Coherent & Cross-compliant Ocean Governance for Delivering the EU Green Deal for European Seas

Case Study: French Mediterranean

STEP 3

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STEP 3 – Assessing the Integration of Marine Biodiversity Conservation into the Planification of the Sea: the Case of the French Mediterranean Sea

1. Introductory concepts

Guidances on the text reading:

Abbreviation explanations: to keep consistency with deliverables published in the past 6 months on the French Mediterranean governance (e.g. Regina MSP deliverable 3.1), I decided to keep the same abbreviations which are in French (e.g. SDAGE should be translated as RBMP but stays as SDAGE in the text).

To make it clearer, the following color code has been adopted: green for land-related documents, dark blue for sea related documents, clear blue for inland-water documents.

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Box 1: Brief description of marine environment policies in France

The French Mediterranean coastline represents a critical hotspot of biodiversity, characterized by the presence of over ten protected species, including Posidonia oceanica seagrass meadows, as well as ecologically valuable landscapes such as rocky inlets and islands. However, this marine region is strongly subjected to human pressures. These include intensive maritime activities (e.g., cruise shipping, commercial navigation, recreational tourism, and fishing), freshwater-borne pollution (particularly plastic waste discharged by the Rhône River), and land-based impacts (such as urbanization and untreated or insufficiently treated wastewater discharges).1.

In France, the WFD was transposed in 20041 and orientates the entire water policy towards results objectives among which the good status of waters. The WFD is operationalised through River Basin Management Plans (RBMPs), which define ambitious targets for the conservation and restoration of aquatic ecosystems. These plans apply to river basins as well as to coastal waters extending up to one nautical mile from the shoreline baseline.

France adopts a centralized approach to marine environmental governance. Strategic frameworks developed under the Marine Strategy Framework Directive (MSFD) and the Maritime Spatial Planning Directive (MSPD) are designed and elaborated at the national level. However, their implementation is delegated to the maritime façade level. To enhance both marine biodiversity protection and the coherence of maritime economic development, France has adopted a unified spatial management framework: the Document Stratégique de Façade (DSF). This integrative document consolidates the objectives and measures of both the MSFD and MSPD, facilitating a more balanced approach to environmental and economic priorities in marine spatial planning.

Historically, the marine environment was partially addressed within the scope of the RBMPs, particularly concerning chemical contamination and eutrophication. Following the implementation of the MSFD and MSPD, responsibility for these issues was retained within the RBMP framework. This strategic choice reinforced land-sea continuity and promoted alignment of environmental objectives across freshwater and marine domains.

From a legal standpoint, both RBMPs and marine strategies are overarching frameworks. All other planning instruments—including terrestrial and sectoral development plans—are required to conform to the objectives and measures outlined therein. Nevertheless, the practical realization of this legal coherence remains limited. This is largely due to the multiplicity of planning documents and the competing economic and employment-oriented goals they pursue, compounded by insufficient human and financial resources to ensure effective cross-sectoral integration and alignment.

On paper, marine environment management policies objectives are the same throughout France. The French global strategy and objectives is gathered through France's national strategy for the sea and coastline (SNML). However, there are some regional declinations to better adapt to the regional marine ecosystems, watersheds, and economic stakes.

The main marine related policies are drafted as follow:

- The MSFD and MSPD are adapted at the Maritime façade level through the Façade Strategic Document (**DSF**) but drafted mostly at the national level.
- The WFD is transposed at the Hydrographic basin level through the **RBMP**

To this two documents, other policies and planning documents have an impact on the marine environment

- The land-related document (**SRADDET**) which allow coastal municipalities to develop a sea development schemes (SMVM). This **SMVM** has a strategic importance because it is anterior to the MSPD (early 2000's). this overlap explains why the MSPD is included in the same strategic document than the MSFD
- The biodiversity protection document such as the **Habitat and Bird directives**
- The local planning documents such as the **MPA management plans**, the local declination of SDAGE called SAGE and the SMVM
- The **marine energy policy framework** built in the recent past year to develop the sector
- The **fisheries policy framework**, that supports the implementation of the Common Fisheries policies and includes the **EMFAF** program.

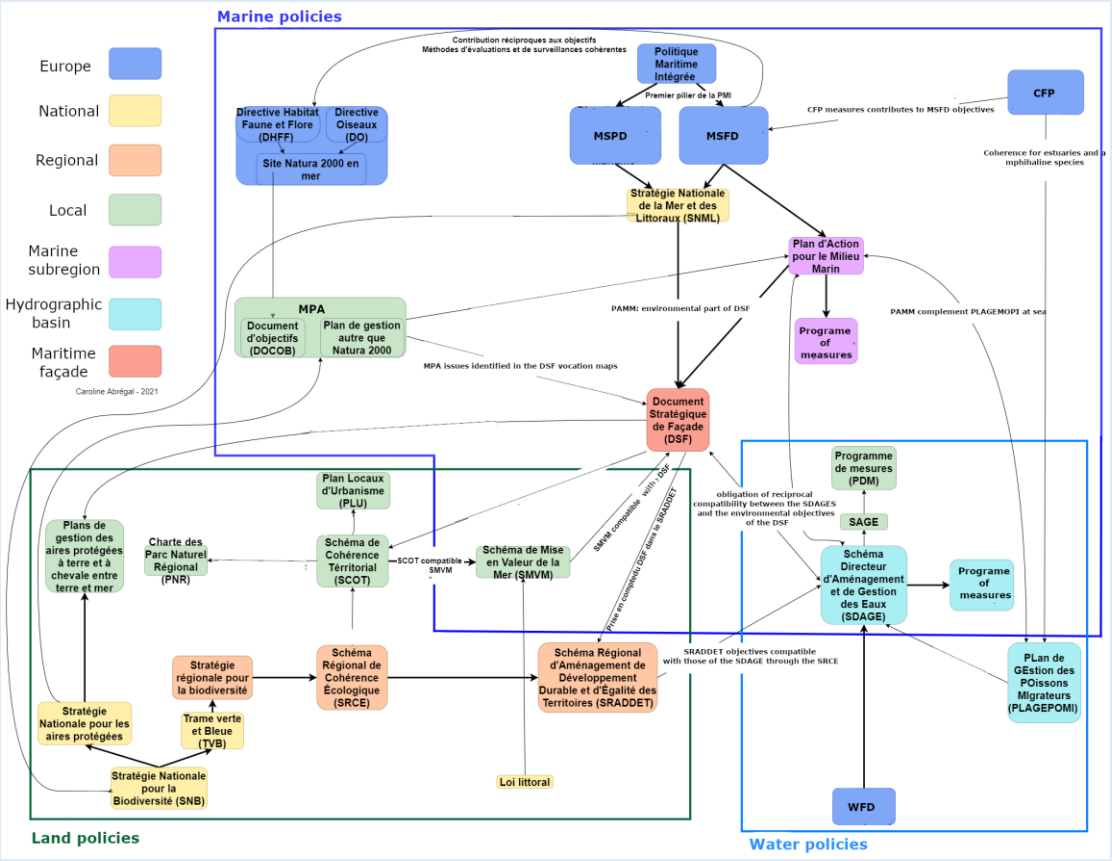

Figure 1 Policies and plans involved in the management of sea in France (modified from Abregal, C. (2021) INRAE)

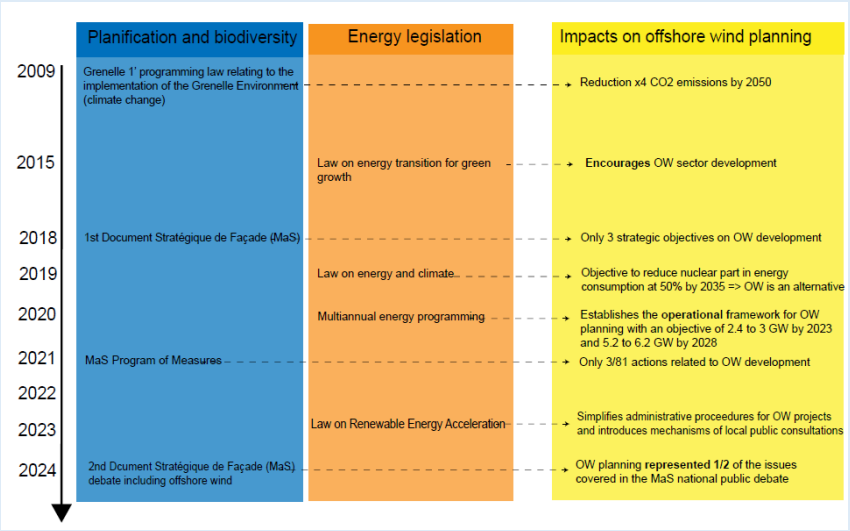

Figure 2 marine and energy legislation impacting offshore wind planning in France (source: Laura Bastide (2025). Balancing offshore wind energy ambitions and marine biodiversity protection, an example of marine spatial planning in the Provence-Alpes-Côte-d'Azur region, CrossGov)

Box 2: list of policy instruments available for marine-related policies in the French Mediterranean Sea

The list following list of policy instruments is non-exhaustive but covers the main issues related to the marine environment in the French Mediterranean Sea

Sea-related planning and instruments:

- Legal instruments and regulations:
  - Regional planning document (RBMP, DSF, SRADDET)
  - Local management plans: MPA management plans, STERE (Territorial ecological restoration schemes), (mooring, achoring etc.), SAGE, contrats de baie (Bay contract)
  - Impact assessment for main planning documents (DSF, RBMP, SRADDET/PADDUC)
- Economic instruments
  - Program of measure of planning documents
  - Projects funding through Water Agency RMC and OFB for research and nature restoration and protection

Sectoral policies planning and management:

- Legal instruments:
  - Fisheries landing obligations, capture control,
  - Permit delivery
  - Geographical and temporal bans
  - Authorization for offshore wind farms
  - The ERC Sequence
- Economic instruments:
  - Support to the fishing industry through EMFAF
  - Funding for research related to offshore wind
  - Future taxes on the offshore wind energy farms

The **ERC sequence** (avoid-reduce-compensation) is a mandatory procedure each construction project at sea must follow to ask for an authorization to build at sea.. It aims to reduce environmental damages and reconciling economic development and environmental issues, by providing a guideline for integrating the environment into planning documents and regional development projects. When a project at sea is instructed, first, the company must try to avoid damaging the environment, if not, to reduce its impact and if none of the two options before it is possible, to compensate by investing in environmental-friendly projects. It is a mix of legal instruments (mandatory), economic instrument (taxes and compensation), compliance procedure (reporting) and information (environmental assessment).

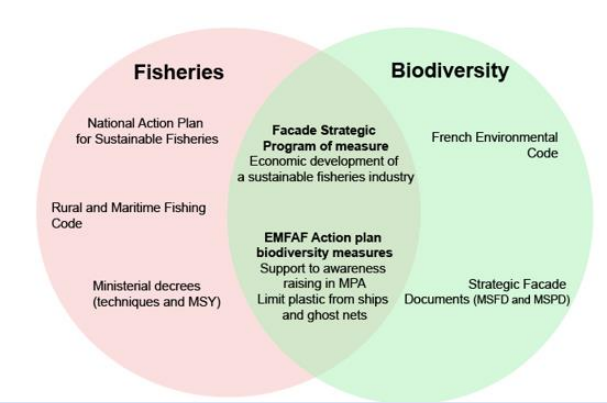

Figure 3 Fisheries and biodiversity regulations and plans (source: Laura Bastide (2025). Can fisheries policy implementation mechanisms be aligned with EU biodiversity objectives?, Crossgov*)*

Box 3: map of the French Mediterranean case study

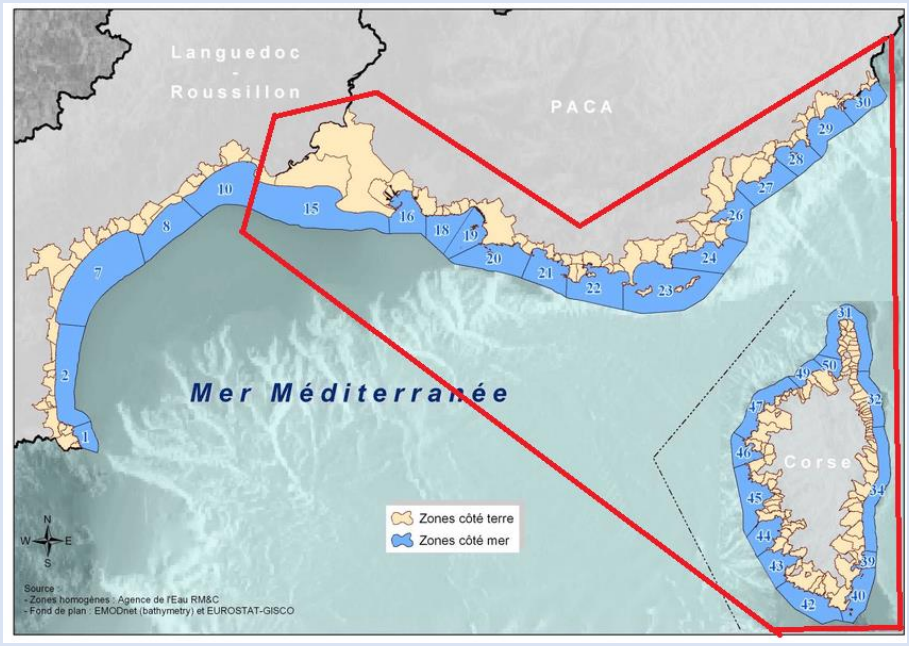

Figure 4 map of the French Mediterranean case study

2. Answering case study-specific research questions

The main challenge (Task 3.2) in the French Mediterranean context lies in the division of responsibilities between stakeholders to implement the WFD, MSFD and MSPD and the related impact on local implementation.

Case study-specific research question n°1

What are the challenges brought about by the interaction of river basin management (WFD), marine spatial plans and MSFD strategies at the local level?

Overall, in France, at the national and regional level, there is a good coherence between marine planning. The main fundamental problem (in the French Mediterranean context) in the interrelationship between the MSFD, the MSPD and the WFD lays not at the national and regional level, but rather at the local level. The different policy mechanisms (regulation, call for fundings, environmental impact assessment) converge to the local level and rely on stakeholders which are often very competent (MPA management) but can also be unfamiliar with the management of the marine environment (municipality representatives).

Despite the complexity of marine-related strategic documents (the Façade Strategic Document (DSF) transposing to the Mediterranean both the MSFD and MSPD and the River Basin Management Plan (RBMP)), local actors must comply with their related programs of measure. It implies to have a good knowledge of the planning document requirements to achieve indicators. Even though the Water Agency Rhone-Mediterranée-Corse (AERMC) and the Interregional Directorate for the Mediterranean Sea (DIRM) have support services, administrative employees do not have sufficient human resources to deal with all the requests, leaving the local agents to handle the difficult task of implementing the

programs of measure with few instructions. In addition, if one of the municipalities is located in an MPA or a Natura 2000 territory, the Birds and Habitats directives must also be implemented. The scheme below show the mandatory regulations to be implemented in the Narbonne area (54,000 inhabitants) within the MPA Côte Agathois (see figure 2 and 3).

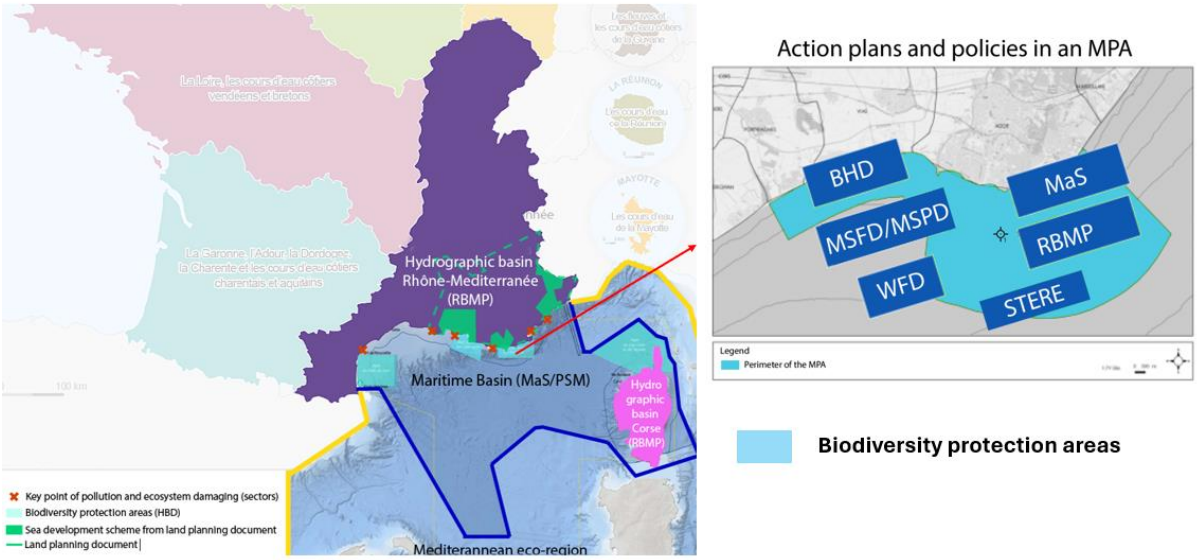

Figure 5 Interplay of planning document at the local level (AMP)

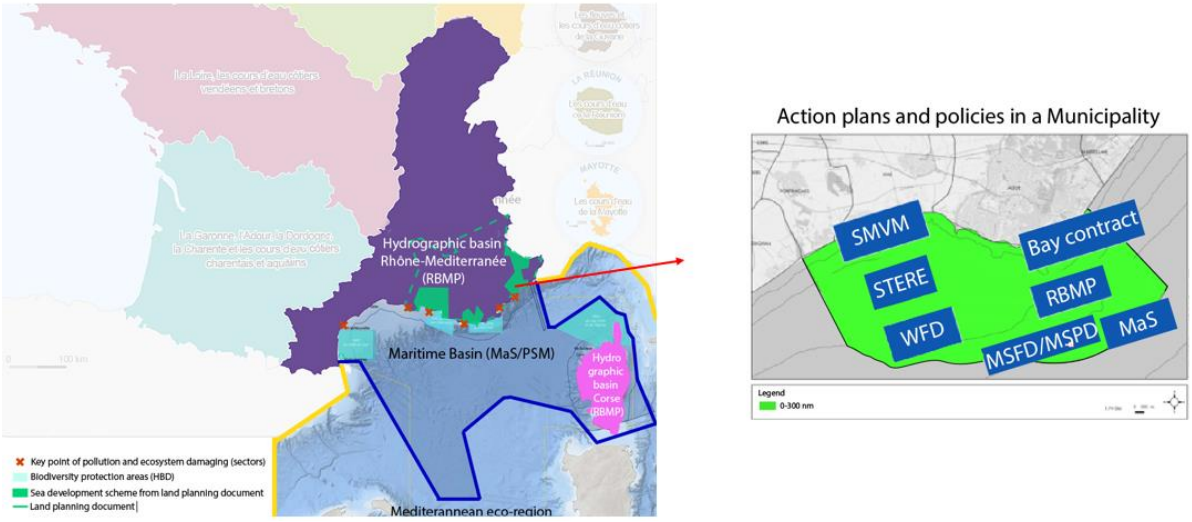

Figure 6 Interplay of planning document at the local level (municipality)

Coastal municipality representatives have the possibility to mobilise different management tools to manage the marine environment. It can be through sea-enhancement schemes aiming at developing economic activities on their coastline (up to 300m). For larger cities (e.g. Marseille), municipalities can develop a contrat de baie where economic, industrial and institutional players join forces to avoid the harmful consequences of industrial and port activities or tourism on water and marine ecosystems. Finally, municipalities can develop territorial ecological restoration schemes which have both objectives: reduce marine contaminants coming from inland waters and develop restorations activities.

However, responding to these planning tools requires administrative knowledge and the management of paperwork, sometimes for several years, which is not always compatible with the level of knowledge

of local stakeholders, or with the human resources available. In addition, balancing all these policy requirements can sometimes lead to giving up on developing a management plan that could cover them all, and choosing what is the easiest and least binding.

In response to these difficulties, the managers and people involved in the marine environments at local level have stressed the importance of having strong political support for the project, having time available, and creating a dialogue with civil society and businesses to ensure that the measures are accepted.

Case study-specific research question n°2

What factors in the regional context facilitate or hinder the coherence of policies to protect the marine environment?

A specific study was carried at the façade level comparing the application of MSFD, WFD and MSPD in two different regions of France (Provence-Alpes-Côte-D'azur and Corsica). Both regions apply the same Mediterranean Façade Strategic Document (MSPD and MSFD) but have a different River Basin Management Plans (RBMP) and different land management plans. This comparative assessment had one main goal: understand the impact of planning adoption timeline and local stakes on the coherence between marine protection policies.

Both regions are interesting because they are managed by the same institutions, the Water Agency Rhône-Mediterranée-Corse and the Interregional Directorate for the Mediterranean Sea (DIRM). Thus, their River Basin Management Plans objectives are similar and they are aligned with the Façade Strategic Document. Interviews have underlined that Corsica wants a stronger separation within the Water Agency Rhône-Mediterranée-Corse and the façade Strategic document to defend their local interest which are not the same (PACA is rather industrialized and crowded while Corsica is sparsely populated) and not well represented. This is also illustrated by the low representation of Corsica in the Maritime Façade Council (consulting body related to the Mediterranean sea), which has over 50 participants, among them 16 representatives of public institutions, but only one is from Corsica while more than 15 are from the mainland (the other 34 are from the private sectors, university experts, elected people etc.).

Conversely, their regional land-management plan called Regional plan for spatial planning, sustainable development and territorial equality (SRADDET) from the Provence-Alpes-Côte-d'Azur Region and Corsica's sustainable development plan (PADDUC) and which allow coastline municipalities to draft a "sea-enhancement plan" to develop and give permits to economic activities at sea have very different objectives impacting the marine spatial planning. Indeed, ¼ of the PADDUC objectives are related to their independencies.

In the interviews, it has been underlined that they rather rely on the land-management document PADDUC to organize their activities at sea because of this requirement of independence, as it is managed by the Corsican assembly and not a mainland institution. On one side, it can create some discrepancy with the European Green Deal Objectives and marine environment protection as the PADDUC objectives are rather economic oriented. On the other side, the Corsican's region is the only one in France to be involved in the MPA's management showing strong effort to protect the biodiversity.

One strong difference is the stakeholder engagement process in their land-management plan. The PADDUC in Corsica was adopted in 2015 after 4 years of consultation. Among it, 1 year was dedicated to the sea; 'the Assise du littoral" gathered actors from municipalities, private sectors, etc. It emphasizes the coherence with the sea-related challenges but rather on the marine spatial planning.

Given this process was set up before the marine spatial planning was adopted (2014) it allows to have a part of coherence between land and sea which does not exist in the other French regions.

Case study-specific research question n°3

What are the bottlenecks and solutions for ensuring an efficient land-sea interface in the French Mediterranean?

The land-sea interface is a key issue to ensure good marine status in the Mediterranean Sea. Indeed, most of the contamination comes from the inland waters (80% according to the last Mediterranean Façade Strategic Document environmental impact assessment). The Mediterranean façade is also confronted with a strong pressure due to the tourism industries.

The French administrative division has separated the administration of land and sea, with two Prefects, one regional (land) and one maritime (sea), representing the state. According to the interviewees, such opposition triggers bottlenecks with “land people/administration” with no relation and no consideration of “marine people/administration”. In the division of the Maritime Public Domain, such division has a strong impact (see the drawing below) with land management policies mostly oriented to the economic development in the first 300 metres while the marine-related policies emphasise biodiversity protection.

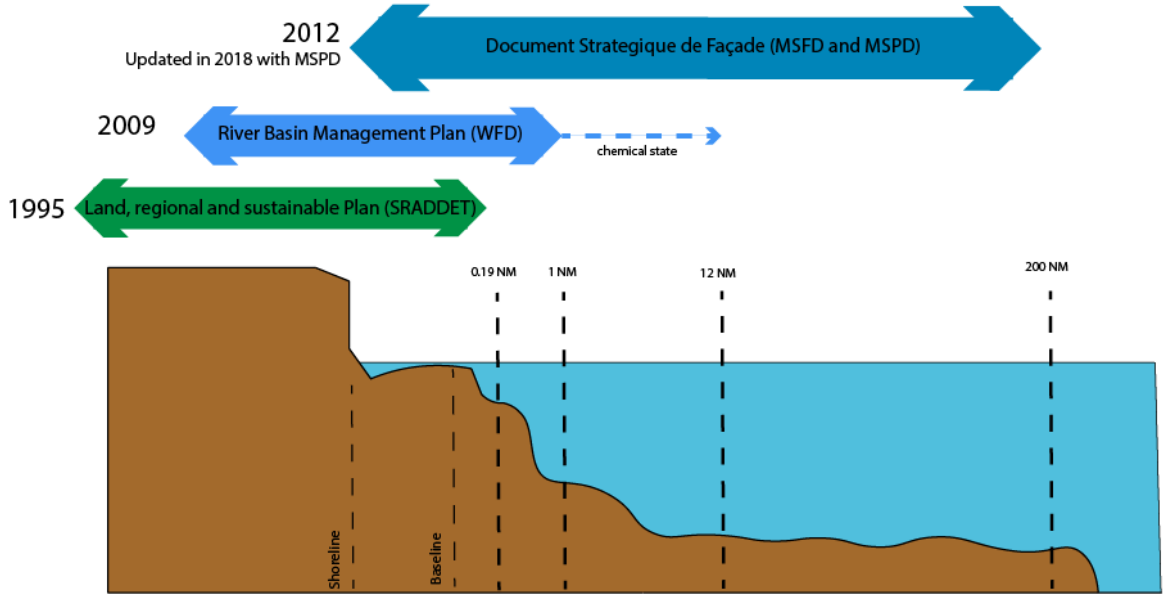

Figure 7 Repartition and overlap of land-sea and freshwater planning documents (source: Bastide 2024)

The question of who is responsible for the marine spatial planning and the organisation of activities at sea is crucial while in reality at least eight or nine institutions are involved with different orientations. Rare discussions are happening in France on this topic. For example, the new Facade Strategic Document has been under public debate from November 2023 until April 2024. Among the 100 webinars, only one was related to the link land-freshwater-sea.

The RBMP program of measure plays a key role in this land-sea interface with 276 actions in total related to the marine environment (186 on transitional waters and 90 on coastal waters including 49 on mooring, 24 on bathing areas, 25 on reducing pollution by hazardous substances.

A key example is the one of the from the new discharges from the Montpellier wastewater treatment plant in 2016, where the municipality decided to discharge wastewater into the sea because the indicators were more permissible than those for freshwater, with the argument that this would "fertilise

the sea", demonstrates several facts: 1) land-freshwater-sea indicators that are not aligned, 2) the organisation of activities on land that do not take account of impacts at sea, and 3) a lack of knowledge among people on land about the challenges of the marine environment.

A solution is to develop capacity building within the framework, for example, of the River Basin Management Plans as most of the representatives of inland municipalities are present in their basin committees.

Another solution pointed out by interviewees is to reduce the number of planning documents and to clarify the repartition of responsibilities (e.g. only one institution in charge of financing restoration projects and mooring instead of two or three institutions).

Finally, it has been suggested to create new cross-sector jobs which allow for the improvement of the consideration of marine sectors in municipalities such as the one created in the municipality of Marseille to take care of the Contrat de Baie (see CS specific research question 1) and increase the link with the marine professionals.

3. Answering the Task 3.2

Task 3.2 research question n°1

Which synergies and conflicts / challenges appear in the operational implementation of River basin management plans (WFD), Marine Strategies (MSFD), and Marine Spatial plans (MSP) with the goal of improving biodiversity conditions within the MSP setting?

The high number of interlocking and interrelated policy documents and strategies (up to 8 at the local level) and institutions (8-9 state representatives) involved in the marine environment management highlighted in box 1 and box 2 is the more foundational problem improving marine biodiversity within the MSP setting. First, because it requires the implementation of strong coordination mechanisms between institutions (step 2, governmental organisation structure), secondly, it entails aligning objectives, measures and indicators relating to biodiversity (Step 2 instruments), and ultimately, it means understanding which issues need to be prioritised between economic development and biodiversity, and who is in charge of this responsibility (step 2 objectives).

In spite of the marine governance complexity, synergies have been developed between MSFD, WFD and MSPD related planning to support a coherent operational implementation:

- There is **one unique document** covering both the MSFD and the MSPD called the Façade Strategic Document which aims at connecting both biodiversity protection measures and economic development.
- The two main planning documents: the Façade Strategic Document (MSFD/MSPD) and the River Basin Management Plan SDAGE (WFD) aim at **achieving common objectives** such as Good Environmental Status including biodiversity protection and Zero pollution.
- It is mandatory for both documents Façade Strategic Document and River Basin Management Plan - RBMP to be **coherent** through their objectives and program of measures
- Their **programs of measures** must be aligned and in the table describing these measures, it is indicated for each measure whether and how it **supports the measure of the other document** (Step 2, policy objective, question 1).
- Two descriptors of the MSFD (D5 and D6 on eutrophication and pollution) are commonly managed. The Water Agency (WFD) work on these indicators and then share the monitoring and results with the Regional Sea Directorate (MSFD) to be included in the MSFD reporting. These two descriptors related measures are funded by the Water Agency.
- =
- There is a **share in the monitoring system** such as the WFD monitoring which are used for MSFD including data on physiochemistry, phytoplankton, green tides, coastal benthic habitats, etc.
- Cross-fertilization of knowledge is now supported by a new platform created in October 2024 that compiles data for both directives (MSFD and WFD).
- **Indicators** have been developed linking **environmental stakes** and **economic pressures** in Annexe “objective indicators” from the Façade Strategic Document. The “vocation area maps” show how the economic activities can influence the marine environment and potential risks.
- To support synergies in the operational implementation of WFD, MSFD, and MSPD (and more globally all Mediterranean-sea-related issues) a **consultative body** has been created called **Façade Maritime Council** which gathers more than 50 different actors including state representatives, state services at sea and inland, freshwater representatives, university experts, work union representatives, and NGOs. Meetings are organised twice a year to validate the Mediterranean Sea strategic orientations, while more targeted work is carried out in a technical committee on strong marine protected areas, marine renewable energy, and marine jobs. It aims at exposing both the environmental and economic challenges of the Mediterranean Sea to validate measures and solutions (taken by the French ministry of environment, not by the Façade maritime council).
- A french-water **coastal committee** has been created for coastal municipalities to support the specific implementation of freshwater measures impacting the marine environment
- Each Water agency has now (since 2012) a **service or an expert dedicated** to marine coastal areas (2-3 person)

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However, conflicts in the operational implementation with the goal of improving biodiversity conditions within MSP setting persist without short and middle term solutions. Gaps particularly challenging have been identified at the local level.

- Analysing biodiversity condition within MSP setting in the French Mediterranean context implies to look beyond the MSFD, MSPD and WFD related planning documents. Indeed, in the French context, **land-management documents** influence the marine biodiversity states. The regional land-management plan called Regional plan for spatial planning, sustainable development and territorial equality (SRADDET) from the Provence-Alpes-Côte-d'Azur Region and Corsica's sustainable development plan (PADDUC) allow coastline municipalities to draft a "sea-enhancement plan" to develop and give permits to economic activities at sea. Even though this document must, on paper, be coherent with the Façade Strategic Document and River Basin Management Plan RBMP) on biodiversity requirements, two difficulties are faced: (a) the list 14 **objectives** driving its operational measures among which only 2 are related to biodiversity protection and 12 on economic development (b) **local actors** involved in the ground land management mostly are not aware of the MSFD and MSPD requirements what leads to discrepancies. In aligning economic development with biodiversity protection (*step 2 objectives and governmental organisational structures)*.
- The **geographical repartition of competencies** between institutions can lead to competition between players for certain competences, in particular the restoration and protection of certain emblematic ecosystems (corals, Posidonia meadows) which are dealt with by the Interregional Directorate for the Mediterranean Sea (DIRM) and the French Biodiversity Office (OFB) through the Façade Strategic Document and the good status of marine ecosystems and by the Water Agency (AERMC) through the good status of coastal species in zone 1nm.
- **Policy instruments** are sometimes **incoherent,** as exemplified in such as an **overlap in funding** responsibilities on biodiversity: the Water Agency (AERMC), in charge of WFD (and has competencies from the coast to 1nm), has a "biodiversity" budget shared with the French Biodiversity Office (OFB)'s Mediterranean Branch, which, according to the division of powers, is responsible for protecting biodiversity. However, if one of these two institutions uses the budget to restore Posidonia meadows, for example, which is within its remit, then the other institution (Water agency AERMC) should not use the budget to restore Posidonia meadows. As these two institutions work on the same topic (as do the mooring strategies), there is a strong overlap which has been highlighted as a problem on several occasions (interviews). This situation is specific to the Mediterranean façade where the Water Agency (AERMC) is strongly involved in the marine environment and this situation does not exist in another façade.
- Even though D5 and D8 of MSFD is implemented by the Water Agecny supporting coherence, the **lack of alignment** between **MSFD and WFD on some indicator.** It has been denounced (interview) as creating irrelevant decision-making. Improvement must be made on the indicators between policies and their related instruments which are still not aligned (e.g. between MSFD and WFD) which makes it difficult to implement projects at a local level because indicators are sometimes good for one directive but not for the other with the same collected data (e;g. on Posidonia meadow status). Those common indicators are in development since 2014 but local actors have underlined the inconsistency of these indicators that can create irrelevant decision-making.
- Finally, the **lack of alignment** between **temporal scales** can be a source of incoherent decision-making. For example, Water agencies have internal strategic cycles not aligned with the RBMP cycle which can lead to inefficient decision making, while considering the European Commission's requirements for the water management plan cycles.

	SDAGE		Façade Strategic Document	PADDUC	SRADDET
Institution	SDAGE cycles	Water Agency cycles	DIRM	Corsica's assembly	PACA regional council

Adoption of 1st plan	2010–2015	2013–2018	2012–2018	2015	2020
Adoption 2nd plan	2016–2021	2019–2024	2018–2024		
Adoption 3rd plan	2022–2027	2024–2029	2024–2030		

The policy and program of measure timeframes not being aligned can create gaps and inconsistencies especially when it comes to adapt to sectoral policies (ex: 2018 MSFD and MSPD program of measures had only 3 measures on offshore wind energy while in 2024 it became a core issue).

Task 3.2 research question n°2

Whether and how the operational implementation of River basin management plans (WFD), Marine Strategies (MSFD), and Marine Spatial plans (MSPD) are coherently contributing / considering measures to the delivery of the GD objectives of protection of marine biodiversity?

Marine-policy-related instruments and mechanisms (see box 3) are currently facing two challenges. Firstly, the mechanisms for implementing the MSFD, MSPD and WFD are being developed in parallel, without necessarily any co-construction between the different policies (e.g. funding, permits, etc.) . Conversely, some instruments are being built independently of the policy it is applied for but require adaptation to each policy (e.g. ERC procedure, impact assessment, reporting).

As a synthesis of the analysis carried in Step 2, several elements must be underlined related to the EGD:

- **Planning document objectives**: Façade Strategic Document (MSFD and MSPD) and River Basin Management Plan (WFD) objectives support different EGD objectives. Climate change mitigation is for example the overarching objective of the Rhone-Mediterranean SDAGE, streamlining all the other objectives. Biodiversity measures in the Façade Strategic Document, the RBMP as well as the Birds and Habitats Directives, and French nature restoration law support biodiversity protection through both protection and restoration measures. Biodiversity protection involves all the actors implementing the Façade Strategic Document including the DIRM, DREAL, OFB, etc. Finally, the topic of pollution is the responsibility of theRBMP and the Water Agency Rhône-Mediterranean-Corse even at sea (only competencies of the Water Agency going beyond 1nm), it encompasses the struggle against inland pollution (agriculture), as well as plastic pollution.
- **Planning document measures and impact assessment:** The Façade Strategic Document environmental impact assessment indicates that 80% of pollution in the Mediterranean Sea comes from rivers. This observation puts into perspective the scope of the Façade Strategic Document's efforts to limit coastal pollution and highlights that significant progress in integrated land-sea management is still expected to achieve good environmental status of marine waters. This evaluation requires that efforts be made in the watershed (SDAGE) otherwise the Façade Strategic Document objectives cannot be achieved. The mechanisms presented (quetsion1) such as the coastal committee and the municipality planning documents (STERE and contrat de baie)à can support the increasement of the marine water status.
- **Funding:** To reach biodiversity objectives from both the MSFD and WFD the Water Agency (AERMC), which has the most important budget of all the states service in the Mediterranean Sea, and the French Biodiversity Office (OFB) have many calls open to support biodiversity protection and ecosystem restoration including the protection of Posidonia seagrass meadows, as well as support MPA management (mooring and anchoring regulations).
  Besides, both the Interregional Directorate for the Mediterranean Sea (DIRM) and the Water Agency provide support through funding collectivities and municipalities into drafting new sea enhancement plans to control activities polluting the sea and restoring ecosystems. Such management plans, called STERE, are still under development and 4 of them are supported in

the Mediterranean coast 4 complementary calls for funding have been published by the DIRM on ecological restoration strategy, impact of diving activity on frequented sites, dredging and land management of dredged sediments, pooling and valorisation and characterisation and functioning of soft substrate habitats.
However, **such funding has a very local effect** but **does not encompass a global solution to** does not encompass a more global solution to a host of environmental crises, including biodiversity, climate change, and pollution"To achieve such goals, the indicators, measures, and planning temporality should be aligned to increase the efficiency of regulations and projects supported.

- **Legal obligations**: to contribute to the link between biodiversity protection and MSP one key instrument is the ERC sequence (avoid-reduce-compensate). The **ERC sequence** (see Box 3), , is a sequence that the private sector is required to follow in order to obtain approval for any infrastructure development project. It obliges private companies to assess the environment before building new infrastructure and to limit the impact on ecosystems and biodiversity. The ERC methodology has been adapted for marine biodiversity through a 100-page guide. It is mostly applied for infrastructure constructions and offshore wind development. Such a strategy could be effective, but it requires the right scientific knowledge to understand the state of the sea before the project and to predict potential impacts on ecosystems.

The above list is non-exhaustive but gives three key examples of policy instruments attempting to improve biodiversity (and EGD) objectives in the marine spatial planning. The instruments are developed and implemented in a disjointed manner, with little consultation between stakeholders, which can lead to either inefficiency in the measures taken or inconsistency in the objectives achieved. MSFD, MSPD and WFD policy instruments can support the three EGD objectives only if they are carried out efficiently and that the projects do not benefit from exemptions and that they include sectors in their regulations (especially marine transport).

Task 3.2 research question n°3

Whether and how the operational implementation of River basin management plans (WFD), Marine Strategies (MSFD) and Marine Spatial Plans (MSPD) are coherently contributing / considering measures for the management of fisheries and energy development?

France must apply the Common Fisheries Policy and manage it mostly through obligation with landing permits and quotas, and through incentives with the EMFAF funding. French marine renewable energy strategy has been accelerated in March 2023 through a new law aiming at reaching carbon neutrality in 2050 mostly relying on 50 offshore wind energy farms that should be constructed before 2050. Taking into account the French hierarchy of norms, it is compulsory for both strategies to be implemented respecting the Façade Strategic Document (DSF transposing the MSFD and MSPD) measures and indicators.

Fisheries and energy wind farm are mostly considered in the Façade Strategic Document “vocation maps” and programs of measures. There is no indication related to marine fisheries and energies in the RBMP (not the purpose of this planning document)

Offshore wind energy:

On one hand, offshore energy development implementation must be coherent with the Façade Strategic Document objectives. On the other hand, there are few relations between all those policies when they are designed, which results in **contradictory objectives** (economic development prevails for sectoral policies including economic growth and employment preservation).

In the Façade Strategic Document program of measures of 2021 (implementing MSFD and MSPD), **offshore wind energies** is only mentioned ten times in the Annex related to biodiversity conservation of the Façade Strategic Document. Offshore wind farms are, however, mentioned several times in the

coastline development section through three key measures meant to develop the industry: (a) Capitalising on and disseminating knowledge about floating offshore wind turbines and its impact on the environment, while ensuring a harmonised following of the various projects, (b) developing an offshore wind farm observatory, (c) develop a competitive, sustainable and structured "commercial floating wind energy" industry along the Mediterranean coast. The impact on biodiversity is mentioned many times but the emphasis of the Façade Strategic Document is on the economic development.

The “Offshore wind” observatory set up and funded since 2022 through the MSFD/ MSPD program of measure supports the offshore wind development by providing scientific input to properly conduct environmental impact assessment.

Both a source of coherence and of contradiction, the Façade Strategic Document is currently undergoing a **wide debate** in France (November 2023-April 2024) and closely linked to the marine renewable energies. This debate aims at gathering feedback on the ground to draft the future façade Strategic Document cycle documents. For this debate, matters of the Façade Strategic Document (environment and MSP) have been mixed with the offshore energy debates, lowering the environmental aspect of the Façade Strategic Document debate but enhancing potential coherence, with both strategy/policy being constructed at the same time.
The emphasis on the offshore wind energy topic lowers the space given to fisheries in the debate with potential lesser inclusion of fisheries matters in the future Façade Strategic Document.

Fisheries:

At the French Mediterranean Sea scale (including the PACA region), MSFD implementation is coordinated by the Interregional Directorate of the Mediterranean Sea through the French Mediterranean Sea strategy and program of measure. Three of the MSFD descriptors are closely linked to the fisheries sector including healthy fish stocks (D3), seabed integrity (D8), and the non-introduction of non-indigenous species (D2). The French Mediterranean Sea program of measures is composed of 81 actions, 13 of which are related to the fisheries sector. These 13 actions include a full chapter of measures on halieutic resources management and four actions on biodiversity protection and fisheries. EMFAF is used to support these actions. MSFD program of measure also supports some sustainable fisheries measures by funding research projects along with the French Biodiversity office on the vessels tracking and fishnet loss.

During the EMFAF call for project drafting, the Interregional Directorate and the Region (managing EMFAF) work closely to ensure coherence between EMFAF-supported projects and the French Mediterranean Sea program of measures. The 2021-2027 national fisheries operational program is aligned with the priorities of this program of measure, focusing on environmental sustainability, innovation development, the promotion of sustainable aquaculture, and the marketing and processing of fishery and aquaculture products. A clear mention is made to the French Mediterranean strategy and the science-policy interface: “Priority will be given to projects that include a dimension of improving knowledge of the impact of climate change on stocks of interest to fisheries. Projects will be able to draw on data sets collected within other frameworks, in particular data collected under the data collection framework (EMFAF specific objective OS1.4) or the MSFD1”.
However, despite these close links on paper, the National EMFAF strategy primarily focuses its biodiversity funds efforts on data collection and raising awareness in MPAs. EMFAF is not yet sufficiently oriented to be used as a concrete incentive for fishing that is closely linked to the sustainable use of resources. Despite the strong recommendations of the Façade Strategic Document,stronguer coordination mechanism and alignment are required. For example, only 1 of the 14 EMFAF measures is related to biodiversity protection.
The main mechanisms for enforcing compliance with CFP stock sustainability objectives and MSFD indicators remain regulatory and coercive, through temporary bans and landing obligations.

Synthesis:

[1] *SFC 2021 EMFAF Program,* p 9-10: https://www.europe-en-france.gouv.fr/sites/default/files/programme_national_feampa.pdf

Both sectoral policies have very different objectives with the MSFD (economic development, energy independence and employment). Their consistency rather relies on the MSPD and the planification of marine activities. The vocation maps of the Façade Strategic Document effectively contribute to measures for the development of fisheries and offshore wind energy activities but still implying a duality between development and conservation that has still not been fixed in the French marine context. The reality of Mediterranean fisheries stock, the difficulties faced by local fishermen and the global warming can only lead to the conclusion that, despite the directives issued by the Façade Strategic Document, sectoral policies are not contributing to the achievement of its objectives.

Going further, a reflection must be led on the institutional mandates of the institutions implementing WFD, MSFD, and MSPD. To provide an example, the French Ministry of environment has decided that, starting in 2025, Water Agencies (in charge of WFD) will collect offshore wind energy taxes up to 200 nm. This can lead to a misinterpretation of the responsibility of the Water Agency in the marine spatial planning (which is still limited to 1nm).

Task 3.2 research question n°4

What needs to be done to enhance horizontal coherence to improve biodiversity conditions within the MSP setting?

Note to the readers: The one-page format does not allow to be exhaustive. Additional information may be requested from the author, such as the sources of these recommendations (analysis of documents, meetings, workshops, interviews, etc.).

Collected during the desk work, the interviews, workshops and other research activities, the following recommendation has been highlighted to improve biodiversity conditions within the MSP setting:

- Improve the timeline coherence: The failure to align planning documents with European and international objectives, and also between planning documents, can lead to inconsistencies in the measures taken in the short and medium term, as well as in the regulatory and funding tools. It is suggested that the timeframes should be aligned so that the measures reinforce each other rather than being built in staggered fashion to fill gaps from the other planning documents.
- Improve the spatial coherence and division of work: division of competencies is unclear especially in the maritime public domain (up to 12 nm) where many institutions are interlocked depending on their area of expertise (fresh, marine water, pollution, biodiversity), their link with the State (representant of the regional authority, repartition of funding) and the plans they implement (MSFD, WFD, MSPD, Habitats and Birds Directives etc.).
- Improve the division of funding: the distribution of funding between French institutions is unclear between operators working on the same type of project. This distribution of competencies among funding should be clarified so as to act more effectively and have a single point of contact able to deal with sectoral policy issues (e.g. environmentally harmful subsidies).
- Improve the indicators and monitoring systems alignment: increasing coherence between policies and their implementation mechanism requires strong work on the indicators and monitoring systems. In the French Mediterranean Sea, it is a work under progress with some WFD monitoring systems shared for MSFD indicators. However, indicators are still not aligned with what creates discrepancy. It is strongly recommended to accelerate the process of harmonisation and to have common data platforms.
- Align the policy mechanisms: rather than multiplying instruments, it would be preferable for the institutions to align themselves on a specific instrument (ERC) and ensure that it is effectively implemented without exemptions (which is not yet the case in the French Mediterranean context where most of the avoid-reduce-compensate procedure end up with “compensation” measures.
- Increase human resources (cross-disciplinary skills, less overload): French public services are overloaded and have difficulties to implement efficiently operational mechanisms. Besides, civil servants are specialised in their own domain of activities (fresh water in the water agency, marine water in the marine-related services). One point underlined by many experts in France is that if the Water Agency from the Mediterranean coast has such positive

impacts and projects on the Mediterranean Sea, it is because they have one deeply qualified expert on the marine environment that provides good strategic advice and get involved.

Task 3.2 research question n°5

What needs to be done to enhance vertical coherence that would contribute to the delivery of the GD objectives for the protection of marine biodiversity?

Working on improving vertical coherence to deliver the Green Deal objectives implies enhancing the governance and organisation of competencies rather changing operational mechanisms.

- Reduce the amount of planning documents: Each institution/area/sector has its own planning document which creates inconsistencies at several stages: local implementation, national reporting, coordination between objectives and indicators. It has been underlined that policy framework should be simplified instead of having more and more regulations coming from the national and European levels.
- Improve stakeholder engagement at all stages: Consultation is part of the process for planning drafting (DSF, SDAGE, SRADDET etc.), it includes the involvement of the population as well as private sectors. Nevertheless, in the final writing, there is a lack of consideration for the local stakeholders who are the ones implementing the plans. To improve vertical coherence, the first step should be to co-construct the plans, and a bottom-up approach to design implementation mechanisms should be leading in parallel with the national strategy orientations so that these local stakeholders can implement the MSFD, MSPD and WFD requirements.
- Transparency: Decentralising the Façade Strategic Document drafting process: As an example of the previous point, the Façade Strategic Document process is interesting to study and improve. There is a public consultation process, indications brought by the Façade Maritime Council and at the end, there is no transparency on how these consultations were taken into account is the final writing of the Façade Strategic Document. It led to disengagement from regions such as Corsica which wants to have its own Façade Strategic Document and not be included anymore in the Mediterranean Façade Strategic Document.
- Improve the knowledge diffusion between state services and the local stage: a lack of communication and understanding of the MSFD, WFD and MSPD requirements has been underlined by local actors who sometimes give up on their biodiversity protection projects because of administrative red tape. More capacity development should be developed in parallel with easier administrative procedures.
- Improve monitoring systems and indicators: monitoring systems and indicators are building by national scientific institutions (IFREMER, SHOM etc.). Indicators and thresholds are defined at a national level and it sometimes makes it impossible to apply some requirements that were built taking into consideration the reality of one territory (e.g. Britany) and to implement it in another territory (Mediterranean Sea). A more important role should be given to regional universities when setting up the indicators.
- Getting NGOs involved: key NGO role has been underlined in creating a bridge between the state's services (Maritime directorates, Water Agencies) which suffer from suspicion by the population as well as local economic players. NGOs has a strong role into raising awareness on the necessity of having environmental rules.

4. Answering the Task 3.3 research questions

*We kindly ask you to write **1 page max per research question**; we encourage you to use this space to **bring the key messages**.*

Task 3.3 research question n°1

Do policy instruments [delivery mechanisms] set for the implementation of sectoral policies adequately internalise key requirements of EU policies established to deliver healthy marine ecosystems (MSFD/WFD/MSPD)?

Both sectors have indicators linking environmental stakes and economic pressures in Annex “objective indicators” from the Façade Strategic Document (MSFD/MSPD) (see Task 3.2 question 3). Conversely, except for the mention that fisheries and offshore wind energy must comply with the Façade Strategic Document requirements, there is no explicit cross-references of its objectives within the energy and fisheries strategies. In practice, the nuance is quite fine because in their strategic definition and writing, there are always links that are established. For example, offshore wind is mixed with the elaboration of the new façade Strategic Document in the 2023-2024 public debate) but, at the regional operational scale, very few synergies are built even though institutions are working together.

Fisheries:

The interviews highlighted two contradictory facts on the coherence between sectoral policies and marine-related planning. On the one hand, the EMFAF and energy farm implementation must be coherent with the Façade Strategic Document. On the other hand, there are few relations between all those policies when they are designed, which results in contradictory objectives (economic development prevails for sectoral policies such as employment preservation for fisheries). For example, only 1 of the 14 objectives of EMFAF is related to biodiversity protection which represents ½ of the Façade strategic document objectives.

Besides, harmful subsidies such as a financial support of 40 cts per litre of fuel through EMFAF have a negative impact on biodiversity protection and climate change.
However, since 2021, it has been possible for the regions managing the EMFAF funding to have a “biodiversity” or a “fight against plastic pollution” indicators and actions. This new objective that did not exist before shows an improvement in coherence between sectoral policies and the marine-related policy objectives. Currently, the biodiversity measures mostly consist in financing employees to raise awareness or to control activities in MPA during the tourism season to limit the impact of tourism on the ecosystems.

A third synergy supported by EMFAF was highlighted in interviews: The French Biodiversity Office (OFB) helps the Interregional Directorate for the Mediterranean Sea (DIRM) via EMFAF funding to carry out the analyses, particularly on the impacts on habitats and their sensitivity to fishing, but also to see if there are any good practices. This reporting supports EMFAF as well.

During the EMFAF call for project drafting, the Interregional Directorate and the Region (managing EMFAF) work closely to ensure coherence between EMFAF-supported projects and MaS. The 2021-2027 national fisheries operational program is aligned with the priorities of the Mediterranean MaS action plan, focusing on environmental sustainability, innovation development, the promotion of sustainable aquaculture, and the marketing and processing of fishery and aquaculture products. A clear mention is made to Mediterranean MaS and the science-policy interface: “Priority will be given to projects that include a dimension of improving knowledge of the impact of climate change on stocks of interest to fisheries. Projects will be able to draw on data sets collected within other frameworks, in particular data collected under the MaS (EMFAF specific objective OS1.4) or the MSFD[18]”.

However, despite these close links on paper, the National EMFAF strategy primarily focuses its biodiversity funds efforts on data collection and raising awareness in MPAs. EMFAF is not yet sufficiently oriented to be used as a concrete incentive for fishing that is closely linked to the sustainable use of resources. The main mechanisms for enforcing compliance with CFP stock sustainability objectives and MSFD indicators remain regulatory and coercive, through temporary bans and landing obligations.

Energy:
Energy strategies and policy (law to accelerate the production of renewable energies of the 10th of March 2023) is mostly dedicated to achieving carbon neutrality by 2050 and to keep national sovereignty on energy production. Thus, offshore wind farms now play a central role on the marine stage and more specifically in the marine spatial planning. This enthusiasm for offshore wind energy can lead to precipitated decision making, running against the requirements of MSFD, MSPD, and WFD.

One specificity from the French offshore wind energy governance system is that the Façade Strategic Document also the strategic environmental asessment (SEA) for a given maritime façade 5. However, given the fast acceleration of offshore wind energy development, the DSF drafted in 2017 has shown limitation as at the time of its adoption, the French Energy Plan Decree was still in preparation, resulting in the targets not being specified in the strategic objectives. Given that the regulatory obligations for strategic environmental assessment are described in the DSF, they did not incorporate the zoning required to meet the objectives of the French Energy Plan relating to marine renewable energy with sufficient detail. SEAs have therefore been unable to completely integrate the impacts of the offshore wind energy develoment from the French Energy programming, nor the cumulative impacts with those of other activities

As an example of this contradiction, the Strategic Façade Document (MSFD and MSPD) is currently undergoing a wide debate in France (November 2023-April 2024). This debate aims at gathering feedback on the ground to draft the future Façade Strategic Document cycle. For this debate, matters of the Façade Strategic Document (environment and MSP) have been mixed with the offshore energy debates, lowering the environmental aspect of the debate but enhancing potential coherence, with both strategy/policies being constructed at the same time.
The emphasis on the offshore wind energy topic lowers the space given to fisheries in the debate with potential lesser inclusion of fisheries matters in the future marine spatial planning.

The construction permitting process of an offshore wind farm and its connection facilities is also a challenge to deliver healthy marine ecosystems. It requires administrative authorisations to be obtained by the successful bidder for the offshore wind farm, and by RTE (national company of electricity) for the connection, including the offshore substation. The nature of the authorisations8 required for the offshore wind farm depends on two possibilities: if the maritime area in which the project is located, either in the public maritime domain or in the EEZ. In the first scenario, on the public maritime domain, the offshore wind farm developer and RTE must each obtain an environmental authorisation and a concession for use of the public maritime domain by the Departmental Prefect. In the EEZ, the developer and RTE each have a single authorisation that takes the place of all the required authorisations (RED III accelerated procedure). The authorisation is issued by the Maritime Prefect. In both case, following recommendations from the Environmental authority assessment is advisory, not mandatory.

Offshore wind farms could have potential positive impacts on climate change and biodiversity protection (reserve effect/reef effect), but also have a negative biodiversity effect through contamination (electromagnetic wave, noise, and chemicals).

For the past 2 years, most of the delivery mechanisms related to the offshore wind energy sector were dedicated to (a) communication, (b) funding science, (c) carrying environmental impact assessment for project development

(1) A strong communication has been developed by the French Government to get the public acceptance. A meeting organised in July 2023 in Marseille about the new offshore wind farm that will be built close from there (Fos-sur-Mer), show that there is no consensus of the population, especially fishers. In November 2023, to reassure fishers, the President of the Republic E. Macron made a speech explaining that 30% of the offshore wind energy taxes will be dedicated to supporting the fishing industry.
(2) In 2022, an observatory of marine renewable energy has been created. About 300 million euros of research has been supported on offshore wind to understand the potential positive and negative impacts of building such infrastructure. Before that, the only study funded was carried by RTE, the main company involved in offshore wind infrastructure construction and led to no harmful consequences on the environment.
(3) Avoid-reduce-compensation (see Task 3.2) procedure must be led carefully in the future to mitigate the impact of building such wind farms. However, a question of competency remains because most of these wind farms energy will be built beyond the maritime public domain where only the Maritime Prefect has competencies and could grant exemptions easily to biodiversity protection.

To achieve the objectives of the Green Deal, particularly with regard to the protection of biodiversity, it is essential to pay attention to the pace of development of offshore wind projects. With a lack of data, the authorisation system may risk favouring this sector over biodiversity. Synergies must be found with

existing planning tools (MSFD and WFD) to ensure the effectiveness of the authorisation procedure, and there must be continued investment in scientific research into the areas around wind farms to understand the cumulative impacts they add to the environment.

Thus, to answer the research question:

- Sectoral policies are closely related to marine spatial planning (**MSPD**) if we consider marine spatial planning as the development of activities being opposed to biodiversity protection. If we consider marine spatial planning as a balanced ecosystem management system, then there is still room for improvement to internalized ecosystem protection in the fundings and authorizations.
- Even if there is an improvement and attempt to better connect sectoral policies with **MSFD,** ecosystem protection is not well internalized and mostly remains at the communication stage (e.g. research and communication on the reef effect of offshore wind energy)
- No element was found on WFD, probably because the policy has no link with these two marine sectors.

Task 3.3 research question n°2

Do policy instruments set for the implementation of sectoral policies adequately internalise the GD objectives?

As climate change is a key priority for the RBMP (WFD) and biodiversity protection the aim of the MSFD key elements can be found in the research question 2 answer.

Regarding the three Green Deal objectives, policy instruments can lead to contradictory effects. On climate change, building offshore wind energy farms can have long-term positive impacts but it is inconsistent with fisheries harmful subsidies. On biodiversity protection, almost no funding is dedicated to the topic in both sectors. Finally, pollution, offshore wind energy farms and harmful subsidies both have negative effects.

Sectoral policies are key to the EGD implementation. Indeed, private sectors are often the source of ocean pressures including biodiversity loss, pollution, and carbon emissions. Targeting these sectoral policies is essential to preserve the ocean.

- Zero Pollution: Even though the Façade Strategic Document describes sectors as the main target for pollution reduction (maritime transport, energy production nuisance, pollution from fisheries), sectoral policies studied (energy and fisheries as well as sporadically maritime transport) have not integrated EGD objectives on zero pollution. Some activities are carried by the French Biodiversity Office (OFB) along with fishers to track fishnet loss and microplastics at sea through an app. Awareness campaigns are dedicated to the fishers, and tourism sector to reduce plastic pollution, but with no mandatory component. Occitanie region (part of the Façade Strategic Document) has started to work through EMFAF on plastic pollution with fishermen in 2023 what might show a paradigm shift in fisheries management.
- Biodiversity: Many research activities are being funded now in the French Mediterranean Sea on biodiversity protection through the offshore wind energy Green Fund. Except referring to the spillover effect, there is no explicit strategy linking biodiversity protection to offshore wind energy. The environmental impact assessment analysis carried through the French

Mediterranean case study show mitigation measures, but they are not described in detail they are only considered as second-order priorities (only compensation measures and no avoidance measures).
Regarding EMFAF, only 1/14 of the specific objectives is on biodiversity protection and it is a completely new objective (2022) which aims mostly at supporting MPA protection and do not regulate fisheries on potentially destructive techniques. Another example of mis-internalisation is the access to membership of a fishing organisation. For membership of a fishing organisation and its quota system, arbitration for the distribution of quotas to new entrants takes into account 4 criteria, including the track record of the species fished by the vessel, the technical and economic project, the potential for revitalising the area and the environmental impact of the vessel. Environmental impact of the vessel is conly considered if two candidates reach the same grade for the three first criteria and cannot be ranked equally.

- On fisheries, two regulatory mechanisms are driven by biodiversity protection: fishing periods restriction and geographical bans. There are 2 small area in the French mediterranean sea and hake stock has risen by 56%. Finally,wiithin MPA and Natura 2000 sites, the fisheries risk analysis, carried in application to the European birds' Directive gives priority to biodiversity protection because if a risk of undermining the site's conservation objectives, the fishing activities concerned must be subject to regulatory measures to reduce the pressure of the activity on the habitat or species concerned. However, France still do not ban trawling in MPAS.
- Climate change: the objective of the Law on accelerating the production of renewable energies (March 2023) aims at constructing 50 offshore wind farms to achieve carbon neutrality in 2050. Among them only 4 will be in the Mediterranean sea. EMFAF does not make any mention of climate change in its objectives.

As most of the objectives and actions in sectoral policies are dedicated to economic growth and preserving traditional jobs, EGD is not directly mentioned or mainstreamed by sectoral policies.

Taking the example of harmful subsidies, no mechanism has been implemented even if it is contradictory with MSFD and the EGD objectives because it comes from a political and societal demand.

Regarding the three Green Deal objectives, policy instruments have contradictory effects. On climate change, building offshore wind energy farms can have long-term positive impacts but it is inconsistent with fisheries harmful subsidies. On biodiversity protection, almost no funding is dedicated to the topic in both sectors, almost only regulatory mechanisms prevent biodiversity damages. Finally, on 0 pollution, offshore wind energy farms and harmful subsidies both have negative effects.

Task 3.3 research question n°3

What can be learnt from impediments and best practices to facilitate the internationalisation of the key GD objectives into sectoral policies?
As explained in the previous section, few elements were found on the internalisation of the Green Deal objectives into fisheries and energy.

Impediments:

- Sectoral policies have different **objectives** and goals to **reach** : the strategy followed for the fishing industry is to preserve job while the one for offshore wind is to create economic growth while taking advantage of the climate change strategy. As long as the sectoral policies remain

almost entirely focused on economic growth with no or few considerations of environmental preservation, the EGD objectives will not be internalised.

- Sectoral policy objectives (national) are not decided at the same **geographical scale** as biodiversity protection measures (regional)
    - Sectoral policies are implemented by **different institutions** than the marine-related ones. It is mostly the Regional Prefect and the Regional adminstration which are in charge of the fisheries management (in collaboration with the Interregional Directorate for the Mediterranean Sea (DIRM) for some actions of the Façade Strategic Document). The Ministry of ecological transition maintains control of the offshore wind farms strategic development (in collaboration with the Maritime Prefecture (PREMAR).
    - Such a change of scale and institution modifies the legal **regime of responsibility** for decisions taken in implementation mechanisms and shows a strong disconnection between sectoral policies and policies geared towards environmental management.
    - Thus, unless the decision are taken at the national scale to internalise the EGD objectives, the room for manoeuvre to internalise them in the implementation mechanisms is strongly diminished.
- **No alignment** of the sectoral policy mechanisms with the MSFD and WFD ones what can create strong incoherence such as harmful subsidies in fisheries or environment exemptions in the construction of wind farms. We can assume that without the alignment of the policy mechanisms, the EGD are not well internalised. Some partial improvements have been noted, such as the funding of MPA staff via the EMFAF and research into the impact of offshore wind farms. However, these political mechanisms do not change habits and do not have any impact on the way the sector operates per se, but rather act as an incentive.
- Beyond fisheries and energy, as long as **marine spatial planning** will keep pitting economic development and environment protection as two different concepts, the EGD objectives will not be properly integrated in sectoral policies. To integrate the notions of zero pollution, mitigation of climate change, and protection of biodiversity, the development of sectors and the economy must go hand in hand with ecosystem-based management and not be unilaterally oriented towards economic development that is disconnected from the environment.

Best practices:

Few “best practices” were found during the case study research.

- **Linking scientific research on sectoral policies with the MSFD** research can bring a leverage effect and ensure the sectoral policies will pay attention to the environmental side of their implementation mechanisms.
- **Integrating biodiversity/climate indicators and measures** into the sectoral policy and not only within the policies and objectives to avoid having only a “EGD internalisation” on paper.
- Improve the environmental conditionality of subsidies and authorisations to use the public maritime domain
- Strengthen regulatory measures that have proved effective (e.g. fishing ban)

Unknown effect:

- Involving more **MSFD and WFD** institutions in sectoral policy management. For example, starting in 2025, the Water Agency (AERMC) will have competencies to manage the offshore wind energy taxes to improve biodiversity protection and research on the marine environment.
- It can lead to two opposite effects: (a) complexifying the sectoral policy management by multiplying the number of institutions involved, (b) to improve the integration of environmental issues in sectoral policy management.