Contents of OCEaN Package

OCEaN Statement on an Improved, Robust and Timely MSP Process

Offshore wind and related electricity grid infrastructure are imperative to reach climate targets and EU energy independence. Simultaneously, marine ecosystems – which are already vulnerable – must be protected from further impacts due to stress caused by climate change and the pressures of traditional and new economic activities. This means that thorough planning is vital to allocate space to those activities which are most needed and least detrimental to the environment, in line with climate, conservation and restoration objectives.

The REPowerEU Plan calls on Member States (MSs) to identify dedicated areas where renewable energy sources (RES) could have faster permit-granting procedures and less environmental risks. For marine areas, Maritime Spatial Planning (MSP) is already the essential tool for an integrated spatial allocation of human activities in line with EU economic, environmental, and social objectives. It enables inclusion and assessment of a complex variety of aspects, such as interactions between traditional and emerging sectors (i.e. offshore renewable energy (ORE)) and environmental protection and restoration needs. Therefore, the members of the Offshore Coalition for Energy and Nature (OCEaN) strongly support an improved, robust and timely MSP process. This will speed up ORE, support the decision-making process for spatial allocation, and also reduce investment risks and project delays. In this context, the OCEaN members recommend the following principles to be considered by all EU MSs:

Improve application of an ecosystem-based[1] approach in MSP. An ecosystem-based, integrated planning approach is needed to allocate space for renewable offshore energy production in consideration of nature protection needs and other existing activities at sea. If applied correctly, MSP can enable such integrated planning, identify less sensitive areas suitable for energy infrastructure deployment, and contribute to reconciling often conflicting interests and the needs of marine users[2].

Complement environmental and socio-economic assessments for spatial designation with sensitivity mapping. Spatial designation must be based on robust impact assessments to allow activities to be located in areas where no significant impacts on the marine environment will occur and to balance the various economic interests at sea. Sensitivity mapping tools can inform planning

[1] Which has been defined as a "holistic approach with a focus on preserving/restoring marine ecosystems and maintaining ecosystem services to support human needs. It should provide spatial solutions for the management of human activities in a way that is compatible with the achievement of Good Environmental Status (GES) and the capacity of marine ecosystems to respond to human-induced changes" (Ansong, Gissi, & Calado, 2017, An approach to ecosystem-based management in maritime spatial planning process)

[2] See OCEaN's 10 recommendations on how to improve Maritime Spatial Planning to reach European climate, energy and biodiversity targets (below)

decisions, along with socio-economic assessments, in order to identify best-suited locations for nature protection and energy infrastructure and define mitigation and compensation measures. MSs and the European Commission (EC) should facilitate and enable the application of sensitivity mapping across national, regional and sea basin levels and further explore tools to analyse socio-economic aspects.

Enable cross-border collaboration. Sea basins should be treated as connected entities, creating an added value of basin-scale planning that must be considered. Therefore, EC and MSs should facilitate and implement regional stakeholder cooperation to enable large-scale compensation, mitigation, and restoration measures and a harmonised and cross-basin data sharing.

Continue to implement EU nature law[3] to a high standard. The 'imperative reason of overriding public interest' (IROPI) permits project development despite impacts on protected habitats or species, in cases of outstanding importance for the public. This is already allowed by EU nature law. MSs needs to carefully consider its application on a case-by-case basis, after demonstrating such an exception's necessity and lack of alternatives, alongside mitigation and compensation measures.

Improve stakeholder involvement and create benefits for local communities. As per EU Law[4] requirements, MSs must engage with national and local stakeholders when developing their MSPs. Early-stage and meaningful engagement of civil society must be ensured to gain public support. Furthermore, models for the creation of local benefits are an emerging trend across Europe. They should be further developed – together with local communities.

Adopt a long-term perspective. Incorporating a long-term perspective enables planning reliability, increases planning efficiency, optimises overall resource and spatial use, and reduces impacts on nature. As changes in the marine environment may only be visible after a certain amount of time, the planning system needs to be flexible enough to respond to such new insights. Thus, a learning planning system and adaptive management are essential for ecosystem protection and should be embedded in all MSPs.

[3] Directive 92/43/EEC, 1992, Habitats Directive and Directive 2009/147/EC, 2009, Birds Directive
[4] Directive 2014/89/EU, 2014, MSP Directive and Directive 2001/42/EC, 2001, SEA Directive

10 Recommendations

How to improve Maritime Spatial Planning to reach European climate, energy and biodiversity targets

Oceans have an essential role for life on Earth, but they are in a poor condition and face increasing pressures from economic activities, climate change, acidification, eutrophication, overfishing and pollution. Decades of exploitation and weak and uncoordinated planning at sea have led to the situation we face today. In response, many countries around the world are transitioning towards a more sustainable and fair management of their marine environment – with the European Union leading the way thanks to its 2014 Directive establishing a framework for Maritime Spatial Planning (MSP Directive).

According to the MSP Directive, EU Member States must develop national Maritime Spatial Plans (MSPs) defining the possible uses of their marine space following an ecosystem-based approach[5]. This Directive aims to keep the collective pressure of maritime activities within levels compatible with the achievement of Good Environmental Status (GES) of the sea[6].

Offshore wind will play a central role in decarbonising our economy, helping the EU to meet its climate targets, and achieve energy independence. Since the first projects in the early 1990´s, actors from the offshore wind industry have incrementally engaged with relevant stakeholders to learn and ensure that offshore projects are developed in the most respectful manner in line with environment protection interests and applicable laws. Unleashing the full potential of offshore wind as a domestic clean energy source requires allocating adequate space for offshore wind and the electricity grid that supports it. The MSP process can help to identify the most suitable areas for wind and grid infrastructure with the aim of minimising environmental impacts of human activities at sea in parallel with the EIA and Habitats Directives. By resolving conflicts and regulating maritime activities, MSP can contribute significantly to the achievement of thriving marine ecosystems, while at the same time reducing delays in the deployment of renewable energy infrastructure and, ultimately, reaching clean energy independence.

As laid out by the MSP Directive, Member States had to publish their Maritime Spatial Plans by 31 March 2021. While the majority of coastal Member States (MSs) have a plan in place, some plans are still in the preparatory phase. This makes it a good moment to assess and take stock of progress so far, identify positive steps taken, and identify weaknesses that must be improved in the future to ensure that

[5] Which has been defined as a "holistic approach with a focus on preserving/restoring marine ecosystems and maintaining ecosystem services to support human needs. It should provide spatial solutions for the management of human activities in a way that is compatible with the achievement of Good Environmental Status (GES) and the capacity of marine ecosystems to respond to human-induced changes" (Ansong, Gissi, & Calado, 2017, An approach to ecosystem-based management in maritime spatial planning process)

[6] Directive 2008/56/EC, 2008, Marine Strategy Framework Directive

all human activities at sea, including the development of offshore wind and grid infrastructure, contribute to the achievement of both our climate and biodiversity goals.

In recent months, three members of the Offshore Coalition for Energy and Nature (OCEaN) – BirdLife, WWF and WindEurope – have analysed available MSPs in the EU to assess how closely they follow the provisions of the MSP Directive, address European renewable energy targets, and contribute to the achievement of GES and other environmental objectives. The recommendations below are based on those assessments and build on OCEaN's 2021 MSP messages. They identify concrete actions for Member States to undertake and specific points to improve in upcoming national-level MSP evaluations and revisions[7].

1 Member States should implement an ecosystem-based approach to MSP to support the achievement of Good Environmental Status of the seas

Employing ecosystem-based planning – an integrated management strategy that promotes conservation and sustainable use in an equitable way[8] – is key in order to meet the EU's 2030 Biodiversity Strategy commitments[9], reach GES, and align with the EU Habitats and Birds Directives and Marine Strategy Framework Directive (MSFD). There is considerable variation in the extent to which an effective ecosystem-based approach (EBA) to MSP is currently applied among MSs [10]. There is considerable room for improvement and a need to make the practical application of the EBA clearer, faster, and comparable across MSs. International guidance and increased cooperation between stakeholder groups, both at regional and national level, would allow national authorities to better include nature protection and address potential conflicts and synergies between the conservation of marine ecosystems and economic activities in their planning.

The use of sensitivity mapping to inform the MSP process and position human activities in areas of lower sensitivity, application of the precautionary principle[11], the assessment of cumulative impacts (see recommendation 4), and the use of adaptive management represent important components of an ecosystem-based approach to MSP. Applying an EBA also requires recognising the contribution of marine and coastal ecosystems as nature-based solutions to climate change mitigation through their function as carbon sinks, as well as their role in coastal protection. Furthermore, climate change adaptation should be facilitated through an EBA to MSP, for example by ensuring adequate ecological connectivity between

[7] European Commission, 2022, Overview of MSP plans, visions and Strategic Environmental Assessments (SEA) per country
[8] European Commission, 2021, Guidelines for implementing an ecosystem-based approach in MSP
[9] European Commission, 2020, Factsheet: EU 2030 Biodiversity Strategy
[10] See individual guidelines per sea basin, e.g. HELCOM-VASAB, 2016, Guidelines for the implementation of an ecosystem-based approach in MSP in the Baltic sea area
[11] The precautionary principle pertains to risk management and states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is not harmful falls on those taking an action. (IPBES, 2018)

Marine Protected Areas (MPAs) and other ecologically important sites (see recommendation 8).

Inspirational examples from across Europe

Some aspects of Sweden's MSP provide a good basis for an ecosystem-based approach, for example the use of sensitivity mapping and the assessment of cumulative impacts with the tool Symphony. Symphony calculates how pressures from human activities in the ocean affect nature values in any selected location in the Swedish sea and thus provides transparency in the decision-making process. Moreover, Sweden's MSP makes explicit reference to the precautionary principle as a basis for decision-making and applies it to relevant MSP provisions. There is also a strong emphasis on high-resolution monitoring and evidence-based impact assessment whenever concrete information is lacking, and 'precaution areas' indicate where activities should be planned with particular caution for the marine environment due to knowledge gaps.

2 Member States should regard transboundary cooperation as a cornerstone of European MSP ambitions

MSP should be coordinated across borders in order to achieve a more balanced distribution of infrastructure and ensure the achievement of GES across EU waters. There has been some progress on transboundary Offshore Renewable Energy (ORE) planning. However, efforts should be expanded to all offshore wind farms to ensure the continuity of ecological blue corridors ~~a~~nd limit potential cumulative impacts along Economic Exclusive Zones' (EEZ) borders.

It is important to note that reaching EU 2030 climate targets requires the allocation of less than 3% of European seas for offshore wind energy production[12]. This European objective will be reached with different contributions from each Member State, as ORE should be developed in locations of high wind potential and low environmental impact. The benefit of planning at sea basin level is that these contributions can be determined in the most efficient way. Some states with high wind potential allocate between 10-15% of their sea areas to ORE in their MSPs, such as Belgium (15%), Denmark (10%), Germany (15%), and Poland (12%). While other MSs (such as Estonia, Finland, France, Ireland, Latvia, Sweden, and Spain), allocated less than 5% of their EEZ for ORE. However, Member States must complement their spatial planning of offshore RES with the Green Deal Biodiversity Strategy's target of protecting at least 30% of EU waters by 2030 (see recommendation 8). This

[12] WindEurope, 2022, MSP Briefing

should also be planned across borders to ensure connectivity and continuity between biodiversity hotspots.

Inspirational examples from across Europe

Transboundary coordination in MSP and environmental protection for the Baltic Sea is well established with institutional structures dating to the 1970s. Broad-scale principles for MSP for the Baltic Sea were produced on a transboundary basis through a joint initiative of the Helsinki Commission (HELCOM) and Visions and Strategies around the Baltic Sea (VASAB).

In contrast, intergovernmental cooperation in the North Sea region is less well established and cooperation on environmental protection issues needs to be strengthened, for example by including an ecosystem-based approach in the North Sea Region 2030 Strategy or by establishing an MSP working group under OSPAR's Regional Sea Convention framework. A new ministerial North Sea Conference would be a great starting point to find solutions for cross-boundary planning issues, involving both EU Member States and neighbouring countries such as Norway and the UK.

3 Members States should share MSP data in a harmonised way to enable transboundary cooperation

Transboundary cooperation via regional sea conventions, agreements between states, or countries considering the impact of their activities beyond their Economic Exclusive Zone supports the reduction of pressures on nature, for example by sharing infrastructure. One of the best ways to enable transboundary planning is by sharing data between countries, requiring data collection and management (e.g., data on seabed mapping, marine species population and habitats as well as human activities) should be shared, coordinated to allow joint analysis and planning across borders. The 2007 INSPIRE Directive, establishing an Infrastructure for Spatial Information in the European Community, aims at harmonising data and publishing it in open standard format across all EU countries. This Directive should guide Member States' compilation of data sets to enable the accessibility and sharing of spatial information across various public authorities and different sectors.

Inspirational examples from across Europe

In the digital MSP of Finland, the data model binds the spatial data and written plan together and combines needs at national, Baltic Sea Region, and EU level. It also includes different sea-use classifications, which enables the wider use of harmonised data in portals like HELCOM at sea basin level and EMODnet at European level. Belgium, Denmark, Germany, Latvia, and Poland also all uploaded their MSPs in the EMODnet Human Activities portal. To share spatial data on regional portals, data packages with specific requirements need to be prepared. This requires long-term investments from MSs to ensure that such competencies are built and maintained in their marine agencies.

4 Member States should address cumulative impacts and long-term scenarios hand in hand

Excessive growth in human activities at sea will increase cumulative impacts on the marine environment, leading to degraded biodiversity that can no longer fully provide their diverse benefits to people and the climate[13]. The vast majority of EU seas is already degraded, limiting its capacity to provide vital ecosystem services. For this reason, a quantitative and spatially explicit assessment of cumulative impacts must be a core component of any MSP process and can inform other assessment processes (e.g. EIA, AA). Assessments of cumulative impacts must consider all types of possible interactions, not only between human activities and the environment, but also between activities themselves. Furthermore, assessments should take explicit account of the volume and intensity of projected activities over the period of the plan. This must also be based on an evidence-informed assessment of alternative scenarios which set out future pathways with varying volumes, intensities, and spatial distributions of activities.

All MSs should ensure the use of innovative tools and methods that include social, economic, and environmental assessments and translate these into spatial thinking and planning. While there are already a number of cumulative impact assessment tools available and many more under development, assessing cumulative impacts is still an extremely complex task and each available tool has its own strengths and weaknesses. Therefore, MSs and relevant stakeholders should share successful practices, for example in regional fora or in dedicated MSP working groups, in order to learn from each other and ultimately apply tools that can be synchronised across the EU and beyond.

[13] Marine ecosystems provide a constellation of services: they produce food, receive and assimilate wastes, protect shorelines from storms, regulate the climate and atmosphere, generate tourism income, and provide recreational opportunities. (Palumbi et al., 2009)

Inspirational examples from across Europe

Estonia and Sweden used a broad knowledge base to construct their MSPs, taking advantage of the best available science from multiple disciplines and translating this into spatial data. They also used innovative tools, recent data, and the precautionary principle to systematically identify cumulative effects and sensitive areas in their MSP processes. This approach ensured sound and up-to-date evidence informed their decision-making process.

When it comes to the long-term perspective, Estonia, Latvia, and Sweden conducted detailed Strategic Environmental Assessments and incorporated the main findings into the development of their MSPs alongside formulating a long-term vision (20-30 years) for the future development of sea use. Finland has used a systematic approach to analyse potential uses of their marine area and their diverse impacts and also put significant effort into developing a long-term vision and roadmap toward an MSP. Latvia and Poland's MSPs included the consideration of the temporal and spatial uncertainties brought by climate change: they explicitly left certain areas free and undesignated to a specific use so that they may be used for yet unknown functions in the future.

5 Member States should collect marine data continuously to guide responsive and adaptive decision-making

MSPs are not a one-time effort, but rather iterative and circular processes which adapt over time. Therefore, it is important to foresee regular reviews and apply adaptive management tools to continuously improve them. With advances in scientific understanding and technology happening at an ever-increasing pace, regular evaluations and revisions are especially necessary. The EU MSP Directive only requires a review of national MSPs at least every ten years, but such a time span is likely to be too long. Therefore, several EU MSs have already committed to a shortened evaluation and review cycle (e.g., France and Ireland have a 6-year review period).

To ensure an effective, science-based evaluation and review of MSPs, it is of the utmost importance to have access to non-fragmented environmental data and support national data collection initiatives, in particular MSs with larger marine jurisdictions. Promoting a centralised collection of long-term environmental data is a good approach. This management of data can be overseen by a state authority, in cooperation with research institutes, civil society and thebprivate sector. This

enables the sharing of knowledge and costs, ensures data availability, supports adaptive management, and reduces risks for project developers and permitting authorities. Such a model should also be aligned with the monitoring needed for other purposes at sea such as the one required by the Marine Strategy Framework Directive (see recommendation 6).

Inspirational examples from across Europe

In Sweden, ecosystem monitoring is intended to occur on a systematic, ongoing basis and provisions for adaptive modification are included. In Belgium, the Belgian Marine Data Centre, coordinated by the Royal Belgian Institute of Natural Sciences, showcases how this can be done for the offshore wind sector and the advantages it brings (for more information, see our data case study below). This model can be replicated in other countries, could be expanded to the monitoring of other marine activities, and should include transborder cooperation to increase its effectiveness.

6 Member States should streamline existing environmental data collection and use it to guide MSP

For many MSs, the environmental data collection prescribed by the EU's relevant directives such as the MSFD, or by other initiatives at national level, and their reporting serve as important sources for the MSP process. However, these processes are generally independent from each other, generating inefficiencies. Striving to align and harmonise environmental reporting required by EU law would bring necessary simplification as well as saving time and costs, since different directives have similar indicators.

Inspirational examples from across Europe

The Netherlands have aligned the monitoring and review of their MSP with the MSFD's cycle, while France combined MSPD and MSFD provisions in one single plan. Estonia and Latvia are leaders in this area and align their cross-sectoral policies and timelines to meet the requirements of various environmental directives (i.e., Latvia aligned EU policies for seafloor and habitat protection). In the Baltic region, the regularly updated data hub within HELCOM is a first step in offering spatial data for planning and monitoring in a comparable form. With the HELCOM database and EU reporting data as a resource, the Baltic countries can rely on a good data structure and are experienced in using the EU reporting mechanisms for monitoring and status assessment, enabling them to transfer that knowledge into the creation of MSPs.

7 Members States should ensure continuous and equitable stakeholder engagement in the MSP process

Stakeholders must be involved in all phases of the MSP process, and the planning authority must transparently justify its decisions regarding space allocation and conflicting interests following stakeholder consultations. The integration of both top-down and bottom-up mechanisms is essential to ensure dialogue, knowledge exchange, and ultimately successful implementation of the MSP Directive at both Member State level and at sea basin level. Tools that allow for transparent and quantitative data analysis could be applied to show stakeholders how draft spatial and temporal allocations were developed. In order to be motivated and enabled to participate, stakeholders must be aware of what MSP is, how it works and what its results are. The objectives, expected outcomes, and purpose of participation should be clarified. Sufficient time and resources should be invested into planning context-specific stakeholder engagement activities. This enables the establishment of trust and support for the decision-making process from knowledge gathered regarding values, needs, conflicts, and opportunities. Interaction platforms should be developed based on existing networks and include a mechanism to give feedback to the stakeholders on how their inputs are being used. Successful stakeholder engagement avoids subsequent delays to MSP implementation.

Inspirational examples from across Europe

Ireland has a robust consultation model for the national marine planning framework. Estonia and Latvia are also examples to follow as they based their stakeholder participation on the principles of the Espoo Convention, which lays down an obligation for Member States to consult each other on all major projects that are likely to have a significant environmental impact across borders and encourages public participation for SEAs and EIAs. Sweden can serve as inspiration too, as it made economic services a central focus of their MSP and ensured active stakeholder inclusivity and participation through many consultation meetings. SeaSketch is an innovative tool for participatory MSP, which has been used to develop national Maritime Spatial Plans and is used increasingly across Europe.

8 Member States should protect nature by establishing a representative and ecologically coherent network of effectively managed Marine Protected Areas

MSP must allocate sufficient space for nature conservation and restoration so that biodiversity can regenerate and maintain its ability to provide ecosystem services on which we depend, such as food production, well-being, and climate mitigation. MSPs should ensure that the planning and management of human activities will not significantly impact the Natura 2000 network and other MPAs. An enhanced connectivity of the network of MPAs is vital in order to maximise ecological effectiveness. The objective of biodiversity net gain[14] should be encouraged, as the MSP Directive requires MSs to contribute to the protection, conservation, and improvement of the marine environment – which can be done through passive and active restoration measures. Passive restoration refers to areas where human pressures are removed – these are often strictly protected areas such as "no-take-zones"[15]. Meanwhile, active restoration measures involve direct human interventions to assist ecosystem recovery.

Nature restoration and the energy transition must be planned and implemented hand-in-hand so they can jointly support each other in delivering the EU's climate, biodiversity, and energy goals. This means that the designation of MPAs and energy generation sites should happen simultaneously to prevent negative effects of one on the other. A coordinated designation of these areas will contribute to addressing the joint climate and biodiversity crises we face, while achieving the necessary speed and scale for the expansion of renewables and electricity grids. When it comes to the environment, every EU Member State needs to step up and designate areas for habitat restoration in their MSPs if we are to reach the target of restoring 20% of degraded marine habitats listed in the Nature Restoration Regulation by 2030, as proposed by the European Commission[16]. Furthermore, designation of areas suitable for marine ecosystem protection covering at least 30% of each state's seas (a third of which is strictly protected), alongside implementation of effective management plans is necessary to meet EU policy targets and ensure that nature is given the space needed to recover and thrive. Therefore, MSs should integrate the management plans and objectives of designated MPAs into their MSP.

[14] Protection and sustainable production approaches to avoid and minimise damage are not enough to reverse nature loss. It is necessary to go beyond 'less bad' and no net loss and aim for a nature-positive economy as part of a nature-positive world. (WBCSD, 2021)
[15] European Commission, 2022, Criteria and guidance for protected areas designation provides support to MSs in designing and managing protected areas.
[16] European Commission, 2022, Proposal for a regulation on nature restoration

Inspirational examples from across Europe

Latvia, Lithuania, and Sweden are examples to follow: their MPA management provisions were transposed directly into MSP priorities. Sweden deserves special recognition for establishing a coherent network of protected areas that are aligned with neighbouring countries. However, Swedish MPAs do not currently cover 30% of its territorial waters.

Spatial planning tools can and should be used when planning ecosystem restoration projects in the marine environment, as they have substantial potential to improve the probability of restoration success – however they are rarely incorporated[17].

9 Member States should integrate multiple use in offshore wind farms from the early planning stages

Due to scarcity of space in European seas, it is of the utmost importance that all MSs start testing and implementing multi-use within offshore wind parks. Two or more activities might take place alongside each other, thereby potentially optimising how we use space and mitigating overall environmental impacts of human activities. Multi-use can either take the form of *multi-functional use*, whereby different usages take place in the same area at the same time thanks to shared infrastructure and services, or of *co-location*, where only the location is shared.

It is important to note that although multi-use scenarios are often approached simply from a design perspective, in practice, regulatory and technical factors can be a hindrance, and overcoming such barriers requires early and active collaboration between all stakeholders. Considerable care is also required to manage not only commercially relevant species, but also the many other species that are part of a given habitat. The application of specific multi-use options needs to be decided upon and evaluated based on environmental and socio-economic factors.

Inspirational examples from across Europe

In the Netherlands, the government aimed at finding a balance between offshore wind energy development, nature conservation and seafood production, which required active collaboration of all stakeholders. The 'Community of Practice North Sea' brings interested

[17] Lester et al., 2020, Spatial Planning Principles for Marine Ecosystem Restoration

parties together to share experiences and creates a learning environment in a non-political setting, fostering a culture of cooperation for the development of multi-use. Results of this experience show that Communities of Practice are a participatory tool with potential to encourage cooperation between stakeholders. The Ten guidelines for Communities of Practices[18] can be an inspiration to transition towards the multi-use of marine resources.

10 Member States should make Maritime Spatial Plans a legally binding framework for all marine activities and provide regulatory clarity

As per the MSP Directive, all EU MSs should have a Maritime Spatial Plan in place, but that is not yet the case. Some EU states have encountered delays in the process, due to a lack of experience, insufficient funding, or lack of willingness to speed up the planning process and establish meaningful stakeholder engagement schemes. If we are to sustainably manage European seas, it is extremely important that all MSs finalise and adopt their MSPs.
However, many MSPs in the EU are currently more of a declaration of intent or an inventory of maritime activities and leave decisions regarding conflicting claims for the use of sea space to the future. MSPs must include clear conflict resolution mechanisms and should be legally-binding and state-led in order better harmonise cross-sectoral policies and timelines. However, MSPs should be kept flexible enough for adaptive management to be implemented (see recommendation 5).

In addition to being legally binding, MSPs must be supported by regulatory clarity. Decision-making and management of the MSP should be kept at the same regulatory level to ensure coherence between different sub-plans and avoid uncertainty, delays, and possibly legal disputes. Indeed, lack of coherence between subplans can lead to omission of cumulative impacts, incoherent protection measures, disconnected MPAs or inadequate consideration of the ecological carrying capacity and sustainable management of the entire national MSP.

Inspirational examples from across Europe

The MSPs of Estonia, Latvia, Lithuania, Poland, and Ireland all have something in common: they are legally binding, which brings strong legal guarantees.

[18] Steins et al., 2021, Combining offshore wind farms, nature conservation and seafood: Lessons from a Dutch community of practice

Case Study

Marine environmental data monitoring for nature-friendly offshore wind

The Maritime Spatial Planning (MSP) process allocates space for traditional and emerging human activities at sea. Data forms the foundation of Maritime Spatial Plans (MSPs) and is crucial for their revision and adaptation based on new scientific knowledge. Since MSP is key to identify areas for offshore renewable energy (ORE) and the connecting electricity grid, marine environmental data is essential for a nature-friendly deployment and to achieve conservation and restoration targets as well as Good Environmental Status in all European seas.

Member States (MS) utilise different environmental data collection and management schemes. In the MSP context, they are responsible for using the best available data and deciding how to share necessary information across marine regions. The Offshore Coalition for Energy and Nature (OCEaN) identifies innovative models and initiatives which allow for better environmental data collection and management for ORE, with the aim of inspiring their replication by MS. One such positive example is the Belgian Offshore Wind Monitoring Programme, WinMon.be. This post-decision monitoring programme for the construction and operation phases of ORE projects after the permit-granting, has been running since 2005, coordinated and executed by the Royal Belgian Institute of Natural Sciences (RBINS) and commissioned by the Belgian Federal Government.

The following selected aspects of this programme can benefit nature-friendly ORE expansion:

- **It simplifies project developers' work and enables needed funds.** All Belgian offshore wind farm concession holders contribute on a yearly basis to the funding of this monitoring programme as part of their environmental license conditions. In exchange, environmental monitoring is conducted centrally and independently by advising authorities, RBINS and other partners, for all ORE projects.

- **It enables systematic and long-term data collection**. The programme creates a solid framework for the systematic collection of marine environmental data. RBINS and partners conducting the monitoring ensure that environmental data is continuously collected and streamlined through standardised protocols and harmonised monitoring as per latest scientific knowledge. Long-term (min. 5-10 years) and continuous monitoring provide reliable environmental data and allow for adaptive processes.

- **It allows better understanding of ORE impacts**. Through an observation phase, it is possible to assess and anticipate impacts of ORE in marine

ecosystems, revealing processes (cause-effect) behind these impacts, and thus enabling a better understanding. In addition, it provides the necessary data to measure the potential combined effects of all ORE projects at the national level and has the potential to do this across all marine users and across the sea basin.

- **It allows open access to marine data and contributes to data sharing at international level**. All environmental data is made available through a data-platform, the Belgian Marine Data Centre and contributes to international databases such as EMODnet, which ensures coherent and coordinated data collection across sea basins at the EU level.

OCEaN recognises the advantages of this programme and the contribution it can make to the data debate, but also that it is based on existing and specific national conditions, premises, and structures. OCEaN will follow its progress and will continue to create opportunities for exchange with other initiatives for better data collection and management in other countries.