Natura 2000 site, but other types of human activities are allowed.
- **Private nature reserves** can be designated in two ways. Landowners (i.e. water rights owners at sea) can propose designation to a regional authority (ELY-centres¹⁰) that designates the area. If the private area is already included in national nature conservation programmes, regional environmental authorities can designate protected areas also without a consent from the landowner. Most of the private protected areas are included in national nature conservation programmes or in the Natura 2000 network.
- **Seal protection areas** were established through a Government Decree in 2001.
- **Other State nature reserves** can be designated through a separate designation by the Council of State or the Ministry of Environment, and most of the existing other State nature reserves are included in the Natura 2000 network.
- Lastly, the Province of **Åland** designates areas by individual decisions of the government of Åland.

Implementation - Estonia

Site selection

MPAs are selected mostly based on ecological criteria (i.e. threatened species and habitats, important flyway or resting areas for migratory species). Socio-cultural aspects are taken into consideration only when land is included or if the area is used by fishermen. In most cases, only certain species and habitats are protected. MPAs are generally proposed by the Environmental Board (when there are ecological values) or NGOs (Estonian Ornithological Society, Estonian Marine Institute etc).

Designation procedure for Estonian MPAs

Keskkonnaamet (Environmental Board) is responsible for the MPA site objectives and for developing the management measures. The organisation requests expertise to determine the social and ecological values of the site, pressures and threats and gathers all the relevant information. Then the Environmental Board prepares protection measures, which is then sent to the Ministry of Environment. The latter initiates the proceedings to grant protection to the site. Following that, stakeholders are asked to contribute to the process. Relevant information is made available in newspapers, a homepage announcement, The Official Announcements (an electronic journal that publishes all notices, invitations and announcements prescribed by the legislation), e-mail/letter to landowners and stakeholders, and via meetings. The relevant legislation is the Nature Conservation Act (Riigi Teataja, 2004).

¹⁰ ELY Centres are Centres for Economic Development, Transport and the Environment, and are responsible for implementing and developing tasks of the central government at a regional level (ELY, 2023)

4.5.3 Site management

This section provides an overview of management measures and relevant authorities in existing MPAs in the different countries, as well as procedures for compliance and enforcement.

Site management - Italy

Management of Italian MPAs

In Italy, the management of MPAs is transferred to public bodies, scientific institutions or recognized environmental NGOs through a decree of the Ministry of Environment (MASE), after consultation with regional and local authorities. In most cases, MPAs are managed directly by local municipalities; but in some cases, by a consortium composed by universities, municipalities and NGOs.

Italian legislation does not require MPAs to adopt a formal management plan but passes a Ministerial decree for the managing body to use ISEA methodology to identify its own management strategy. The ISEA Project was promoted and carried out by WWF in collaboration with the Italian Ministry for the Environment. ISEA (Standardised Interventions for the Efficient Management of Marine Protected Areas) implements initiatives aimed at supporting the management of Italian MPAs and at strengthening management effectiveness (Programma Mare WWF and Minisero Dell'Ambiente, 2012). The ISEA methodology is developed for planning, managing and monitoring the activities related to biodiversity conservation covered in the management plans. The "Open Standard" methodological approach was chosen, following the Conservation Measures Partnership recommendations (Conservation Measures Partnership, 2020). Miradi software (MIRADI, 2023), a tool commonly used in the management of environmental conservation projects, helped in computerizing the "management strategy" of each MPA. Strategy plans have been sketched in a comparable framework, outlining the targets of conservation, the short and long-term objectives and the strategies in place meant to reduce threats to the habitats and species. The ISEA methodology put the foundations in place to have an effectively managed network of ecologically representative MPAs in Italy in place by 2020, as requested by the CBD.

Pursuant to art. 19, paragraph 5 of Law 394/91, the MASE approves the Regulation governing the activities allowed in the MPA. Such regulation encompasses the different environmental protection regimes and which activities are allowed within the area, in compliance with the characteristics of the environment and the founding purposes of the area itself. Pursuant to Law 979/82, the Minister of the Environment, having obtained the favourable opinion of the Reserve Commission, approves by special decree the Regulations for the execution and organisation of the marine protected area, which contains the detailed regulations and the conditions for the exercise of the permitted activities. The same Implementing and Organising Regulation provides for the possibility of issuing further detailed provisions contained in a supplementary regulation adopted annually. Every year, the MPA Management Plan (technical/scientific and financial) is defined by the consortium/municipality under the direct control of the Ministry. The management plan includes a monitoring plan.

The Ministry of the Environment is responsible for overseeing the management of MPAs at the national level. The Ministry provides strategic direction, policy development, and coordination among different stakeholders. Law No 394/91, art. 19, identifies the activities that are forbidden in MPA, i.e., those that may compromise the protection of the characteristics of the environment



being protected and the area's founding purposes (see Annex 4 for a complete list of regulated activities in Italian MPAs). However, the decrees establishing MPAs, considering the nature and socio-economic activities of the areas, may provide for certain exceptions to the prohibitions established by Law no. 394/91, as well as more exhaustive details of the constraints. In this regard, reference is made to each individual establishing decree or subsequent amending decree and, where present, to the regulations for each of the marine protected areas.

Compliance and enforcement

Enforcement in Italian MPAs involves various stakeholders and organisations, and its success relies on the cooperation and coordination of all involved parties. The Coast Guard's involvement is significant due to its expertise in maritime law enforcement and its capability to patrol and monitor marine areas effectively. It plays a crucial role in enforcing regulations within MPAs and are responsible for detecting and deterring illegal activities. Park Rangers, MPA staff and local associations work on site to monitor activities, educate visitors and stakeholders as well as enforcing regulations within the MPA. Local authorities, such as the financial guard, the forest guard and the police may be involved in enforcing specific regulations, particularly regulations related to access, waste management and public order.

Beyond responsible authorities, engaging with local communities and encouraging them to be actively involved in conservation efforts and reporting any violations or suspicious activities can enhance compliance and enforcement.

Site management - France

Management of French MPAs

The establishment of a management plan is not systematically mandatory and varies according to the type of MPA. In general, these management plans define (i) the guidelines and measures for the management and conservation of habitats and species, (ii) the methods for their implementation and (iii) the accompanying financial provisions. It develops specific management measures, which can be implemented through signing formal contracts with relevant partners. The Natura 2000 contracts formally bind relevant local stakeholders to take measures for environmental conservation, and who receive financial compensations in return.

The management and conservation measures consider the economic, social, and cultural activities that take place on the site and the regional and local particularities. If human activities do not have significant effects on conservation and restoration objectives, they are allowed to continue within the site.

Table 12 lists the management requirements and measures according to MPA type.

Table 12. Management requirements for French MPAs.

Type of MPA	Management requirements	Management measures
Registered on the World Heritage List	Requirement to develop a management plan.	Management measures are directed toward protection and conservation, as well as towards general recognition of the site.
RAMSAR sites	A Ramsar Description Form is mandatory, which then serves as a management plan.	Management comes from superposition with other protected areas. If there are no protected areas already in place prior to the establishment of a Ramsar site, both a monitoring committee and a coordination body are established.
Biosphere reserve	No requirement for management plans.	There is a management committee
N2000 sites	Mandatory objective document (DOCOB). Steering committee defines management measures.	Established with local stakeholders. It includes an ecological and socio-economic inventory, conservation objectives for habitats and species of community interest and also appropriate management measures and a Natura 2000 charter.
Marine Nature Park	Legal requirement for management plan within 3 years of creation of the park. Revised every 15 years.	Determines the protection, knowledge, enhancement and sustainable development of measures. It includes a graphic document indicating the different zones of the park and their vocation
Nature reserves	Mandatory management plan, on the model of the CT88 (see below)	Any action likely to harm the natural development of the fauna and flora, the geological heritage and, more generally, to alter the character of the reserve is prohibited within the reserve (République Française, 2023a).
National parks	Mandatory charters	Set out the park's objectives and working methods in consultation with the relevant stakeholders
National hunting and wildlife reserves	Program management establish during the designation	Management of bird population and their habitats, studies on the birds, courses and awareness of politics and users
Public maritime domain	There is no legal obligation to have management plan, but there is a long-term strategic intervention document.	Management plans in 3 parts: an initial state, an identification of the stakes of the area and an operation plan setting out management measures and planned actions.

Type of MPA	Management requirements	Management measures
Biotope/geotope/natural habitat protected area ruling	No legal requirement for management plan. Prefect defines measures to prohibit or control activities and is responsible for management.	Existing management measures result from the superposition with other MPAs with a different legal status.

MPA management measures can be set by the State (or its local representative), or by the management board (see Table 14 in Annex 5). The management measures are linked to specific objectives of the sites and are divided into several axes: protection and restoration of biodiversity, coordination, awareness, communication, knowledge, and monitoring. The most common management measures are related to communication, awareness, monitoring and improving knowledge. Different types of MPAs are managed through a single management plan. These MPAs often geographically overlap.

The State is always responsible for the management, but it can delegate the management to a local body (for example: OFB, local authority, NGO ...). The OFB sometimes manages areas together with professional fisheries committees. The management authority can also be an NGO, such as the League for the Protection of Birds (LPO), through a 5-year management delegation agreement between the French State and the LPO (Schéré *et al.*, 2023). Large marine nature parks interact with natural reserves and Natura 2000 sites. Smaller sites are often directly managed by the larger sites' management committee.

Measures can be taken to restrict or even prohibit fishing in MPAs during specific time and space windows. Nature Marine Parks, Nature Reserves and Biotope/Natural/Habitats protected areas can have a regulation of professional and recreational fisheries, linked to fisheries stock management. In the National Park, there is a possibility to create during the designation, a permanent and definitive no take zone, like in the Calanques National Park, where the no take zone covers an area of 46km². Since 2013, the Natura 2000 impact assessment of professional fishing activities at sea has informed the preparation or revision of the management plan (Ministère de l'Écologie, du développement Durable et de l'Énergie, 2013; Ministère de la transition écologique, Ministère de la mer, 2022). The fishing risk analysis, a separate procedure from the required Environmental Impact Assessment (EIA) under the Birds and Habitats Directives (BHDs) developed specifically by France, is conducted by the site manager with the technical support of the French Office of Biodiversity and in collaboration with the representative structures of professional fishermen according to a standardized national method (AFB *et al.*, 2019; République Française, 2023a). It allows consistency and equal treatment at the national level. This method consists in analysing the interaction between ecological issues and fishing. This leads to the proposal of a certain number of regulatory measures, aimed in particular at bottom trawling for a better protection of marine habitats. In the end, the State decides whether to implement these measures or not. On the Channel - North Sea coast, these measures target the habitats at stake in the coastal strip and prohibit or strongly restrict bottom trawling and fishing dredges in the coastal strip (SPA Western Seine Bay, SPA Eastern Seine Bay). These measures are implemented in a specific area and affect all fishermen, French and foreign vessels, which use the area. To respect the EU rules, a specific procedure is realized which includes a negotiation between Member States (see Section 4.3.2). In order to respond in an equal and

coherent way, when the fishing risk analysis identifies a type of impact (e.g. abrasion) and other activities cause this same impact, these activities can also be restricted or prohibited (e.g. recreational fishing).

Initially, the fishing risk analysis focused only on ecological habitats. Currently, the issue of bycatch is being assessed: a risk analysis of bycatch is to be carried out on a biogeographical scale (2022-2023), which will allow the identification of large areas where the risks between specific combinations of species and fishing gear are to be assessed (OFB, MiMer and MTE, 2022). If necessary, a risk analysis can then be carried out at the scale of a Natura 2000 site. After, the same methodology used for the ecological habitats will be applied for the bycatch. The overall efficiency of such measures depends on both cooperation with professional fishermen and final decisions taken at the national level.

Compliance and enforcement

Ensuring compliance with regulations is the responsibility of the Maritime Prefecture, through two decentralized State services (Interregional Directorate of the Sea and the Regional Directorate of the Environment of Development and Housing). These two organizations refer to the environmental code (République Française, 2023a), as well as to the rural and maritime fishing code (République Française, 2023b). The control of the marine environment is established and prioritized in the Monitoring and Control Plan for the Protection of the Marine Environment. A specific national center was created in 2016 to provide support to these organisations, the “Centre d’Appui au Contrôle de l’Environnement Marin (CACEM)” (Marine Environment Control Support Centre), which verifies compliance via controls and monthly feedback requests to managers.

Monitoring is done mainly thanks to professional fishing tools such as the Vessel Monitoring System (VMS), on-board cameras and on-board observations, the European Fisheries Control Agency (EFCA) Fisheries Information System, a national scientific network for observing resources and all professional fishing fleets, as well as other specifically developed tools (e.g. VALPENA, which collects data through surveys on the location of fishing vessels under 12m (COREPEM, 2014)). Monitoring depends on available resources. It should be noted that more and more interdepartmental control operations are being carried out to pool the control forces and carry out larger-scale operations, especially at the land/sea interface.

Site management - Belgium

Management of Belgian MPAs

Belgian MPAs do not have management committees nor direct managers. Management is done at the federal level. MPA-specific regulations exist for the following activities (Etat Belge, 2016): high-speed boats, helicopters, water sport competitions, sand and gravel extraction and bottom-disturbing recreational fishing. Regarding projects at sea, in addition to the EIA required for all projects at sea, projects proposed that may have a significant effect on a N2000 site must conduct an appropriate assessment to evaluate if their activities could impact on the achievement of the conservation objectives (Etat Belge, 2016). Authorization for conducting the project depends on the results of the appropriate assessment and is given by the Minister.

Within the Vlaamse Banken site, gravel extraction is prohibited and a maximal volume of sand per year can be extracted from a specific zone within the MPA. Recreational fishing with bottom-disturbing techniques is prohibited, except when the gear is pulled/pushed by a person or a horse.



An exception to this rule is possible if the Minister gives individual permission to existing recreational bottom-contact shrimp fishers, with the condition that the applicant can demonstrate that they have been at least three years actively fishing already. With this permission the applicant can fish a maximum of 10 days a year, and the permission is valid for maximum six years (RD 22/05/2019).

The current MSP (2020-2026) designates three search zones within which restrictions on bottom-contact fisheries can be implemented. These restrictions first need to be approved by other Member States through Article 11 of the CFP. Zones 2 and 3 are located within the Vlaamse Banken MPA, and zone 3 overlaps with SBZ 1 & 2. In addition to these spatial measures relevant to the MPAs, the management plans for Natura 2000 areas in the BPNS also include measures related to addressing knowledge gaps, policy issues, sectoral measures and measures tackling pollution relevant to MSFD descriptors (Arcadis Belgium, 2021; Belgische Staat, 2022b, 2023). An overview of measures in place for the Belgian MPAs can be found in Annex 6.

Compliance and enforcement

The MUMM (Management Unit of the Mathematical Model of the North Sea), the scientific service of RBINS (Royal Belgian Institute of Natural Sciences) is responsible for the monitoring of the marine environment, including and particularly in the N2000 sites. Enforcement of existing regulations is done by MUMM, Flemish authorities and the Coast Guard.

Site management - Ireland

Management of Irish MPAs

The main body responsible for management of most MPAs (SACs, SPAs, NHAs, and others) in Ireland is the National Park and Wildlife Service (NPWS). A more complex management structure is present in the case of The Dublin Bay UNESCO Biosphere Reserve, which is administered by Dublin City Council, in collaboration with other local authorities, Dublin Port Company, Fáilte Ireland (National Tourism Development Authority), NPWS, as well as community groups, non-governmental organizations (NGOs), local businesses, third-level institutions, and schools.

Site management - Croatia

Management of Croatian MPAs

Croatian MPAs are managed through both local authorities and national institutions. Responsibilities for administrative and professional affairs, and inspection are shared between the Ministry of Economy and Sustainable Development (specifically, the Directorate for Nature Protection, Institute for Nature and Environmental Protection) and State Inspectorate (Inspection of nature protection). The management of areas at the local level is left to municipalities and counties (Public institutions of national parks and nature parks, County public institutions, and local public institutions).

The Ministry of economy and sustainable development, through its subordinate institutions, is primarily responsible for setting policies, guidelines, and regulations related to MPAs at the national level. It establishes management plans, defines conservation objectives, and coordinates the overall management framework for MPAs in Croatia. The Institute for Nature and Environmental Protection plays a crucial role in the management of MPAs. It provides scientific support, develops



conservation strategies, monitors biodiversity, and carries out research activities to ensure the effective management of these protected areas. The Institute works closely with local authorities and stakeholders to implement management plans and conservation measures. Local authorities, particularly municipalities and counties, have responsibilities in managing specific MPAs within their jurisdictions. They may be involved in day-to-day management activities, such as monitoring, enforcement, and public engagement. Local authorities often collaborate with the national institutions to ensure compliance with regulations and to address specific regional concerns.

Fishing activities within MPAs are regulated through the 'Ordinance on Fishing in Protected Areas, Special Habitats and Areas with Special Fishing Regulations'. Commercial fishing, small coastal fishing and sports and/or recreational fishing need to be granted a special permit from the managing institution in order to be carried out in those areas. VMS devices are mandatory for Croatian fishing vessels (>12m).

Compliance and enforcement

Compliance and enforcement within Croatian MPAs are carried out through a combination of measures. The responsibility for enforcement lies with various institutions, including the Ministry of Interior, Ministry of Agriculture, and the Croatian Coast Guard. They work in coordination with the Ministry of economy and sustainable development and the Institute for Nature and Environmental Protection to enforce regulations and protect the integrity of the MPAs. Enforcement efforts involve surveillance, patrols, and inspections to detect and prevent illegal activities, such as illegal fishing, poaching, or unauthorized access. Penalties and fines may be imposed for violations of MPA regulations. Awareness campaigns, education programs, and public engagement activities are also undertaken to promote compliance and responsible use of these protected areas.

Site management - Montenegro

Management of Montenegrin MPAs

The Public Enterprise for the Coastal Zone Management of Montenegro is responsible for the management of established protected areas. In the three current Montenegrin MPAs, proclamation decisions have defined two protection regimes for two protection zones (II and III), with permitted and prohibited activities. Planned activities are linked to indicators in order to monitor implementation, as well as indicators for financing.

Protection zone II allows commercial and recreational fishing with fishing tools that do not touch the seafloor, as well as scientific and educational activities. Bottom-contact fishing gears, vessel anchoring and killing of animals are prohibited. Protection zone III allows more activities, with all fishing activities allowed as long as they comply with national fishing regulations. Annex 7 of this deliverable provides a detailed list of allowed and prohibited activities per protection zone.

Compliance and enforcement

There is no specific compliance procedure within management plans, compliance is ensured through different national regulations. The most important tool for compliance is inspection (maritime, fisheries, ecological etc). The Public Enterprise for the Coastal Zone Management of Montenegro (who manages the MPAs) established the Department for Nature protection and Sustainable development, which has competence for surveillance and control of those areas. It also employs external personal for extra scientific monitoring and ensuring compliance. Management



capacities are not sufficient for complete control of the protected area, and the involvement of other institutions and organizations is necessary. Also, the responsibilities of the rangers employed by the MPA manager are limited, while the jurisdiction in this area is held by different inspection bodies.

Site management - Finland

Management of Finnish MPAs

A key element in Finland's nature conservation planning and management is the regional, integrated conservation planning that is done jointly by the two state nature conservation authorities, namely Parks and Wildlife Service and the Centres for Economic Development, Transport and the Environment. Both organisations have their regional offices that jointly produce the regional, integrated conservation plans (so called master plans). The regional planning implements network thinking in conservation planning and management covering all nature reserves and protected areas in the region. Through the regional planning the authorities can direct and prioritise different types of management measures or identify needs of more detailed management planning to individual sites in relation to the protected area network in the region. The last time the 13 regional conservation plans were updated for the Natura 2000 areas in 2016 (Parks and Wildlife Finland, 2023).

Planning, management and reviews of all protected areas is facilitated by the use of a centralized data system, ULJAS. All existing relevant data on the N2000 sites (and other designations) are compiled in the national GIS-based protected area information system. ULJAS is open to all authorities responsible for the governance and management of the sites. The system includes information on all sites, their nature and other values, results of assessments and management and operational plans. The system includes also schedules for updates of management plans or assessments for each site.

There is a legal obligation to produce management plans for all national parks, but they can be produced also for other types of protected areas, if assessed to be necessary (Parks and Wildlife Finland, 2023). For Natura 2000 sites this is not compulsory. The Nature Conservation Act stipulates that in such Natura 2000 sites where special measures are not needed, the Natura site condition assessment – so-called "NATA" assessment – gives necessary directions for management of the sites (Parks and Wildlife Finland, 2023). This assessment also assesses the need for a management plan.

Preparation of the management plan or the Natura 2000 site's condition assessment ('NATA assessment') identifies the need for specific protection and restoration measures. If such a need is identified, the necessary measures are compiled in a site-specific operational plan.

Steps in NATA assessment:

- Current state of the site
 - o Key natural values
 - o Threats
 - o Current and targeted future state of the key natural values
- Possible needs of management measures
 - o Need is identified for...
 - a management plan, and/or

- a specific operational plan for concrete measures, and/or
- another type of a plan (ie. land use plan or water management plan), and/or
- no need for further plans.

Actual management plans are perceived to be necessary for Natura 2000 sites where there is a need to coordinate multiple human activities and conservation measures. The management plans are more strategic than the NATA assessment and preparation of the management plans is always done in participatory processes together with relevant stakeholders.

Management plans of protected areas typically include strategic targets for the time span of 10-15 years. Implementation and impacts of the management plans are assessed in every 5-6 years to check if the development is according to the strategic objectives and if new or updated measures are needed.

Internationally and regionally designated MPAs do not have specific management plans apart from the ones described above. Indeed, HELCOM MPAs belong to the Natura 2000 network and are managed as such. Ramsar designations do not directly provide for any protection measures, but since most of the Ramsar sites in Finland belong to the Natura 2000 network, protection measures are stipulated in that respect. However, the Ramsar convention requires that plans and projects need to consider protection and sustainable use of the Ramsar sites. Thus, activities that are harmful for birds and habitats important for birds should be avoided. Lastly, within the only World Heritage site in Finland, the protected area designation of Kvarken Archipelago site consists only of land area and as such, is not counted as an MPA.

Management measures for nationally designated MPAs are listed in Table 13.

Table 13. Management measures for Finnish national MPAs.

Type of MPA	Management measures in place/specific regulations	Responsible body
Natura 2000 sites	Compulsory Natura 2000 site's condition assessment ('NATA assessment') assesses the need on management measures. Management plans are not mandatory. Management is done through different protection or restoration measures, if needed.	Parks and Wildlife Finland
National parks	Each national park has its management. The management plans are not binding, but the more detailed regulations that accompany the management plans are binding. Visiting and camping in parts of the park can be restricted or prohibited. Management is done through different protection or restoration measures, if needed, setting different zones within the sites, with zones dedicated to recreation and tourism. Such zones can be restricted or prohibited to protect birds or seals.	Parks and Wildlife Finland

Type of MPA	Management measures in place/specific regulations	Responsible body
Private nature reserves	Protection and management measures varies for each individual site. Often these sites are part of a larger Natura 2000 site and their management is planned and implemented as an integrated entity. Planning is done in cooperation with conservation authorities.	Individual owners of coastal land and/or islands ELY Centres Parks and Wildlife Service Municipalities
Seal protection areas	Prohibition of visiting the islets and skerriers any time closer than one nautical mile (926 metres). Permission can be granted by the Parks and Wildlife Finland (for scientific purposes for example). Prohibition of movement in the whole area from beginning of February to mid-June. Prohibition of hunting of seals and other activities that might harm them.	Parks and Wildlife Finland
Other State nature reserves	Conservation objectives and measures are defined individually for each area.	Parks and Wildlife Finland
Nature Reserves in Åland	Protection measures defined individually for each site	Government of Åland

Compliance and enforcement

Management plans for the protected areas are not binding to other than nature conservation authorities, but they can be accompanied by a more detailed regulation that is binding. This applies especially to large areas such as national parks. For areas that are designated based on other legislation than Nature Conservation Act, e.g. Water Act, the respective permit conditions and other restrictions given by authorities stipulate what is allowed and forbidden in the sites. The two state nature conservation authorities, namely Parks and Wildlife Service and the Centres for Economic Development, Transport and the Environment, are responsible for supervision of the protected areas which they are responsible for.

Site management - Estonia

Management of Estonian MPAs

Management plans are required for all Natura 2000 areas. A management plan is an operational action plan in which the values of the area are described, as well as the factors endangering species and habitats and the likely impacts. It sets protection objectives, the necessary measures to be taken to achieve such objectives and the specific priorities and work schedule.

The Environmental Board is responsible for developing management plans and measures for MPAs and all other protected areas. Common management measures include the prohibition of



destruction or harming of the habitats for the protection of which a limited-conservation area was formed, and of all activities which are likely to endanger the favourable conservation status of the habitats and protected species. Some areas have restrictions on fishing activities. In limited-conservation areas, there are no protection rules, fishing is allowed, but there is a requirement to follow the Estonian Fishing Act, fishing rules and regulations of the Minister of the Environment for temporary regulation of fishing.

Compliance and enforcement

The Environmental Board is responsible for compliance with MPA regulations. It carries out supervision of the use of the environment and natural assets in almost 20 different fields, from the protection of forests and fish stocks through to waste management and problems related to pollution. Areas are monitored also through the Estonian Environmental Board, as well as through universities and the Environment Agency.

4.5.4 Review of MPA effectiveness and financial considerations

Review of MPA effectiveness - Italy

The management plan and its results are reviewed by scientific institutions, such as universities or research entities (University of Rome, 2020), or by specific entities like SPA/RAC (SPA/RAC, 2021) or MedPAN (MedPAN, 2020). The Ministry of Environment and Energy Security (MASE) has supervisory functions regarding whether management objectives are achieved or not. It can remove the responsibility for management from the identified manager.

Funding by the Ministry is decided annually based on the distribution among all MPAs of available resources in the State budget. Budget is therefore not allocated based on management needs and varies annually. As a result, Italian MPA managers are made aware of the annual budget in the first months of the year. Another element is the fact that there is a law that prevents the use of ministerial management funds for the payment of staff, since according to the law the managers must provide their own funds.

Review of MPA effectiveness - France

MPAs are revised at the same time as their management plans. Such plans are living documents, reviewed, and updated as more knowledge is gathered and are set up for periods of 5 to 10 years, sometimes 15. After this period, the results achieved by the management of the site, the effectiveness of the actions carried out and the adequacy of the means are assessed. Considering this assessment, new or updated management plans are proposed (Office Français pour la Biodiversité, 2021). World Heritage Sites are reviewed every 10 years, Ramsar sites every 5 years and OSPAR MPAs are annually assessed. National parks are reviewed every 6 years, national hunting and wildlife reserves every 10 years and natural marine parks every 15 years. The reviewing period of Natura 2000 sites and nature reserves varies. Existing MPAs can be reviewed through specific decrees, which can modify either the perimeter of the MPA or the composition and/or organisation of the governance body. Such decrees are adopted after public inquiry, as stated in the Environment Code.



French MPAs receive mainly public funding. The areas designated under the Biotope Protection Decree (BPD), Geotope Protection Decree (GPD), Natural Habitat Protection Decree (NHPD) and SPAMIs do not receive specific funding, except on an ad hoc basis by the State (République Française, 2023a). All other types of MPAs benefit from complex financing, mobilizing a plurality of mainly public players (department, region, decentralized state service, public establishment for inter-communal cooperation, water agency, National Forestry Office, etc.).

Review of MPA effectiveness - Belgium

6 years after adoption, conservation objectives and management plans of MPAs are reviewed. It is a public process, under the responsibility of the government. During the evaluation, achievement of the objectives will be evaluated, and threats and opportunities to their accomplishment will be assessed. If necessary, objectives will be adapted depending on the outcome of the review. Conservation objectives are the basis of the general management of Natura 2000 sites and form the reference for designing a relevant monitoring strategy. The current conservation objectives for Belgian N2000 sites were formulated so that, where possible, they integrate existing MSFD objectives as conservation objectives for Natura 2000 (Belgische Staat, 2022a).

In terms of financing, for the revision of the programme of measures, any information about the availability of possible financing was included in the analysis for identifying and selecting additional measures (Belgische Staat, 2022a).

Review of MPA effectiveness - Ireland

EU Birds and Habitats Directives require Member States to report on the conservation status of birds and of species and habitats listed in the Annexes (see Section 4.3). The last report was submitted by NPWS in July 2019 for the Birds Directive, and in April 2019 for the Habitats Directive.

Review of MPA effectiveness - Croatia

The management plans of the protected areas are adopted for a period of ten years, with the possibility of modification and/or amendment after five years. Changes that occurred during those ten years should be incorporated into management actions through audits. After a period of five years, the implementation of the management plan and the achieved results are analysed and, if necessary, the plan is revised in the manner and in the procedure prescribed for its enactment. If the need arises, management activities should be reassembled, partially or completely. Even when prescribed, management plans are rarely revised or completely reassembled.

The effectiveness of management in the Croatian nature protection system has been evaluated using the RAPPAM and METT methodologies since 2009. RAPPAM (Rapid Assessment and Prioritization of Protected Areas Management) is used to give an assessment of strength and weaknesses of MPAs and has been developed by WWF; METT (Management Effectiveness Tracking Tool) is a questionnaire to be filled out by MPA managers which is used to identify trends and patterns in the management of individual sites. In addition, analyses of the planning and implementation of Annual programs of public institutions were carried out as one of the indicators of the effectiveness of planning and implementation of management in protected areas. In the next

period, the Institute for Environmental and Nature Protection will certainly put greater emphasis on monitoring the effectiveness of management, which is one of the strategic goals set by the Strategy and Action Plan for Nature Protection of the Republic of Croatia for the period from 2017 to 2025.

Funding mechanisms for protected areas, including MPAs, are provided from the state budget, county, city or municipality budget, income from the use of protected parts of nature, income from compensatory benefits and from other established sources by the Nature Protection Act. It should be emphasized that the development of tourism in Croatia has led to an increase in the number of visitors to Protected Areas, including MPAs. Over the last few years, a significant increase in the number of visitors was recorded in all national parks and nature parks. A higher number of visitors in national parks and nature parks has led to an increase in income, which in turn enables allocation of a significant part of these funds for nature protection activities. National parks and nature parks use these funds for building infrastructure, research, monitoring, etc.

Review of MPA effectiveness - Montenegro

According to Article 100 of the Nature Protection Law, the state of nature conservation is monitored through a five-year monitoring plan adopted by the Government of Montenegro and implemented through the annual monitoring programs. The monitoring plan and program must include: methods for monitoring and assessing the status of wild plant, animal, and fungal species, including birds, their habitats, and habitat types, and methods for monitoring the condition of protected areas. The Agency for Environmental Protection is responsible for the monitoring plan and programme, while the municipality may also monitor the state of nature conservation within its territory at its own expense. The management plan also requires further monitoring of MPAs, including targeted monitoring of species and habitats in the areas, such as of priority habitat *Posidonia oceanica*, *Axinella canabina*, monitoring of habitat in Velika Krekavica cave, coralligenous communities, terrestrial habitats, etc.

Since their designation in 2021, MPAs have not been reviewed. Management plans adopted for the five-year period do not accommodate interim revisions. However, in line with the law, protected areas can be revised if new data or findings important to revise the protection study and status become available. There is a formal procedure in place. Additional activities can also be added to the annual management program prepared by the management body. The supervisory authority – the Ministry - gives consent to the annual management program. No legal obligation currently exists for conducting the evaluation of the management effectiveness in protected areas. However, some management bodies have voluntarily included this activity in the Management Plans (METT tool) or management programmes.

Financial considerations have been included in the MPAs management plans, including 5-year planning and possible sources of funds, mainly consisting of the national budget and grant projects. Detailed financial breakdown of the costs for the three existing MPAs for the 5 years-period is given in the management plans.

Review of MPA effectiveness - Finland

The Natura 2000 network, its functioning and possible needs for strengthening protection of the network is assessed by the Parks and Wildlife Finland and regional environmental authorities



approximately every 10 years. The latest assessment and the resulting general Natura 2000 planning was done in 2016-2017 (Virtanen *et al.*, 2018). In Finland, the planning needs of the Natura 2000 network are assessed every ten years or so in the so-called Natura 2000 master plans. The purpose of the master plans is to prioritise and target more detailed site-specific planning for the most important and urgent sites, based on factors such as key conservation values, habitats, species importance, management or restoration needs, and threats and pressures on the sites.

A follow up of management of the protected areas scrutinises if the necessary plans have been produced, if the planned measures have been applied and if the area-, habitats- or species-specific conservation objectives have been achieved or if the trend at least is going into the right direction. This information is collected to the national nature conservation data base that includes a system for planning and monitoring of protected areas (SASS) and its special module for planning and inventories (SI). The protected area information system includes thus also information on management and other plans as well as their implementation.

NATA assessment for Natura 2000 sites are updated in approximately every 6 to 12 years, but at the latest 18 years after the previous assessment. The updates are based on priority criteria, and they also be pre-scheduled in the management plans. The update is also needed if there are significant changes in the site's protection targets or its delineation. Also, an observed change in major threats to the site's key nature values or collection of new information about the sites can trigger the update of the assessment.

Financing for planning, management, protection and restoration measures comes from various, mainly public sources. The key authorities, the Parks and Wildlife Service and regional Centres for Economic Development, Transport and the Environment, get their main funding from the state budget. Funding is further directed to management and protection of individual sites according to the needs identified in regional integrated nature conservation planning. Funding is needed also for maintenance of protected area infrastructure, especially in the sites that allow recreational use (i.e. national parks) and for statutory surveillance and evaluation of the protection.

Different EU funds are an important source of nature conservation as well. The Prioritised Action Framework (PAF) for Natura 2000 (IEEP and the N2K Group, 2022; European Commission, 2023c) in Finland provides the overall planning of financing for Natura 2000 sites' management, protection and monitoring. The EU Life programme is a very important funding mechanisms for nature conservation and restoration in Finland. There are currently several EU Life projects in Finland. For the sea areas the most relevant one is the [BIODIVERSEA](#) integrated project.

State funds for non-state actors to conduct small projects for nature conservation or restoration projects are channelled through regional Centres for Economic Development, Transport and the Environment.

Review of MPA effectiveness - Estonia

There are no requirements for regular reviewing of Estonian MPAs; in practice, this is occasionally done, mainly after new information is acquired. Assessing the effectiveness of conservation takes place at least once every 10 years. There are no long-term financial strategies for MPAs. Financial considerations are included in management plans, as well as possible funding sources. Funding for nature conservation mainly comes from State budget and various EU funds.



4.6 Perspectives on public participation

Supra-national perspectives

Public participation is an essential component of good governance, and all relevant stakeholders should be involved in the planning and implementation of MPAs. The UN Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) guarantees citizens of the European Union a right to access information on the environment as well as on policies managing it (UNECE, 2023). Participation in international and regional multilateral environmental agreements is generally limited to general meetings, and in most cases only some civil organisations are granted observer status. Under OSPAR, 50 organisations are recognized as observers, of which nine are strictly environmental NGOs. OSPAR observers are allowed to participate openly and are encouraged to draw attention to relevant issues and submit documents to meetings. Similarly, 46 NGOs are observers to HELCOM¹¹ that can take part in the meetings of several HELCOM bodies and make statements. The power of HELCOM observers is limited to being able to attend certain meetings and make statements. In most cases, HELCOM observers are not allowed to attend expert meetings which are essential in understanding the decisions made by the Conference of Parties (CoPs).

The OSPAR Commission provides guidance for good practice for communicating with stakeholders on the establishment and management of MPAs (Agreement 2008-2), giving tools to Contracting parties for stakeholder engagement (OSPAR Commission, 2008). The OSPAR Commission also developed a general consultation procedure for establishing MPAs in ABNJs (Agreement 2019-09), with the goal of collecting as much information as possible before establishing such areas (OSPAR Commission, 2019). Information to be collected during this procedure include information of relevance on species, habitats and ecosystems in the proposed MPA; information on the current and/or potential future human activities at the site, economic and other activities; and additional indicative information about current and/or potential future management actions. The consultation runs for three months.

Within the EU, the Birds and Habitats Directives do not lay down specific consultation processes when selecting sites for protection. This varies from State to State. The analysis of lists of SCIs by the Commission is done in a transparent way through scientific seminars, supported by the European Environment Agency. Member States and environmental NGOs are given opportunities to participate in those seminars. According to the Habitats Directives, public opinion becomes important in case a plan or project could potentially negatively affect the site. Their opinion can however be overruled if this plan or activity has “imperative reasons” and “overrides public interest” (Article 6 of the Habitat Directive) (European Commission, 1992).

Public participation is also a central pillar to the MSP Directive with Article 9 §1 explicitly stating that: “Member States shall establish means of public participation by informing all interested parties and by consulting the relevant stakeholders and authorities, and the public concerned, at an early stage in the development of maritime spatial plans, in accordance with relevant provisions established in Union legislation” (European Commission, 2014). The goal being to increase acceptance and understanding by all stakeholders in the MSP implementation process.

¹¹ In addition to the 2 governments and 19 intergovernmental organisations.

The transition from 'Blue Growth' to a 'sustainable Blue Economy' will require relying on "close engagement with stakeholders, from businesses large and small to local groups, to young people passionate about the health of our ocean and the general public" (European Commission, 2021). Workshops are frequently used as a tool for stakeholder participation, knowledge exchange and institutional learning (see Slater and MacDonald, 2018 for examples).

The European Fisheries Areas Network (FARNET) is a network of Local Action Groups across the EU, consisting of managing authorities, citizens and experts implementing community-led, coastal development under the European Maritime and Fisheries Fund (EMFF). This collaboration allows local projects to exchange knowledge and receive EU funding opportunities (European Commission, 2023b).

NGOs such as SeasAtRisk, Oceana, WWF, ClientEarth, Global Fishing Watch consist of actors mobilizing information, money and policy action beyond national boundaries and also at the EU level. They can for instance exert influence in the Joint Recommendation Process (see Annex 2). These actors form horizontal, collaborative networks and decentralize power as they share information and work together towards common policy goals. WWF and Oceana for instance share the discourse that having a management plan in place equals protection status. Philanthropists supporting these NGOs also advocate for MPAs in EU waters aiming to pressure governments to uphold EU law. Oceans5, for instance, financially support projects with the objective of establishing MPAs through grant schemes transferred towards non-governmental organizations (Oceans5, 2023).

National perspectives

Different countries choose different approaches to public participation.

Italy uses petitions as important tools for citizens to suggest new MPAs. This has been the case for the Conero Park, an MPA located in the Tuscan archipelago. Other tools frequently used include conferences, citizen's juries and stakeholder fora, surveys, focus groups and public hearings.

In **France**, MPA planning and management occurs primarily at the local level, therefore all relevant local stakeholders are involved in the planning phase (i.e., public administrations, local representatives, scientists, NGOs and professional and recreational users such as fishers, maritime transport and aquatic sports). There are two formal and mandatory procedures allowing citizen participation in MPA planning: public consultations and public inquiries. Public inquiries aim at informing and collecting the opinions of the public, an inquiry commissioner compiles and gives a global opinion which is considered in the designation. Public consultations are limited to simply making available the documents relating to the MPA project, the public opinion is published but it is not considered during the designation (non-binding). Both procedures are initiated by the French State. Effectiveness is difficult to quantify as the interests of the different stakeholders diverge (economic vs. ecological interest). Nevertheless, it is possible to highlight the community-based management of MPAs, where the involvement of stakeholders is a full-fledged part of a participatory research and planning process that contrasts greatly with a so-called "sectoral" and authoritarian approach. The French model of stakeholder consultation tends to favour maximal stakeholder involvement in the definition of management measures and the limitation of uses within MPAs. It is formalized through the organization of governance bodies (Management Board, Advisory Committee, Scientific Council, Steering Committee, etc.) and working groups (Table 14).



The limit of this model lies in the plurality of stakeholders involved and their divergent views, which can make management choices difficult and limit the ambition of protecting ecological issues.

A detailed study on stakeholder involvement through the advisory council of the Sept-Îles National Nature Reserve in Brittany (Schéré *et al.*, 2023) highlighted that good governance, as defined by the IUCN Green List, could be further improved for the reserve through setting up thematic commissions alongside the advisory council, e.g. to discuss specific topics such as tourism or fishing. This was suggested to help overcome 'for vs against' discussions during the annual meeting of the advisory council (Boncœur *et al.*, 2007; IUCN and World Commission on Protected Areas (WCPA), 2017; Schéré *et al.*, 2023).

In **Belgium**, transparency in the MPA designation and management process has greatly improved over time, with a shift from one-to-one consultation behind closed doors by the MPA authority with each sector, to consultation rounds with a combination of one-to-one meetings and meetings with all stakeholders together. During the decision-making process, most sectors have representative bodies to represent their interests, such as the 'Rederscentrale' for commercial fisheries (Pecceu, Hostens and Maes, 2016). Due in part to the relatively small community active in the Belgian marine space, the community constitutes of a tight network, and close and open dialogue is possible between the sectors and the administration. A public consultation is held for both the industry and the general public.

In **Ireland**, the first wildlife legislation was developed without formal stakeholder participation or assessment of social or economic benefits. Consequently, designations were often determined through a top-down approach by the national competent authority, based on scientific criteria. The designation of the Natura 2000 network in Ireland was done with minimal stakeholder consultation and independently from other marine planning processes. In contrast, during the development of the MPA Bill expected to be passed later in 2023, relevant stakeholders, including non-conservation actors, were engaged early in the process to ensure their awareness, seek their views and share the best scientific information and local knowledge. Some of the feedback from these stakeholders indicated considerable dissatisfaction with the lack of stakeholder involvement in the Natura process and associated concerns about the effectiveness of the existing MPA network. It is anticipated that stakeholder engagement will be a prominent feature of MPA designation and implementation processes under the new MPA legislation.

In **Croatia**, the participation of stakeholders in the establishment of MPAs (including other protected areas) in terms of legal obligations is limited to their participation in the declaration process and to proposals for acts and documents that affect their interests. For MPA declaration, public debates on site proposals take place, as the public institutions and the relevant Ministry must consider the comments and statements of stakeholders on the proposed acts and documents. While there have been efforts to involve stakeholders in the MPA management process, their engagement is often limited to information sharing and consultation, rather than focusing on collaboration and empowerment. Adequate funding for effective MPA management is often insufficient, leading to a lack of resources for stakeholder engagement. To achieve the 30 by 30 goal, Croatia will need a collaborative effort from the government agencies, NGOs, and local communities. To reach this goal, Croatia has already started the process of engaging NGOs, the scientific community and academia for proposing new areas for future designation.

In **Montenegro**, the 2016 Nature Protection Law requires institutions proposing an MPA to inform the public about the process. Public access to the relevant documents is to be ensured, and public



discussions are generally organised. For the three MPAs established in Montenegro, several consultation meetings have been organized in the locations next to the MPAs. The Ministry and MPA manager – Public enterprise for coastal zone management of Montenegro – were continuously available for any discussion or comments/suggestion/criticism from interested members of the public and stakeholders. Protection zones and limitation imposed by conservation measures have been discussed with fishermen organizations primarily, aiming to agree on the restrictions and cooperation with them in the conservation of these areas.

In **Finland**, participatory approaches to planning and policy-making have been practiced already for a long time, at least in principle. There are still limitations in the approaches. For instance, collaboration in the preparation of the national Natura 2000 took place mainly at the national level where national level interest groups participated in the process. Regional and local level participation was not arranged, which led to at times fierce opposition towards the Natura 2000 network. However, Hiedanpää (Hiedanpää, 2004) observed that the opposition stemmed especially from the poorly organized participation than against the nature conservation network itself. Later, for instance the Parks and Wildlife Service has included participatory methods and consultations into its procedures and guidelines of nature conservation planning and management of the protected areas (Metsähallitus, 2023a). The participatory practices were utilized, for instance, in preparation of a management plan of a large MPA: the Bothnian Sea National Park. To ensure effective participation of various stakeholders and authorities, several regional and thematic groups were established. Numerous public events were organized, as well, and a newsletter was published for five years to inform about the process. A long-term collaboration group was established to support implementation of the management plan. It consists of representatives of relevant authorities, NGOs, and economic actors together with representatives of the region's municipalities. However, the very beginning of the MPA planning was not done in a collaborative process. The Ministry of the Environment ordered a technical report on the alternative options of the MPA extent and protection measures from the Parks and Wildlife Service. This caused some protests against the MPA, but the well-organized collaboration in the actual MPA designation processes reduced the opposition.

In **Estonia**, participation of stakeholders is also limited to the planning stage, and stakeholders are included in the MPA process through newspapers, homepage announcements, The Official Announcements (an electronic journal that publishes all notices, invitations and announcements prescribed by the legislation), e-mails and meetings. Civil society is not usually involved in site selection. No effective system has been developed in terms of stakeholder participation in the day-to-day management of MPAs. This is carried out through informal and direct contact and negotiation between stakeholders and representatives of public institutions. Also, stakeholders tend to influence the management of public institutions through the Ministry. The most effective way for stakeholders to participate in the day-to-day management of the MPAs is to include stakeholder representatives in the administrative councils of public institutions for the management of the MPA. However, the members of the administrative councils are determined exclusively by political means, and they are formally appointed by the minister, thus losing the direct influence and contribution of local stakeholders.

5. Discussion

This study collected information on the relevant policies, authorities and procedures linked to each of the identified phases in a conservation planning process, at different geographic and political levels: international, regional, EU and in a selection of European countries. The discussion explores the important actors for MPAs at those levels, assesses the overall coherence of the process and addresses the key challenges for achieving effective governance of MPAs.

5.1 Relevant policies and institutions in a conservation planning process

The last decades saw an increase in coverage of MPAs in Europe, following EU, regional and international policies such as the CBD's target of 30% of oceans under protection by 2030, or the recent EU Biodiversity Strategy for 2030 setting the same objective for European seas. Many scholars criticised this rush to meet supra-national targets through the sole expansion of MPA coverage, fearing it would not work towards effective protection of marine sites if the focus is on quantity and not quality of MPAs (De Santo, 2013; Agardy, Claudet and Day, 2016; Beuret and Cadoret, 2021). Although the EU Natura 2000 network represents the majority of MPAs established in EU waters, several Member States also developed their own legislation to increase marine protection.

Albeit some variations, MPAs are established in a similar way (through the phases explained in section 3.1). First, sites tend to be selected through a case-by-case approach, often based on ecological criteria defined by EU Directives and Regional Seas Conventions. Additionally, at the supra-national level, other institutions play an important role in providing scientific input underpinning site selection, for example the International Council for the Exploration of the Sea (ICES) and HELCOM. At the national level, local experts usually play a crucial role. Once a site is selected, implementation is mostly done through top-down approaches, with public participation often being limited to the planning phase. Regional Seas Conventions have a crucial role in providing a platform for collaboration and cooperation amongst States and other supra-national organisations, as well as technical support and guidance. However, decision-making power lies with national governments, with RSC Commissions having limited power for implementation and enforcement of regional regulations.

After governments design and implement MPAs at national level, these may be granted HELCOM/OSPAR MPAs or SPAMI status by the relevant commissions. Only the OSPAR Commission has the mandate to directly design and implement MPAs, specifically for the high seas. After designation, the management of sites is left to States themselves, with Regional Seas Conventions providing general requirements as well as technical support and guidance. The process is similar within the European Union, where Member States designate sites as either Sites of Community Importance (SCIs) – which are then assessed by the EU Commission and transposed as Special Protected Areas (SPAs) at national level – and/or Special Areas of Conservation (SACs). The EU Commission has a limited role throughout the implementation and management process at national level.

At the national level and in the different countries considered in this deliverable, competences for MPA planning and management are divided between different institutions, which sometimes operate at different levels. Competences for planning, implementation and sometimes management are devoted to the ministries in charge of environmental affairs and/or land planning,



based on inputs provided by a specific scientific institute (i.e., RBINS in Belgium, ISPRA in Italy, OFB and MNHN in France). Those institutes are either under the jurisdiction of the ministry (ISPRA), or funded by the government (RBINS, OFB).

Site management is often left to local authorities, with support from the government – depending on the approach developed by the country. Some countries adopted a rather centralised approach to the MPA process, with the government overseeing the entire process and limited powers given to local authorities. This is the case for Belgium, as competences for management of the marine environment are devoted to the federal government. France, on the other side, has a very decentralised approach: The French State (its local representative), who is responsible for the management and control of the MPA, delegates the individual management of each MPA to local stakeholders. Italy and Croatia display a mixture of those two approaches. Either the Coast Guard and/or the relevant police department take responsibility for enforcement and compliance.

Section 4.6 highlights that stakeholder engagement tends to be limited to the early stages of the MPA process. It has been shown, however, that robust stakeholder involvement helps both to better design MPAs, but also to ensure their success through social acceptance and local support. This is why it is beneficial to include them all throughout the MPA planning process (Horta E Costa *et al.*, 2022). Several countries have legislations requiring public consultation before the implementation of protected areas, as is the case in France, Belgium and Montenegro. French MPAs are generally designed through an intense period of consultation and collaboration between national, regional and local authorities, but also involving all relevant local stakeholders. However, in some cases, the finalisation and adoption of the management plan marks the end of this collaborative platform, and non-governmental and local stakeholders participation is reduced (Beuret *et al.*, 2021). Italy gives an important role to non-governmental stakeholders, not only at planning stages but also in the management. Environmental NGOs could be responsible for the management of sites, such as the LPO (Ligue pour la Protection des Oiseaux) in France (Schéré *et al.*, 2023).

5.2 Institutional coherence

A crucial barrier to effective ocean governance is its siloed and fragmented nature. Human activities are regulated through several different international and regional organisations that generally work independently from each other. Considering the transboundary nature of marine ecosystems, this impairs effective tackling of the threats to those ecosystems (Chung, 2010; Watson-Wright and Valdés, 2019; Weiland *et al.*, 2021). For example, for OSPAR MPAs, measures in place apply to OSPAR Contracting Parties only, whilst other parties may be active in the MPA areas as well. To overcome this, OSPAR recommends cooperation with other international organisations that may have a relevant mandate which can impose measures to reduce impact on OSPAR MPAs, such as for sectors such as fisheries or maritime transport (OSPAR, 2009). Although efforts have been made in some cases, there are little interactions between RSCs and regional fisheries management organisations (RFMOs) regarding protected areas, as well as with other international organisations dealing with environmental matters (International Maritime Organisation, International Seabed Authority). Similarly, the interaction between the EU Birds and Habitats Directives and the CFP regarding MPAs is limited to Article 11 of the latter, which is difficult to implement in practice. Article 11 is currently the only procedure for restricting fisheries in Natura 2000 sites (see Annex 2). The procedure is long



and complex and leaves the final decision to the Commission. To date, only three delegate acts relating to Article 11 have come into force (Kingma *et al.*, 2021).

Within countries, competences for the different phases in the conservation planning process may be divided between different institutions, with the main actors being governmental institutions in charge of environment and/or land use and planning. MPAs are falling within the field of environmental protection, and economic sectors (such as fisheries, shipping) are poorly integrated in MPA planning, implementation and management. Enforcement is often done through different governmental institutions: in Belgium, it is done by the Coast Guard, the BMM and the Flemish authorities; similarly, in Croatia, both Ministries of Interior and Agriculture and the Coast Guard are responsible for monitoring and enforcing regulations. The division of competences between different institutions raises questions as to how those actors effectively work together. It can bring confusion as to who has which responsibilities in the management of the marine environment. It can also impair stakeholders' trust in the MPA process, a fundamental aspect for its effectiveness (Bennett and Dearden, 2014). The siloed nature of both the regional and national frameworks for MPAs makes it difficult to assess the effectiveness of established sites, in terms of both protection level and compliance with regulations. It also complicates monitoring and transparency. To avoid confusion and duplication of work, Montenegro appointed a specific institution to be responsible for enforcement and compliance (Public Enterprise for Coastal Zone Management of Montenegro) and France established a dedicated body (Centre d'Appui au Contrôle de l'Environnement Marin (CACEM)). Estonia took the same approach, with the Estonian Environmental Board being the sole entity in charge of MPAs.

It has been argued that having one clear well-established institution with competences for the entire conservation planning process is more likely to be effective (UN Environment, 2019; Beuret and Cadoret, 2021). As this might not always be possible, cross-sectoral coordination and cooperation between the different administrations and relevant bodies should be reinforced. Planning for MPAs should be done in close consultation and collaboration with representatives and institutions of activities likely to have adverse impacts on the marine environment, and who might also be affected by MPAs (i.e., fisheries, transport, tourism activities and resource-extraction sectors). Partnerships between the different institutions at different levels could be a good way to increase cooperation, to include stakeholders and enhance broader public participation while restoring trust in the process (Schéré *et al.*, 2021). Similarly, to reinforce monitoring, control and compliance of MPAs, an important step would be to increase the sharing of data on human activities. Firstly, this could be done between the relevant national administrations (i.e., between ministries competent for environment and fisheries, coast guards, park rangers and local and regional authorities), then between neighbouring countries. Inter-sectoral platforms could support this, allowing to share for example lists of vessels engaged in illegal activities, but also good practices.

As an example of a good practice, the memorandum of understanding between the North-East Atlantic Fisheries Commission (NEAFC) and the OSPAR Commission in 2008 can be mentioned. The aim of this memorandum is to enhance coordination between both organisations, particularly with regards to the development of protected areas in the North-East Atlantic region. Both organisations share almost the same regulatory area and have complementary competences. OSPAR and NEAFC have regular contacts and attend each other's commission meetings. NEAFC has an observer status to OSPAR and can therefore attend meetings of the OSPAR biodiversity committee, where MPAs are examined. However, OSPAR staff is not allowed to access and participate in NEAFC committees



and working group meetings, where main decisions regarding fisheries closures are taken; this impairs transparent and effective cooperation (Kvalvik, 2012).

NEAFC measures, such as fisheries closures, have been examined by an Other Effective Area-Based Conservation Measures (OECM) NEAFC working group, and measures that protect Vulnerable Marine Ecosystems have been considered to be possible OECMs (NEAFC, 2023). As well as MPAs, OECMs are also expected to contribute to the targets set by the EU Biodiversity Strategy, provided they meet the criteria defined at EU level (European Commission, 2022). The good practice example described here on the collaboration between the NEAFC and OSPAR highlights how measures that are implemented independently of designated MPAs can also make important contributions for achieving biodiversity objectives.

In terms of communication across sectors, another good practice is the development of an interactive cartographic tool which provides clear spatial information on fishing activities by the University of Nantes, France together with professionals from the fisheries sector. GIS VALPENA (Nantes Université, 2023) is a valuable collaborative platform between the University of Nantes and fisheries professionals that informs decision-making if agreement on the use of data is in place.

5.3 Key challenges for achieving effective governance of MPAs

A first important aspect for overall effectiveness of the conservation process is a **strong national legislation**. Several countries developed their own specific legislation to support MPA designation, i.e. France, Italy while others rely mostly or exclusively on transposition into national law of supra-national legislations, i.e. Ireland, Finland and Belgium. For example, Belgium and Finland both transposed EU Nature directives into national law: Belgium through the Marine Environmental Protection Act (MEPA) of 1999 and Royal Decrees implemented through this act (such as the 2016 Royal Decree concerning the procedure for the designation and management of MPAs (Etat Belge, 2016)), and Finland through the Nature Conservation Act (1096/1996). The 1999 Belgian MEPA has recently been updated to a new law (11/12/2022), and the new law ensures a better connection with the Natura 2000 Directives. Ireland, to date, does not have specific national legislation underpinning EU directives and the OSPAR Convention, and is currently in the process of doing so.

Robust national laws are needed to ensure that policy goals are met. The objectives and associated protection levels of MPAs should be clearly defined to ensure protection of the marine environment. Some countries rely mainly on EU and international designation types to design MPAs (N2000 sites, OSPAR MPAs); this is the case for Belgium and Ireland. Croatia, Montenegro and Estonia developed their own designation types. Italy uses EU and international designations but the majority of established MPAs fall within one national designation type. All existing Italian MPAs are listed in national law, which helps ensure a clear overview of the protected areas coverage in the country. This national law (Article 19 of Law 394/91) also explicitly defines which actors are responsible for MPA designation and management and which activities are forbidden within established MPAs. Sanctions for violations are stated in Article 30, and Article 36 lists all established MPAs for which the legislation applies. Unlike Italy, France laid out a myriad of MPAs in the legislation ('Code de l'Environnement'). In France, the MPA definition does not systematically define which activities can be restricted. Only certain MPA designations have the power to restrict human activities (NRN, NP, B/G/NHPA). It is mostly during the establishment of the management plan that there is a case by case analysis of what activities to permit, restrict or forbid. It is not at this moment



possible to assess the effectiveness of the overall network of French MPAs, both in terms of coverage and protection level, because not all management plans are in place. National laws relating to marine resource management should be either amended or modified to include a clear definition of MPAs, or new provisions should be drafted to do so.

Another important aspect for overall effectiveness of the conservation process is the definition of **management measures and/or management plans** that should be in place from the planning phase with, if possible, measures to limit industrial/intensive fishing. Clear and well-designed management plans are a crucial factor for MPA success (Rife *et al.*, 2013; Di Franco *et al.*, 2016; Horta E Costa *et al.*, 2019; Grorud-Colvert *et al.*, 2021; Roessger, Claudet and Horta e Costa, 2022). However, significant proportions of MPAs established through different legal frameworks either do not have management plans, or management measures are not implemented. Both criticisms are frequently mentioned in scientific literature (De Santo, 2013; D'Anna *et al.*, 2016; Álvarez-Fernández *et al.*, 2020; Beuret *et al.*, 2021; Roessger, Claudet and Horta e Costa, 2022). Only 2% of MPAs established in EU North-East Atlantic waters have a management plan in place (Roessger, Claudet and Horta e Costa, 2022), and a search in the OSPAR MPA database revealed that no established high seas MPAs under the OSPAR Convention have a management plan.

The lack of management plans can be partly explained by the different requirements for MPA management. The SPA/RAC Protocol provides the strictest framework, with MPAs legally required to display management plans to be granted SPAMI status. OSPAR and HELCOM both recommend MPAs to have such plans, but do not legally bind Contracting Parties to design and adopt them. Under the EU Natura 2000 Directives, the development of conservation objectives and management measures is left to Member States. Management plans are not mandatory under the Habitats Directives, but the establishment of conservation measures is mandatory for all Member States under Article 6.1, and similarly through Article 4.1 and 4.2 of the Birds Directives. Such management plans can be either sectoral or for individuals or groups of sites (European Commission, 2013a). However, many sites have little management measures and/or management plans. Indeed, within the EU, 'only 1.8% of the European Union marine area is covered by MPAs with management plans, despite 12.4% of the EU marine area being designated for protection' (WWF, 2019).

Many MPA management plans are limited to overlapping regulatory documents, managed by different national institutions (Roessger, Claudet and Horta e Costa, 2022). Regulations within these MPAs should be compiled in a single document to ensure clarity and to avoid conflicts of interests between sectoral organisations. They should also be easily accessible through an open database. However, accessibility of management plans and site assessments is often limited (Schéré, Dawson and Schreckenber, 2020). In France, due to the myriad of possible MPA designations and the site-by-site approach taken, management plans have been included in a database (milieumarinfrance, 2023). In other countries, management plans have been proven to be difficult to find, making assessment of the overall network challenging. These countries would benefit from developing a database with all established MPAs mapped and with their respective management plans made available to the broader public.

In France, management measures rely on binding and non-binding agreements with local and regional stakeholders ('Natura 2000 contracts', 'Natura 2000 charter'). The approach taken by most countries – set by the EU through the Habitats and Birds Directives – is to allow, but monitor, some human activities which are deemed compatible with the preservation of marine environments. However, in most cases, for an MPA to achieve its conservation objectives, extractive activities

should be strongly limited (Sala *et al.*, 2018). Currently, a significant proportion of national and regional MPAs allow damaging and extractive activities such as fishing, which may be damaging to the ecological features to be protected by the MPA. Regional Seas Conventions do not have a mandate to regulate fishing.

In the different European countries, different approaches have been taken to regulate fisheries. In France, fishermen are not required to undertake an environmental impact analysis in order for their activities to continue to take place within MPAs¹², and there is often no distinction between MPAs and nearby non-protected zones in terms of fishing efforts (Cadoret and Beuret, 2016). The country develops site-specific risk assessments to assess fishing pressure, to be carried out by MPA managers through a national standardised methodology. This assessment should lead to regulation of the fishery. In the MSP, Belgium has identified zones within which measures can be implemented to reduce impacts from bottom-trawling, mainly to comply with requirements from the MSFD. Industrial fishing still takes place within Belgian Natura 2000 sites. However, the country is currently carrying out a joint recommendation process under Article 11 of the CFP, to implement measures to restrict bottom-trawling. Italy listed fishing activities to be prohibited within MPAs in national laws (see Section 4.5.2). In Croatia, fishing activities – either commercial or small-scale fishing – have to be granted a permit in order to be allowed to continue within MPAs. Montenegro regulates the type of fishing gear to be used when fishing within protected areas; bottom-contact fishing gear are prohibited in MPA zones with stricter protection. Estonia does not regulate fishing within limited-conservation areas provided national fishing rules are followed.

The regulations taken by individual countries for MPAs established within their territorial sea and/or exclusive economic zone apply first and foremost to vessels flying their flag. An important question is therefore, how to make sure foreign vessels, particularly fishing vessels, comply with MPA regulations. Belgian MPAs are large (proportionally to the country's EEZ) and expand offshore; the EEZ hosts important numbers of foreign fishing vessels which operates within these areas. Unlike Belgium, Italian MPAs are smaller and much closer to shore – and dominated by national, small-scale fisheries rather than by foreign industrial fleets. As such, Italian national law restricting certain fishing activities within MPAs proves more relevant than the EU Common Fisheries Policy, contrarily to Belgium which can only regulate foreign fisheries within its MPAs through Article 11 of the CFP.

Lastly, robust financial strategies are needed to ensure the success of MPAs and should sustain the management of sites, as well as compliance and enforcement with regulations (Edgar *et al.*, 2014; Gill *et al.*, 2017). MPAs often suffer from not receiving adequate funds and/or inconsistent financial support (Bohorquez *et al.*, 2022). Most national MPAs rely on public funds, which often depend on political support and as such, are subject to changes. In Italy, MPA managers are informed at the beginning of each year of the budget allocated by the Ministry of Environment and Energy Security. This makes it complicated for management staff to develop long-term strategies and brings a certain amount of uncertainty as to whether management activities will be able to be carried out the following years. French, Croatian and Montenegrin MPAs receive mainly public funding from a range of actors at different levels (national institutions, regional and local bodies). Croatia uses the financial revenues of tourism, such as incomes from access fees to MPAs to fund necessary infrastructures for management.

¹² Article 91 of Law 2016 –1087

6. Conclusions

This deliverable gave an overview of the institutional framework for marine protected areas at different levels: international, EU, regional and national, the latter through a selection of European countries. It looked at the relevant policies, institutions and bodies playing a role in the different phases of the process of establishing new MPAs. This process was divided into four different phases: planning, implementation, site management and reviewing and financing.

The policy landscape for MPAs is highly complex. Multiple policies allow for the designation of MPAs at the different levels and interact with one another, leading to sites being labelled under a variety of statuses (e.g., Natura 2000 sites, HELCOM and OSPAR MPAs, specific national MPA types...). Although little research has been done on whether a correlation can be made between multiple designations and effective management, a scientific study available showed multiple designations have a positive effect on conservation outcomes (Schéré, Dawson and Schreckenberg, 2020). Indeed, more designations means sites are more likely to have a management plan in place as well as a management authority, and more regular monitoring of the area is carried out (Schéré, Dawson and Schreckenberg, 2020).

Several institutions are involved in the process. The Conferences of the Parties of multilateral environmental agreements relevant to MPAs (Ramsar Convention, Convention on Biological Diversity, UNESCO) give a first incentive for Contracting Parties (CPs) to develop MPAs through specific requirements for conservation. They also keep a database of existing sites and provide technical and sometimes financial support to their CPs. At regional level, the respective Commissions of the OSPAR and HELCOM Conventions, as well as the SPA/RAC provide a crucial platform for increasing the protected areas' coverage in the associated sea-basins. CPs are legally required to take action to protect the marine environment, and they receive technical support from the Commission to fulfil this obligation through MPAs. In Europe, the EU Commission assesses and validates sites under the Habitats Directive. The implementation and concrete management of sites is left to the countries themselves. At the national levels, Member States often adopt top-down approaches to MPAs: a specific ministry is responsible for the planning and implementation phase, while management tend to be left to regional and local authorities. Throughout the different levels, a specific body is responsible for providing the scientific knowledge underpinning site selection: the International Council for the Exploration of the Sea (ICES) for international and regional frameworks, the EEA for the EU and national research institutes in the different countries.

Institutions tend to work independently from one another, with little cooperation and coordination on the different topics related to MPAs. At the regional level, while fisheries closures are often established by regional fisheries management organisations (RFMOs) in areas covered by regional MPAs, little cooperation is seen between RFMOs and RSCs. Some progress has been made, but cooperation and coordination are very limited. Within the EU, the Common Fisheries Policy and the Birds and Habitats Directives only interact through Article 11 of the CPF, with as mentions before often fails to work in practice. Similarly, at national levels, ministries in charge of MPAs often work independently from the sectors likely to affect MPAs. Moreover, this high number of bodies involved can also lead to confusion amongst the relevant stakeholders, and following that, to a general sense of distrust in the process and those in charge of it (Schéré *et al.*, 2021).

At the national level, a key aspect for ensuring robust and effective MPAs is whether and how supra-national policies were transposed into domestic legislation. Poor transposition can often mean lack



of clarity as to the responsibilities of the different institutions, and as to what effective protection means in practice. States adopted different approaches to the MPA process, from very centralised in some cases (e.g., Belgium) to highly decentralised with important powers given to local authorities (e.g., France), and through a combination of both approaches (e.g., Montenegro, Croatia). Although adopting a decentralised approach makes it difficult to have a clear overview of the MPA network at the national level - considering each site has its own specificities – it also adapts well to each individual context and may allow for better stakeholder engagement and sense of ownership of the MPA by the public. Indeed, a crucial component of robust stakeholder engagement is that those living alongside the MPA need to know the boundaries of the area, who is responsible for it and which regulations are in place (Schéré *et al.*, 2021).

However, designating an MPA does not mean conservation objectives will be achieved (Beuret and Cadoret, 2021). MPAs can prove effective in practice if, amongst other things, socio-economic aspects are considered from the planning stage in addition to ecological issues; if carefully prepared management plans are prepared, with consideration of activities such as fishing and if financing strategies are in place and include compliance and enforcement aspects. Moreover, as discussed before, the EU MPA network is far from being representative and coherent. Most MPAs are designated in coastal, shallow waters, leaving pelagic and offshore benthic habitats unprotected. EU Natura 2000 sites are chosen based on species and habitats listed in the Annexes of the Birds and Habitats Directives. However, such annexes are not entirely up-to-date and do not always consider the latest scientific knowledge (Olsen *et al.*, 2013; European Court of Auditors, 2020). Several endangered species are left out, in particular commercially exploited fish species that are under intense pressure. Moreover, policies do not always provide for effective conservation. Through the Article 11 of the Common Fisheries Policy, Member States cannot restrict fishing activities in their MPAs beyond territorial waters without depending on both the willingness of neighbouring States to engage in multilateral discussions and approval of the EU Commission. Beyond the problem this poses to the effectiveness of MPAs, this also poses an equity issue between fishermen from the different Member States. The development of marine spatial planning based on the ecosystem approach, through the EU Marine Spatial Planning Directive (2014/89/EU) could prove a relevant way to address challenges related to MPAs.

In the scope of the Blue4All project, D1.1 will inform D2.2 on the Social and Governance Tools. The definitions of the phases of the MPA process will be used as a basis for D3.1, Innovative Ecological Tools.

7. Annexes

Annex 1: IUCN Green List

The IUCN Green List is an international Standard for measuring and improving the performance of area-based conservation at site level, as well as at the national and transboundary networks level. It is a certification programme that aims to recognize and increase the number of fairly governed and effectively managed Protected and Conserved Areas around the world, that achieve successful conservation outcomes. It has 4 components: Good governance, Sound design and planning, Effective management and Successful conservation outcomes. A set of 17 criteria and 50 indicators further defines these components.

The Green List is applicable to any category of Protected Areas, as well as to Conserved Areas (community-based or led) and Other Effective Conservation Measures (OECMs). It is applicable to terrestrial and marine areas. Protected and Conserved Areas engaged in the Green List process gain multiple benefits. Efforts towards improving the overall performance of the Protected and Conserved Areas are recognized. The credibility and quality of the evaluation are guaranteed by the Standard's procedure, overseen by an international assurance provider. The Green List is a growing community of practice, offering access to peers' networks, resources and experts. It draws media attention, increases visibility and attracts investments, including revenue from recreational services. To date, 77 sites have gained the Green List certification, out of which 16 are Marine Protected Areas. In Europe, the Côte Bleue Marine Park, the Île du Grand-Connétable National Nature Reserve, Iroise Marine Nature Park, Cerbère-Banyuls and Western Seine Bay Nature 2000, in France, and Arcipelago Toscano National Park in Italy are Green Listed so far

In essence, the Green List certification allows for:

- An international recognition as a well-managed site;
- increased political and financial support, as a result of demonstrating effective use of resources and successful outcomes;
- motivation to meet and maintain high management standards, through the generation of local and national pride;
- acknowledgement of benefit sharing for local communities;
- recognition of a quality experience, providing justification for further marketing of the site to visitors.

It however faces some challenges:

- It is a voluntary global standard
- The amount of data and material that has to be assembled, collated, analysed and written up in order to assess the criteria is important
- The protected area personnel may not understand what is required
- The data and materials required to support the verification process are often not readily available
- There is a risk that an incentive mechanism such as this could be biased towards protected areas that are well resourced and have the capacity and experience to prepare the documentation and undertake assessments.
- Improved guidance is needed on many aspects of the GLPCA if the process is to be widely adopted.



- Language and terminology are a particular issue as the concepts involved are not always easily understood across different cultures.
- Governance criteria have proved difficult to measure both for the GLPCA and in more general assessments of management effectiveness, requiring a site visit and extended interviews with stakeholders for objective assessment

It will take many years for all MPAs to reach this standard and indeed the programme itself will not have the capacity in the immediate future to accept all those that might want to take part.

Under revision



Annex 2: Joint Recommendations under Article 11 of the CPF

The Joint Recommendations, as described in Article 11 of the CFP, is a process whereby a Member State can propose measures to be taken by the EU Commission in consultation with other Member States in the Community. In the context of MPAs, the Joint Recommendations process allows Member States to implement protective measures to Special Areas of Conservation established under Article 6 of the Habitats Directive or Article 15 of the MSFD. Article 15 of the MSFD allows a Member State to enact Community action at the regional level by informing the Commission on an issue that affects the environmental status of its waters. Recommendations on appropriate measures are then negotiated by other Member States in the Community, and will be forwarded to the Council and Parliament.

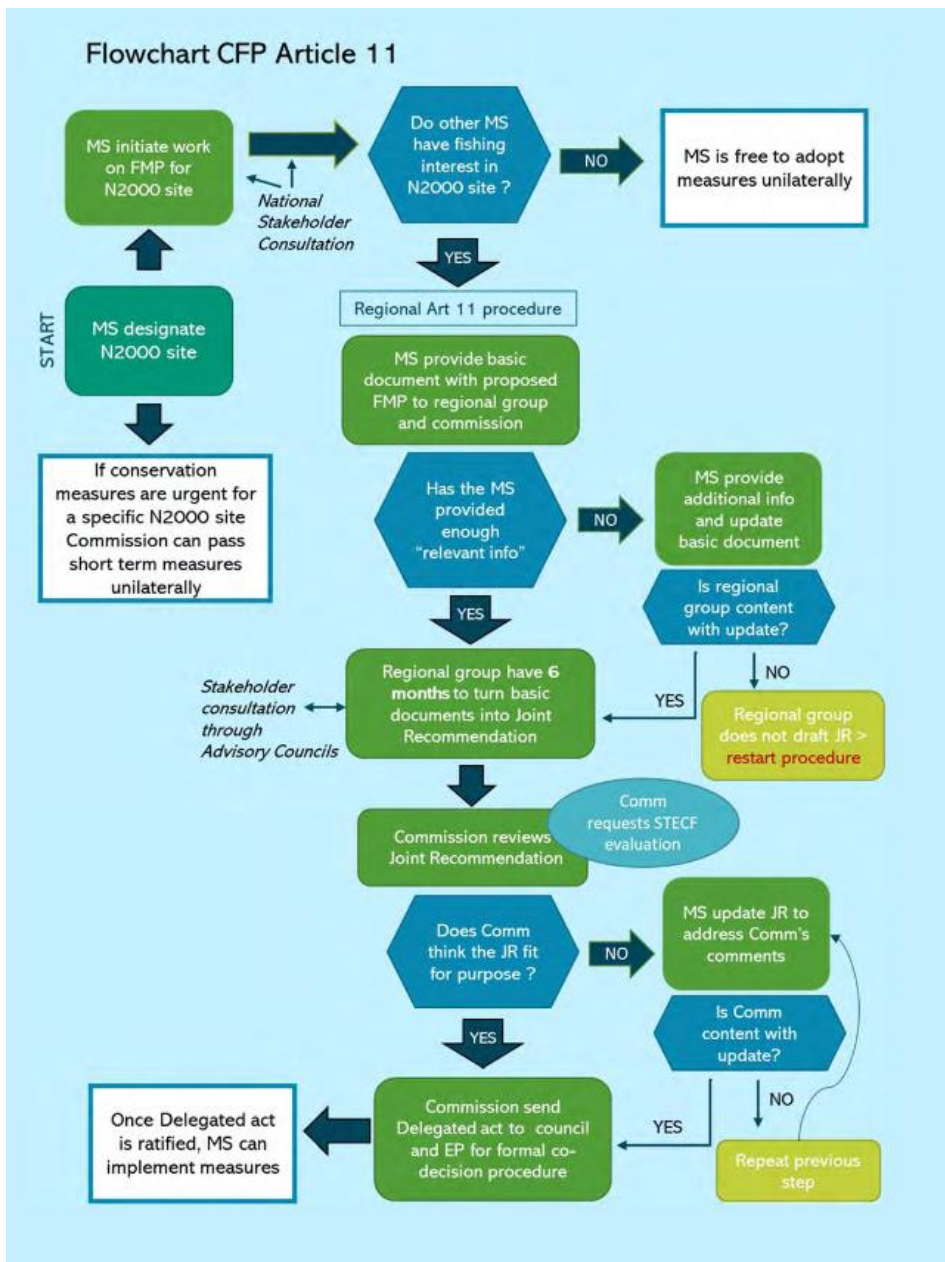


Figure 8: Flowchart of Article 11 of the CPF (Source: Kingma et al., 2021).

The Joint Recommendation process is constrained by the need for scientific data input (see box 1). Member States are to provide evidence for environmental effects based on expert knowledge to the Commission. In the context of restricting fisheries access, which is based on the principle of exclusive EU competence, absence of this evidence will put the proposing Member State in a position with less negotiation power in relation to the other member states (European Court of Auditors, 2020) (see Box 2). Recommendations thus need to be based on scientific evidence in order to limit fisheries access, which can both be enabling and constraining.

Box 1. Joint Recommendation: the role of data.

Data availability allows for the identification of vulnerable habitats and endangered species under the Habitat and Birds Directives, after which member states can propose fishing restrictive measures in a the Joint Recommendation. To illustrate, Denmark together with Sweden, Germany and Poland jointly proposed fisheries conservation measures in the Baltic Sea to protect reef structures placed in Natura 2000 sites established under the Habitats Directive¹⁶. The Baltic Sea Advisory Council, fishers organizations and NGOs were part of the coordination as well. The Scientific, Technical and Economic Committee for Fisheries, a body of experts providing consultations to the Commission, concluded that the area designated for reef protection will put a bottom trawling ban in place according to Article 11 and 18 under the CFP. This example shows how member states can appeal to both the Habitats Directive and CFP in order to successfully restore and protect habitat against bottom contact gear.

NGOs like SeasAtRisk, Oceana, WWF, ClientEarth, Global Fishing Watch are actors mobilizing information, money and policy action beyond national boundaries and also at the EU level. They can for instance exert influence in the Join Recommendation Process (Figure 9). These actors form horizontal, collaborative networks and decentralize power as they share information and work together towards common policy goals.

CONSULTATION ON FORMAL PROPOSAL (<6 MONTHS)

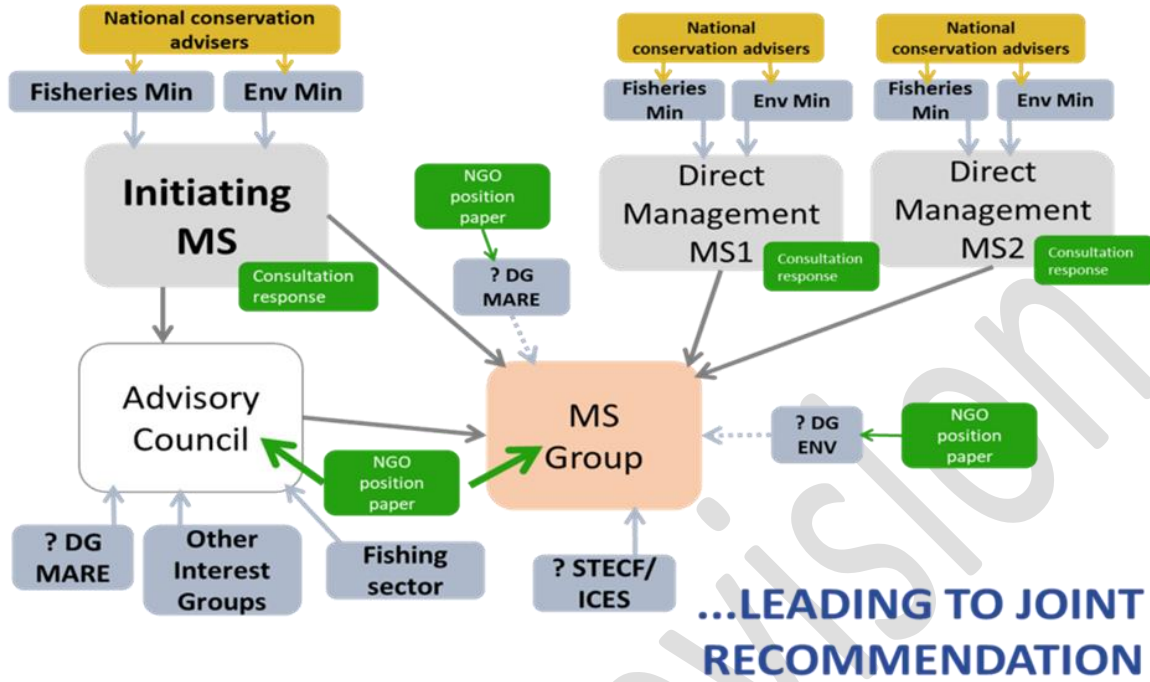


Figure 9. The Joint Recommendation process and the actors involved. Green boxes show space for advocacy from NGOs and organization representing civil society (Source: MPAs Europe, 2023).

Box 2. Joint Recommendations: the role of scientific knowledge

Portugal imposed a ban on bottom trawling in a deep-sea area (2,280,000 km²) in national waters, and wanted to exclude other fleet from the EU Community in order to achieve Good Ecological Status as is required by the MSFD objective 6,7. In July 2015, the issue was raised at EU level under Article 15 of the MSFD. The EU Commission responded with a request for scientific evidence supporting the need to implement these fishing restrictions. Portuguese authorities did not provide this, which led to the scenario where Portuguese bottom trawlers were not authorized to fish whereas other EU member states were.

This case illustrates the dynamics of top down politics and the role of scientific knowledge in order to implement fisheries management measures to facilitate seabed protection. At the national level, the protection of the seabed was favored over fishing interests while at the EU level, fishing access rights by the EU Community were favored over nature conservation in EU waters. Discrepancies between national and EU level could therefore lead to constraints in the implementation and management process of MPAs.



Annex 3: Required content of Montenegrin management plans

- ❖ A presentation of natural resources and users of the protected area;
- ❖ An assessment of the state of the protected area;
- ❖ The long-term goals for protection and sustainable development;
- ❖ An analysis and evaluation of the conditions for achieving protection goals;
- ❖ The measures for protection, conservation, management, improvement, and use of the protected areas;
- ❖ The methods of implementing protection, use, and management of the protected area;
- ❖ The priority activities for the preservation, maintenance, and monitoring of natural and other environmental values and segments;
- ❖ A spatial identification of planned land use purposes and regimes;
- ❖ The guidelines for scientific research;
- ❖ Development guidelines, guidelines, and priorities for the protection and preservation of the protected area, considering the needs of the local population;
- ❖ The planned activities for the sustainable use of natural resources, development, and spatial planning;
- ❖ The activities for the promotion and valorisation of the protected area;
- ❖ The methods of cooperation with the local population, property owners, and users;
- ❖ A timeline and entities responsible for implementing the management plan and methods of assessing its implementation;
- ❖ The resources required for implementing protection measures and sources of funding;
- ❖ Indicators for monitoring the success of plan implementation;
- ❖ Other relevant elements for area management.

Annex 4: Regulations of human activities within Italian MPAs

In Italy, Article 19 of Law 394/91 explicitly defines which actors are responsible for MPA designation and management. It also clearly states which activities are forbidden within established MPAs.

The following activities are prohibited within sites:

- The capture, collection and damaging of marine species and habitats;
- The alteration of geophysical environment as well as the chemical and hydrological characteristics of waters;
- Carrying out advertising activities;
- The introduction of weapons, explosives and other destructive fishing techniques;
- Navigating with motorboats;
- Any form of dumping solid or liquid waste.

Sanctions for violations are stated in Article 30. Article 36 lists all established MPAs for which the legislation applies.

Under revision



Annex 5: Public participation in French MPAs

Table 14. Participation of stakeholders in MPA planning and management in France.

MPA type	Management bodies		
	Name	Composition	Role
Nature reserve (NNR/RNR/CNR)	Advisory committee	Socio-professional actors and concerned users Qualified stakeholders and Nature Conservation Associations Local authorities, public institutions, local institutions Members are nominated during 5 years (renewable)	Gives advice on the functioning of the reserve, its management and the conditions of application of proposed measures. Can ask the NNR manager to carry out scientific studies and collect other relevant information.
	Scientific council (not systematically present in RNR and CNR)	Set out by the prefect	Assists the advisory committee and reserve manager on scientific issues
National Park	Board of directors	representatives of the French State, locally elected officials, scientists and users of the territory	Assists on all matters concerning the national park
	Scientific council	Appointed by the prefect of the department for 6 years (renewable). It is composed to qualify personalities on nature sciences and human sciences.	Assist the board of directors in everyday activities including monitoring and evaluation.
Nature Marine Park (NMP)	Management council	Composed of: Local representatives of the French State (in a minority), Representatives of the interested territorial communities and their competent groupings, Representatives of the interested regional natural park(s), Representatives of the management body of a contiguous marine protected area, Organization representatives of professionals, users, environmental protection associations and qualified personalities.	Has authority to decide on questions related to the park and to elaborate the management plan.
Natura 2000 sites (SCA, SPA)	Steering committee	Includes local authorities, representatives of owners,	The aim of the steering committee is the

		operators and users of the territories covered by the site. Representatives of the French State sit in an advisory capacity.	elaboration and the monitoring of the implementation of the document of objectives,
Biotope/geotope/natural habitat protected area ruling ¹³	Regional Scientific Council for Natural Heritage (RSCNH)	RSCNH is composed by regional scientist and naturalists in the domain of terrestrial, aquatic and marine natural environments, and also human sciences. Members are nominated during 5 years renewable	consulted for its opinion (it is an obligation)
UNESCO World Heritage sites	National commission for heritage and architecture	Appointed by the Ministry of Culture for 5 years, members are composed of Representatives of the French State, representatives of an elected mandate, representatives of associations or foundations whose purpose is to promote knowledge, protection, conservation and enhancement of heritage, and qualified personalities.	The commission is consulted for the perimeter of the protection and the management plan.

Under review

¹³ In order to demonstrate the need for prefectural intervention, the Biotope Protection Decree (BPD), Geotope Protection Decree (GPD) or Natural Habitat Protection Decree (NHPD) must be based on scientific elements such as studies, reports, inventories, theses, databases, etc. The scientific relevance of the BPD, GPD or NHPD will be assessed during the rest of the procedure by the Regional Scientific Council for Natural Heritage (RSCNH), which will be consulted for its opinion

Annex 6: Regulations of human activities within Belgian MPAs

Conservation measures in place for the Vlaamse Banken MPA (source: RD 22/05/2019)

- Sand extraction is allowed within specified zones within the Vlaamse Banken MPA, but a maximum volume of 1.578.000 m³ per year between 2020 en 2025 can be extracted. Gravel extraction is forbidden within the sand extraction zones in the Vlaamse Banken MPA (2kb, 2br and 2od)
- Recreational fisheries within the Vlaamse Banken MPA is only permitted with non-bottom contact fishing gear, except for bottom-contact fishing gear that is pulled or pushed by a person or a horse. An exception to this rule is possible if the Minister gives individual permission to existing recreational bottom-contact shrimp fishers, with the condition that the applicant can demonstrate that they have been at least three years actively fishing already. With this permission the applicant can fish a maximum of 10 days a year, and the permission is valid for maximum six years

Conservation measures in place for the SPAs: SBZ1,2,3 (source: RD 22/05/2019)

Measure	SBZ1	SBZ2	SBZ3
In the SPAs civil engineering activities and industrial and commercial activities are only allowed if they obtain a Natura 2000 permit			
Temporary measures from 1 st of December to 15 th of March:			
- Prohibition to cross the SPAs with high-speed vessels except for exceptional circumstances			
- Prohibition to carry out helicopter exercises above the SPAs at heights lower than 500 ft (except for helicopters owned, managed or contracted for a State, Region or Community and is being used at that moment exclusively for a non-commercial government service)			
- Prohibition to hold water sport competitions, unless they obtained a Natura 2000 permit (insofar as they are subject to these procedures)			

Measures applying to all Natura 2000 sites in the BPNS (source: RD 27/10/2016, Art. 14-15)

A plan or project (activities of civil engineering, industrial and commercial activities, ...) can only take place if a Natura 2000 permit has been granted that is not directly related to the management of a Natura 2000 area, and that, independently or in combination with other plans or projects can have significant effects for a Natura 2000 area, is subject to an appropriate assessment (insofar as the activities are subject to this procedure). This assessment will determine whether or not the project or plan obtains a Natura 2000 permit.

Conservation measures in the Vlakte van de Raan MPA (source: RD 22/05/2019)

All measures apply that apply to all Natura 2000 sites in the BPNS.

Measures overlapping with MPAs (source: RD 22/05/2019)

The current MSP (2020-2026) designates three search zones within which restrictions on bottom-contact fisheries can be implemented. These restrictions first need to be approved by other



Member States through Article 11 of the CFP. Zones 2 and 3 are located within the Vlaamse Banken MPA, and zone 3 overlaps with SBZ 1 & 2.

Relevant Royal Decrees mentioned

RD 27/10/2016: Koninklijk besluit betreffende de procedure tot aanduiding en beheer van de mariene beschermd gebieden/ Arrêté royal relatif à la procédure de désignation et de gestion des zones marines protégées (URL: https://etaamb.openjustice.be/fr/arrete-royal-du-27-octobre-2016_n2016024257)

RD 22/05/2019: Koninklijk besluit tot vaststelling van het marien ruimtelijk plan voor de periode van 2020 tot 2026 in de Belgische zeegebieden/ Arrêté royal relatif à l'établissement du plan d'aménagement des espaces marins pour la période de 2020 à 2026 dans les espaces marins belges (URL:)

Measures listed in Natura 2000 & MSFD management plan

In addition to these spatial measures specific for the MPAs, the combined management plans for Natura 2000 areas and the MSFD in the BPNS also include a host of measures related to addressing knowledge gaps, policy issues, sectoral measures and measures tackling pollution relevant to MSFD descriptors (Arcadis Belgium, 2021; Belgische Staat, 2022b, 2023).

Annex 7: Allowed and prohibited activities in protection zones II and III in Montenegro

Permitted activities in the protection zone II	Prohibited activities in the protection zone II
<ul style="list-style-type: none"> • commercial and sport-recreational fishing with floating longlines and fishing tools that do not touch the seabed and do not damage species and habitats on the seabed, and in accordance with the conditions issued in the fishing permits, giving priority to holders of commercial fishing permits; • setting up and using underwater diving paths for nature interpretation - a maximum of two paths in separate parts of the II protection zone, which will be determined based on the appropriate professional basis of the Program of temporary structures in the marine property zone, the Management Plan and on the basis of previously obtained approvals; • controlled scientific research and monitoring of natural processes based on the permission of the Environmental Protection Agency and the approval of the Manager; • controlled visits for educational, recreational and tourist purposes, exclusively in part II of the protection zone, which will be determined on the basis of the appropriate professional basis and on the basis of previously obtained approvals 	<ul style="list-style-type: none"> • fishing, with the exception of fishing with floating longlines and fishing tools that do not touch the seabed and do not damage species and habitats on the seabed, and in accordance with the conditions of fishing licenses, giving preference to holders of licenses for commercial fishing; • use of natural resources; • vessel anchoring; • movement of motor-driven vessels at a speed greater than ten knots (10 kn), except for the official vessels of the Manager and competent services for controlling activities at sea; • mariculture; • installation or construction of facilities; • changing the use of surfaces; • dispersing, capturing, harassing and killing animals and plant species; • settlement of non-native and invasive species; • undertaking works that could lead to damage to species and habitats and archeological values; • the use of substances that can threaten the vitality and fundamental natural values of the marine ecosystem; • accidental or intentional disposal or rejection of communal and any other waste; • damage to underwater geological and geomorphological values; • impoverishment of the natural stock of wild species; • pollution or endangerment of the sea

Permitted activities in the protection zone III	Prohibited activities in the protection zone III
<ul style="list-style-type: none">• economic and sport-recreational fishing, in accordance with the regulations governing sea fishing, until the conditions for introducing restrictions are met, based on scientific data of targeted research of fishing resources in the protected area, which are defined by the Management Plan, fishing permits and regulations for the field of sea fishing;• movement and stopping of motor-driven vessels;• use of pedestrian and recreational trails on land in accordance with the Management Plan and on the basis of previously obtained approvals;• scientific research and monitoring of natural processes	<ul style="list-style-type: none">• placing or building facilities that pollute, damage or threaten the marine and coastal ecosystem, natural habitats and species;• changing the use of surfaces;• dispersing, catching, harassing and killing animal species;• settlement of non-native species

Under review

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