Europe Jacques Delors
Thinking Europe

Policy Paper / January 2022

#BlueGovernance
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Revamping EU blue governance:

Why and how?

Abstract

It is increasingly recognised that Europe's ocean and seas are under threat. Europeans need to ensure the sustainable use of marine ecosystems, both economically and socially. Over the past two decades, EU ocean governance has been developing at a steady rate, its visibility also making significant progress at the EU level. However, the kaleidoscope of actions developed by the EU has now reached its limits. This comes at a time when governing EU ocean and waters requires an adequate combination of political vision, institutional involvement and enforceable rules. Better-integrated blue governance will help resolve conflict among different users of the sea, provide clarity and stability for investment, as well as contribute to the development of synergies.
All are essential elements in addressing the blue issues at hand when the stakes are higher than ever. The Green Deal calls for a major transformation to reduce the environmental and climate footprint of the European economic model, which must also benefit European ocean, seas and waters.

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2022 will be the international year of the ocean, with a trilogy of major international conferences during the year's first six-month period. The EU has claimed international leadership in ocean protection. To be an inspirational global leader, the EU must also prove to be exemplary in its own actions if it wants to truly influence other actors worldwide.

Considering the persistent lack of coherence in the EU's ocean policy framework, it is high time to revamp EU ocean governance. The ocean is a holistic, interconnected, and interdependent system – it must be governed much in the same way. To this effect, we propose three priorities and thirteen measures:

- Creating a clear political steering capacity through institutional reforms across the board:
  - The adoption by the European Council of an Integrated Ocean and Water Plan for Europe
  - The establishment of an Ocean and Water Council
  - The creation of an Ocean Committee in the European Parliament
  - The creation of a multi-Commissioner Ocean and Water Coordination Group in the Commission
  - An annual European Blue Citizens' Forum
  - The establishment of a European Ocean Agency coordinating the implementation of all EU ocean-related policies and strategies
  - The revision of the EU treaties to recognize ocean and water policy as one
- Building a consistent and coherent ocean legislative framework:
  - Future-proofing all ocean-related legislation in line with the Green Deal's targets, and starting the revision of core directives and regulations before the end of the current Commission's mandate
  - Revising the Maritime Strategy Framework Directive to increase its effectiveness
  - Ensuring consistency of the Maritime Spatial Planning directive, regulations on shipping, and the Common Fisheries Policy with the revised MSFD
- Levelling up information for better science-based policy-making and maritime surveillance:
  - Improving scientific knowledge by setting up a European Digital Twin Ocean (DTO)
  - Defining common objectives for maritime security, of which marine protection should be part
  - Fully integrating maritime surveillance systems by aligning agencies' mandates with sustainability objectives, pooling data, and fostering coordinating action at sea.

Introduction

Human activities have put Europe's ocean and seas under threat. From climate change to urbanisation and pollution, our hydrosphere[1] is under increasing pressure. Sea levels are rising and water temperatures are increasing. Extreme weather events put our livelihoods at risk. Contaminants and marine litter are pervasive. Overfishing persists.

Paradoxically, we depend to a large extent on healthy marine, coastal and water ecosystems. Together, the European Union (EU)'s Member States have the world's largest exclusive economic zone. The EU's blue economy sectors directly employed close to 4.5 million people in 2018 and generated around EUR 650 billion in turnover, EUR 176 billion of that being gross value added[2]. Economic assets within 500 metres of the sea are estimated to be valued at EUR 500 billion to EUR 1000 billion[3]. By providing food security, fisheries have a strategic value in the context of climate change. Economically and socially, we need to guarantee the sustainable use of marine ecosystems.

Governing EU ocean and waters requires an adequate combination of political vision, institutional involvement, and enforceable rules. Because marine ecosystems are fragile and complex, this is needed to resolve conflict among different users of the sea, to provide clarity and stability for investment and to develop synergies across policy tools. Over the past two decades, EU ocean governance has been developing at a steady rate, with significant progress at several levels and in many sectors. Yet, Europe's ocean and water governance remains complex and fragmented, rendering it not as efficient as it should. It is also poorly understood and acknowledged by both decision makers and the public.

This comes in contrast to the major goals that the EU has set for itself with the Green Deal, which involves significant transformations to reduce the environmental and climate footprint of the European economic model and thus must benefit Europe's hydrosphere. Contributing to the Green Deal's efforts, the "Mission Restore our Ocean and Waters by 2030" (inspired by the *Mission Starfish 2030* report) launched by the European Commission in September 2021[4] sets ambitious objectives by 2030 for the protection and restoration of ecosystems, as well as the decarbonization of the blue economy. Considered by many stakeholders as the "blue version" of the European Green Deal, the Mission "Restore our Ocean and Waters by 2030" (Starfish)'s success will highly depend on better coordination and coherence at EU- and Member State-levels.

Because the stakes are higher than ever, and with the EU claiming international leadership in ocean governance, 'blue' policy and institutional apparatus must be fit for purpose.

Inspired both by a long-standing concern for environmental protection and a strong commitment to multilateral cooperation, the EU has a long history of promoting marine ecosystem protection and the international regulation of human activities at sea. To be an inspirational global leader, the EU must also act exemplary and thus reinvest in ocean governance domestically if it wants to truly influence other actors worldwide.

[1] In line with the Mission Starfish 2030 report, we use the holistic term "hydrosphere" to refer to the entire and interconnected water and sea system.

[2] European Commission, *EU Blue Economy report*, 2021 (https://op.europa.eu/en/publication-detail/-/publication/0b0c5bfd-c737-11eb-a925-01aa75ed71a1).

[3] European Environment Agency, *Europe's seas and coasts*, 2020 (https://www.eea.europa.eu/themes/water/europes-seas-and-coasts/europes-seas-and-coasts/#interesting-facts).

[4] European Commission, *Communication on European Missions*, COM(2021) 609.

2022 is the international year of the ocean. During the first six months, a trilogy of three major international conferences – the One Ocean Summit organised by the French Presidency of the EU Council, the Our Ocean Conference co-organized by Palau and the United States, and the UN Conference on SDG 14 in Lisbon – will set the scene for the European Commission's proposals on international ocean governance and ocean observation.

We will address in this first contribution to ocean policy the issue of revamping European blue governance, in light of the Green Deal and Mission Restore our Ocean and Waters by 2030 (Starfish)'s ambitions. This policy paper marks the start of a Europe Jacques Delors series that aims to support ocean policy advancement in the EU and globally from the intersection of environmental, European and maritime issues.

In this paper, we provide an overview of evolutions in Europe's legal and institutional framework, the implementation mechanisms of ocean governance in the EU, and the visions that underpinned each change in the governance approach. We question the effectiveness of the current set up of ocean and water ecosystems protection and the sustainable use of coastal and marine resources. Our analysis of the strengths and weaknesses of the current framework leads us to identify priority areas for improving EU blue governance. In short, with an encouraging (albeit limited) track record, EU blue governance must become more efficient: faced with mounting challenges, a revamp is necessary.

I.

A short historical overview: From managing competition to protecting the environment?

The founding members of the European Economic Community (EEC) had an initial limited interest in designing a policy framework to regulate maritime activities and protect marine resources. It took several decades for the EU to build a policy framework to that effect.

The early days: limited scope and limited will

Ocean-related affairs were present in the Treaty of Rome of 1957 from the perspective of fisheries, yet in a circumscribed way: Article 38 considered them as part of agricultural production and managed them under the umbrella of the Common Agricultural Policy (CAP).

However, unlike agricultural policy, the development of a fisheries policy was not treated as a priority and therefore took more time to establish. The main reasons for this difference were the relatively lower proportion of fish in supply and demand in the six founding Member States as compared to other foods, as well as a general lack of awareness of fish stock exhaustibility, and therefore of the need to jointly manage fisheries in a sustainable way[5].

As a result, for at least two decades, the predominant vision of fisheries policy followed the same objectives as the CAP: increasing productivity, ensuring a fair standard of living for producers, stabilising markets, ensuring the availability of supplies, and securing reasonable consumer prices. This explains why the two first regulations, adopted in 1970 and inspired by the CAP regulatory tools, focused respectively on providing structural aid to the fishing sector with the objective of modernising and developing the fishing fleets, and on forming a common market for fisheries products.

In parallel, the Community's interest in the ocean extended to another area – namely maritime transport. The possibility to develop a common maritime transport policy also dates back to the Treaty of Rome[6]. However, similar to fisheries, it was not until the 1970s that Member States decided to give effect to this provision[7].

Although a non-linear trajectory, the evolution of maritime policy can be summarised as responding successively to three main concerns (see more detail in Annex).

A. Ensuring a level playing field between Member States

The successive enlargements of the EEC to the United Kingdom, Ireland, and Denmark (1973), Greece (1981), and Spain and Portugal (1986) saw the incorporation of substantial fishing interests, as well as a strong maritime sector and shipping industry into the Community. This new situation triggered the first step of Europeanisation of ocean governance: **regulating competition amongst**

[5] Ernesto Penas Lado, *The Common Fisheries Policy: The Quest for Sustainability*, John Wiley & Sons, Ltd, 2016.

[6] Article 84(2) of the Rome Treaty.

[7] Ivana Keser, The Common Maritime Transport Policy of the European Union - the protection and preservation of the marine environment, 2011 (https://www.semanticscholar.org/paper/The-Common-Maritime-Transport-Policy-of-the-Union-Keser/fdc2abbd30918f822a4ebb49d2bc7a1c7c828ae4).

Member States in the two main maritime sectors of the time – fisheries and maritime transport.

The notion of level-playing field was at the core of the **first European Common Fisheries Policy (CFP)**. Adopted in 1983 after years of negotiations, the primary concern of Member States was to preserve their existing share of access to fisheries resources. This translated into the concept of relative stability, namely the stable allocation of fish stocks for each Member State – a principle that remains at the core of the CFP today.

In parallel, although in a somewhat delayed dynamic, the EU developed a policy for **maritime transport**. In 1986, and then in 1989, the adoption of a new set of regulations laid the foundation for European shipping policy. It aimed to promote the liberalisation of navigation and cargo carriage between Member States and was designed to ensure fair competition among them as part of the programme of measures to build the European Single Market.

In the early 1990s, this overarching objective of regulating competition had to make way for the **rise of environmental concerns**. As regards fisheries, a serious imbalance between fishing fleet capacity and catch potential came to the fore[8] and called for a revision of the CFP in 1992. Nevertheless, the *status quo* prevailed. It was not until 2002 that environmental issues started to be seriously and systematically addressed. The **2002 CFP reform** promoted by Commissioner Franz Fischler was noteworthy for enshrining sustainability as the overarching objective of the CFP. This encouraged the engagement of European lawmakers in science-based and multi-annual planning of fishing activity, including putting an end to funding for new vessel construction.

[8] Ernesto Penas Lado, *The Common Fisheries Policy: The Quest for Sustainability*, John Wiley & Sons, Ltd, 2016.

During the same period, sustainability became a concern also in the maritime sector following **several disasters** which turned political and public attention onto the environmental hazards associated with shipping. This resulted in three successive legislative packages (Erika I, II and III) to improve safety measures in the shipping industry but also to prevent pollution caused by ships or by oil and gas installations. Although environmental protection remained in the shadow of safety concerns, the policies and measures put in place were instrumental in limiting the impacts of the sector on ocean and water health.

At the turn of the century, Europeans began to realise the pressures, both in terms of resources and pollution, that their activities were putting on marine ecosystems. As a result, the need for common legislation to regulate and limit damaging impacts to the environment had become more prominent.

B. The need for more integration to achieve sustainable development

With an increasing number of sectoral regulations in both the shipping and fisheries sectors, the years 2000 focused on developing a more holistic approach to policymaking.

The Green Paper on Maritime Policy

In 2006, after more than a year of consultations with stakeholders, the Commission published, under the impetus of Joe Borg, the Green Paper "*Towards the future Maritime Policy for the Union: a European vision for the oceans and seas*"[9]. It was based on the following premises:

– The need to put sustainable development – understood as the mutual reinforcement of economic growth, social welfare, and environmental protection – at the core of decision-making.
– The fact that management of maritime spaces was addressed in sectoral silos despite the systemic and interconnected nature of the ocean and seas.
– The fragmentation of existing policies and strategies by sector, which prevented stakeholders from exploiting potential synergies between different maritime sectors.

This new approach required more adequate forms and frameworks of governance, namely more cooperation, collaboration, coordination, coherence, and integration in policy making. While the Green Paper intended to make good use of the existing institutions and advisory bodies, it also suggested to supplement them by appropriate cross sectoral bodies. It put forward the idea of holding an annual conference on best practices in maritime governance, and the need to facilitate and improve the dialogue between science and policy with a view to base decision-making on the best available science.

The EU **Integrated Maritime Policy** (IMP) of 2007[10] was the first attempt to provide a coherent policy framework for the development of all sea-related activities in a sustainable manner[11]. This entailed a wide coverage of blue economy sectors, ranging from maritime transport, oil and gas extraction, and renewable energy to fisheries and aquaculture, while addressing several cross-cutting and interrelated issues.

The focus was predominantly on coordination between institutional bodies and stakeholders. At the national level, the Commission encouraged Member States to draw up their own **national integrated maritime policies** and to share best practices. At the EU level, new horizontal and cross-cutting policy tools were adopted in three main areas.

As regards marine ecosystem preservation, the adoption of the **Marine Strategy Framework Directive** (MSFD) in 2008[12] marked a pivotal moment in better governing EU seas by embedding environmental objectives. Going beyond the protection of species and habitats of special interest promoted by the ground-breaking Habitats Directive[13], the objective of the MSFD was to achieve

[9] European Commission, Green *Paper. Towards a future Maritime Policy for the Union: A European vision for the oceans and seas*, 2006 (https://eur-lex.europa.eu/resource.html?uri=cellar:b2e1b06a-6ca9-4e24-ac15-60e1307f32e2.0003.03/DOC_1&format=PDF).

[10] European Commission, *Communication: An Integrated Maritime Policy for the European Union*, COM(2007) 575.

[11] Luc van Hoof, Judith van Leeuwen and Jan van Tatenhove, *All at sea; regionalisation and integration of marine policy in Europe*, 2012 (https://link.springer.com/article/10.1186/2212-9790-11-9).

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

[13] Adopted in 1992 and revised in 2003, 2006 and 2013, the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora aims to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. It forms the cornerstone of Europe's nature conservation policy with the Birds Directive and establishes the EU wide Natura 2000 ecological network of protected areas,

or maintain "Good Environmental Status" (GES) in EU marine waters by 2020 at the latest.

Years later, the EU also ventured into maritime spatial planning and coastal zone management with the adoption of a **Directive on Maritime Spatial Planning** (MSP) in 2014[14]. It provided a framework for Member States to plan all activities and uses of maritime space through national maritime spatial plans.

The 2007 IMP also encouraged new developments in **maritime surveillance and marine observation**. By responding to different needs – overseeing activities at sea in a more coordinated manner and sharing data resulting from national marine scientific activities – initiatives all had a common feature: the Commission refrained from proposing new legislation, instead offering funding and incentives to the relevant national authorities and experts to share experience and information in these areas.

C. The rise of a regionalised and ecosystem-based approach

For equal reasons of efficiency (no one size fits all) and legitimacy (limited direct EU competences), the integrative vision promoted by the IMP was followed in the 2010s by the search for a more balanced governance system between the EU and Member States, while also looking to strengthen the emphasis on environmental protection. Under the leadership of Commissioner María Damanáki, the Commission actively promoted policy integration at the level of sea basin cooperation.

As a result of the Marine Strategy Framework Directive (MSFD), European maritime space was split into **four geographical regions** and challenged Member States sharing the same sea basin to cooperate and coordinate in achieving good environmental status. New governance structures had to be developed or existing ones exploited. In addition, the need to address environmental challenges, energy and transport related issues, economic growth potential as well as safety and security issues in a more collaborative way at sea basin level was recognised. It resulted in the adoption of **regional maritime strategies** in each sea basin both by the European Commission and the relevant Member States.

Correspondingly, as regard fisheries, the **2013 reform of the CFP** constituted a breakthrough by putting the emphasis on environmental sustainability. Maximum Sustainable Yield (MSY)[15] was paved as the main objective of fisheries management to be reached at the latest by 2020 for all stocks, and the elimination of unwanted catches was established as a key objective. The reform also further enshrined regionalisation of fisheries management. The reinforcement of multi-annual plans and the enhancement of the role of advisory councils for each sea basin were designed to achieve a less centralised system of fisheries management and to ensure a balanced representation of all stakeholders.

The 2010s saw also the rise in public concern over marine pollution. As part of a new EU strategy to reduce, re-use and recycle plastics, a directive regulating the availability of **port reception facilities** was adopted in 2019[16] with the aim to ensure that all ships, including fishing vessels, can deliver their waste to adequate port reception facilities ashore.

safeguarded against potentially damaging developments.

[14] Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning.

[15] The maximum sustainable yield is the maximum level at which a natural resource can be routinely exploited without long-term depletion.

[16] Directive (EU) No 2019/883 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC.

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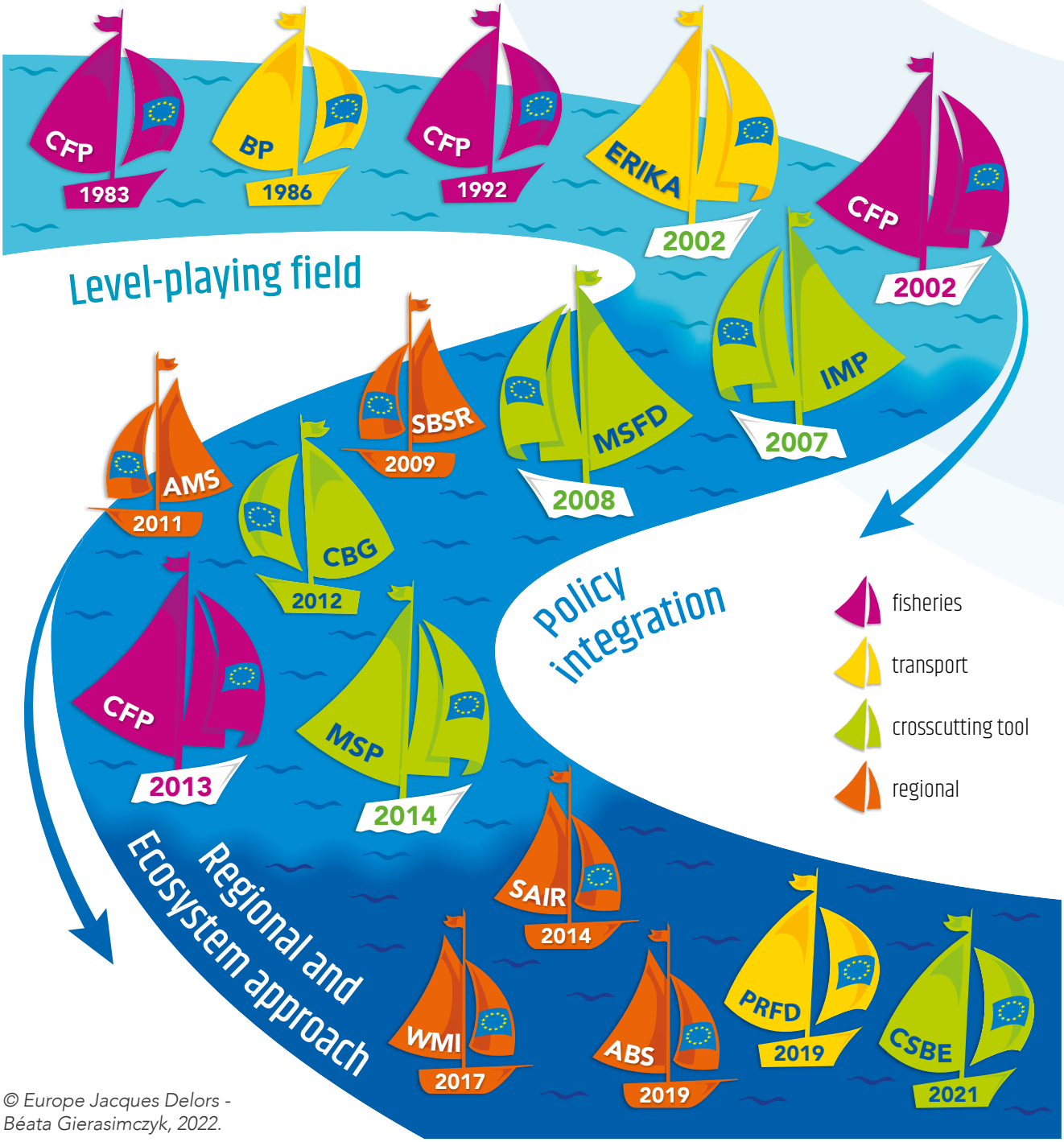
History of EU blue governance at a glance



ABS = Common Maritime Agenda for the Black Sea
AMS = Atlantic Maritime Strategy
BP = Brussels Package
CBG = Communication Blue Growth
CSBE = Communication Sustainable Blue Economy
CFP = Common Fisheries Policy
IMP = Integrated Maritime Policy
MSFD = Marine Strategy Framework Directive
MSP = Maritime Spatial Planning Directive
PRFD = Port Reception Facilities Directive
SAIR = Strategy for the Adriatic and Ionian Region
SBSR = Strategy for the Baltic Sea Region
WMI = West-Mediterranean Initiative

II.

Is the EU ocean governance framework fit for purpose?

Despite these efforts, the integration of policies has been slow and did not result in major progress toward the sustainable use of European marine waters[17]. To some extent, this is attributable to a certain lack of ambition, political vision or difficulty in implementing the objectives set out in various initiatives taken over the years. This paper will not discuss this aspect but will rather analyse how far the shortcomings can be explained by the governance framework itself.

There are few EU policy areas in which the EU has developed, in a relatively short period, a significant action plan while i) having no direct legal basis in the Treaties, ii) needing to determine how to act among different levels of competences, and iii) initiating action without a clear mandate to do so. This patchwork of competences resulted in a kaleidoscope of actions which may have reached their limits.

A. A patchwork of competences

The Treaty on the Functioning of the European Union (TFEU) distinguishes three types of EU competences: 1) exclusive competence, where only the EU can legislate and adopt binding acts; 2) shared competence, where Member States can legislate and adopt legally binding measures if the Union has not done so; and 3) supporting competence, where the EU adopts measures to support or complement Member States' policies.

What division of competences has been established regarding ocean governance? There is in fact **no dedicated provision**. At a time when the European Commission was publishing its first orientations on an integrated maritime policy (2006 and 2007 – see above), this shows how little the issue of shared responsibility for the sustainable use of the sea was present in Treaty-makers' minds. This has not changed since then and explains why all successive initiatives had to follow a "sectoral" path, the solidity of which depends on the strength of the Union's powers in each area.

EU competences in the area of ocean governance

Exclusive competence	Shared competence	Complementary competence	No competence
– Fisheries	– Environment – Transport – Energy	– Research and innovation – Tourism – Education & professional training – Security	– Maritime spatial planning – Coastal zone management – Maritime surveillance

The EU only has **exclusive competence** for the conservation of marine biological resources under the CFP. As specified in a reasoned opinion to Portugal issued by the Commission in 2018, the powers assigned to the EU on the internal level also give the EU exclusive competence to enter into international undertakings with other States and/or international organisations for the purposes of conserving marine biological resources[18].

On the other hand, the Union **shares competence** with Member States for core marine and marine-related policy areas: fisheries (excluding the conservation of marine

[17] *Report "Mission Starfish 2030: Restore our Ocean and Waters"*, 2020 (https://ec.europa.eu/info/publications/mission-starfish-2030-restore-our-ocean-and-waters_en).

[18] European Commission, *Conservation of marine biological resources: Commission requests Portugal to respect the exclusive competence of the EU under the Common Fisheries Policy*, 2018 (https://ec.europa.eu/oceans-and-fisheries/news/conservation-marine-biological-resources-commission-requests-portugal-respect-exclusive_fr).

biological resources), the environment, energy, and transport. In concrete terms, for example, to reduce ship-generated waste and cargo residues into the sea the EU[19] provides a common policy framework for the uniform application of environmental standards for European ships and port reception facilities that applies to both Member States and ship-owners. Member States are responsible for the selection of implementation tools that best fit their internal system and for the evaluation and approval of the waste reception and handling plan of each port, as well as for the monitoring of its implementation.

In key cross-cutting areas essential for the dynamic and smooth development of maritime activities, the EU has a very limited amount of power. In the area of research and innovation, the EU has essentially **supporting competences**, such as for innovation, space and research, and technological development. In the sector of tourism, which is particularly relevant for the blue economy, the EU only has the power to support, coordinate or complement the action of EU Member States and has neither the competence to legislate, nor to harmonize legislation between Member States – the same is true for education and professional training.

As for **security**, the EU's powers are characterized by specific institutional features. They are defined and implemented by the European Council and by the Council, giving the European Commission and the European Parliament no legislative competence and only limited participation in the decision-making and implementation processes. As part of the Common Foreign and Security policy (CFSP), maritime security at the EU level is more a matter of national action coordination, and sometimes of joint operation organization, opposed to the deployment of self-standing EU powers.

Finally, in some policy areas that are key to blue governance, the EU has **no competence** – such as maritime spatial planning and coastal zone management, as well as maritime surveillance.

From the outset, the proclaimed ambition of the European Commission to develop an EU integrated maritime policy was therefore confronted with **two institutional locks**: the absence of a single legal basis that obliges navigation through the thematic silos and the breaking of walls between them; and a variety of EU powers bearing the duty of acting in certain areas (e.g. fisheries), therein failing to offer sufficient levers for action in other domains (e.g. maritime spatial planning). When assessing the achievements since the early 2000s, it is all the more important to nevertheless recognize that a wide range of initiatives have been developed.

[19] Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues, and Directive (EU) 2019/883 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC.

Who is in charge?

The patchwork of EU competences is reflected in the EU Institutions' internal organisation. None of them has put in place an overarching body that oversees the whole spectrum of matters relevant to maritime policy.

In the **European Commission**, fisheries were a self-standing portfolio until 1999, while between 1999 and 2004, they were attributed to the Commissioner in charge of agriculture and rural development (Franz Fischler). The appointment of Joe Borg in 2005 represented an important change with the extension of his remit to include maritime affairs. It has remained the case since then, but in 2014, Karmenu Vella's portfolio had the added responsibility of environment policy. A further symbolic step was reached with the addition of the ocean among the responsibilities of Vella's successor, Virginijus Sinkevičius. This holistic ambition is reflected in the scope of the supporting service, DG MARE, whose role since 2005 is to develop and coordinate all EU policies related to the ocean. However, its focus is still predominantly on fisheries, with no less than three directorates out of five dedicated to fisheries management.

In the **European Parliament**, an informal intergroup called Seas, Rivers, Islands & Coastal Areas (SEARICA) was set up in 2010 under the leadership of former MEP Gesine Meißner. The SEARICA Intergroup currently brings together 107 MEPs and 6 political groups and has as overarching objective to ensure that "Europe of the Seas remains a major, cross-cutting and well-identified issue". Nevertheless, the structure of the legislative committees has still not been altered.

The only ocean-related committee is the Committee on Fisheries (PECH), and other committees (transport, energy, environment) remain competent on matters concerning predominantly their fields of responsibility. Despite calls in this direction, the new legislature elected in 2019 did not decide to transform the PECH committee into an "Ocean" committee.

In the **Council of the European Union**, the integrative approach has only recently been implemented. The sectoral working groups remain responsible for "sectoral" legislation (environment, transport, energy, fisheries, law of the sea etc), often combined with non-ocean related policies (agriculture, transport and energy). A "Friends of the Presidency Group" was entrusted to follow the Integrated Maritime Policy in 2006, and a group on EU Maritime Security Strategy was launched in 2014. The Council recently established a long-awaited Working Party on maritime issues in July 2021[20], and has inherited the work of the two aforementioned groups. Reporting to the General Affairs Council, the Working Party is responsible for all horizontal issues concerning the Integrated Maritime Policy and the European Union Maritime Security Strategy.

B. A kaleidoscope of actions

As a consequence of the patchwork of competences, the EU must resort to several governance tools and implementation levers to turn its vision into reality. They vary in nature, intensity, and effectiveness, but three main forms of action can be distinguished: legislative powers, budgetary powers, and the power to influence through words and ideas.

[20] Council of the European Union, *Mandates of Council preparatory bodies*, 8728/21, (https://data.consilium.europa.eu/doc/document/ST-8728-2021-INIT/en/pdf).

Nature and intensity of EU action

Legislating	Funding	Influencing
Direct application (regulations) – Fisheries – Aspects of maritime transport	*Coordination of Member States* – Fisheries control – Maritime safety – Maritime surveillance – Border control	*Cooperation among Member States* – Sea basin strategies – Exchange of experience – Maritime security
Common objectives or principles (directives) – Environmental protection – Maritime spatial planning	*Support to investment and innovation* – Fisheries and maritime fund – Research and innovation – Transeuropean networks – Energy transition	*Communication* – Overall policy objectives – Coastal zone management – Training and education – Advocacy and citizens' awareness

1. Legislating

The EU legislated in the areas where the Treaties gave it the most powers. Unsurprisingly, this concerns primarily fisheries, maritime transport, and environmental protection.

The **Common Fisheries Policy** is the policy that encapsulates the strongest legislative powers of the EU. As a direct consequence of the exclusive competence concerning 'the conservation of marine biological resources', the EU mostly enacts directly applicable regulations[21]. When compared to other sectors of the blue economy, the intensity and breadth of EU powers is at its strongest in the fisheries area. This often generates tensions between the EU institutions, Member States, and economic actors. That was one of the reasons for the move toward some form of the aforementioned "regionalisation".

Maritime transport is an area where the EU also exercised strong legislative powers, but in a very fragmented manner. The EU developed several directly applicable regulations to protect marine ecosystems from the impacts of shipping. Regulation (EU) No 1257/2013 on ship recycling is a case in point. Its purpose is to prevent and reduce accidents, injuries and other adverse effects on human health and the environment caused by ship recycling. It follows that the regulation includes requirements for ship owners and shipping companies as well as for Member States' authorities. Other key EU regulations include Regulation (EU) No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species, which imposes obligations mainly on Member States, and Regulation (EU) No 2015/757 aiming to promote the reduction of CO2 emissions from maritime transport which mainly applies to shipping companies.

Several directives also add to the European legislative arsenal regarding fuel emissions reductions[22], alternative fuels infrastructure[23], waste discharge from ships using EU ports[24], and ship safety rules and standards[25].

[21] Such as the right for EU fishing vessels to fish in all EU seas; fixing and allocating fishing opportunities among Member States (e.g. total allowable catches - TACs - and quotas) in the Atlantic and North Sea area and fishing effort limits in the Mediterranean; the obligations on traceability of catches control for fishers and on control and enforcement for Member States; and the rules for placing fisheries products on the EU market.

[22] Directive (EU) No 2016/802 relating to a reduction in the sulphur content of certain liquid fuels.

[23] *Ibid.*

[24] Directive (EU) No 2019/883 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC.

[25] This includes Directive 94/57/EC, Directive 2009/45/EC, Directive (EU) 2017/2108, Erika Packages I, II and III.

However, no overarching policy framework on maritime transport has been developed, resulting in a fragmented consideration of environmental objectives.

As regards the **protection of the marine environment**, the EU body of law designed to protect soils and waters from pollution is extremely rich and is often directly relevant to marine ecosystems, such as the Habitats[26] and the Water Framework[27] directives. But the Marine Strategy Framework Directive is emblematic of the delicate balance between setting common objectives and respecting national diversity. Indeed, the approach was to require EU countries to achieve a certain result, leaving them free to choose how to do so, i.e. entrusting implementing mechanisms to Member States and in particular, the setting up of monitoring and implementation programmes to achieve GES. This is very representative of EU environmental policy, where EU competence is shared, and EU ambitions rely on a wide range of national actors to act on the ground.

Beyond these three policy areas – fisheries, transport, and environment – it is noteworthy that the EU barely legislates. Whenever it did, it broke new ground very cautiously, such as **maritime spatial planning**, an area where the EU does not have direct, explicit competence. The 2014 MSP Directive was therefore conceptualised as a tool for public authorities and stakeholders to plan the wide range of activities and uses taking place in the Member States' maritime space, Member States being responsible for designing, developing, and implementing national maritime spatial plans for their national waters. These plans had to be submitted by the end of June 2021 to the European Commission, which will publish a state of play report in 2022. The MSP Directive encourages consultation and coordination between Member States who share the same sea basin and cross-border cooperation with third countries. Again, the organisation and arrangements of such coordination is nevertheless the responsibility of Member States.

2. Financing

While the EU is limited by its competences and chose to exercise legislative restraint, it has not been so withdrawn when considering financing. Financing may prove to be a powerful tool for the EU to turn its vision into action on the ground. As the EU budget is primarily an investment budget, the orientation and priorities set for EU funding are a way to translate EU policy into operational projects. However, even if the funding streams reflected the legislative silos, ocean-related funding is still fragmented in different budget streams and sectors. There is, nevertheless, a clear specialisation of budgetary instruments around three main preoccupations.

The first is to foster investment in blue sectors. The most traditional concern has been fisheries. As a result, the main funding tool regarding ocean-related affairs since the creation of the CFP has been the fisheries structural fund. The successive fisheries funds have been co-managed by the European Commission and Member States over a seven-year programming period, following the rhythm of EU Multiannual Financial Frameworks (MFF). EU legislation frames the types of actions that can be funded and defined their objectives, and Member States determine the priorities and the type of projects that they will carry out and provide additional national funding for these projects. In general, public support is only a part of the funding with the rest being financed by the private sector[28].

[26] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

[27] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

[28] Jordi Guillena, Frank Asche, Natacha Carvalho, José M. Fernández Polanco, Ignacio Llorente, Rasmus Nielsen, Max Nielsen, Sebastian Villasante, *Aquaculture subsidies in the European Union: Evolution, impact and future potential for*

Fisheries at the core of EU structural funding

Initiated in 1993 and following the 1992 reform of the CFP, the **Financial Instrument for Fisheries Guidance** (FIFG) was the first fund entirely dedicated to fisheries and aimed to support the achievement of the 1992 CFP reform. The FIFG was renewed for the period of 2000-2006 and its objectives and rationale essentially remained the same, with only the revitalisation of areas dependent on fisheries and aquaculture being introduced as an additional objective.

The FIFG was replaced by the **European Fisheries Fund** (EFF) whose objective was again to underpin the objectives of the 2002 CFP reform, putting more emphasis on the sustainable development of the fisheries and aquaculture sectors. 58.5% of the spending was dedicated to measures aimed at reducing fishing capacity through permanent cessation (i.e. vessel scrapping), however, the protection and conservation of marine and coastal biodiversity remained blind spots[29].

The **European Maritime and Fisheries Fund** (EMFF) was launched in 2014. Unlike its predecessors, it was not dedicated to the sole implementation of the CFP's objectives, but also aimed at supporting the *Integrated Maritime Policy* adopted in 2007. However, fisheries and aquaculture remained the focus of the new fund, and environmental concerns were coupled with the new approach to fisheries conservation.

The EMFF was recently replaced by the **European Maritime, Fisheries and Aquaculture Fund** (EMFAF) for the period of 2021-2027. While fisheries and aquaculture feature prominently in the fund, other maritime issues, particularly those related to the environment, are also explicitly taken into account for the first time, such as blue economy and international ocean governance. The fund is also more focused on the achievement of biodiversity preservation, climate change mitigation, and the broader adaptation objectives of the Union[30].

If the EMFF is the oldest and often most visible fund with its primary focus being fisheries and aquaculture, diverse blue economy sectors also benefit from other structural funds. The *European Regional Development Fund* (ERDF) is active in all EU regions, including coastal regions, to foster investment in small business, infrastructure and research, and innovation.

The European Investment Bank (EIB) also actively supports key EU blue economy sectors. The EIB has been particularly instrumental in the development of Europe's offshore wind industry. Since 2003, the EIB has financed 33 offshore wind and transmission projects in Belgium, Denmark, Germany, France, the Netherlands, Portugal, and the United Kingdom for a total signed loan amount of more than EUR 11 billion[31]. In recent years, the EIB has also played a major role in enhancing the sustainability

growth, 2019 (https://www.sciencedirect.com/science/article/pii/S0308597X18309400).

[29] European Commission, *Ex-post evaluation of the European Fisheries Fund (2007-2013). Final Report*, 2016 (https://op.europa.eu/en/publication-detail/-/publication/f0ab224d-f34c-11e6-8a35-01aa75ed71a1).

[30] According to the Multiannual Financial Framework for 2021-2027, 30% target of all expenditure shall be spent on mainstreaming climate objectives, 7.5% of annual spending under the MFF 2021-2027 to biodiversity objectives in 2024, and 10% of annual spending under the MFF 2021-2027 to biodiversity objectives in 2026 and 2027. These requirements apply to the EMFAF.

[31] European Investment Bank Group, *Clean oceans and the blue economy. Overview*, 2021 (https://www.eib.org/attachments/thematic/clean_oceans_and_the_blue_economy_overview_2021_en.pdf).

of the shipping sector. Between 2016 and 2020, the Bank invested in 11 EU shipping projects, lending approximately EUR 715 million with a particular focus on supporting the development of port infrastructure to reduce emissions and pollution from docked ships (i.e. shore-side electrification and ship waste reception facilities).

Another major funding priority has been to strengthen **research and innovation** through the framework programme Horizon 2020. Although a recent trend, the upturn in attention to a wide spectrum of marine and maritime issues has been significant. Since it is considered to have significant potential for rapid growth and innovation, the blue economy has been identified as one of the twelve Focus Areas of Horizon 2020. The budget allocated to blue research and/or innovation projects under Horizon 2020 is estimated to have reached almost EUR 1.7 billion over the period of 2014-2020[32] and is spread over an interesting spectrum of research areas: 1) Climate action, environment, resource efficiency (41%), 2) Biotechnology (6%), 3) Food security and marine, maritime and inland water research (22%), 4) Secure, clean and efficient energy (7%), and 5) Smart, green and integrated transport (26%). This trend is expected to continue during the period 2021-2027, not least with the stimulus of a budget specifically dedicated to the Mission Ocean (EUR 344.15 million over the 2021-2023 period[33]).

A third role of the EU budget is to foster **coordination and cooperation** among Member States. **Cross-border cooperation** is a conventional way to encourage actors on the ground to achieve EU policy aims. It took time to do so, but this approach eventually reached maritime policy in the period 2014-2020. It took shape as support to the implementation of the Marine Strategy Framework Directive and of the maritime strategies in the Atlantic, Baltic and Mediterranean Seas. The Interreg programme, funded by the European Regional Development Fund, has played a particularly important role in the implementation of ocean-related cross-border cooperation projects. With a total budget of EUR 10.1 billion invested in several cooperation programmes over the period 2014-2020, Interreg has significantly supported the green transition of the EU blue economy in a number of different sectors, from ports[34], fisheries[35] and aquaculture[36], to blue tourism[37].

EU funding has also been used to support enhanced coordination between Member States. This is typically the case for **maritime surveillance**. Progress has been made slowly but surely, thanks to a combination of institutional innovations requiring EU legislation and the provision of budgetary means. It is striking that several key activities – shipping, fishing, illegal trafficking, and immigration – have seen the steady involvement of EU capacities to coordinate control activities of the Member States via the establishment of dedicated EU agencies.

[32] Authors' own calculations based on the data provided by the Horizon 2020 Projects dashboard and searching for marine and maritime projects within the five thematic priorities (https://webgate.ec.europa.eu/dashboard/sense/app/93297a69-09fd-4ef5-889f-b83c4e21d33e/sheet/erUXRa/state/analysis).

[33] Indicative contribution of Horizon Europe to Mission Restore our Ocean and Waters by 2030 (Starfish) over the 2021-2023 period. See European Commission, *Mission Restore our Ocean and Waters by 2030. Implementation plan*, 2021, https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ocean_and_waters_implementation_plan_for_publication.pdf.

[34] Interreg Europe, *Smooth Ports: Reducing CO_2 Emissions in Ports* (https://www.interregeurope.eu/smoothports/).

[35] Interreg Europe, *CHEIRSH: Creating opportunities for regional growth through promoting Cultural HERitage of fISHing communities in Europe* (https://www.interregeurope.eu/cherish/).

[36] Interreg Europe, *EXTRA-SMES: Improving policies to boost SME competitiveness and extraversion in EU coastal and rural areas where aquaculture is a driver of the regional economy* (https://www.interregeurope.eu/extra-smes/).

[37] Interreg Europe, *Land-Sea: Sustainability of the land-sea system for eco-tourism strategies* (https://www.interregeurope.eu/land-sea/).

EU Agencies as the main response to enhance maritime surveillance

Surveillance of marine waters is conducted both for security and law enforcement purposes, but also for the sake of pollution prevention and control as well as scientific knowledge. As most of the activities that need to be monitored are transnational in nature, the IMP highlighted the need to improve cooperation between national surveillance agencies and to take steps towards more integrated and interoperable surveillance.

Established in 2002, the **European Maritime Safety Agency** (EMSA) aims to ensure safe, secure and sustainable maritime transport. With a budget of EUR 85 million in 2021[38], it supports the Commission and the Member States in the implementation of legislation and in the investigation of maritime accidents (for example, regarding ship air pollutants and GHG emissions, ship waste disposal in ports, and ship recycling).

Established in 2005 in the wake of the 2002 CFP reform and effective since 2012, the **European Fisheries Control Agency** (EFCA) aims to organise the coordination and cooperation between national control and inspection activities so that the rules of the CFP are respected and applied effectively. Effective fisheries control and inspection is essential for combatting illegal, unreported and unregulated fishing, and, more broadly, to ensure the sustainable exploitation and protection of living aquatic resources.

A European Border Surveillance System (also known as Eurosur) was launched in 2013 to track illegal immigration, including through maritime routes.

In 2014, in response to calls from human rights NGOs, the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (also known as Frontex) was established. It was followed by the creation of the **European Border and Coast Guard Agency** in 2016, which succeeded Frontex and aims to address what was perceived as its predecessor's main shortfalls – lack of resources and weak enforcement powers.

However, it is also striking that the exchange of information and data among Member States and their pooling in a shared system or platform has not developed at the same pace as the creation of new EU agencies. Nevertheless, thanks to the persistence of the Commission and its project on a Common Information Sharing Environment (CISE)[39], funding and incentives to share experience and information were used to convince relevant national authorities and experts to participate in a European network for maritime surveillance and an associated interoperable surveillance system.

3. Influencing

The EU's capacity to influence is also a key element in the implementation of its vision on maritime policy. As policy initiator, the **European Commission has made extensive use** of this capacity at various levels and through diverse instruments. The publication of Green Papers, such as the one published in 2006 on IMP (see above), aims to stimulate discussion on a given topic at the European level. Communication events held as part of the consultation process are a powerful tool to raise awareness among stakeholders and citizens, as well as to initiate potential action on their part. Green Papers

[38] European Maritime Safety Agency, *EMSA Budget 2021* (http://www.emsa.europa.eu/financial-management/financial-documents/download/6436/4312/23.html).

[39] European Commission, *Communication: Better situational awareness by enhanced cooperation across maritime surveillance authorities: next steps within the Common Information Sharing Environment for the EU maritime domain,* COM(2014) 451.

may give rise to legislative developments – as was the case for IMP – directly or following the publication of White Papers, or increasingly following policy strategies published by the European Commission. By putting forward more specific orientations following initial consultations, the aim is to eventually arrive at a political consensus.

Beyond talk from Brussels, the organisation of and participation in seminars, expert workshops, and stakeholders' networks aimed at sharing knowledge and best practices allows the EU to disseminate its ideas at Member State, regional, and local levels across all sectors. A case in point is the European Maritime Day (EMD), an annual two-day event initiated by the Commission during which Europe's maritime community comes together to network, discuss, and outline joint action on maritime affairs and sustainable blue economy. Studies and scientific publications released by the EU institutions and agencies are also extremely valuable tools to sound the alarm, initiate discussion, feed the debate with fact-based arguments, and orientate decision-making. Advocacy can also be a last-resort instrument when the EU lacks competence, such as in the areas of coastal zone management or education and training.

However, one area remains the preserve of Member States' competence: **maritime security**. To this day, the maritime dimension remains mostly absent from the CFSP. A first step was made by the adoption of an EU Maritime Security Strategy and its associated Action Plans (adopted in 2014 and revised in 2018) but it was essentially a framework inviting Member States to tackle common maritime security challenges through a cross-sectoral approach. This included maritime safety, marine environment protection, fisheries control, customs, border control, law enforcement, defence, research and development and others in conjunction with all relevant EU policies[40]. The implementation of most activities depends on the will and means of national authorities, and the EU Institutions – especially the European External Action Service (EEAS) and the Commission – remain very cautious entering this arena through their own means. The first draft of the *Strategic Compass for Security and Defence*, published by the EEAS in November 2021[34], seems to depart somewhat from this prudence; it is more assertive on the need for EU effective action in security and defence in general. Member States are still hesitant – if not reluctant – to share competence, information, and capacities to jointly monitor and protect their maritime domain. In this context, the Strategic Compass does not provide the clear, in-depth, holistic assessment of maritime security[41] that is needed, instead prolonging the previous approach focussed on specific geographic areas – the key trade route in the Horn of Africa and the Gulf of Guinea.

Nevertheless, the Compass does focus on consolidating and strengthening existing tools – such as expanding the Coordinated Maritime Presences[42] to new maritime zones, with priority given to the Indo-Pacific. It also enhances the importance of maritime security by considering the maritime domain as a strategic territory whose access needs securing, as well as recognising the current inefficiencies in information sharing between civilian and military authorities, hence calling for enhanced

[40] European Union External Action Service (EEAS), *The EU Maritime Security Strategy and Action Plan – Information Toolkit* (https://eeas.europa.eu/archives/docs/maritime_security/docs/maritime-security-information-toolkit_en.pdf).

[41] For example, no link is made between climate change, the particular situation of the poles (Antarctica and Artic) and conflict prevention, i.e. the conflict potential of the changing natural conditions in polar regions especially as regards the use of marine resources.

[42] This consists in agreeing that the naval forces of Member States present in a particular maritime zone will share information. The first such operation until now is developed in the Gulf of Guinea.

coordination. Interestingly, it illustrates the need for more investment in EU defence capabilities by proposing the development of unmanned platforms in order to enhance maritime situational awareness.
Published in November 2021, the Joint Communication on the Arctic[43], a region where the EU will face increasing security challenges, seems to be heading in the same direction in terms of security ambitions – namely to use and strengthen existing tools.

C. Where do we stand in EU ocean governance?

1. Real progress and concrete achievements

Slowly but steadily, a more coherent vision of shared responsibility to sustainably manage EU marine waters has been moulded and has trickled down to new areas. The EU has developed a **more holistic and comprehensive approach** to maritime policy that it continues to update. The European Commission's 2012 *Communication on Blue Growth*[44] illustrated the dissemination of this approach by highlighting new horizontal issues such as access to research and financing, and the promotion of education and training for the sustainable development of the blue economy. Sectoral and cross-border integration is also a pillar of the *Communication on the Sustainable Blue Economy*[45] adopted in 2021, which puts strong emphasis on reaching the objectives of the Green Deal.

The **protection of the environment** has found its place in EU ocean governance. It is encapsulated by the adoption of the Marine Strategy Framework Directive in 2008. Beyond the MSFD,[46], the EU succeeded in establishing a governance and legislative framework to protect the marine environment as underlined by the Court of Auditors in 2020. This has permeated many ocean-related strategies, policies, and discourse.

The EU requires Member States to establish their national maritime spatial plans in consideration of the need to avert human pressures on the marine environment. The CFP reform of 2013 has put the environment and the sustainable use of resources at the centre of its legal framework, featuring, *inter alia*, fish stock management at maximum sustainable yield, the gradual introduction of a landing obligation, and fleet capacity ceilings to reduce overcapacity. The 2013 reform also sought to reinforce the role of science by intensifying the collection of data and the sharing of information on stocks, fleets and the impact of fishing activities[47]. Overall, some positive results can be noted concerning the conservation of commercial fish stocks. This was especially notable in North-East Atlantic, which saw a significant reduction in overfished stocks[48]. Similarly, shipping and port regulations are increasingly focussed on minimising pollution, emissions, and waste.

It is important to acknowledge the improvements in **regional cooperation**. Member States and the

[43] European Commission and European Union External Action Service (EEAS), *Joint Communication: A stronger EU engagement for a peaceful, sustainable and prosperous Arctic*, JOIN(2021) 27.
[44] European Commission, *Communication from the Commission on Blue Growth opportunities for marine and maritime sustainable growth*, COM(2012) 494.
[45] European Commission, *Communication on a new approach for a sustainable blue economy in the EU Transforming the EU's Blue Economy for a Sustainable Future*, COM(2021) 240.
[46] European Court of Auditors, *Special Report Marine environment: EU protection is wide but not deep*, 2020 (https://www.eca.europa.eu/Lists/ECADocuments/SR20_26/SR_Marine_environment_EN.pdf).
[47] European Parliament, *The Common Fisheries Policy: origins and development*, 2021 (https://www.europarl.europa.eu/factsheets/en/sheet/114/the-common-fisheries-policy-origins-and-development).
[48] Scientific, Technical and Economic Committee for Fisheries (STECF), *Report on the performance of the Common Fisheries Policy*, 2020 (https://ec.europa.eu/jrc/en/science-update/eu-fishing-becoming-more-sustainable-places-many-stocks-remain-overexploited).

Commission (together with regional sea conventions and other stakeholders) have set up an informal coordination program, or "common implementation strategy", to achieve the MSFD objectives[49]. This programme resulted in the establishment of platforms to exchange information, therein setting the foundation for mutual trust in the decision-making process between stakeholders of different Member States. Implementation of the MSFD also contributed to reinforcing the role of existing regional institutional cooperation structures, including those under Regional Sea Conventions. For example, OSPAR[50]'s Regional Implementation Framework for MSFD stated that it aimed to "use its efficient cooperation structures in order to facilitate the coordinated implementation of the MSFD".

Similarly, as regards fisheries management, the 2013 CFP reform aimed to further decentralise by bringing the decision-making procedure closer to fishing grounds: since the reform, EU legislators draw up the general framework such as regional long-term management plans, while the Member States develop the implementing measures and cooperate at the regional level[51]. The establishment of the Regional Advisory Councils and the adoption by the Commission of 'discard plans' based on joint recommendations by regional Member States groups contributed to better involvement of fisheries sector stakeholders in the decision-making process. However, this approach has also been criticized[52] for the many exemptions and flexibilities that the Commission agreed to give to Member States.

Overall, the European Environment Agency found that where regional cooperation has been established and implemented consistently, negative trends in certain pressures are beginning to be reversed. Such can be seen, for example, in the levels of nutrients and contaminants, or with the presence of non-indigenous species[53].

The need to incorporate environmental considerations has also influenced the design of the EU's **budget**. In 2021, the European Maritime, Fisheries and Aquaculture Fund (EMFAF) set the environmental dimension as its overarching priority. It will fund innovation and investments in i) low-impact, climate resilient and low-carbon fishing practices and techniques, ii) fishery and aquaculture product processing, and iii) the collection, management and use of data to improve knowledge on the state of marine environments.

With the support of EMFF and Horizon 2020 funds, the creation of **observation** tools has also been a major step forward in increasing scientific knowledge and understanding of the ocean. High-quality and

[49] It involved at least 280 experts from Member States, up to 70 participants from EU institutions and over 100 registered observers or stakeholders and resulted in 15 guidance documents on overarching and technical implementation issues. Source: European Commission, *Report on the implementation of the Maritime Framework Directive* (Directive 2008/56/EC), COM(2020) 259 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0259&from=en).

[50] Convention for the Protection of the Marine Environment of the North-East Atlantic.

[51] European Parliament, *The Common Fisheries Policy: origins and development*, 2021 (https://www.europarl.europa.eu/factsheets/en/sheet/114/the-common-fisheries-policy-origins-and-development).

[52] BirdLife Europe & Central Asia, Client Earth, The Fisheries Secretariat, Oceana, Our Fish, Seas at Risk, WWF, *Common Fisheries Policy: Mission Not Yet Accomplished*, 2021 (https://seas-at-risk.org/wp-content/uploads/2021/06/20210611-CFP-Mission-Not-Yet-Accomplished_joint-NGO-paper.pdf).

[53] European Environment Agency, *Report no. 17/2019: Marine messages II Navigating the course towards clean, healthy and productive seas through implementation of an ecosystem-based approach*, 2019 (https://www.eea.europa.eu/publications/marine-messages-2/).

accessible marine data is a prerequisite to sustainably manage human activities at sea. The Copernicus Marine Service – the marine component of the Copernicus programme of European Union[54] – and the European Marine Observation and Data Network (EMODnet)[55] are important in supporting EU and international policies: the in-situ and satellite data they provide help combat pollution, support marine protection, maritime safety and routing, ensure the sustainable use of ocean resources and development of renewable marine energy resources, as well as support blue growth, climate monitoring, forecasting.

2. The limits of the current approach

While the efforts made to further integrate the European maritime policy and incorporate environmental objectives have borne fruits, results have not lived up to expectations in three fundamental ways.

Results on the ground fall far short of the ambitions. Despite its high level of ambition, the MSFD did not manage to halt **biodiversity loss** in its first cycle of implementation[56]. While there are differences across sea basins, the biodiversity of marine ecosystems is still vulnerable overall and the good environmental status of marine waters by 2020, as mandated by the MSFD, went unfulfilled. Major challenges remain. Non-indigenous species, fishing, human-induced eutrophication, permanent alteration of hydrographical conditions, contaminants, marine litter, and underwater noise are identified as the main pressures affecting marine ecosystems in Europe. In the Mediterranean and Black Seas, at least 87% of commercially exploited fish and shellfish species are still overfished; the EU also did not manage to reach the CFP objective to fish all stocks within MSY by 2020[57]. Furthermore, less than 1% of European MPAs could be considered marine reserves with full protection (i.e. through fishing bans) and the European Court of Auditors found that Member States dedicated only 6% of their EMFF funding to conservation measures with a further 8% indirectly going to conservation measures.

Weak coherence in the governance framework persists. These mixed results on the ground reflect governance shortcomings at both the EU and Member State level. The first shortcoming is **insufficient harmonisation between key policies at the EU level**. The absence of an overarching legal basis set in the Treaties creates a vacuum and maintains the potential for inconsistencies across policy objectives given the lack of coherence in policy implementation between the different policy areas and governance levels[58].

The **harmonisation of MSFD descriptors with other ocean-related policies** remains a challenge. For example, the interaction between MSFD's descriptors on contaminants[59] and the regulation of pesticides under

[54] Copernicus is the European Union's Earth observation programme launched in 1998, and coordinated and managed by the European Commission in partnership with the European Space Agency (ESA), the Member States and EU agencies.

[55] Based on the "collect [data] once and use [them] many times" approach, EMODnet provides access to European marine data across many different scientific disciplines, including bathymetry, chemistry, biology, chemistry, geology, physics and seabed habitats. It also reports about the intensity and spatial extent of human activities at sea.

[56] European Commission, *Report from the Commission on the implementation of the Marine Strategy Framework Directive (Directive 2008/56/EC)*, 2020 (https://ec.europa.eu/info/sites/default/files/com2020_259_final_en.pdf).

[57] European Commission, *Report on the Implementation of the Marine Strategy Framework Directive (Directive 2008/56/EC)*, COM(2020) 259.

[58] European Commission, Assessment of the existing EU policy tools in the field of Sustainable Development Goal (SDG) 14 and other ocean-related Agenda 2030 targets, 2021 (https://op.europa.eu/en/publication-detail/-/publication/1625f673-b201-11eb-8aca-01aa75ed71a1).

[59] Descriptor 8 of the MSFD describes protection against the

the Common Agricultural Policy was not clearly addressed during the decision-making process, leaving room for potential inconsistencies or conflicting measures. Similarly, several descriptors have bearing on fisheries policy, while the latter impacts the achievement of MSFD objectives, but the two policies are misaligned. The scientific underpinning of the two policies differs considerably – that of the MSFD having been developed only after its adoption – and the stakeholders that implement them are diverse with barely any interaction between them.

Even more challenging is the lack of **coherence and coordination between maritime spatial planning and the MSFD**. The MSP Directive requires that the "collective pressure of all activities is kept within levels compatible with the achievement of good environmental status" (paragraph 2), but makes no further provision for articulation between the two directives – neither concerning the coherence of their own objectives, nor their implementation. Being conscious of this lack of integration, the European Commission has carried out different types of action over the past years – i.e. information sessions to national authorities, workshops and meetings with various stakeholders, publication of materials, etc. – with an aim to influence the drafting process of national MSP plans and make sure the environment is included as a critical decision-making criteria. Nevertheless, the weak integration of the two legislations does not give the European Commission a clear enough basis to take strong action (e.g. through an infringement procedure) if the environment is not, or not sufficiently, integrated into national maritime spatial plans.

The second shortcoming is the persistent **dichotomy between ocean and water policies.** Highlighted in the *Mission Starfish 2030* report[60], EU ocean governance and policy would benefit from a holistic water cycle approach. Indeed, the persisting segmentation of the instruments, policy frameworks and institutional arrangements between maritime affairs, on the one hand, and water policy, on the other, is at odds with the functioning of the water cycle. It is now established that the health of the ocean and seas highly depends on the quality of inland waters. Pollution is a case in point, with land-based sources estimated to account for 80% of plastic in the ocean for example[61].

The third issue is the **potential for conflict between various levels of authority**. The shared nature of EU competence on most ocean issues leads to potential inconsistencies in the implementation of policies. The **MSFD** has particularly been singled out. Opting for a framework directive gave a degree of flexibility and discretion to Member States that "automatically creates the potential, albeit sanctioned by the EU, for different ways of implementing the MSFD and so leads to inconsistencies between Member States"[62].

More generally, there is a lack of precision on the scope and level of authority of the various legislations, which leads to potential conflicts of interpretation and implementation on the ground[63]. This is the case for

pollution of marine waters by chemical contaminants, and Descriptor 9 contamination of fish and seafoods.

[60] *Report "Mission Starfish 2030: Restore our Ocean and Waters"*, 2020 (https://ec.europa.eu/info/publications/mission-starfish-2030-restore-our-ocean-and-waters_en).

[61] European Commission, *Good Environmental Status. Descriptor 10: Marine Litter* (https://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index_en.htm).

[62] Marianna Cavallo *et al.*, *Impediments to achieving integrated marine management across borders: The case of the EU Marine Strategy Framework Directive*, 2019 (https://www.researchgate.net/publication/331344611_Impediments_to_achieving_integrated_marine_management_across_borders_The_case_of_the_EU_Marine_Strategy_Framework_Directive).

[63] Luc van Hoof, Judith van Leeuwen and Jan van Tatenhove, *All at sea; regionalisation and integration of marine policy in Europe*, 2012 (https://link.springer.com/article/10.1186/2212-9790-11-9).

fisheries management, both subject to **CFP and MSFD**, wherein the decisions taken by the main power holders in the area, the EU institutions, have consequences on performance under the fisheries-related descriptor of the MSFD, which is reported by Member States[64].

The **regionalisation** process has also been criticized for its lack of structure and organisation of coordination efforts between Member States, which is inadequate for managing and protecting complex socio-ecological systems such as marine ones[65]. For example, the MSFD objective of protecting sea bottoms has different translations depending on the geographic area considered, and therefore the ecosystem to protect, whether in the context of a MSFD "region" or of fisheries management under the CFP.

Overall, this lack of clarity on which policy prevails over the other, combined with varying degrees of competence depending on the policy area, inevitably leads to inconsistencies on the ground. The Commission acknowledged the challenges posed by such conflicting overlaps in its 2012 report[66], but offered few responses on how to address them.

Scientific knowledge of the ocean and water remains limited. Data needed to assess the environmental status of marine waters is inadequate for most assessed species[67]. Information sources across the EU are fragmented, which hinders harmonisation and knowledge exchange. Many marine species groups are under-sampled, which prevents scientists from fully quantifying the impact of different human activities on marine populations or the food web. Data and science on inland waters are not integrated with data and science on marine waters, preventing a holistic knowledge of the EU's water ecosystems. There is an urgent need to improve data collection and to complement it with specialised modelling approaches in order to determine and prioritise actions to be taken regarding ocean and water conservation and protection.

However, relevant financing for essential research and innovation is lagging behind[68]. In general, the approach has been project-based and bottom-up, which overshadows necessary strategic and systemic investment in natural capital to maintain and improve public goods and services. The fragmentation of Member States' research activities does not create the required conditions for financial institutions and businesses to target investment.

[64] Descriptor 3 aims for populations of all commercially exploited fish and shellfish to be within safe biological limits and is monitored by Member States, while the CFP key parameter is to reach MSY and is monitored by the EU. See Luc van Hoof, Judith van Leeuwen and Jan van Tatenhove, *All at sea - Regionalisation and integration of marine policy in Europe*, 2012 (https://link.springer.com/article/10.1186/2212-9790-11-9).

[65] Emanuele Bigagli, *The EU legal framework for the management of marine complex social-ecological systems*, 2015 (https://www.researchgate.net/publication/270753120_The_EU_legal_framework_for_the_management_of_marine_complex_social-ecological_systems).

[66] European Parliament, *Factsheet: Integrated Maritime Policy of the European Union* (https://www.europarl.europa.eu/factsheets/en/sheet/121/integrated-maritime-policy-of-the-european-union).

[67] European Commission, *Report from the Commission on the implementation of the Marine Strategy Framework Directive*, COM(2020) 259, (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593613439738&uri=CELEX:52020DC0259).

[68] *Report "Mission Starfish 2030: Restore our Ocean and Waters"*, 2020 (https://ec.europa.eu/info/publications/mission-starfish-2030-restore-our-ocean-and-waters_en).

III.

How to align EU ocean governance with environmental ambitions?

Almost fifteen years since its initiation and following the introduction of innovations in the EU governance apparatus, the development of a more ambitious EU blue policy is clearly hampered by the weakness of its institutional set-up. The overall soft approach has not been effective in delivering on some of the main objectives of the 2007 IMP (notably failing to reach good environmental status of marine waters and to sustainably manage of fisheries). Assuming that it will be fit to meet society's high expectations is unrealistic.

Why does this matter? Governing EU ocean and waters requires an adequate combination of political vision, institutional involvement, and enforceable rules. In a shared space such as European maritime space, and with complex ecosystems such as marine ecosystems, integrating governance makes sense: it helps resolve conflict among different users of the sea, provides clarity and stability for investment, and helps develop synergies.

But European ocean and water governance is complex, fragmented, and lacks teeth. Above all, it is poorly understood and acknowledged by both decision makers and the public. This is in sharp contrast with the major challenges that the EU has set for itself with the Green Deal. For example, if the fight against climate change is going to shape EU policy in the future, how are we going to de-carbonise shipping and fisheries, which are today entirely dependent on fossil fuels? If this is one of the central issues, then the objective of better integrated maritime governance should be to find solutions to de-carbonise maritime activities.

In other words, because the stakes are higher than ever, the policy and institutional apparatus must be fit for purpose.

The Green Deal and the Ocean

- Achieve climate neutrality by 2050.
- Reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.
- Protect at least 30% of the land and 30% of the sea in the EU with 10% of EU land and 10% of EU sea to be strictly protected.
- By 2030, habitats and species show no deterioration in conservation trends and status, and at least 30% reach favourable conservation status or at least show a positive trend.
- The risk and use of chemical pesticides is reduced by 50% and the use of more hazardous pesticides is reduced by 50%.
- At least 25,000km of rivers to be restored into free-flowing rivers by 2030.
- Reduction of use of fertilisers by at least 20%.
- Improve water quality by reducing waste, plastic litter at sea (by 50%) and microplastics released into the environment (by 30%).
- Eliminate greenhouse gas emissions from maritime economic activities in the EU and sequester emissions that cannot be avoided (net zero maritime emissions).
- Develop zero-carbon and low-impact aquaculture and promote circular, low- carbon multi-purpose use of marine and water space.
- Have an installed capacity of at least 60GW of offshore wind and at least 1GW of ocean energy by 2030.
- Installed capacity of 300GW of offshore wind and 40GW of ocean energy capacity by 2050.
- An increase in transport by inland waterways and short sea shipping by 25% by 2030 and by 50% by 2050.

Addressing the gaps and loopholes identified above must be considered a priority by EU decision-makers. They can and should acknowledge and embrace the holistic, systemic nature of ocean and water policy. Starting at the EU level by targeting key areas may trigger similar processes at the national level. In order to enable the EU to meet these challenges, we propose three priority areas: institutions, legislation and information.

A. Political steering through institutional reform

The purpose of pursuing institutional reform should be, on the one hand, to end the silo approach that is still dominant in EU Institutions, and on the other hand, to create a clear political steering capacity in each EU Institution.

As a first step towards more integration, it is critical for European institutions to adapt their own governance framework to ensure appropriate political oversight, ownership, and leadership. To achieve this, the "*Mission Starfish 2030*" report published in September 2020[69] draws several recommendations:

– At the EU level: outlining an **Integrated Ocean and Water Plan for Europe**. The European Council should call on the Commission to prepare an Integrated Ocean and Water Plan for Europe (2022-2030) for the consideration of the European Parliament and the Council. This Plan would aim to position the EU by 2030 as the world leader in ocean regeneration, ocean-climate mitigation, and carbon neutral economy. As a follow up, the Commission should publish a triennial progress report (as of 2025) on the implementation of the Integrated Ocean and Water Plan.
– At the Council level: an **Ocean and Water Council**. Building on the Working Party on maritime affairs established in July 2021, the Council should set up a dedicated European Ocean and Water Council, where maritime and aquatic issues would be addressed and discussed in a holistic and systemic way by Member States.
– At the European Parliament level: an **Ocean and Water committee**. With a new elected Parliament set for 2024, it will be high time to scale up the SEARICA Intergroup to create an Ocean and Water committee. In line with the holistic vision promoted by the Mission Starfish 2030 report, the committee's mandate would be to examine all maritime and water affairs as lead committee or as mandatorily associated by sectoral committees.
– At the European Commission: a **multi-Commissioner Group for Ocean and Water Coordination**. Chaired by the Commission President or the Vice-President for the Green Deal, the Group would gather the Commissioners for the Ocean (and Environment), Research, Transport, Energy, Spatial policy, Agriculture, Budget and the High Representative for External Action. It would prepare and follow-up on the Integrated Ocean and Water Plan for Europe and ensure that all Commission initiatives are consistent with and successfully implement the Plan as well as the "Mission Restore our Ocean and Waters by 2030 (Starfish)".
– **Engaging European citizens in ocean governance**. Increasing citizens' involvement in EU ocean governance is a major component of a renewed EU system of ocean governance. Every year, the European Commission, together with the European Parliament, the European Committee of the Regions, and the European Economic and Social Committee should organise a European Blue Citizens' Forum. Building on the European Maritime Day – composed of all segments of society and associating citizens, science, business, and local authorities' representatives – it would be the sounding board and proposing platform for discussing how the EU Plan and the Mission objectives are delivered across the EU.

[69] *Report "Mission Starfish 2030: Restore our Ocean and Waters"*, 2020 (https://ec.europa.eu/info/publications/mission-starfish-2030-restore-our-ocean-and-waters_en).

Further steps towards more integration of ocean governance would be, first, the establishment of a **European Ocean and Water Agency** that would help coordinate the implementation of all EU hydrosphere-related policies and strategies. In line with the approach promoted by the Mission Starfish 2030 report, its primary purpose would be to structure and coordinate marine research, fishing, environmental protection, maritime spatial planning, as well as coastal and water management. Its mission and functions would be performed in partnership with Member States, their lead agencies and the already existing EU Agencies, EU programmes and networks.

In charge of coordinating Member States and supporting the work of the European Commission, the agency would also transparently work for and with the private sector and civil society. Its hybrid nature would therefore require a governance set-up to ensure fair representation of all stakeholders (Member States, regional authorities, the private sector, civil society, and research).

Another step would be **recognizing ocean and water policy as one in the EU Treaties**. Even with minor changes in institutions and a thin constitutional mandate, significant progress has been made in EU blue governance, and the range of proposals we make could be implemented under the current Treaty provisions. Nevertheless, our analysis shows that achieving the European Green Deal's ambitions will require a holistic and systemic approach to ocean and water policy, based on the premise that Europe lives within one single water system, from the top of the Alps or the Himalayas, to glaciers of Antarctica and the corals reefs of the Pacific, through the mouth of the Rhine or the Bay of Biscay, the Mediterranean Sea and the Atlantic Ocean. Consequently, human activities and ocean and water protection need also to be managed in a holistic manner. This means amending the EU's founding treaties, if they were to be revised at a future Intergovernmental Conference (IGC), to give a single and common legal basis to EU's action for protecting and managing the hydrosphere.

B. A consistent and coherent ocean legislative framework

The EU ocean-related legislative apparatus relies on a large number of legislations. Because they have been developed at different intervals in line with various legal bases and mostly according to their specific objectives, their overall consistency has become problematic. It is now a matter of concern when we consider the huge efforts to be made to achieve ocean-related Green Deal objectives. In the coming years (2022-2024), most of this core legislation is due for assessment and report by the Commission, as well as review and/or reform. There is therefore a major opportunity for an overall re-alignment of EU maritime legislation with the Green Deal's objectives that should also ensure its internal consistency.

Future-proofing legislation with the Green Deal's targets: all core directives and regulations should be re-assessed within the next two years to leave sufficient time for implementation before the 2030 milestones. They should be benchmarked with the ocean-related Green Deal's objectives (see box above). A case in point is the potential of carbon sequestration that well-managed marine ecosystems can provide in reaching carbon neutrality. Its consideration under several pieces of legislation, such as the MSFD and the Land-Use and Land-Use-Change regulation[70] will be essential in securing its development. These re-alignments will be indispensable to address the following discrepancies.

[70] European Commission, *Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EU) 2018/841 as regards the scope, simplifying the compliance rules, setting out the targets of the Member States for 2030 and committing to the collective achievement of climate neutrality by 2035 in the land use, forestry and agriculture sector, and (EU) 2018/1999 as regards improvement in monitoring, reporting, tracking of progress and review*, COM(2021) 554.

Revising the Marine Strategy Framework Directive to increase its effectiveness. As the report published by the European Commission in 2020 highlighted, the determination of good environmental status has to be more "measurable, regionally coherent and ambitious". To this effect, three key actions are needed: a common regional understanding of what constitutes good environmental status in each sea basin and ensuring coherence between policies, notably the CFP; better targeting existing pressures on marine ecosystems; putting more emphasis on spatial protection measures in order to achieve the 30% target of marine protected areas (MPAs) set by the EU Biodiversity Strategy. For the latter point, coherence between the revised MSFD and the criteria and guidance for identifying and designating additional protected areas that the Commission was due to agree on by the end of 2021 will be crucial. The 'Mission Starfish 2030' also made important recommendations to deliver a coherent and effective European network of MPAs[71].

More integration between Maritime Spatial Planning and the Marine Strategy Framework Directive. The Commission launched the review of the MSFD in 2021 and in 2022, and it will report on the MSP plans submitted by Member States. This coincidence in timing is an opportunity that should not be missed. Until now, the weak integration of the MSFD into the MSP does not give the European Commission strong grounds to take action if the environment is not, or not sufficiently, integrated into national maritime spatial plans. Amending the MSP Directive in order to give more power to the Commission on the validation of national plans will be the next step. In addition, the ecosystem-based approach should be reinforced as it still struggles to be reflected in the national MSP plans. Finally, regarding cooperation between Member States, the next step forward would be for the Commission to ensure that national plans have been coordinated at sea basin level in line with the regional mapping of the MSFD and/or to request the development of regional maritime spatial plans.

Aligning the maritime transport sector with the Green Deal. The objectives of the Sustainable and Smart Mobility Strategy[72] and the "Fit for 55" Package[73] regarding the decarbonization of maritime sectors should be used as catalysts for further and better alignment between marine protection and maritime transport activities. Given the multiplicity and fragmentation of directives and regulations on maritime transport, the development of a framework directive that would encompass all relevant targets and principles along the lines of the MSP and the MSFD and with the objectives of the Green Deal as its compass is essential[74]. EU decision-makers should put particular attention on the articulation between the EU's maritime

[71] Several steps to achieve this expansion have been identified: 1) the definition of an MPA should be harmonised at EU level; 2) all MPAs should be covered by effective management plans; 3) the imbalance between coastal waters and offshore waters, a large part of which in the deep sea, should be rectified; 4) the European MPA network should become ecologically representative by including more deeper sea habitats; 5) the overall design of marine protection in Europe should result in a coherent network of MPAs which function together; 6) the involvement of local stakeholders is critical to ensure legitimacy and effectiveness of MPAs.

[72] European Commission, *Communication from the Commission: Sustainable and Smart Mobility Strategy – putting European transport on track for the future*, COM(2020) 789 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0789).

[73] European Commission, *Communication from the Commission: 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality*, COM(2021) 550 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0550).

[74] This recommendation is in line with the proposals of the Mission Starfish 2030 report that called for the establishment of an integrative strategy for green and climate-neutral maritime transport and ports. See *Report "Mission Starfish 2030: Restore our Ocean and Waters"*, 2020 (https://ec.europa.eu/info/publications/mission-starfish-2030-restore-our-ocean-and-waters_en).

transport strategy and the MSFD. In addition, the impacts of shipping on marine ecosystems, such as greenhouse gas and underwater acoustic emissions, could be included as an additional descriptor of good environmental status under the MSFD.

Harnessing synergies between the fisheries policy and marine protection. The 2013 CFP reform laid the foundations for its alignment with the requirements of the MSFD; since then, much work has gone into shrinking the gaps between similar concepts used under each legislative framework. But the Green Deal challenges policy makers to do more and better. The Action Plan on Fisheries and Biodiversity and the CFP's implementation report to be published by the Commission in 2022 should pave the way for further coherence between, on the one hand, biodiversity conservation and restoration objectives, and on the other, fisheries management. This should particularly target the most destructive fishing practices and by-catches of protected species. These will only be a first step toward a CFP reform after 2022 – that is, ten years after its approval and coinciding with the scheduled revision of the MSFD. This timing should ensure full and complete alignment of the CFP with the Green Deal, especially concerning its targets for the protection and restoration of marine ecosystems and the decarbonization of vessels.

C. Levelling up information for better science-based policy-making and maritime surveillance

Managing human activities at sea in a sustainable manner, monitoring the evolution of the marine ecosystems and human interactions with them, and understanding the impact of climate change on the ocean and the role it can play in mitigating climate is a major task that still lies ahead. Much progress has been made in Europe over the past decade, but a new stage is needed to improve scientific knowledge and maritime surveillance for effective policymaking. In both areas, priorities lie in more integration of existing capacities at the national and EU level, further data sharing, and new governing structures.

Improving scientific knowledge for better decision-making. Building on the already extensive foundations of the Copernicus Programme and its Monitoring Environment Marine Service and of the EMODnet initiative, the aim should be setting up a **European Digital Twin Ocean**[75]. It would consist of a comprehensive and holistic digital representation of the ocean using real-time and historical data, as well as models and artificial intelligence to represent the past and present, including simulations to predict the future of our ocean. These simulations could help determine and prioritise actions to be taken regarding ocean conservation and protection and would be an essential tool used by the proposed European Ocean Agency.

To achieve this ambition, **pooling, coordinating and increasing the numerous databases, satellite, and in situ observations** that already exist in Europe and beyond – though fragmented – will be necessary. This will provide a high-resolution and multi-dimensional description of the ocean, integrating not only its physical, chemical and biological dimensions, but also its associated socio-ecological and economic components. A critical first step will consist in prioritising and coordinating observation activities in Member States. This is the aim of the European Commission's announced Ocean Observation legislative proposal foreseen in spring 2022.

[75] As foreseen in the Horizon Europe's Mission Restore our Ocean and Waters by 2030, often referred as "Mission Ocean" (https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ocean_and_waters_implementation_plan_for_publication.pdf). Similar projects are supported by several international organisations and groups such as International Ocean Governance, the UN Ocean Decade and the G7 working group Future of the Seas and Oceans.

Fully integrating maritime surveillance at the service of ocean protection. The development of the digital twin should be coupled with improved maritime surveillance in European seas and waters. Four priority areas can be highlighted:

– **Defining common objectives.** National naval forces no longer have the capacity to address new geopolitical risks alone, such as the disengagement of the United States and the accumulation of naval forces at the EU's external maritime borders. The joint acknowledgement of risks would be an essential starting point. The threats posed to marine ecosystems by illegal fishing, illegal mining, illegal waste or unregulated degassing should be part of these risks. The challenges they raise will grow in the context of protecting 30% of marine territory as mandated by the EU Biodiversity Strategy. These risks can only be dealt with collectively in order to be addressed efficiently. Only by identifying long-term objectives will Europeans be able to work together, namely redefining the mandates of European agencies, coordinating national agencies in a more operational way, and carrying out joint operations at sea.

– **Aligning agencies' mandates with sustainability objectives.** The European Commission intends to revise the **European Maritime Safety Agency** mandate by the end 2022. The implementation of new environmental legislation included in the European Green Deal, as well as the emergence of new technology such as digital twins are about to transform the maritime sector[76]. Aligning the EMSA mandate with the objectives of the Fit for 55 Package (an extension of the EU Emissions Trading System (ETS) to maritime transport, FuelEU Maritime initiative) and the European Green Deal in general (*inter alia* the Zero Pollution Action Plan) must be considered as a priority in this revision process.

Similarly, the **European Fisheries Control Agency** should be considered as a key lever in implementing marine environmental ambitions. The environmental dimension of EFCA's mandate strongly depends on the CFP objectives and rules. Nevertheless, reinforcing the capacity of the agency to direct and coordinate Member State's own fisheries control and enforcement activities will be a priority, especially when new restrictions on fishing practices and fishing grounds are enacted.

– **Pooling data on maritime surveillance.** Working on the EU agencies' mandate will not be sufficient. Their coordination should also be improved, but first and foremost, the full sharing of information by and among Member States needs to be attained. A first decisive step would be to bring the CISE project to a new level by giving the EU a legislative mandate to pool all maritime surveillance data gathered by Member States and EU agencies in one single data hub available for all coastguards' functions at the national and EU level by 2025.

– **Fostering coordinated action at sea.** Operation Atalanta, launched in 2008 to counter piracy off the Horn of Africa and in the Western Indian Ocean, was the first-ever EU military naval operation. Widely considered a success, it should serve as inspiration for other types of operations. To ensure marine protected areas do not remain mere "paper parks", and to lead by example in international fora, particularly in Antarctica where the EU is a proponent of two marine protected areas, European civil and military control and enforcement forces need to work cooperatively. In several frameworks, including within NATO, harmonised protocols are increasingly used, notably to fight drug trafficking. It is time this is applied to the protection of the marine environment. The aim should be that, by 2030, all maritime surveillance activities of EU agencies and Member States are coordinated, and joint surveillance operations in EU and international waters are carried out.

[76] Xavier Le Den, Franziska Lessmann, Alexandru Floristean, Tsvetelina Blagoeva, Samy Porteron, Carsten Ellegaard, Jonatan Sandager Hansen, *Evaluation on the implementation of the Regulation (EC) NO 1406/2022 establishing EMSA. Final report*, 2017.

Conclusion

European blue governance is at a decisive moment in its history. Over the last two decades, EU ocean governance has considerably developed and gained in visibility despite navigating limited legal basis in the Treaties and different levels of competences. However, the kaleidoscope of actions developed by the EU has now reached their limits when the stakes are higher than ever: marine ecosystems are generally in a poorer state than they were twenty years ago, the Green Deal calls for a major transformation to reduce the environmental and climate footprint of the European economic model that must also benefit Europe's ocean, seas and waters, and the EU has claimed international leadership in ocean protection and restoration.

Governing EU ocean and waters requires an adequate combination of political vision, institutional involvement, and enforceable rules. Better integrated blue governance will help resolve conflict among different users of the sea, provide clarity and stability for investment, and promote the development of synergies.

Considering the persistent lack of coherence in the EU's ocean and water policy framework, it is high time to revamp EU ocean and water governance. The hydrosphere is a holistic, interconnected, and interdependent system – it must be governed much in the same way. To this effect, we propose three priorities and thirteen measures:

- **Creating a clear political steering capacity through institutional reforms across the board:**
  - The adoption by the European Council of an Integrated Ocean and Water Plan for Europe
  - The establishment of an Ocean and Water Council
  - The creation of an Ocean and Water committee in the European Parliament
  - The creation of a multi-Commissioner Ocean and Water Coordination Group in the Commission
  - An annual European Blue Citizens' Forum.
  - The establishment of a European Ocean Agency coordinating the implementation of all EU ocean-related policies and strategies
  - The revision of the EU treaties to recognize ocean and water policy as one
- **Building a consistent and coherent ocean legislative framework:**
  - Future-proofing all ocean-related legislation in line with the Green Deal's targets, and starting the revision of core directives and regulations before the end of the current Commission's mandate
  - Revising the Maritime Strategy Framework Directive to increase its effectiveness
  - Ensuring consistency of the Maritime Spatial Planning directive, regulations on shipping, and the Common Fisheries Policy with the revised MSFD
- **Levelling up information for better science-based policy-making and maritime surveillance:**
  - Improving scientific knowledge by setting up a European Digital Twin Ocean (DTO)
  - Defining common objectives for maritime security, of which marine protection should be part
  - Fully integrating maritime surveillance systems by aligning agencies' mandates with sustainability objectives, pooling data, and fostering coordinating action at sea.

In doing so, we should not forget the EU's influence in global discussions. The EU has taken the lead in several ocean issues (for example, the expansion of marine protected areas and the fight against IUU fishing). The oceans are open systems, where no individual actor can be fully effective without the cooperation of others. The EU's soft power has proven to be a very useful and effective tool to promote good policies around the world; as such, the EU must harness its potential to shape up the world's maritime governance alongside its green ambitions. Europe Jacques Delors will endeavour to further contribute on this reflection in its forthcoming publication.

Annex

A short history of EU Blue Policy: The key building blocks

The founding members of the European Economic Community (EEC) had an initial limited interest in designing a policy framework to regulate maritime activities and protect marine resources. It took several decades for the EU to build a policy framework to that effect. We outline here some key moments.

A. Ensuring a level playing field between Member States

1. Regulating competition amongst Member States

The notion of level-playing field was at the core of the **first European Common Fisheries Policy (CFP)**[77]. Launched in the wake of the UK, Ireland and Denmark's accession – the most powerful European fishing nations at the time – the CFP was adopted in 1983 after years of negotiations and in the shadow of the forthcoming accession of Spain and Portugal, the other European fishing giants. The main purpose was to set rules to manage European fishing fleets and fish stocks, focusing mainly on access to fish stocks, their management, and the allocation of quotas between Member States. The first regulation (Regulation 2141/70) had established equal conditions of access and use of fishing grounds in the EEC's waters based on the principle of equal access for all Member States. But this was no longer acceptable to founding Member States after the first enlargement to the UK, Ireland and Denmark, which had much larger fleets. The issue was exacerbated by the prospect of Spain's much larger fleet entering the playing field.

Therefore, the primary concern of the new CFP was for Member States to preserve their existing share of access to fisheries resources. Although it also demonstrated an emerging interest for sustainability with the establishment of the Scientific Technical Committee for Fisheries (STECF) whose role it was to advise the Commission on conservation and management of living marine resources, the main decision was the introduction of the concept of 'relative stability'. This term refers to the stable allocation of fish stock shares for each Member State – a principle that remains at the core of the CFP still today. The corresponding Total Allowable Catches (TACs) were decided by the Council of Ministers and shared among Member States based on these allocated percentages.

Despite stepping out of agriculture's shadow, the vision of the first CAP remained and was therefore very prominent. The resulting emphasis on the increase in production was not without environmental consequences. Unlike in agriculture, where improving the means of production generally leads to better yields and an increase in production, the abundance of the resource in fisheries is inversely proportional to the efficiency of the means of production. This is due to the natural dynamics and constraints of wild stocks reproduction. This productivist approach inspired by the CAP has therefore encouraged overfishing and the exhaustion of fish stocks.

In parallel, the EU started to develop a policy for **maritime transport**. Following the release by the Commission of a memorandum entitled '*Progress towards a common transport policy – maritime transport*' in 1985, the adoption of a new set of regulations known as the "Brussels Package"[78] laid

[77] It materialised through two regulations: Regulation 170/83 aimed at establishing a Community system for the conservation and management of fishery resources; Regulation 171/83 laid down technical measures for the conservation of these resources, specifying inter alia the mesh sizes, by-catch rates and fish sizes permitted as well as the limitation of fishing within certain areas and periods and with certain gear with the aim to ensure that Member States fish by the same rules.

[78] The package included Council Regulation (EEC) No 4055/86 of 22 December 1986, Council Regulation (EEC) No 4055/86 of 22 December 1986, Council Regulation (EEC) No 4057/86 of

the first stones for a European shipping policy in 1986. Through four regulations, the Brussels Package aimed to promote the liberalisation of navigation and carriage of cargo between Member States. Partly triggered by the enlargement of the EEC to important maritime states – Greece, and later Spain and Portugal – these regulations were designed to ensure fair competition between Member States as part of the programme of measures to build the European Single Market.

A second wave of action followed the same logic in 1989. The European Commission's communication – "*A future for the Community shipping industry: Measures to improve the operating conditions of Community shipping*"[79] – aimed to curb the decline in EU fleet capacity and to modernise it. More specifically, the Commission's objective was to tackle increasing divergence in operating conditions between Member States' fleets and distortion of competition between Community shipowners in line with its overall concern of ensuring a level-playing field between Member States.

2. The rise of environmental concerns

Together, the **accession of Spain and Portugal in 1986**, the reunification of Germany in 1990 and the achievement of the internal market in 1993 led overexploitation of key resources to become a major concern among fishing communities and decision-makers for the first time. This imbalance called for a revision of the CFP[80]. However, the improvements introduced by the **1992 CFP reform** were limited. It consolidated regulations of the first CFP, laid the foundations for conservation policy to move to multi-species and multi-annual approaches, and consolidated the scientific committee (STECF)[81]. But, overall, the *status quo* prevailed. For example, the question of discards of unwanted catches, a major source of wasted resources, was not addressed.

It was not until 2002 that environmental issues started to be seriously and systematically addressed. The **2002 CFP reform** was instrumental in shaping the environmental architecture of the CFP by introducing long-term plans for stock management to manage fisheries more sustainably[82]. While the implementation of these plans was not entirely effective, and partly due to unclear defining of what could be considered a "safe biological limit", the efforts of European lawmakers to engage in science-based and multi-annual planning of fishing activity was noteworthy, as was putting an end to funding for new vessel construction. More importantly, the 2002 reform enshrined sustainability as the overarching objective of the CFP. Sustainability encompassed three different dimensions: social, economic and environmental. Although the conditions for achieving this objective were not clarified, integration of the environment in decision-making represented a step in a new and important direction for the CFP.

Another innovation was the recognition that, to increase buy-in from the industry and other relevant stakeholders[83], CFP governance would benefit from involving actors beyond national authorities and European Institutions by taking into account diverse sea basin realities. This took shape as five Regional Advisory Councils (RACs) that covered the five sea basins

22 December 1986 and Council Regulation (EEC) No 4058/86.

[79] European Commission, *Communication on a future for the Community shipping industry: Measures to improve the operating conditions of Community shipping*, COM(1989) 266.

[80] Ernesto Penas Lado, *The Common Fisheries Policy: The Quest for Sustainability*, John Wiley & Sons, Ltd, 2016.

[81] *Ibid.*

[82] According to Article 6 of Regulation 2371/2002, the objective of long-term plans was to "maintain stocks within safe biological limits for fisheries exploiting stocks at/or within safe biological limits".

[83] Ernesto Penas Lado, *The Common Fisheries Policy: The Quest for Sustainability*, John Wiley & Sons, Ltd, 2016.

surrounding the Community and that gathered fishers, scientific experts, representatives of other sectors related to fisheries and aquaculture, regional and national authorities, environmental groups, and consumers.
During the same period, environmental protection and sustainability also became major concerns in the **maritime sector.** The tragic images of the oil spill caused by the shipwreck of the oil tanker Erika in 1999 made a strong impression on public opinion, prompting the EU to take action through safety measures.
The European Commission presented three packages to improve safety measures in the shipping industry (Erika I, II and III) in the following years. In particular, Erika II, through Regulation (EC) No 1406/2002, led to the creation of the European Maritime Safety Agency. Its objective was to support the European Commission and Member States in ensuring "[a] high, uniform and effective level of maritime safety and maritime security in the European Union", but also the prevention of pollution and responding to pollution caused by ships or by oil and gas installations[84].
Although environmental protection remained in the shadow of safety concerns, the policies and measures put in place were instrumental in limiting the impacts of the sector on ocean and water health.

B. Sectoral and political fragmentation: the need for more integration to achieve sustainable development

As a growing number of sectoral regulations in both the shipping and fisheries sectors were being developed and implemented, the Commission sought to put in place a **European maritime policy**.

The Green Paper and the stakeholder consultation process that followed resulted in the EU Integrated Maritime Policy (IMP), presented by the European Commission in 2007[85]. It was the first attempt to provide a coherent policy framework for the optimal development of all sea-related activities in a sustainable manner[86] by "[avoiding the] duplication of regulatory powers of different national or regional authorities in the Member States and [replacing] overlap and doubletrack decision-making by a one-stop-shop approach in each Member State" [87]. This approach involved broad coverage of blue economy sectors, ranging from maritime transport, oil and gas extraction, renewable energy, fisheries, conservation, while also addressing several cross-cutting and interrelated issues such as maritime surveillance, maritime spatial planning, coastal adaptation to climate change, and marine research.

The focus was predominantly on coordination between institutional bodies and stakeholders both at the European and Member State levels. At the national level, the Commission encouraged Member States to draw up their own **national integrated maritime policies**. While recognising that 'one size does not fit all', the Commission recommended that national integrated maritime policies be guided by the principles of subsidiarity, competitiveness and economic development, the ecosystem approach, and the principle of stakeholder participation. The Commission also encouraged Member States to share best practices in integrated marine policy approaches, to improve integration efforts, but also to help ensure coherence across national frameworks.

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[84] EUR-lex, *Maritime safety: European Maritime Safety Agency*, 2021 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:l24245).

[85] European Commission, *Communication from the Commission: An Integrated Maritime Policy for the European Union*, COM(2007) 575.

[86] Luc van Hoof, Judith van Leeuwen and Jan van Tatenhove, *All at sea; regionalisation and integration of marine policy in Europe*, 2012 (https://link.springer.com/article/10.1186/2212-9790-11-9).

[87] European Commission, *Communication from the Commission on Guidelines for an Integrated Approach to Maritime Policy: Towards best practice in integrated maritime governance and stakeholder consultation*, COM(2008) 395.

This initiative resulted in the development of the "Grenelle de la Mer" in France and the establishment of the "Entwicklungsplan Meer" in Germany.

The proposal was also about designing **new EU-level horizontal and cross-cutting policy tools,** leading to strong progress in three areas: marine ecosystem preservation, maritime spatial planning and coastal zone management, and observation and surveillance.

The adoption of the **Marine Strategy Framework Directive (MSFD)** in 2008[88] marked a pivotal moment in better governing the EU seas by embedding environmental objectives. Mirroring the Water Framework Directive[89] adopted in 2000, the MSFD was presented as the environmental component of the IMP and was shaped by the same holistic and unifying vision. The MSFD set the objective to achieve or maintain good environmental status (GES) in EU marine waters by 2020 at the latest, as well as to protect marine ecosystems and resources by evaluating their status through 11 descriptors[90].

With regard to the development of maritime spatial planning and coastal zone management, the new policy led to the adoption (albeit years later) of a **Directive on Maritime Spatial Planning** (MSP) in 2014[91]. It was seen as another cross-cutting policy tool to apply a coordinated, integrated, and trans-boundary approach to the sustainable development and growth of maritime and coastal economies. Addressed to Member States, the Directive aims to provide a framework for planning an extensive range of activities and uses taking place in the Member States' maritime space. On the basis of this framework, Member States are in charge of designing, developing and implementing national maritime spatial plans for their own marine waters.

The 2007 IMP also set the foundation for new developments in **maritime surveillance and marine observation**. Responding to different needs – overseeing activities at sea in a more coordinated manner and sharing data resulting from national scientific marine activities – the initiatives of the Commission were nevertheless similar in that they refrained from legislating, due in part to their awareness of the EU's lack of competence in these areas. Through funding and incentives to share experience and information, the relevant national authorities and experts were nevertheless invited to participate in a European network for maritime surveillance and an associated interoperable surveillance system on the one hand, and in a European Marine Observation and Data Network on the other.

C. The rise of a regionalised and ecosystem-based approach

The Marine Strategy Framework Directive (MSFD) split European maritime space into **four geographical regions**, mainly coinciding with the geographical boundaries of the Regional Sea Conventions[92]: the Baltic Sea, the

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

[89] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

[90] They range from biological diversity to eutrophication and marine litter, the assessment of good environmental status is intrinsically integrative, encompassing all activities that may potentially have an impact on the health of the marine environment.

[91] Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning.

[92] Regional Sea Conventions are "regional seas" treaties developed under the aegis of the United Nations Environment Programme (UNEP) which aim to protect the marine environment and bring together Member States and neighbouring countries that share marine waters. The four European Regional Sea

North-East Atlantic Ocean, the Mediterranean Sea, and the Black Sea. Under the MSFD, all Member States were required to develop sea basin strategies by 2012 against which the achievement of the GES would be assessed. Each Member State was then required to coordinate with other Member States to draw up a programme of cost-effective measures to achieve GES.

This approach challenged Member States that shared the same sea basin to cooperate and coordinate on the management of their seas and waters. It meant that new governance structures had to be developed or existing ones exploited, such as the Regional Sea Conventions. The first **EU macro-regional strategy** was approved by the European Council in 2009, the EU Strategy for the Baltic Sea Region (EUSBSR). It aimed to address environmental challenges, energy and transport related issues, economic growth potential, as well as safety and security issues. Since then, it has been followed by the Atlantic maritime strategy (2011)[93], an initiative on the sustainable development of the blue economy in the western Mediterranean (2017)[94], the EU Strategy for the Adriatic and Ionian Region (EUSAIR) in 2014[95] and a Common Maritime Agenda for the Black Sea (2019)[96].

As regard fisheries, the **2013 reform of the CFP** constituted a breakthrough by putting the emphasis on environmental sustainability, establishing several wide-ranging instruments to that effect. Maximum Sustainable Yield (MSY)[97] was cemented as the main objective of fisheries management to be reached by 2020 at the latest for all stocks. The elimination of 'discards' (i.e., unwanted fish thrown back at sea, often dead or dying and thus leading to the substantial waste of resources and negative impacts on sustainability) was established as another key objective. The reform also further enshrined regionalisation of fisheries management. The reinforcement of multi-annual plans (MAPs)[98] and the enhancement of the role of advisory councils for each of the sea basin were designed to achieve a less centralised system of fisheries management and to ensure a balanced representation of all stakeholders.

The 2010s saw also the rise in public concern over **marine pollution**, with particular focus put on plastics. The pressure of public opinion became such that the late Juncker Commission published a *Strategy for Plastics in the European Union* in early 2018, with one of its key items being a directive regulating the availability of **port reception facilities** and the delivery of waste to

Conventions are 1) the Convention for the Protection of the Marine Environment in the North-East Atlantic of 1992 – known as the OSPAR Convention; 2) the Convention on the Protection of the Marine Environment in the Baltic Sea Area of 1992 – known as the Helsinki Convention (HELCOM); 3) the Convention for the Protection of Marine Environment and the Coastal Region of the Mediterranean of 1995- known as the Barcelona Convention (UNEP-MAP); 4) the Convention for the Protection of the Black Sea of 1992 – known as the Bucharest Convention. The EU is a party to the first three Conventions and considers its accession to the Bucharest Convention as a priority.

[93] Followed by an action plan in 2013 which was updated in 2020 (See European Commission, *Communication on a new approach to the Atlantic maritime strategy – Atlantic action plan 2.0 An updated action plan for a sustainable, resilient and competitive blue economy in the European Union Atlantic area*, COM(2020) 329)

[94] European Commission, *Communication on the Initiative for the sustainable development of the blue economy in the western Mediterranean*, COM(2017) 183.

[95] European Commission, *Communication concerning the European Union strategy for the Adriatic and Ionian Region*, COM(214) 357.

[96] Ministerial Declaration on a Common Maritime Agenda for the Black Sea, Bucharest, 2019 (https://ec.europa.eu/oceans-and-fisheries/ocean/sea-basins/black-sea_fr).

[97] The maximum sustainable yield is the maximum level at which a natural resource can be routinely exploited without long-term depletion.

[98] Multiannual plans set targets for the management of fish stocks (mortality rates by fishing type and/or size of the stock in question).

those facilities[99]. Together with the Single Use Plastics Directive[100], this directive was swiftly adopted by the European Parliament and the Council on 17 April 2019, just in time for the European elections.

By facilitating all ships to deliver their waste to adequate port reception facilities ashore, the EU showed newfound concern over the generation of marine litter.
The Directive aims to provide safe and environmentally sound management of ship-generated waste by allowing ships to pay a fixed waste fee without port-specific limitations towards the volumes delivered.

The objective is to reduce waste discharge from ships, including fishing vessels, and to improve efficiency of maritime operations in ports by seeking to ensure that more waste is delivered on shore (with a focus on garbage), including waste from the fishing sector such as derelict fishing gear. It also aims to contribute to the Circular Economy by improving the adequacy of waste reception facilities, particularly as it concerns their environmental performance.

[99] Directive (EU) 2019/883 of the European Parliament and of the Council of 17 April 2019 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC.
[100] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

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