



Guidance Paper

Ecosystem-based Maritime Spatial Planning in Europe and how to assess it

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INTRODUCTION

The European Blue Economy is growing. According to the European Commission, its global added value reached 218 billion in 2018, a 15% increase compared to 2009.¹ It has also generated an estimated 5 million direct jobs, a 12% increase compared to 2017, in sectors including coastal tourism, shipping, fisheries and ocean energy.²

Growth in the blue economy sectors goes hand in hand with spatial expansion. The more activities there are at sea, the more space is needed to accommodate them. Yet, as any resource, space is not an indefinite commodity. In fact, European seas already count amongst some of the most intensively used maritime areas in the world.³ In turn, the significant growth in European blue economic activities results in increased competition for sea space.

Marine biodiversity is continuing to decline in European seas and most of our marine ecosystems are under significant and adverse pressure. The objective to reach “Good Environmental Status (GES) of EU seas” by 2020 as per the Marine Strategy Framework Directive (MSFD) has not been reached⁴, due to a combination of the failure to reduce multiple human pressures, such as eutrophication or overfishing, and climate change.⁵

A healthy ocean is however vital to address the challenges both our societies and Nature are nowadays facing. It is key to alleviating the impacts of climate change, fighting biodiversity loss and ensuring food security for many of our communities. It also constitutes the cornerstone of a resilient sustainable blue economy. On the other hand, an unbalanced and poorly managed growth of economic activities at sea will only magnify and accelerate the negative effects of human activity on marine ecosystems. Weakened ecosystems will in turn negatively affect our societies, as fewer benefits will be derived from weakened and therefore less productive seas.

Ecosystem-based Maritime Spatial Planning (EB MSP) plays a pivotal role in the future of our ocean. While supporting the sustainable development of blue economy activities, MSP can be used to ensure there is space for nature to thrive and recover. In particular, applying an Ecosystem-based approach (EBA) to MSP is instrumental in ensuring both a sustainable development of the Blue Economy while preserving marine and coastal ecosystems and their services.

According to the Maritime Spatial Planning Directive (MSPD, 2014/89/EU)⁶, European Member States are expected to release their national MSPs by the 31st March 2021 at the latest. In the face of the many challenges they are required to address, it is vital that these plans are well conceived and effectively implemented. The March 2021 deadline will mark the end of the designing phase, the first step of the MSP cycle. This milestone

¹ European Commission, The EU Blue Economy, 2020, https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/2020_06_blue_economy_infographics_hd.pdf

² Ibid.

³ WWF, Oceans, https://www.wwf.eu/what_we_do/oceans/

⁴ European Commission, Report on the implementation of the Marine Strategy Framework Directive, 25 June 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593613439738&uri=CELEX:52020DC0259>

⁵ Korpinen, S., Klančnik, K., Peterlin, M., Nurmi, M., Laamanen, L., Zupančič, G., Popit, A., Murray, C., Harvey, T., Andersen, J.H., Zenetos, A., Stein, U., Tunesi, L., Abhold, K., Piet, G., Kallenbach, E., Agnesi, S., Bolman, B., Vaughan, D., Reker, J. & Royo Gelabert, E., 2019, *Multiple pressures and their combined effects in Europe's seas*, ETC/ICM Technical Report 4/2019: European Topic Centre on Inland, Coastal and Marine waters, 164 pp, <https://www.eionet.europa.eu/etcs/etc-icm/products/etc-icm-report-4-2019-multiplepressures-and-their-combined-effects-in-europes-seas>

⁶ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0089>

represents an opportunity to assess this first phase of the MSP cycle, whose main outcome is the adoption and publication of marine spatial plans.

This paper is conceived as a guide for those interested in MSP and its implementation in Europe, especially from an EBA perspective. Chapters 1 and 2 are meant for those readers looking for basic background information about MSP, the ecosystem-based approach, and EB MSP. Chapters 3 and 4 focus on the European MSP context, introduce the European MSPD and detail the WWF European network's approach to EB MSP. Based on the previous chapters, Chapter 5 uses the WWF EB MSP principles to identify those MSPD provisions with an EBA relevance. The practical dimensions of the identified provisions are then further explored so as to propose a set of concrete EBA indicators, derived from the MSPD legal requirements and relevant to the designing phase of the MSP cycle. Based on those indicators, Chapter 6 sets out to offer a method to assess the plans. It explains how to use the indicators built in Chapter 5 within a simple scoring system with a view to produce visual compass cards.

1. APPROACHING MARITIME SPATIAL PLANNING

1.1. On the way towards Maritime Spatial Planning

The management of marine space is complex. Many new and/or growing maritime sectors, such as offshore renewable energy, aquaculture, or shipping, put pressure on spatial planners to quickly unlock spatial use of the sea space while reducing the risks of conflicts with other sea users and avoiding to negatively affecting marine ecosystems to the best extent possible. The significant Blue Economy growth experienced over the past decades has cast light on the need for more transversal policies to govern the uses of sea space. Furthermore, the sharp decline in marine biodiversity not only called for increased spatial-based protection mechanisms such as Marine Protected Areas (MPAs), but also for a better management of the cumulative effects of human activities beyond sectoral boundaries.

The blue economy growth, the degradation of our ocean, and the development of the ecosystem approach to ocean policy, drove an increasing need for tools capable of providing more complex impact assessments at an ecosystem level, factoring cumulative impacts at sea basin level, across borders and sectors.

As a result, policy makers engaged in more holistic and integrated approaches to marine and maritime policies, such as integrated coastal zone management, ocean zoning and ultimately, maritime spatial planning (MSP). In 2006, the IOC/UNESCO convened the first International Workshop on the use of MSP as a tool to implement ecosystem-based, sea use management.⁷ An International Conference on MSP later complemented the workshop in 2017, organised jointly with the European Commission's Directorate-General for Maritime Affairs and Fisheries (DG MARE), which resulted in a “*Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide*”.⁸ In parallel, the IOC-UNESCO started to share policy guidance to MSP, and published in 2009 a first guide to “*Marine Spatial Planning: a step-by-step approach toward ecosystem-based management*”.⁹ Following the 2017 joint conference, “*MSP global*” was also jointly launched by the IOC-UNESCO and DG MARE to develop guidance on international cross-border planning and to support cross-border pilot regional projects.

In the European Union¹⁰, the Recommendation 2002/413/EC on Integrated Coastal Zone Management¹¹ from the Council and the European Parliament, the Protocol to the Barcelona Convention on Integrated Coastal Zone Management¹² ratified by the EU in 2010, and the 2011 Integrated Maritime Policy¹³ constituted the first steps towards the adoption of the Maritime Spatial Planning Directive (MSPD, 2014/89/EU)¹⁴ in 2014.

⁷ IOC-UNESCO, MSP at IOC-UNESCO, <http://msp.ioc-unesco.org/about/msp-at-unesco/>

⁸ European Commission, IOC-UNESCO, *Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide*, 2017, http://www.mspglobal2030.org/wp-content/uploads/2019/04/Joint_Roadmap_MSP.pdf

⁹ Ehler, Charles, and Fanny Douvère, *Marine Spatial Planning: a step-by-step approach toward ecosystem-based management*, Intergovernmental Oceanographic Commission and Man and the Biosphere Programme, IOC Manual and Guides no. 53, iCaM Dossier no. 6, Paris: UNESCO, 2009 (english), <https://unesdoc.unesco.org/ark:/48223/pf0000186559>

¹⁰ For additional background about the EU's MSP policy, see https://ec.europa.eu/environment/iczm/index_en.htm

¹¹ Council, European Parliament, Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32002H0413>

¹² Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, Protocol on Integrated Coastal Zone Management in the Mediterranean, 2009, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22009A0204\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22009A0204(01)&from=EN)

¹³ Regulation (EU) No 1255/2011 of the European Parliament and of the Council of 30 November 2011 establishing a Programme to support the further development of an Integrated Maritime Policy, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32008L0056>

¹⁴ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0089>

1.2. Maritime Spatial Planning in practice

In the literature, Maritime Spatial Planning (MSP) has been defined as “a *public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, social, and economic objectives that are usually specified through a political process*”.¹⁵

According to Ehler and Douvere, a “*comprehensive MSP provides an integrated framework for management that provides a guide for, but does not replace, single-sector planning*”¹⁶. It “*aims to provide guidance for a range of decision-makers responsible for particular sectors, activities or concerns so that they will have the means to make decisions confidently in a more comprehensive, integrated, and complementary way*”.¹⁷ Soininen and Haasan (2015) also say, “*What MSP is promising, then, is a new future-oriented planning process, which takes into account all the sectors related to the governance of marine issues and allocates marine space both geographically and temporally for different purposes (interests) which are deemed politically desirable.*”

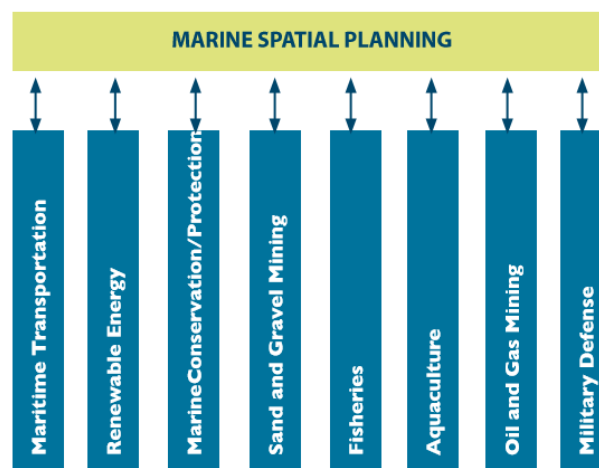


Figure 1 - Marine spatial planning and single sector planning, Ehler and Douvere, IOC, 2009.

In that perspective, MSP is not just about taking stock of ongoing maritime activities in order to attribute them locations. It also entails a strategic and long-term thinking, which may in turn lead to transformative changes in how the sea space is used and for what purposes. According to Walsh, “*spatial planning has the potential to foster ‘transformative practices’ with the capacity to challenge existing structural constraints on the basis of future visions of what places might become (Albrechts, 2010, p. 1116). Arguably, marine spatial plans should also be concerned with ‘place-making’ at sea, shaping how sea spaces develop through future-oriented transformative spatial strategies. In this way, MSP can act as a catalyst for change rather than performing a solely regulatory function*”.¹⁸

¹⁵ Ehler, Charles., *A Guide to Evaluating Marine Spatial Plans*, Paris, UNESCO, IOC Manuals and Guides, 70; ICAM Dossier 8, 2014, <https://unesdoc.unesco.org/ark:/48223/pf0000227779>

¹⁶ Ehler, Charles, and Fanny Douvere, op. cit., 2009.

¹⁷ Ibid.

¹⁸ Walsh, Cormac., *Best Practice in Maritime Spatial Planning, Towards Mutually Beneficial Outcomes for Fishers, Renewable Energy Production and Marine Conservation*, Study Commissioned by the Greens EFA, 2021, <http://extranet.greens-efa-service.eu/public/media/file/1/6757>

Box 1 - Shaping successful maritime spatial plans: inputs from the literature

From the literature review, it is possible to extract a certain number of best practices and goals that all marine spatial plans/planning should aim at, including: coordination and integration with other planning frameworks, meaningful stakeholder participation, commitment to plan implementation, gaining resources and political support and gathering baseline data.¹⁹

The characteristics of “effective” MSP have also been summarized as “ecosystem-based (balancing ecological, economic, and social goals and objectives toward sustainable development), integrated (across sectors and agencies, and among levels of government), place-based or area-based, adaptive (capable of learning from experience), strategic and anticipatory (focused on the long-term), participatory (stakeholders actively involved in the process)”.²⁰

In practice, MSP must be understood as a cycle: “MSP does not lead to a one-time plan. It is a continuing, iterative process that learns and adapts over time”.²¹ As such, MSP includes several steps:

1. An initial designing phase that results in the drafting of a plan;
2. Followed by the implementation of the plan;
3. Accompanied by monitoring and enforcement;
4. Which allows for evaluation and continual adaptation;
5. Ultimately a revision and adaptation of the initial plan.

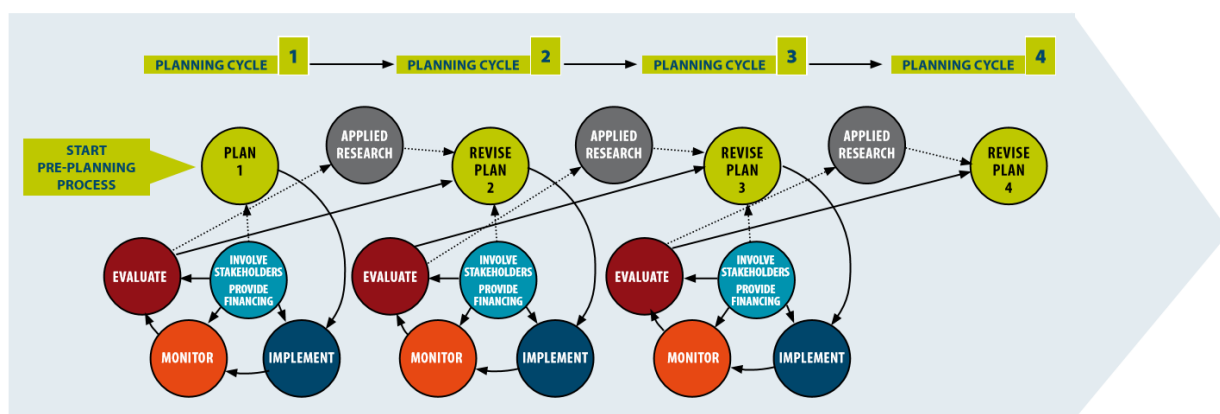


Figure 2 - The continuing MSP planning cycle, Ehler and Douvere, IOC, 2009.

The creation of the first MSP plan constitutes a critical stage that will set the level of ambition of the MSP planning cycle with long lasting effects. While the continuous adaptation dynamics should improve the MSP plans, the sharp decline of our marine biodiversity henceforth requires efficient and immediate action when it comes to how we plan and use our maritime space. In short, the dire state of play of marine ecosystems makes it imperative to succeed in producing a proper first version of any new MSP plan.

No evaluation is expected at the end of the designing phase, when the plan is published but not implemented. However, it is already possible to check whether the plan fits the objectives formulated for the MSP process, and broadly speaking, nature and people's needs.

¹⁹ Jay, Stephen., *Marine Spatial Planning Assessing net benefits and improving effectiveness*, OECD Issue Paper, 2017, https://www.oecd.org/greengrowth/GGSD_2017_Issue%20Paper_Marine%20Spatial%20Planning.pdf

²⁰ Ehler, Charles, and Fanny Douvere, 2009, op.cit.

²¹ Ibid.

2. UNPACKING ECOSYSTEM-BASED MARITIME SPATIAL PLANNING

2.1. The emergence of the ecosystem-based approach in the policy dialogue

The development of an ecosystem-based approach (EBA) to policy making dates back from the 1990's. A key step was reached under the auspices of the Convention for Biological Diversity (CBD) in 1998, when it adopted the twelve defining principles commonly known as 'Malawi Principles'²².

Box 2 - The 12 CBD 'Malawi Principles' of the ecosystem approach to biodiversity management

1. The objectives of management of land, water and living resources are a matter of societal choices.
2. Management should be decentralized to the lowest appropriate level.
3. Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.
4. Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context, considering e.g. mitigating market distortions, aligning incentives to promote sustainable use, and internalizing costs and benefits.
5. Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.
6. Ecosystem must be managed within the limits of their functioning.
7. The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.
8. Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.
9. Management must recognize the change is inevitable.
10. The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.
11. The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.
12. The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

Convention on Biological Diversity, *Ecosystem Approach Principles*.

<https://www.cbd.int/ecosystem/principles.shtml>

From an ocean perspective, the origins of an ecosystem approach to marine issues can be traced back up to the 1992 United Nations Conference on Environment and Development in Rio de Janeiro (the Rio Conference) and the Agenda 21 Action Plan.²³

Box 3 - The Rio Conference's Agenda 21 Action Plan

17.1. The marine environment - including the oceans and all seas and adjacent coastal areas - forms an integrated whole that is an essential component of the global life-support system and a positive asset that presents opportunities for sustainable development. International law, as reflected in the provisions of the United Nations Convention on the Law of the Sea referred to in this chapter of Agenda 21, sets forth rights and obligations of States and provides the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources. This requires new approaches to marine and coastal area management and development, at

²²Convention on Biological Diversity, *Ecosystem Approach Principles*, <https://www.cbd.int/ecosystem/principles.shtml>

²³ United Nations Conference on Environment and Development, 1992, Chapter 17, <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

the national, subregional, regional and global levels, approaches that are integrated in content and are precautionary and anticipatory in ambit, as reflected in the following programme areas:

- a. Integrated management and sustainable development of coastal areas, including exclusive economic zones;
- b. Marine environmental protection;
- c. Sustainable use and conservation of marine living resources of the high seas;
- d. Sustainable use and conservation of marine living resources under national jurisdiction;
- e. Addressing critical uncertainties for the management of the marine environment and climate change;
- f. Strengthening international, including regional, cooperation and coordination;
- g. Sustainable development of small islands.

United Nations Conference on Environment and Development, 1992, Chapter 17.

The Agenda 21 itself refers back to the United Nations Convention on the Law of the Sea (UNCLOS) as a basis to the objectives it sets.

Box 4 - UNCLOS, Article 145, Protection of the marine environment

Necessary measures shall be taken in accordance with this Convention with respect to activities in the Area to **ensure effective protection for the marine environment from harmful effects which may arise from such activities**. To this end the Authority shall adopt appropriate rules, regulations and procedures for inter alia:

- (a) the **prevention, reduction and control of pollution and other hazards to the marine environment**, including the **coastline**, and of **interference with the ecological balance of the marine environment, particular attention being paid to the need for protection from harmful effects of such activities** as drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities;
- (b) the protection and conservation of the natural resources of the Area and the **prevention of damage to the flora and fauna of the marine environment**.

United Nations Convention on the Law of the Sea, 1982, Article 145.

In parallel, scholars increasingly engaged with the ecosystem approach. Based on a literature review, Grumbine identified in 1994 5 key ecosystem management goals.²⁴

Box 5 - Grumbine's 5 key ecosystem management goals, 1994.

1. Maintain viable populations of all native species in situ.
2. Represent, within protected areas, all native ecosystem types across their natural range of variation.
3. Maintain evolutionary and ecological processes (i.e., disturbance regimes, hydrological processes, nutrient cycles, etc.).
4. Manage over periods of time long enough to maintain the evolutionary potential of species and ecosystems.
5. Accommodate human use and occupancy within these constraints.

Grumbine, R.E., 1994. What is ecosystem management?. *Conservation biology*, 8(1), pp.27-38.

²⁴ Grumbine, R.E., What is ecosystem management?, *Conservation biology*, 8(1), pp.27-38, 1994, [https://www.life.illinois.edu/ib/451/Grumbine%20\(1994\).pdf](https://www.life.illinois.edu/ib/451/Grumbine%20(1994).pdf)

In 2005, McLeod et al. further defined what “ecosystem-based management for the oceans” could be, through a statement signed by 217 academic scientists and policy experts with relevant expertise.²⁵

Box 6 - McLeod et al., “What is Ecosystem-based management for the oceans?”, 2005.

“Ecosystem-based management is an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors. Specifically, ecosystem-based management:

- emphasizes the protection of ecosystem structure, functioning, and key processes;
- is place-based in focusing on a specific ecosystem and the range of activities affecting it;
- explicitly accounts for the interconnectedness within systems, recognizing the importance of interactions between many target species or key services and other non-target species;
- acknowledges interconnectedness among systems, such as between air, land and sea; and
- integrates ecological, social, economic, and institutional perspectives, recognizing their strong interdependences.”

McLeod, K.L., Lubchenco, J., Palumbi, S.R. and Rosenberg, A.A. 2005. *Scientific Consensus Statement on Marine Ecosystem-Based Management*. Signed by 217 academic scientists and policy experts with relevant expertise and published by the Communication Partnership for Science and the Sea.

The ecosystem-based approach also started to be applied to more specific ocean topics, such as management of marine areas²⁶, maritime sectors such as fisheries²⁷ or integrated ocean management²⁸ and ocean zoning.²⁹ At the same time, public institutions alongside various stakeholders tried to get a better grasp on the concept to guide and support practitioners, contributing to expanding the grey literature available on the subject, be it from

²⁵ McLeod, K.L., Lubchenco, J., Palumbi, S.R. and Rosenberg, A.A., *Scientific Consensus Statement on Marine Ecosystem-Based Management*. Signed by 217 academic scientists and policy experts with relevant expertise and published by the Communication Partnership for Science and the Sea, 2005, <https://marineplanning.org/wp-content/uploads/2015/07/Consensusstatement.pdf>

²⁶ Arkema, K.K., Abramson, S.C. and Dewsbury, B.M., Marine ecosystem-based management: from characterization to implementation, *Frontiers in Ecology and the Environment*, 4(10), pp.525-532, 2006.

²⁷ Garcia, S.M., Zerbi, A., Aliaume, C., Do Chi, T., and Lasserre, G., *The ecosystem approach to fisheries. Issues, terminology, principles, institutional foundations, implementation and outlook*, FAO Fisheries Technical Paper, No. 443, p.71. Rome: FAO., 2003, https://www.wideworld.org/Resources/Docs/FAO_FishTechPap_443_ecosystem_appr_to_fisheries.pdf

²⁸ Lieberknecht, L.M., *Ecosystem-Based Integrated Ocean Management: A Framework for Sustainable Ocean Economy Development*, A report for WWF-Norway by GRID-Arendal, 2020, https://gridarendal-website-live.s3.amazonaws.com/production/documents/s_document/531/original/Ecosystem-Based_Integrated_Ocean_Management_EN_web.pdf?1587588391

²⁹ Halpern, B.S., McLeod, K.L., Rosenberg, A.A. and Crowder, L.B., Managing for cumulative impacts in ecosystem-based management through ocean zoning, *Ocean & Coastal Management*, 51(3), pp.203-211, 2008, https://www.researchgate.net/publication/245123599_Managing_for_cumulative_impacts_in_ecosystem-based_management_through_ocean_zoning

governmental bodies such as DEFRA in the United Kingdom³⁰, the United Nations^{31,32}, or non-governmental organisations such as the IUCN³³ and the WWF.³⁴ In parallel, scholars kept on trying to better define this buzzword concept.³⁵

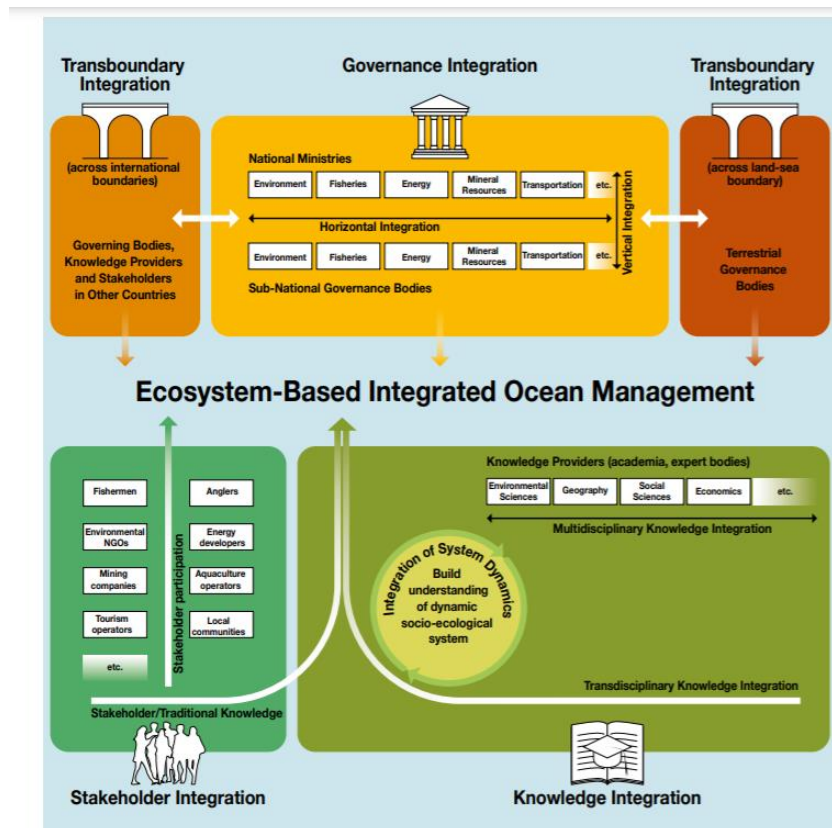


Figure 3 - The five categories of integration in EB-IOM, in Lieberknecht, L.M. (2020) *Ecosystem-Based Integrated Ocean Management: A Framework for Sustainable Ocean Economy Development*. A report for WWF-Norway by GRID-Arendal.³⁶

All this led to a situation characterized by a great variety of conceptions of what the ecosystem approach principles and conceptual frameworks entail, in both the literature and public policies (Long *et al.* 2015). Yet, in

³⁰ Defra, *Securing a healthy natural environment: An action plan for embedding an ecosystems approach*, London: Crown copyright, 2007, <https://ecosystemsknowledge.net/sites/default/files/wp-content/uploads/Defra%20eco-actionplan.pdf>

³¹ UNEP, *Taking Steps toward Marine and Coastal Ecosystem-Based Management - An Introductory Guide*, UNEP Regional Seas Reports and Studies No. 189., Nairobi: UNEP, 2011, https://www.researchgate.net/publication/259080098_Taking_Steps_Towards_Marine_and_Coastal_Ecosystem-based_Management_-_An_Introductory_Guide_UNEP_2011

³² UNEP GPA (United Nations Environment Programme Global Programme of Action), *Ecosystem-based management: Markers for assessing progress*, 2006, <https://www.unep.org/resources/report/ecosystems-based-management-markers-assessing-progress>

³³ Gjerde, K. and Wright, G., *Towards Ecosystem-based Management of the Global Ocean: Strengthening Regional Cooperation through a New Agreement for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction*, STRONG High Seas Project, 2019, https://www.iucn.org/sites/dev/files/content/documents/strong_high_seas_ecosystem-based_management_draft_policy_brief.pdf

³⁴ Lieberknecht, L.M., 2020, op.cit.

³⁵ Waylen, K.A., Hastings, E.J., Banks, E.A., Holstead, K.L., Irvine, R.J. and Blackstock, K.L., *The need to disentangle key concepts from ecosystem approach jargon*. *Conservation Biology*, 28(5), pp. 1215–1224, 2014, <https://onlinelibrary.wiley.com/doi/10.1111/cobi.12331>

³⁶ The report is available online here: https://gridarendal-website-live.s3.amazonaws.com/production/documents/s_document/531/original/Ecosystem-Based_Integrated_Ocean_Management_EN_web.pdf?1587588391

spite of the lack of a common unifying framework, it is safe to say that the EBA is now well acknowledged and widely applied across many policies.

2.2. At the crossroads of EB management and maritime spatial planning: EB MSP

At the crossroads of the emergence of both the EBA and integrated maritime policies, the concept of Ecosystem-Based Maritime Spatial Planning (EB MSP) emerged in the late 2000's. The connection between those two elements flowed quite naturally. As recalled by Lieberknecht, the “MSP concept originated essentially as a call to embed systematic MPA networks in wider spatial measures that simultaneously pursue environmental, social and economic objectives. Most MSP literature is therefore rooted in the ecosystem approach, with many MSP frameworks resembling generic EBM frameworks that all emphasize the need for an integrated, adaptive, multisectoral, and strategic approach that involves stakeholders and delivers social and economic benefits within ecosystem boundaries”.³⁷

It is worth noting for instance that the first IOC-UNESCO guide on MSP, published in 2008 and mentioned above, actually already focused on the ecosystem-based approach. In 2010, the Convention on Biological Diversity also recognized the role of MSP in delivering on the EBA and “for better integration of conservation objectives in marine and other sectoral development programmes, and in overall plans for economic development”.³⁸

EB MSP and how to apply it has also been continuously explored in the literature, by scholars such as Douvere³⁹, Gilliland and Laffoley in 2008⁴⁰, Ehler and Douvere in 2009⁴¹, Foley in 2010⁴², Katsanevakis in 2011⁴³, Link and Browman in 2014⁴⁴, Long in 2015⁴⁵, Gelcich in 2018⁴⁶, Carr in 2019⁴⁷, Steenbeek in 2020⁴⁸, and Walsh 2021.⁴⁹

Following, EB MSP was quickly adopted by a wide range of public institutions at various levels of governance. The growing grey literature resulted in multiple guides being consequently produced for practitioners and

³⁷ Lieberknecht, L.M., 2020, op.cit.

³⁸ Convention on Biological Diversity. Decision X/29. Marine and coastal biodiversity, 2010, <https://www.cbd.int/decision/cop/default.shtml?id=12295>

³⁹ Douvere, F., The importance of marine spatial planning in advancing ecosystem-based sea use management, *Marine Policy*, 32(5), pp.762-771, 2008, <https://www.sciencedirect.com/science/article/abs/pii/S0308597X0800064X>

⁴⁰ Gilliland, P.M. and Laffoley, D., Key elements and steps in the process of developing ecosystem based marine spatial planning, *Marine Policy*, 32(5), pp.787-796, 2008, <https://www.sciencedirect.com/science/article/abs/pii/S0308597X08000675>

⁴¹ Ehler, C. and Douvere, F., 2009, op.cit.

⁴² Foley, M.M., Halpern, B.S., Micheli, F., Armsby, M.H., Caldwell, M.R., Crain, C.M., Prahler, E., Rohr, N., Sivas, D., Beck, M.W. and Carr, M.H., Guiding ecological principles for marine spatial planning, *Marine Policy*, 34(5), pp.955-966, 2010, https://www.oceansciencetrust.org/wp-content/uploads/2015/04/MSP_Eco_Principles.pdf

⁴³ Katsanevakis, S., Stelzenmüller, V., South, A., Sørensen, T.K., Jones, P.J., Kerr, S., Badalamenti, F., Anagnostou, C., Breen, P., Chust, G. and D'Anna, G., Ecosystem-based marine spatial management: review of concepts, policies, tools, and critical issues, *Ocean & Coastal Management*, 54(11), pp.807-820, 2011,

⁴⁴ Link, J.S., Browman, H.I., Integrating what? Levels of marine ecosystem-based assessment and management, *ICES Journal of Marine Science* 71(5), 1170–1173, 2014, <https://academic.oup.com/icesjms/article/71/5/1170/647527>

⁴⁵ Long, R.D., Charles, A. and Stephenson, R.L., Key principles of marine ecosystem-based management, *Marine Policy*, 57, pp.53-60, 2015, https://www.researchgate.net/publication/274737141_Key_principles_of_marine_ecosystem-based_management

⁴⁶ Gelcich, S., Assessing the implementation of marine ecosystem based management into national policies: Insights from agenda setting and policy responses, *Marine Policy*, 2018, <http://www.eula.cl/musels/wp-content/uploads/2019/04/gelcich2018.pdf>

⁴⁷ Carr L.M., Marine Spatial Planning in a Climate of Uncertainty – An Irish Perspective, *Irish Geography* Vol. 52, No. 1 May 2019, https://tethys.pnnl.gov/Assessing_the_implementation_of_marine_ecosystem_based_management_into_national_policies_Insights_from_agenda_setting_and_policov/sites/default/files/publications/Carr2019.pdf

⁴⁸ Steenbeek, J., G. Romagnoni, J. W. Bentley, J. J. Heymans, N. Serpetti, M. Gonçalves, C. Santos, H. Warmelink, I. Mayer, X. Keijser, R. Fairgrieve, and L. Abspoel, Combining ecosystem modeling with serious gaming in support of transboundary maritime spatial planning, *Ecology and Society* 25(2):21, 2020, <https://www.ecologyandsociety.org/vol25/iss2/art21/>

⁴⁹ Walsh, C., 2021, op. cit.

relevant authorities, from bodies such as the United Nations⁵⁰, the OECD⁵¹, but also Regional Seas Conventions such as The Baltic Marine Environment Protection Commission – also known as the Helsinki Commission (HELCOM)⁵² and stakeholders such as the WWF.⁵⁴ In the EU, a key step was reached in 2014, when the Maritime Spatial Planning Directive enshrined the EBA as one of the main goals for European Maritime Spatial Plans.⁵⁵

EB MSP is now a mature concept, widely recognised, well proven and promoted across marine and maritime policies. Henceforth, enough expertise and experience on EB MSP have also been accumulated for specific expectations to be expressed by those stakeholders closely involved in spatial ocean management.

⁵⁰ Ehler, C. and Douvère, F., 2009, op.cit.

⁵¹ Jay, S., *Marine Spatial Planning Assessing net benefits and improving effectiveness*, OECD, Issue Paper, 2017, https://www.oecd.org/greengrowth/GGSD_2017_Issue%20Paper_Marine%20Spatial%20Planning.pdf

⁵² Helcom, Maritime Spatial Planning, <https://helcom.fi/action-areas/maritime-spatial-planning/>

⁵³ Helcom, *Guideline for the implementation of ecosystem-based approach in Maritime Spatial Planning (MSP) in the Baltic Sea area*, 2016, https://helcom.fi/media/documents/Guideline-for-the-implementation-of-ecosystem-based-approach-in-MSP-in-the-Baltic-Sea-area_June-2016.pdf

⁵⁴ To learn more about EB MSP, please also see: WWF, *Delivering ecosystem-based marine spatial planning in practice: An assessment of the integration of the ecosystem approach into UK and Ireland Marine Spatial Plans*, Pp. 1-132, 2017, https://www.wwf.org.uk/sites/default/files/2017-12/Final%20Report_WWF_Ecosystem-based%20approach%20in%20MSP%20%28002%29.pdf

⁵⁵ Directive 2014/89/EU of The European Parliament and of the Council of 23 July 2014 establishing a framework for Maritime Spatial Planning, Article 5, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0089>

3. THE EU MSP POLICY FRAMEWORK

3.1. Background

In the European Union, the Maritime Spatial Planning Directive (MSPD, 2014/89/EU)⁵⁶ sets up the general marine spatial planning framework since 2014. While the directive provides general goals and requirements as well as a policy timeline, Member States however remain competent for designing and implementing their own marine spatial plans.⁵⁷

The directive builds on the Recommendation 2002/413/EC on Integrated Coastal Zone Management⁵⁸ from the Council and the European Parliament, on the Protocol to the Barcelona Convention on Integrated Coastal Zone Management, which was ratified by the EU in 2010⁵⁹, as well as on the 2011 Integrated Maritime Policy⁶⁰ and its environmental pillar as set up by the 2008 Maritime Framework Strategy Directive (MSFD).⁶¹

The management of marine space is complex. Member States must overcome the difficulties inherent in the interrelated issues specific to the marine world, which have grown as marine ecosystems have kept on declining simultaneously as the Blue Economy was developing. As the directive puts it, “*the high and rapidly increasing demand for maritime space for different purposes, [...] as well as the multiple pressures on coastal resources, require an integrated planning and management approach*”.⁶²

In order to frame the ongoing maritime revolution, the MSPD requires a paradigm shift, which implies a major change in public policy for all member states and thereby specifies a large number of objectives and requirements to do so. In fact, it is the first time in history that the sea is to be managed by States through a spatial, holistic and cross-border vision.

As a public policy, the MSP process interacts with a wide range of international, European and national ocean management legislations and agreements already in place, with a view to make sure they are consistently articulated through a legally binding document, the maritime spatial plan. The interlinkage of the MSPD with other EU legislations is therefore especially important to acknowledge.

⁵⁶ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0089>

⁵⁷ For additional background about the EU's MSP policy, see https://ec.europa.eu/environment/iczm/index_en.htm

⁵⁸ Council, European Parliament, Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32002H0413>

⁵⁹ Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, Protocol on Integrated Coastal Zone Management in the Mediterranean, 2009, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22009A0204\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22009A0204(01)&from=EN)

⁶⁰ Regulation (EU) No 1255/2011 of the European Parliament and of the Council of 30 November 2011 establishing a Programme to support the further development of an Integrated Maritime Policy, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32008L0056>

⁶¹ 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, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32008L0056>

⁶² Maritime Spatial Planning Directive (MSPD), Recital 1.

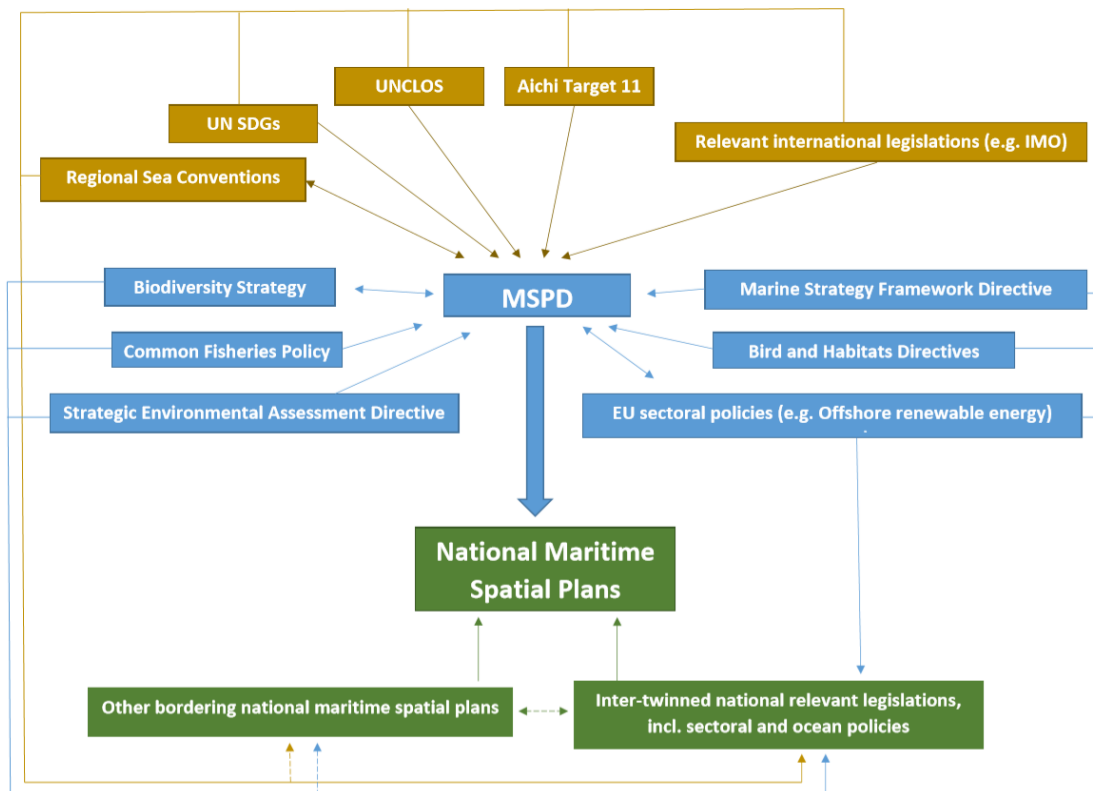


Figure 4 - A schematic view of the MSPD multi-level policy interconnections, WWF, 2021

Arguably, the application of the Directive is not an easy task, with cross-sectoral, cross-region, cross-regulation engagements as well as multi-level and public/private governance. Yet, MSP remains an opportunity to design a sustainable future at sea and deserves special efforts from all decision-makers as well as stakeholders in the sea. To do so, the Directive sets up a list of core goals and requirements, which are below explored.

3.2. A journey through the European Maritime Spatial Planning Directive

The Maritime Spatial Planning Directive (MSPD, 2014/89/EU)⁶³ contains the conditions and means to support public policy at the level of the maritime basins. It defines Maritime Spatial Planning as “a process by which the relevant Member State’s authorities analyse and organise human activities in marine areas to achieve ecological, economic and social objectives”.⁶⁴

As a guiding framework, the MSPD introduces broad goals and thematic requirements for national maritime spatial plans. The five broad goals introduced are to:

1. Consider **economic, social and environmental aspects** to support sustainable development and growth in the maritime sector (article 5)
2. Apply an **ecosystem- based approach** (article 5)
3. Promote the **coexistence** of relevant activities and uses (article 5)

⁶³ Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0089>

⁶⁴ MSPD, Article 3.

4. Contribute to the **sustainable development** of energy sectors at sea, of maritime transport, and of the fisheries and aquaculture sectors and pursue other objectives such as the promotion of sustainable tourism and the sustainable extraction of raw materials (article 5)
5. Contribute to the **preservation, protection and improvement of the environment**, including **resilience** to climate change impacts (article 5)

Further, Article 6 of the directive also sets up 8 **thematic minimum requirements** for Member States when drafting the maritime spatial plans, some of them are further developed in subsequent articles:

1. Take into account **land-sea interaction** (article 7);
2. Take into account **environmental, economic and social aspects**, as well as **safety aspects**;
3. Promote **coherence** between maritime spatial planning and the resulting plan or plans and other processes, such as integrated coastal management or equivalent formal or informal practices;
4. Identify the **spatial and temporal distribution of relevant existing and future activities** and uses in their marine waters (article 8);
5. Ensure the **involvement of stakeholders**, through the establishment of means of **public participation** (article 9);
6. Organise the **use and sharing of the best available data** (article 10);
7. Ensure **trans-boundary cooperation between Member States** (article 11);
8. Promote **cooperation with third countries** (article 12).

In addition to two last obligations related to implementation:

9. Designate the **authorities competent** for the implementation of the directive (article 13)
10. **Share the maritime spatial plans** with the Commission and concerned Member States for monitoring and reporting purposes (article 14)

Much of the goals and requirements refer to common fundamental concepts as well-known tools to support Member States in covering the complexity of ocean management: the ecosystem-based approach (EBA), Environmental Impact Assessment (EIA), the Strategic Environmental Assessment (SEA), cross-border cooperation, data collection or public participation.

For the sake of clarity, it is possible to refine the directive's goals and requirements into **thematic provisions**, either to split thematic issues gathered in common articles, or to gather articles coping with similar purposes but spread across several articles.

The requirements to take into account environmental, economic and social aspects, as well as safety aspects can be split out into four distinct goals for the sake of clarity. Besides, some of the goals and requirements mirror or complement each other and can therefore be associated, while others constitute stand-alone indications. The goal of a "promotion of the coexistence of relevant activities and uses" can be associated with the requirement to "identify the spatial and temporal distribution of relevant existing and future activities and uses". Likewise, the goals to "Take into account environmental aspects" and "Contribute to the preservation, protection and improvement of the environment, including resilience to climate change impacts"; "Take into account economic aspects" and "Support sustainable development and growth in the maritime sector"; "Ensure trans-boundary cooperation between Member States" and "Promote cooperation with third countries" can be associated.

Overall, the final list of **thematic provisions** that can be extracted from the MSPD is as follows:

1. **Land sea interactions** (article 7);
2. **Ecosystem-based approach** (article 5);
3. **Thriving Nature** (Take into account environmental aspects - article 6 - & Contribute to the preservation, protection and improvement of the environment, including resilience to climate change impacts -article 5-);
4. **Sustainable Blue Economy** (Take into account economic aspects -article 6 -, Support sustainable development and growth in the maritime sector - article 5 -, Contribute to the sustainable development of energy sectors at sea, of maritime transport, and of the fisheries and aquaculture sectors and pursue other objectives such as the promotion of sustainable tourism and the sustainable extraction of raw materials - article 5);
5. **Social aspects** (article 6);
6. **Safety aspects** (article 6);
7. **Policy coherence** (article 6);
8. **Coexistence and distribution** (Promote the coexistence of relevant activities and uses - article 5 -, identify the spatial and temporal distribution of relevant existing and future activities and uses in their marine waters - article 8-);
9. **Public participation** (article 9);
10. **Data & knowledge** (article 10);
11. **Cross-border cooperation** (article 1(2), Ensure trans-boundary cooperation between Member States - article 11- Promote cooperation with third countries - article 12-);
12. **Competent authorities** (article 13);
13. **Monitoring and reporting** (article 14).

This list constitutes the guidelines and the framework Member States had to build on to design their marine spatial plans. However, the directive does not delve into the practical way those goals and requirements need to be translated into the marine spatial plans. Especially, it does not impose any specific or measurable objectives, management measures, or indicators of any forms to the planning authorities. What matters here is that those broad goals and requirements must somehow be reflected in the national plans. As a matter of fact, each Member State has navigated its own journey into the MSP Directive.

3.3. The MSPD implementation: a State of play

The MSPD sets up a precise calendar when it comes to its implementation by Member States. All coastal countries are bound to send their contribution to the Commission by the 31st of March 2021. This means the initial designing phase of the EU MSP cycle spanned over more than six years, from mid-2014 to April 2021.

The below table offers a state-of-play (31 March 2021) of the plans developed in the EU to implement the 2014 MSP Directive and its requirements. Sixteen out of the 22 EU MSPD-based national marine plans have not been released by the official deadline. While some of those countries have plans in place, it is important to note that they are older than the MSPD, and therefore cannot be considered as deriving from the directive and its requirements. The release of national marine spatial plans faces high expectations from the point of view of environmental protection and sustainable blue economy. In many Member States, their drafting was longer than expected.

Country	MSP established based on the MSP Directive	Additional comment/information
Belgium	Yes	<p>The second Belgian MSP entered into force on 20 March 2020, for a period of 6 years (2020-2026). More information can be accessed at the following link:</p> <ul style="list-style-type: none"> • https://www.health.belgium.be/en/environment/seas-oceans-and-antarctica/north-sea-and-oceans/marine-spatial-plan • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/belgium/ • https://www.msp-platform.eu/countries/belgium
Bulgaria	No	<p>More information about the Bulgarian MSP can be accessed at the following links:</p> <ul style="list-style-type: none"> • http://www.ncrdhp.bg/en/maritime-spatial-plan-of-the-republic-of-bulgaria-for-the-period-2021-2035/ • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/bulgaria/ • https://www.msp-platform.eu/countries/bulgaria
Croatia	No	<p>More information about the Croatian MSP can be accessed here: https://www.msp-platform.eu/countries/croatia</p>
Cyprus	No	<p>More information about the Cypriot MSP can be accessed here:</p> <ul style="list-style-type: none"> • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/cyprus/ • https://www.msp-platform.eu/countries/cyprus
Denmark	Yes	<p>The Danish plan will be legally applicable from the moment it enters the hearing phase. The official status of the Danish plan is that it will enter public consultation for 6 months no later than March 31, thereby meeting the Directive's deadline on paper while the plan is not yet the final one.</p>
Estonia	No	<p>Two county-based pilot MSPs - for Hiiumaa and Pärnu counties - were initiated by the Government in 2012, already before MSP directive adoption. These MSPs were adopted in 2016 and 2017.</p> <p>The national MSP process - covering the sea area outside the two counties, and including EEZ - was started in 2017.</p> <p>The final draft of the Estonia MSP can be openly accessed at https://www.rahandusministeerium.ee/en/objectivesactivities/spatial-planning/maritime-spatial-planning</p> <p>The adoption of the final Estonian MSP is expected in January 2022.</p>
Finland	Yes	<p>The Finnish plan has been adopted in 2020. More information can be available here: https://www.merialuesuunnittelu.fi/en/msp-draft-2030/</p> <p>https://ym.fi/en/-/finland-s-first-maritime-spatial-plan-completed-extensive-work-will-help-to-combine-the-good-state-of-the-marine-environment-and-sustainable-growth</p>

		<p>However, it must be noted that the plan is a very strategic document which should then be guiding the more detailed regional planning and development plans of the different sectors operating at sea or having an impact on the sea.</p>
France	No	<p>France has published 4 <i>Documents Stratégiques de Façade</i>, but has not adopted the associated action plans yet, making the overall French MSP process incomplete to date. The MSP consultation process should be completed by the end of the second semester 2021. The final version will be released according to the French water management timeline, more precisely in early 2022, to align with the revised outlines of the implementation of the Water Framework Directive</p> <p>More information about the <i>Documents Stratégiques de Façade</i> can be accessed here: http://www.geolittoral.developpement-durable.gouv.fr/documents-strategiques-de-facade-metropole-r560.html</p>
Germany	No	<p>Germany has already spatial plans in place since 2009 for the EEZ of North Sea and Baltic Sea.</p> <p>Those plans are currently under revision, to take account of requirements of the MSPD as well as national legislation and increasing (maritime) developments such as offshore wind. The revision is expected to enter into force in late summer 2021.</p> <p>The new German MSPs will therefore be adopted after the 31 March's deadline.</p> <p>MSP for coastal waters (up to 12 nautical miles) is under the responsibility of federal states and part of their state development plans or programs (regional planning). These coastal areas are covered by spatial provisions for several years already and updated accordingly. More information about the German MSP process can be accessed here: https://www.bsh.de/EN/TOPICS/Offshore/Maritime_spatial_planning/National_spatial_planning/national_spatial_planning_node.html</p>
Greece	No	<p>The MSP Directive was transposed into Greek legislation in 2018. The competent authority was designated (Ministry for Environmental and Energy), some key provisions were gradually put in place regarding spatial planning system & MSP, including specifications of overall content of plans. However, the development of plans has not formally started yet, and there is no information on process and timeline available.</p>
Ireland	No	<p>More information about the Irish MSP can be accessed here:</p> <ul style="list-style-type: none"> • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/ireland/ • https://www.msp-platform.eu/countries/ireland
Italy	No	<p>No public consultation and no SEA have been conducted yet in the Italian MSP process.</p> <p>More information the Italian MSP can be accessed here:</p>

		<ul style="list-style-type: none"> • https://www.msp-platform.eu/countries/italy • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/italy/ • https://www.mit.gov.it/documentazione/pianificazione-dello-spazio-marittimo
Latvia	Yes	<p>Latvia developed its MSP between 2016 and 2018. On may 14, 2019 the plan was accepted by the government.</p> <p>More information is available here: https://www.varam.gov.lv/en/maritime-spatial-planning</p>
Lithuania	No	<p>The Comprehensive Plan of the Republic of Lithuania, which features a part dedicated to “Maritime territories” was adopted in 2015. While it is currently updated, the 2015 plan remains valid.</p> <p>More information about the Lithuanian plan can be accessed here: https://www.msp-platform.eu/countries/lithuania</p>
Malta	No	<p>The Strategic Plan for Environment and Development, which constitutes the Maltese MSP, dates back from 2015. It is therefore not deriving from the MSP directive.</p> <p>More information about the Maltese MSP is available here:</p> <ul style="list-style-type: none"> • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/malta/ • https://www.msp-platform.eu/countries/malta
Netherlands	Yes	<p>The Dutch Policy Document on the North Sea, which acts as MSP, was developed in 2016 and covers the 2016-2021 period.</p> <p>More information about the Dutch MSP can be accessed here:</p> <ul style="list-style-type: none"> • https://www.msp-platform.eu/countries/netherlands • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/netherlands/
Poland	No	<p>The regulation on the spatial development plan of Polish sea areas is planned to be released in the second quarter of 2021.</p> <p>More information about the Polish plan can be accessed here: https://www.msp-platform.eu/countries/poland</p>
Portugal	Yes	<p>The Portuguese plan was approved by the Resolution of the Council of Ministers no. 203-A / 2019. Information about the plan can be accessed here: https://www.psoem.pt/</p> <p>However, it must be noted that the MSP was approved without the Azores, which constitutes a great part of the Portuguese sea.</p>
Romania	No	<p>More information about the Romanian MSP can be accessed here:</p> <ul style="list-style-type: none"> • https://www.msp-platform.eu/countries/romania • https://www.lexology.com/library/detail.aspx?g=c4a07a29-06c9-4dfa-a673-fd39b3debad0

Slovenia	No	<p>More information about the Slovenian MSP can be accessed here:</p> <ul style="list-style-type: none"> • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/slovenia/ • https://www.msp-platform.eu/countries/slovenia
Spain	No	<p>Information about the Spanish MSP can be accessed here:</p> <ul style="list-style-type: none"> • https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/europe/spain/ • https://www.msp-platform.eu/countries/spain • https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/ordenacion-del-espacio-maritimo/ <p>On December 14, 2020, a workshop was held to present the drafts of the action plans (5 drafts in total, one per marine demarcation). March 31, 2021 is the date set for them to go out for public information. Once the feedback from the public information process will be processed, it is expected that the plans will be approved in 2021 by Royal Decree.</p>
Sweden	No	<p>More information about the Swedish plan can be accessed here:</p> <ul style="list-style-type: none"> • https://www.havochvatten.se/en/eu-and-international/marine-spatial-planning/review.html • https://www.havochvatten.se/download/18.56d79bf516b232e9db573cab/1560164109554/proposal-marine-spatial-plans-sweden-review.pdf

The designing process and preparation of the marine spatial plans illustrates how the Directive goals and requirements have been concretely interpreted and applied. It shows heterogeneous situations and outcomes. This demonstrates the values of building a common understanding of the Directive's provisions in Europe, so as to make sure its implementation remains consistent across all sea basins. This report especially focuses on one of the key principles set up by the directive, which is opened to broad interpretation and therefore requires further guidance: the ecosystem-based approach to maritime spatial planning.

4. WWF'S COMMITMENT TO EB MSP IN A EUROPEAN CONTEXT

4.1. WWF and MSP in Europe

WWF has a long history of engaging in marine policies, not only for conservation purposes, but also for supporting the sustainable development of many maritime sectors of the Blue Economy. As an environmental stakeholder involved in various ocean issues, the WWF gained experience on the implementation of EBA in public policies, on integrated ocean policies such as maritime spatial planning, and following, on EBA applied to MSP.

Since the establishment of the Maritime Spatial Planning Directive in 2014, the European WWF network has dedicated efforts to make sure the implementation of the directive by Member States remains in line with the EBA goal. The latter is not only set up by the article 5 of the MSP directive, but also by other key intertwined EU legislations such as the Marine Strategy Framework Directive.⁶⁵ To do so, WWF offices have been participating in national MSP processes, providing expertise, supporting public participation mechanisms, scrutinising decisions and arbitrations made, raising the profile of MSP in the political arena but also towards EU citizens, including through science-to-policy and communication work. At EU level, WWF has engaged with policy-makers to support an EB approach to MSP and monitored the discussion with Member States, for instance as an observer to the Member States Expert Group (MSEG) on MSP.

4.2. WWF views on EB MSP

According to the MSPD, EU Member States were given up to 31 March 2021, more than 6 years, to draft and publish their ecosystem-based marine spatial plans. As the MSP 2021 deadline approaches, many countries appear to be quite late in the drafting of their plans. It is also becoming evident that plural interpretations of the Directive's broad ecosystem approach objective were made across EU countries, putting at risk the effective implementation of this key piece of ocean legislation. To prevent any major discrepancies that would render the plans inconsistent with one another and to make sure all core components of the EBA are found in the drafts, the European WWF network, coordinated by the WWF European Policy Office, set out to provide further guidance to policy-makers and Member States MSP authorities. In February 2020, WWF EPO subsequently released a position paper entitled "[*Achieving Ecosystem-based Marine Spatial Plans*](#)".⁶⁶ Based on the legal background for MSP in the EU and expert knowledge, the position paper summarized key EB MSP principles, detailed in the following subsection.

⁶⁵ 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), Article 1, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0056>

⁶⁶ WWF, *Achieving Ecosystem-based Marine Spatial Plans*, 2020, https://wwwfeu.awsassets.panda.org/downloads/wwf_position_paper_ecosystem_based_approach_in_msp_feb2020.pdf

Box 7 - WWF's definition of EB MSP

According to the 2020 WWF position paper “*Achieving Ecosystem-based Marine Spatial Plans*”, an ecosystem-based approach in planning how we use and access our seas acknowledges that the **carrying capacity of marine ecosystems against human pressures is finite**. The approach considers the marine space as an **integrated system**, providing a variety of **uses and services** including **marine protection**. This **safeguards** important **ecological areas**, **reduces negative pressure** on the marine ecosystem as a whole and ensures that there is **space for nature** in the maritime spatial plans. The paper also recalled that, by nature, **EB MSP** is a **transversal goal**.

For the sake of clarity, key WWF criteria on EB MSP were structured based on the following macro-principles: conservation measures, transparency and governance, and monitoring, enforceability and funding. They are further detailed in the below paragraphs.

Conservation measures

Ecosystem-based MSP must be supported **across all maritime sectors** (e.g. fishing, tourism, infrastructure development, shipping, offshore renewable energy and aquaculture) and be complemented by **integrated coastal zone management** and **area-based conservation management** measures such as **Marine Protected Areas (MPAs)**. It should also ensure that the **mitigation hierarchy** is applied to current and future development that might compromise the ability of those sites to achieve their conservation objectives. The EBA approach must be based on the **best available science or knowledge if science is lacking**, which should provide **data and assessments** of the functionality of natural processes, ecosystem services and cumulative effects of human pressures. This shall allow for a **spatio-temporal analysis** and protection of species and habitats sensitivity on the **long run and consider climate change**. According to the EBA approach, management measures implemented through the MSP must follow **ecosystem boundaries** and where needed **transcend national borders**. The ecosystem-based MSP process needs to apply the **precautionary principle**. **Robust environmental and strategic impact assessments** must be required for all development projects at sea, and they must cover the entire lifespan of the development.

Conservation measures
Based on and use the best available science or knowledge if science missing
Is based on data and assessments of the functionality of natural processes, ecosystem services and cumulative effects of human pressures
Is based on spatio-temporal analysis and protection of species and habitats sensitivity in the long run and consider climate change
Follows ecosystem boundaries and where needed transcends national borders
Complemented by Integrated Coastal Management
Features area-based conservation management such as MPAs
Applies the mitigation hierarchy
Applies the precautionary principle
Uses Strategic and Environmental Impact Assessments

Transparency and governance

Ecosystem-based MSP should integrate **political** considerations, **social** values, **local** livelihoods, and **public** attitudes through community and multi-stakeholder **participation**. **Social and economic impacts** of the management of the sea need to be transparently reflected in **management goals and objectives**. It should also increase **synergies** between sectors while providing a coherent approach to regional seas, especially through cross-border cooperation. To facilitate the adoption of the plans as well as the resolution of conflicts, the MSP should be **transparent**. MSP objectives need to be **measurable**, sector-wide and associated with a **clear timeframe and a clear direction**.

Transparency and governance
Based on SMART objectives associated with management measures and indicators to allow for proactive, iterative, and adaptive management
Adopts a long-term perspective
Cross-border cooperation
Integrated across sectors
Integrates political considerations, social values, local livelihoods, and public attitudes
Reflects social and economic impacts
Ensures community, multi-stakeholder and public participation
Transparent

Monitoring, enforceability and funding

Ecosystem-based MSP needs to **secure and use reliable long-term data** of environmental descriptors and human activities. MSP must remain a **proactive and iterative process** and requires continued **monitoring and adaptation**. Ecosystem-based MSP needs to be **regulatory and enforceable**. At minimum, marine spatial plans must be binding for public authorities' decision making on maritime uses and should be **integrated** into the sectoral planning schemes (e.g. MPAs, fisheries, shipping). Sustainable, independent and continued **financing** must be secured to provide objective, immediate and future marine monitoring, protection, enforcement, preservation, restoration etc. Investments facilitated through the MSP process should also follow the principles of **the Sustainable Blue Economy⁶⁷ and finance**.

Monitoring, enforceability and funding
Sets up harmonised monitoring means
Regulatory and enforceable
Follows the principles of the sustainable blue economy and finance

⁶⁷ WWF, *Principles for a Sustainable Blue Economy*, 2018,
http://awsassets.panda.org/downloads/wwf_marine_briefing_principles_blue_economy.pdf

4.3. Towards a WWF EB assessment of the MSPD implementation

The 2020 position paper “*Achieving Ecosystem-based Marine Spatial Plans*” highlighted WWF’s interpretation and understanding of EB MSP. It established key guiding EBA principles and criteria with a view to support the drafting of national plans, which are to be completed by 31 March 2021 as legally requested by the MSPD.

A full review of the marine spatial plans’ conformity with regards to the MSPD objectives would require their full practical implementation. Therefore, it will only be possible in several years from now. It is worth recalling that the 31 March 2021 deadline set up by the directive only corresponds to the end of the MSP designing phase for EU Member States. Yet, a preliminary assessment of the plans provides an opportunity to gauge their general direction, and whether the outcomes of their drafting phase makes it likely for them to deliver on key EBA objectives.

Actually, the MSPD itself calls on the European Commission “*to submit to the European Parliament and to the Council, at the latest one year after the deadline for establishment of the maritime spatial plans [...] a report outlining the progress made in implementing this Directive*”.⁶⁸ This means the Commission will have to review the plans right after they’re published, from April 2021 to April 2022. This also means that the European Parliament the Council will need to be prepared to review the Commission’s report. Based on the WWF interpretation of the MSPD, the elements deemed to be relevant for an evaluation at this stage of the European MSP cycle will be described in the following section.

The below section offers an analysis of the MSPD through the lens of its transversal EBA goal, based on the WWF EB MSP principles and criteria identified in the 2020 position paper “*Achieving Ecosystem-based Marine Spatial Plans*”. In short, it aspires to explore the various ways through which the ecosystem-based approach should be practically implemented in the plans on the basis of, and through, the legally binding goals and requirements set up by the directive. The EB MSP indicators thereby identified will help evaluate the plans established by EU Member States to meet the 31 March 2021 deadline established by the MSP Directive, with a view to identify best practices and common gaps in European MSPs and improve the next EU MSP cycle.

⁶⁸ MSPD, Article 14.2.

5. INTERPRETING THE MARITIME SPATIAL PLANNING DIRECTIVE THROUGH THE LENS OF ITS ECOSYSTEM-BASED APPROACH GOAL

5.1. Applying the ecosystem-based approach: a key MSPD objective

First, it is worth recalling that the EBA is recognised as one of the key goals set up by the MSPD: “*When establishing and implementing maritime spatial planning, Member States shall [... apply] an ecosystem- based approach*”⁶⁹ as defined by the Marine Strategy Framework Directive. It explains, “*the application of an ecosystem-based approach will contribute to promoting the sustainable development and growth of the maritime and coastal economies and the sustainable use of marine and coastal resources*”.⁷⁰

The directive especially states that the EBA should be used to support the implementation of the Maritime Strategy Framework Directive (2008/56/EC), and should therefore “*be used with the aim of ensuring that the collective pressure of all activities is kept within levels compatible with the achievement of good environmental status (GES) and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while contributing to the sustainable use of marine goods and services by present and future generations*”.⁷¹ According to the directive, this should also lead to action “*adapted to the specific ecosystems and other specificities of the different marine regions*”, as well as adaptive management and the application of the precautionary principle.⁷²

Box 8 – Adaptive management and MSP

Adaptive management is to be implemented over time, once the plans have been implemented. However it requires clear and measurable objectives to be clearly spelled out in the plan from the offset⁷³, that is, during the design phase.⁷⁴ These objectives must be associated with management measures and indicators. In fact, “the lack of clear, measurable objectives results in the inability to monitor and review the outcomes of MSPs systematically and prevents the understanding whether the MSP is actually successful or not”.⁷⁵ Accordingly, “objectives should have a number of characteristics, including: specific, measurable, achievable, relevant, time-bound” (SMART).⁷⁶

⁶⁹ MSPD, Article 5.

⁷⁰ MSPD, Recital 3.

⁷¹ MSPD, Recital 14.

⁷² MSPD, Recital 14.

⁷³ Ehler, Charles., and Fanny Douvere., The importance of monitoring and evaluation in adaptive maritime spatial Planning, *Journal of Coastal Conservation*, 2011.

⁷⁴ Jay, Stephen., 2017, op. cit.

⁷⁵ Ehler, Charles., and Fanny Douvere., 2011, op. cit.

⁷⁶ Ibid.

5.2. A cross-over objective: EB MSP throughout the Directive

Key principles and criteria required to deliver on an ecosystem-based approach to MSP have been put forward in the 2020 WWF position paper “*Achieving Ecosystem-based Marine Spatial Plans*”. The paper introduces specific conservation, transparency and governance, and monitoring, enforceability and funding measures that should be found in all EBA marine spatial plans. Those are detailed in the previous section.

Analysing the MSPD’s content through the lens of the WWF EB MSP principles shows that many of the directive’s provisions contribute to achieving an ecosystem-based approach to MSP. That is further explored in the below table, which associates each of the key WWF EB MSP principles with the relevant thematic provisions set up by the directive.

This demonstrates that, while applying the ecosystem-based approach constitutes a goal on its own within the MSPD, such an objective is actually deeply intertwined with many other thematic provisions legally enshrined in the directive. This means that those provisions also constitute key pieces to deliver on an EB approach to MSP in line with the directive. As a consequence, those intertwined MSPD provisions must be factored into any assessment of the MSPD implementation from an EBA perspective.

WWF EB MSP Principles	Associated MSPD provisions
Conservation measures	
Based on and use the best available science or knowledge	- Data & knowledge (article 10)
Is based on data and assessments of the functionality of natural processes, ecosystem services and cumulative effects of human pressures	- Land sea interaction (articles 1(2), 7) - Thriving Nature (articles 5 &6) - Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Data & knowledge (article 10)
Is based on spatio-temporal analysis and protection of species and habitats sensitivity in the long run and considers climate change impacts	- Thriving Nature (articles 5 &6) - Data & knowledge (article 10)
Follows ecosystem boundaries and where needed transcends national borders	- Thriving Nature (articles 5 &6) - Policy coherence (article 6) - Data & knowledge (article 10) - Cross-border cooperation (article 11 & 12)
Complemented by Integrated Coastal Management	- Policy coherence (article 6) - Land-sea interaction (articles 1(2), 7) - Coexistence and distribution (articles 5&8)
Features area-based conservation management such as MPAs	- Thriving Nature (articles 5 &6) - Policy coherence (article 6) - Coexistence and distribution (articles 5&8)

	- Data & knowledge (article 10)
Applies the mitigation hierarchy	- Thriving Nature (articles 5 &6) - Policy coherence (article 6)
Applies the precautionary principle	- Thriving Nature (articles 5 &6) - Policy coherence (article 6) (- Recital 14)
Use Strategic and Environmental Impact Assessments	- Thriving Nature (articles 5 &6) - Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Policy coherence (article 6) - Data & knowledge (article 10)
Transparency and governance	
Based on SMART objectives associated with management measures and indicators to allow for proactive, iterative, and adaptive management	- Thriving Nature (articles 5 &6) - Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Policy coherence (article 6) (- MSP definition (Article 3))
Adopts a long-term perspective	- Thriving Nature (articles 5 &6) - Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Policy coherence (article 6) - Coexistence and distribution (articles 5&8)
Ensures cross-border cooperation	- Policy coherence (article 6) - Coexistence and distribution (articles 5&8) - Cross-border cooperation (articles 1(2), 11 & 12)
Integrates across sectors	- Sustainable Blue Economy (articles 5 &6) - Policy coherence (article 6) - Coexistence and distribution (articles 5&8) - Cross-border cooperation (article 11 & 12) - Competent authorities (article 13) - Land sea interaction (articles 1(2), 7)
Integrates political considerations, social values, local livelihoods, and public attitudes	- Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Coexistence and distribution (articles 5&8)

	- Public participation (article 9)
Reflects social and economic impacts	- Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Coexistence and distribution (articles 5&8) - Public participation (article 9)
Ensures community, multi-stakeholder and public participation	- Social aspects (article 6) - Coexistence and distribution (articles 5&8) - Public participation (article 9)
Transparent	- Social aspects (article 6) - Coexistence and distribution (articles 5&8) - Public participation (article 9) - Competent authorities (article 13)
Monitoring, enforceability and funding	
Sets up harmonised monitoring means	- Data & knowledge (article 10) - Cross-border cooperation (article 11 & 12) - Competent authorities (article 13)
Regulatory and enforceable	- Competent authorities (article 13)
Follows the principles of the sustainable blue economy and finance	- Sustainable Blue Economy (articles 5 &6) - Social aspects (article 6) - Policy coherence (article 6) - Coexistence and distribution (articles 5&8) - Public participation (article 9)

Based on the above table, the following list of MSPD thematic provisions have been identified as participating in achieving EB MSP:

- Data & knowledge (article 10)
- Land sea interaction (articles 1(2), 7)
- Thriving Nature (articles 5 &6)
- Sustainable Blue Economy (articles 5 &6)
- Social aspects (article 6)
- Policy coherence (article 6)
- Cross-border cooperation (articles 1(2), 11 & 12)
- Coexistence and distribution (articles 5&8)
- Competent authorities (article 13)
- Public participation (article 9)

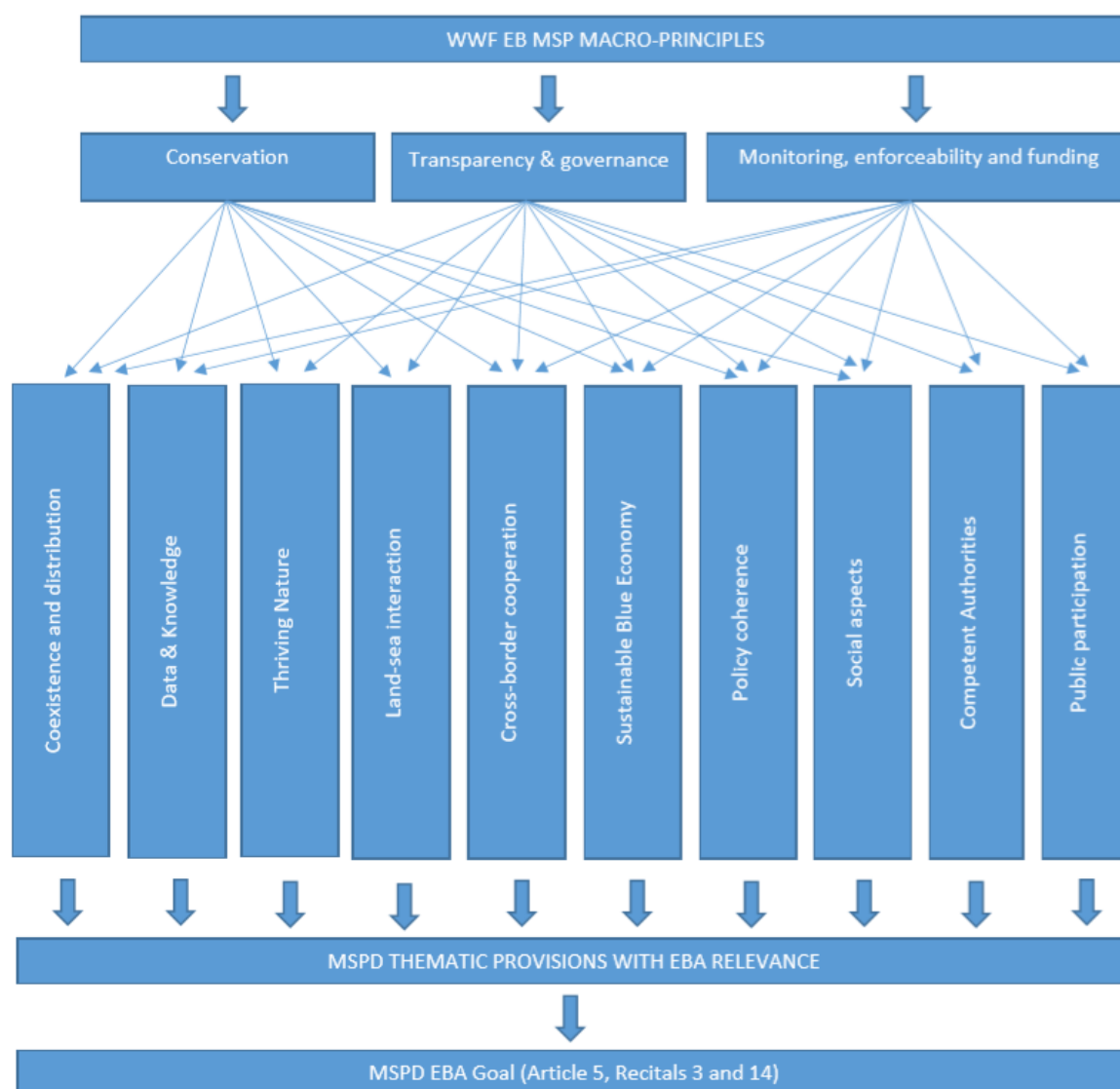


Figure 5 - Deriving MSPD Thematic provisions with EBA relevance from the WWF EB MSP Macro-principles, WWF, 2021

5.3. Exploring the MSPD provisions with EBA relevance

The 2020 WWF position paper “Achieving Ecosystem-based Marine Spatial Plans” set up key EB MSP principles. Member States had to draft EBA marine spatial plans based on the MSPD legal provisions. The above analysis looked at the MSPD through the lens of WWF EB MSP principles to identify those MSPD provisions needed to deliver on EBA. It showed that the MSPD EBA goal is intertwined with many other goals and requirements set up by the directive. Delivering on the MSPD EBA goal therefore relies on achieving those MSPD EBA-related provisions.

At this point, it is worth trying to develop further those intertwined goals and requirements, with a view to show why their implementation matters, and what they are expected to deliver from an EBA perspective. For the sake of clarity and structure, those specific provisions are associated with one of the WWF EB MSP principles macro-indicators: conservation, transparency & governance, and monitoring, enforceability and funding.

This study especially focuses on an assessment of the designing phase of the national marine spatial plans. It focuses not only on the actual planning procedures and on processes, but takes into account the content and the qualitative dimension of the plans, including in terms ecosystem functions, protected areas and nature

conservation issues. Therefore, it is equally important to identify specifically what can be expected from planning authorities for those provisions at this stage of the MSP cycle. In short, this boils down to answering the following question: *What does it mean to deliver successfully on the EBA-related MSPD provisions while designing maritime spatial plans?*

Land sea interaction (article 7)

What the directive says about land-sea interaction

As the MSP directive puts it, “*marine and coastal activities are often closely interrelated*”.⁷⁷ On the one hand, activities at land can deeply impact the marine environment. A well-known example is that of the impacts of nutrient runoff in sea basins due to some land activities such as agriculture. On the other hand, activities at sea can also affect the coastal environment. Developing a new shipping lane could result in additional port infrastructures, while building offshore renewable energy projects will often come up with sea-land grid connectors.

That is why the directive says “*maritime spatial planning should aim to integrate the maritime dimension of some coastal uses or activities and their impacts*”.⁷⁸ This must be articulated with other relevant formal or informal processes, such as integrated coastal zone management.

Delivering on land-sea interaction at a design stage

During the design phase, taking into account the land-sea interaction requires that the **relevant coastal uses and activities have been identified** and their effects on the marine environment **analyzed**. In turn, **measures** to address those effects must be proposed through the marine spatial plan. The MSP process also requires the **identification and consistent articulation with other relevant policies** such as **integrated coastal management**.⁷⁹⁸⁰⁸¹

Land sea interaction – Planning phase deliverables	Macro-principle
Identification and analysis of land sea interactions: the relevant coastal uses and activities have been identified and their effects on the marine environment analyzed	Conservation
Integration of the maritime dimension of some coastal uses or activities and their impacts in the plans: measures have been proposed to address those effects through the marine spatial plans	Governance
Identification and consistent articulation with other relevant policies such integrated coastal zone management or the Water Framework Directive-related legislations	Governance

⁷⁷ MSPD, Recital 16.

⁷⁸ MSPD, Recital 16.

⁷⁹ To learn more about Integrated Ocean Management see for example Winther, J-G., M. Dai, et al., *Integrated Ocean Management*. Washington, DC: World Resources Institute, 2020, www.oceanpanel.org/blue-papers/integrated-ocean-management

⁸⁰ The [Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe](#) laid down the basis of a European approach to ICM, and was later complemented by the [2009 Protocol on Integrated Coastal Zone Management in the Mediterranean](#) from the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, before the Maritime Spatial Planning Directive was published in 2014.

⁸¹ See also S. Kidd et al., Taking Account of Land-Sea Interactions in Marine Spatial Planning: past, present, future, in J. Zaucha, K. Gee (eds.), *Maritime Spatial Planning*, 2019, https://www.researchgate.net/publication/330610998_Taking_Account_of_Land-Sea_Interactions_in_Marine_Spatial_Planning_past_present_future

What the directive says about environment aspects and preservation, protection and improvement

The MSPD acknowledges that the various pressures affecting the marine environment should be factored in marine spatial plans⁸², namely with a view to achieve GES.⁸³ Likewise, it encourages ecosystem services to feed in the MSP process.⁸⁴ Referring back to the **Strategic Environmental Assessment (SEA)** Directive (2001/42/EC), the MSPD casts the light on *“the environmental assessment as an important tool for integrating environmental considerations into the preparation and adoption of plans and programmes”*.⁸⁵ It especially recalls that maritime spatial plans likely to have significant effects on the environment must be subject to SEA. Spatial plans are required to be appropriately assessed by virtue of article 6 (3) of the Habitats Directive.⁸⁶ The directive also says that the precautionary Principle should be applied to the maritime spatial plans with reference to Article 191(2) of the Treaty on the Functioning of the European Union⁸⁷, which explains that *“Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay”*.⁸⁸ Further, the directive directly refers to the need for MSP to be aligned with the timeline and objectives of the Maritime Strategy Framework Directive (2008/56/EC), especially to reach Good Environmental Status of all EU waters by 2020.⁸⁹ It also explains that *“healthy marine ecosystems and their multiple services, if integrated in planning decisions, can deliver substantial benefits”*⁹⁰ and that marine services should be preserved by present and future generations.⁹¹ The role of MSP in tackling climate change is also clearly stated in the directive. The directive mentions that *“Member States need at least to ensure that the planning process or processes result in a comprehensive planning [...] taking into consideration long-term changes due to climate change”*⁹² and that *“through their maritime spatial plans, Member States shall aim to contribute to [...] resilience to climate change impacts”*.⁹³

The directive explains, *“‘maritime spatial planning’ means a process by which the relevant Member State’s authorities analyse and organise human activities in marine areas to achieve ecological [...] objectives”*.⁹⁴ In order to deliver on nature protection, the directive mentions that Member States should *“take into account environmental [...] aspects”*⁹⁵ and *“take into consideration relevant interactions of activities and uses [including] nature and species conservation sites and protected areas”*.⁹⁶

⁸² MSPD, Recital 13.

⁸³ MSPD, Recital 14.

⁸⁴ MSPD, Recital 13.

⁸⁵ MSPD, Recital 23.

⁸⁶ MSPD, Recital 23.

⁸⁷ MSPD, Recital 14.

⁸⁸ Treaty on the Functioning of the European Union, Article 191(2).

⁸⁹ MSPD, Recitals 14, 22.

⁹⁰ MSPD, Recital 13.

⁹¹ MSPD, Recital 14.

⁹² MSPD, Recital 19.

⁹³ MSPD, Article 5.2.

⁹⁴ MSPD, Article 3.2.

⁹⁵ MSPD, Article 6.2.b.

⁹⁶ MSPD, Article 8.2.

Box 9 - Marine Strategy Framework Directive and EB MSP

The Marine Strategy Framework Directive is of importance for applying ecosystem based spatial measures and is thus relevant for MSPs. There are a number of other directives also where the MSFD is relevant such as the Habitats and Birds Directive, Renewable Energy Directive and the Water Framework Directive. It is also central to coastal zone management and plays an important role in the analysis of spatial aspects for MSP.

The MSFD itself states that each Member State should therefore develop a marine strategy that would culminate in the execution of programmes of measures designed to achieve or maintain good environmental status. In this context it is important that there is alignment between MSPs and the environmental provisions and objectives of the MSFD in achieving and maintaining Good Environment Status (GES) or Member State waters. A major component of the MSFD is putting forward spatial protection measures and the integration of conservation objectives, management measures and monitoring and assessment activities which why EB MSP is so important in meeting the GES objectives of the MSFD and the descriptors under Annex I of the MSFD that sets these out.

In practice, it is observed that the implementation of the MSFD and the MSPD are often handled by different authorities, both at EU and national level, which do not necessarily have the effective level of communication and coordination needed to ensure coherence and meaningful cooperation in the exercise of those two policies. This can result in a lack of consistency and effectiveness that could hamper the implementation of both directives. The ecosystem approach requires a steer away from isolated unilateral approaches and build policy synergies.

ANNEX I

Qualitative descriptors for determining good environmental status

(referred to in Articles 3(5), 9(1), 9(3) and 24)

- (1) Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
- (2) Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.
- (3) Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
- (4) All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.
- (5) Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters.
- (6) Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.
- (7) Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.
- (8) Concentrations of contaminants are at levels not giving rise to pollution effects.
- (9) Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.
- (10) Properties and quantities of marine litter do not cause harm to the coastal and marine environment.
- (11) Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

List of Descriptors for determining Good Environmental Status, Annex I of Marine Strategy Framework Directive

Box 10 - How to deliver effective SEAs

The EU framework: The SEA Directive

The Strategic Environmental Assessment Directive (Directive 2001/42/EC) applies in the MSP context. The SEA Directive ensures that member States integrate environmental assessment into their plans and programmes at the earliest stages, and thus help in laying down the groundwork for sustainable development. The latter is a prerequisite for defining the objectives and requirements requested by the MSPD and is part of the designing phase. Its realization constitutes a guarantee to initiate action proportional to the ecological and economic stakes at sea and must be carried out scrupulously by the member states.

Assessing effective SEA: the Baltic SCOPE checklist example

Tools have been developed to assess whether SEA can be deemed effective. For instance, the Baltic Scope Project has established a checklist of questions.⁹⁷

Baltic SCOPE Checklist Toolkit (BSCT)– SEA	
1	Will an SEA be carried out?
2	Which regulation lays the basis for the screening?
3	Which environmental aspects are relevant to assess?
4	Which descriptors from the Marine Strategy Framework Directive (MSFD) are relevant?
5	Which ecosystem services are relevant?
6	How is the SEA integrated in the MSP-process?
7	Which linkages between the planning process and the SEA are present?
8	Which are the ecologically important areas, which may be affected by MSP?
9	What is known on the coherence of the MPA network?
10	Which are the actual and potential threats on the marine ecosystems?
11	How are “reasonable” alternatives included in planning?
12	Are different planning solutions presented?
13	Is it possible to identify strategic choices in planning?
14	How is the “zero alternative” defined and used in the assessment?
15	Which are the significant environmental effects of the plan?
16	Which are the cumulative impacts?
17	Does the plan support the achievement and/ or contribute to maintaining GES and other environmental targets?
18	Which are the impacts on relevant ecosystem services?
19	Who participated in the assessment and what is their opinion on the results?
20	Have ESPOO-consultations been carried out?
21	Has feedback been given on responses from neighbouring countries?
22	How are environmental impacts minimized or prevented?
23	Are the SEA-directives requirements considered?
24	How will the environmental impacts of the plan be monitored and audited?

Baltic SCOPE checklist questions for the SEA, from WWF (2017). Delivering ecosystem-based marine spatial planning in practice: An assessment of the integration of the ecosystem approach into UK and Ireland Marine Spatial Plans.

MSP and environment aspects and protection in practice

First, the preservation, protection and improvement of the environment implies that **areas of ecological importance**, such as **MPAs**, migration corridors or climate refugia, are effectively **safeguarded** through MSP. It also implies that the **precautionary principle**, the **principle of preventive action** and the **mitigation**

⁹⁷ WWF, *Delivering ecosystem-based marine spatial planning in practice: An assessment of the integration of the ecosystem approach into UK and Ireland Marine Spatial Plans*, Pp. 1-132, 2017.

hierarchy⁹⁸ should be applied to current and future development that might compromise the ability of those sites to achieve their conservation objectives. As hardly any human maritime activity can occur without resulting in environmental impacts, **robust environmental and strategic impact assessments** must be required for all activities at sea, and they must cover the entire lifespan of development, from construction with effective mitigation of adverse effects on the ecosystem where such occur, to operation, to decommissioning.⁹⁹

The MSP process should also facilitate areas of active and passive **restoration**, namely for those habitats critical to increase ocean resilience, in the face of climate change for instance, and preserve areas with carbon capture functions. In that perspective, MSP can contribute to **climate change mitigation** and **nationally determined contribution** in terms of Paris agreement. The goal to contribute to the preservation, protection and improvement of the environment also liaises with the objectives set out in the new **Biodiversity Strategy**, especially the target to **effectively protect 30% of our ocean by 2030, with at least 10% of the ocean being strictly protected**. All these must be supported through a thorough knowledge of ecosystems, their **functionality** and of the impacts of human activities on those ecosystems, through **sensitivity mappings** and **Environmental Impact Assessments**, including those legally required for sensitive areas such as the Natura sites by the Birds and Habitats Directives. It must be noted however that looking at projects at an individual scale is not enough to ensure their sustainability. **Cumulative impacts assessments** are also vital, and must be delivered through appropriate **Strategic Environmental Assessments**. This also means that **effective management plans** should accompany the designation of marine protected areas, which must features appropriate limitations of human activities based on the area's conservation objectives. Similarly, attention must be paid to the qualitative nature of those designations, especially to assess whether they respect principles of **ecological coherence**.¹⁰⁰

Delivering on environment aspects and protection at a design stage

Whether the MSP will actually succeed in preserving, protecting and improving the environment will require implementation and proper monitoring through time. Yet, many things can be done during the design phase of the plans to contribute to this goal. The planning phase needs to be based on science and strong knowledge of the marine environment affected by the plans. The various pressures affecting the marine environment should be mapped, and baseline studies can be conducted to assess the initial state of the environment. Sensitivity mapping are for instance effective ways to support the MSP process in that regard. Likewise, robust and effective SEA must be conducted during this phase, in accordance with the SEA directive, as well as the Habitats Directive where relevant. Lastly, the spatial objectives embedded in the EU Biodiversity Strategy must also be reflected right from the design phase, while the designation of these protected areas need to be based on science and associated with conservation measures and management plans.

⁹⁸ The mitigation hierarchy prioritized steps are to avoid, reduce, and only after that, compensate. For more information, see WWF, *Discussion Paper, Mitigation hierarchies*, 2020,

https://wwfint.awsassets.panda.org/downloads/wwf_discussion_paper_mitigation_hierarchies_april_2020.pdf

⁹⁹ WWF, *Achieving Ecosystem-Based Marine Spatial Plans*, February 2020.

¹⁰⁰ To learn more, see Borg, J., Burgess, S., Milo-Dale, L., *Protecting our Ocean: Europe's challenges to meet the 2020 deadlines*, WWF, 2019, https://wwfeu.awsassets.panda.org/downloads/protecting_our_ocean.pdf

Environment protection	Macro-principle
Effective SEA, in line with the Strategic Environmental Assessment directive provisions	Conservation
Environmental impact assessments for projects falling within the MSP process, in line with the Environmental Impact Assessment directive, associated with proposal and appropriate measures to address them based on the mitigation hierarchy	Conservation
Application of the precautionary principle and the principle of preventive action	Conservation
Cumulative impact assessment of all activities at sea on the marine environment ensuring that planned activities in combination do not exceed the carrying capacity of the sea or limit achievement of Good Environmental Status	Conservation
Appropriate sensitivity mappings and reflections of sensitive areas in the drafting of the plan	Conservation
Baseline environmental studies and identification of ecosystem services and functionality	Conservation
Integration of a coherent, well-connected and representative network of marine protected areas and areas of ecological importance in the plan as well as ensuring connectivity through respective provisions outside MPAs, in line with the Biodiversity Strategy spatial targets, and associated with management plans	Conservation
Identification of areas suitable to restoration activities followed by restoration plans	Conservation
Adoption of a long term perspective and especially identification of how MSP can support adaptive conservation strategies to cater for spatial changes in ecosystems (e.g. migration of species, change of critical conditions for habitats), including the further exploration of the potential for including climate refugia in MSP and explanation about how the MSP contributes to the NECP for instance through strengthening the capacity of the ocean to store carbon	Conservation
Ensure that maritime spatial plans are in line with and support environmental provisions and objectives of relevant interconnected policies, such as Birds and Habitats directives, the MSFD, the CFP, and the Biodiversity Strategy, i.e. MSP foresees MPA network covering at least 30% of the marine area, with 10% strictly protected and proposing where needed high biodiversity areas to be added to MPA network	Conservation

Sustainable Blue Economy (SBE - articles 3, 5 &6)

What the directive says about Sustainable Blue growth and economic aspects

The MSPD promotes the “sustainable development and growth of the maritime and coastal economies and the sustainable use of marine and coastal resources”.¹⁰¹ Actually, the MSPD even states that “the main purpose of maritime spatial planning is to promote sustainable development”.¹⁰² It also says that “‘maritime spatial planning’ means a process by which the relevant Member State’s authorities analyse and organise human activities in marine areas to achieve [...] economic [...] objectives”.¹⁰³

MSP is thereby called **support initiatives** for “smart, sustainable and inclusive growth” and “deliver high levels of employment, productivity and social cohesion, including promotion of a more competitive, resource-efficient and green economy”.¹⁰⁴ The directive calls on MSP to support blue growth by **providing “greater confidence and certainty for investors”**.¹⁰⁵ This can namely be done by **managing conflicts** in sea space uses.¹⁰⁶ Equally, the “**coordination of authorization, certification and planning procedures**” through MSP is also called to contribute to the development of certain maritime sectors, such as offshore energy.¹⁰⁷ In addition, article 5 (1) and 6 (2) (b) mention “tak[ing] into account environmental, economic and social aspects”.¹⁰⁸

SBE in practice

With increasing human demands and stresses on the ocean, effective marine spatial plans, which uphold the capacity of marine ecosystems to mitigate human-induced changes to marine ecosystems and processes, are key to maintaining healthy seas that are resilient to the impacts of climate change, and which contribute to a thriving Sustainable Blue Economy.¹⁰⁹

Principles already exist that frame a sustainable blue economy and finance. They must be reflected in the maritime plans. WWF stresses that a sustainable blue economy is a marine-based economy that provides social and economic benefits for current and future generations, restores, protects and maintains the diversity, productivity, resilience, core functions, and intrinsic value of marine ecosystems, is based on clean technologies, renewable energy, and circular material flows.¹¹⁰ It is governed by public and private processes that are inclusive, well-informed, precautionary and adaptive, accountable and transparent, holistic, cross-sectoral and long term, innovative and proactive.¹¹¹ Through the “*Declaration of the Sustainable Blue Economy Finance Principles*”, the WWF, together with the European Commission, the European Investment Bank and the World Resources Institute, also set up 14 guiding principles for the Sustainable Blue Finance, including being transparent, science-led, compliant and inclusive.¹¹² Lastly, MSP should also help support sectors key to the transition towards a sustainable economic system. For instance, MSP should directly contribute to the mitigation of climate change i.e. by securing sufficient space for renewable energy development, while making this does not threaten marine ecosystems or take measures to enhance the capacity of the ocean to store carbon.

¹⁰¹ MSPD, Recital 3.

¹⁰² MSPD, Recital 19.

¹⁰³ MSPD, Article 3.2.

¹⁰⁴ MSPD, Recital 4.

¹⁰⁵ MSPD, Recital 5.

¹⁰⁶ MSPD, Recital 19.

¹⁰⁷ MSPD, Recital 22.

¹⁰⁸ MSPD, Articles 5.1 and 6.2.b.

¹⁰⁹ WWF, *Achieving ecosystem-based marine spatial planning*, 2020,

https://wwfeu.awsassets.panda.org/downloads/wwf_position_paper_ecosystem_based_approach_in_msp_feb2020.pdf

¹¹⁰ WWF, *Principles for a Sustainable Blue Economy*, Briefing, 2018,

https://wwfeu.awsassets.panda.org/downloads/wwf_marine_briefing_principles_blue_economy.pdf

¹¹¹ Ibid;

¹¹² The European Commission, The WWF, The World Resources Institute, the European Investment Bank, *Declaration of the Sustainable Blue Economy Finance Principles*, 2018,

https://wwfeu.awsassets.panda.org/downloads/sbefp_declaration_6_aug_2018.pdf

Delivering on sustainable blue growth and economic aspects at a design stage

Some SBE objectives will require time to be assessed, for instance before any effects on employment, growth in maritime revenues, etc. can be observed. Yet, the sustainable blue economy goal can also be supported right from the design phase. First, **clear economic objectives** need to be spelled out, be it macro-indicators such as employment rates or sector specific. In addition to providing certainty for investors and helping with long-term planning, this also helps later with reviewing the effectiveness of the plan. In addition, **baseline economic studies** are helpful to understand the economic context within which the plans are developed. Similarly, the **economic impacts of the plan** and allocation of sea space uses also need to be evaluated ex-ante, so as to best support those actors that are impacted by the MSP process, for instance through **economic impacts assessments**.

Sustainable Blue Economy – Planning phase deliverables	Macro-principle
Baseline economic studies and economic impact assessment	Governance
Definition of clear economic objectives, focusing on sustainable development and aligned with the sustainable blue economy and finance principles as well as with the timeline and objectives of interrelated policies	Governance
MSP foresees areas for offshore renewable energy development that are sufficient for just energy transition and climate goals, and are located in areas compatible with biodiversity recovery and resilience	Governance

Social aspects (articles 3, 5, 6)

What the directive says about social aspects

Article 3 of the MSPD says “‘maritime spatial planning’ means a process by which the relevant Member State’s authorities analyse and organise human activities in marine areas to achieve [...] social objectives”.¹¹³ It also explains that Member States must “consider” and “take into account” “social aspects”.¹¹⁴ Furthermore, it also states “maritime spatial planning supports and facilitates the implementation of the Europe 2020 Strategy for smart, sustainable and inclusive growth [...], which aims to deliver high levels of employment, productivity and social cohesion[...]”.¹¹⁵ According to the directive, “maritime spatial planning can play a very useful role in determining orientations related to sustainable and integrated management of human activities at sea, preservation of the living environment, the fragility of coastal ecosystems, erosion and social and economic factors”.¹¹⁶

Social aspects in practice

Sustainable development includes a social development “pillar”.¹¹⁷ Furthermore, establishing Maritime Spatial plans is a highly political process, which does impact local coastal communities and sectors. For instance, local communities whose way of life is based on traditional fisheries activities will most likely be affected by impacts broader than mere economic ones if the planning process results in a modification of their access to fisheries resources. This is also particularly important when plans are developed in areas traditionally used and occupied by Indigenous peoples. As such, it is important that political considerations, social and cultural values, as well as local livelihoods are reflected in the design of the plans. To do so, baseline studies on the social context of the plans can be developed, while social impact assessments can effectively support the MSP process right from the offset.

Delivering on social aspects at a design stage

At a design phase, taking into account social aspects can be achieved through **baseline studies** on the social, political, cultural context of the plans, alongside **impact assessments studies**. Once those effects have been identified, **measures** to support or compensate social actors affected by the plans must be proposed. Clear political, social, cultural **objectives** associated with measures can also be set from the offset, for instance with regards to underwater cultural heritage sites.

Take into account social aspects – Planning phase deliverables	Macro-principle
Social, political, cultural baseline studies and appropriate impact assessments for local communities	Governance
Clear political, social and cultural objectives associated with measures and obtained through an open and participative consultation process	Governance

¹¹³ MSPD, Article 3.2.

¹¹⁴ MSPD, Article 5.1. and 6.2.b.

¹¹⁵ MSPD, Recital 4.

¹¹⁶ MSPD, Recital 16.

¹¹⁷ Brundtland, G., *Report of the World Commission on Environment and Development: Our Common Future*, United Nations General Assembly document A/42/427., 1987, <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

Policy coherence (article 6)

What the directive says about policy coherence

An integrated policy, MSP feeds in and from many other policies and legislation. At EU level, the MSPD established a list of all the related legislation in 2014.¹¹⁸ Since then, many more were of course added. The MSPD also clearly states that Member States shall “*aim to promote coherence between maritime spatial planning and the resulting plan or plans and other processes, such as integrated coastal management or equivalent formal or informal practices*”.¹¹⁹

Policy coherence in MSP in practice

In practice, MSP in European Seas must be **coherent and integrated** with all relevant European maritime policies and legislations (e.g. MSFD, Habitats Directive, Birds Directive, CFP, Strategic Environmental Assessment Directive), with regional conventions (e.g. UNEP/MAP, OSPAR, HELCOM and Barcelona Convention) as well as with intergovernmental agreements (e.g. ACCOBAMS), macro-regional strategies (e.g. EUSAIR, Western Mediterranean, Baltic) and international conventions and commitments (e.g. the UN SDG and CBD targets). This must apply to both policy and legislation specific targets and timelines. This means that provisions made by maritime spatial plans should not interfere with objectives and provisions made by other policies and legislation. In fact, it has to be ensured that MSPs are contributing to the successful implementation of relevant policies. For instance, it has to be analysed in the design phase whether objectives of the Habitats and Birds directives or MSFD can still be fulfilled - also from a legal point of view. Such an integration allows for better consistency and compatibility of marine policies in the seas shared by EU Member States and neighbouring countries, for instance limiting the duplication of efforts towards shared objectives, accelerating reporting or facilitating data sharing.¹²⁰

Delivering on policy coherence at a design stage

Policy coherence is a vital element of the MSP process, and must be applied right from the design phase. First, it means that national marine spatial plans need to have **mapped out** and acknowledged all **relevant policies and legislations** and their associated objectives and timelines. Then, national marine spatial plans need to make sure the objectives they set out **are aligned** with those policies and legislations, and that all relevant obligations incumbent to Member States based on those related policies and legislations are fulfilled.

If sectoral objectives are fixed through the MSP, they need to align with objectives, targets and timelines already set by relevant other policies and legislations. For instance, if an objective for the development of offshore renewable energy is set out in the plan, it needs to be consistent with the national and European targets and timelines already fixed on the matter by the EU and/or the Member State and with goals of other policies such as the Habitats Directive.

Policy coherence – Planning phase deliverables	Macro-principle
Identification of and alignment of the plan with the relevant interconnected policies at national, EU, regional, international level, of their targets, and timeline	Governance

¹¹⁸ MSPD, Recital 15.

¹¹⁹ MSPD, Article 6(c).

¹²⁰ WWF, *Achieving Ecosystem-Based Marine Spatial Plans*, February 2020.

Coexistence and distribution (articles 5 & 8)

What the directive says about coexistence and distribution of activities and uses

The MSPD states that some of the main purposes of MSP are to identify the utilization of maritime space for different sea uses, manage spatial uses and conflicts in marine areas, and to identify and encourage multi-purpose uses.¹²¹ To achieve the goal to promote the coexistence of activities and uses, the MSPD especially refers back to the identification of the “*spatial and temporal distribution of relevant existing and future activities and uses*”, as well as to interactions of activities and uses.¹²²

Coexistence in practice

Coexistence of activities and uses through MSP, in the context of shared space, is beneficial from many different perspectives. For the private sector, an agreed shared space helps avoid negative situations, such as stranded assets, delays in the procedure or reputational risks and damages that would arise from strong opposition from other sea users and stakeholders in a scenario where an agreed shared space does not exist or is lacking. An equitable shared space also facilitates the roles of the public authorities tasked with managing activities at sea, which are ultimately responsible for solving sea space-use conflicts. In the best-case scenario, synergies can even be found between sectors and result in win-win situations and common ground found between environmental stakeholders, civil society and industry. To achieve this, full consideration must be given during the design phase and before the plans enter into force, in order to avoid conflicts between activities and sea space use that would constitute obstacles to the plans' implementation.

When it comes to nature conservation, the sharing of space must ensure that the objectives of the protected areas are not compromised, but instead will facilitate conservation objectives being met. WWF believes that marine areas that are to be designated for protection should be guided by a comprehensive, transparent and inclusive process, but with ecological considerations as the primary priority that an EB MSP should strive for. This is particularly important for the achievement of a multitude of environmental objectives at national, regional and EU level when it concerns different sea spaces, whether its achieving and maintaining favourable conservation status for Natura 2000 sites under the Birds & Habitats Directive, achieving Good Environment Status for the seas under the Marine Strategy & Framework Directive or working towards the EU's target of 30% of the sea being protected, including 10% strictly protected as set out under the EU's Biodiversity Strategy for 2030, or 15% of the EU's land and sea area being targeted for restoration. EB MSP must also ensure that the mitigation hierarchy¹²³ is applied to current and future development that might compromise the ability of those sites to achieve their conservation objectives. Furthermore, when applying the principle of shared space in practice, due consideration should be given to all physical dimensions of the sea (water column, surface, sea bed etc.) as well as temporal, for instance through provisions that regulate certain uses in certain time periods i.e. in particularly sensitive time frames, such as migration or spawning seasons.

Delivering on coexistence at design stage

An effective design phase of the marine spatial plan can greatly contribute to achieving successful coexistence in terms of shared space. First, the directive clearly spells out that, while drafting the plans, Member States must **identify the spatial and temporal distribution of relevant existing and future activities and uses in their marine waters and analyse their interaction**. This should therefore be reflected in all national marine spatial plans at the end of the design phase. Besides, to **figure out compromises** between sectors and avoid conflicts, planning authorities should also **facilitate dialogues** between sea space users and relevant stakeholders. To

¹²¹ MSPD, Recital 19.

¹²² MSPD, Recital 19, articles 8.1 and 8.2.

¹²³ WWF, *First Things First: Avoid, Reduce ... and only after that—Compensate*, 2020, https://www.panda.org/discover/our_focus/forests_practice/climate_change_and_forest/?362819/First-Things-First-Avoid-Reduce--and-only-after-thatCompensate

help avoid conflicts, the MSP should **explain the rationale of any arbitration** made in favour of a specific sea space user over others and be equitable in terms of access to and distribution of benefits to historical as well as new users. In the same perspective, it should also **identify sea space users that may be negatively affected** by the allocation of sea space and consider the **necessary compensations** and **adaptation measures**.

Coexistence – Planning phase deliverables		Macro-principle
Identification of spatial and temporal utilization of maritime space for different sea uses and activities		Governance
Analysis of ocean uses interactions and reduction of conflicts that can potentially lead to social tensions, accidents/pollution events, especially, ensure that no conflicts occur between maritime sectors and area based conservation management measures		Governance
Identification of sustainable multi-purpose uses		Governance

Public participation (article 9)

What the directive says about public participation

The MSPD clearly states, “*stakeholders, authorities and the public must be consulted at an appropriate stage in the preparation of maritime spatial plans*”.¹²⁴ It also mentions, “*Member States shall establish means of public participation by informing all interested parties and by consulting the relevant stakeholders and authorities, and the public concerned, at an early stage in the development of maritime spatial plans*”.¹²⁵ In addition, “*Member States shall also ensure that the relevant stakeholders and authorities, and the public concerned, have access to the plans once they are finalised*”.¹²⁶

Public participation in practice

Community and multi-stakeholder participation is essential for the development, implementation and buy-in of the EB MSP. Consultations especially enable a long-term foundation for both cooperation among sectors and well-integrated decision-making.¹²⁷ They need to happen at early stages in the MSP process so that inputs from relevant stakeholders have a chance to be processed into the plans. Transparency in decision-making processes is a key enabling requirement associated with effective public participation. In fact, a readily accessible process to identify, hear and resolve complaints or disputes facilitates adoption of MSP. Currently, many crucial parts of decision making, for example compliance assessment processes, are closed to public scrutiny. Marine resources are publicly owned assets, managed by government officials, financed by public funds and thus must be held as a public goods enterprise with parties held accountable in case of infringement. Making information on compliance assessments and the subsequent action plans publicly available is a first step to increase transparency.¹²⁸

Delivering on public participation at a design stage

The design phase of the plans is the key moment for public participation. A successful design phase will be based on **public consultation run by public authorities** and will **ensure that the comments advanced during public consultation are taken into account**. Public consultations’ **results and outcomes** must be made **publicly available**. **Key documents** used to draft the plans, such as compliance assessments, must also be **accessible to all stakeholders**. In addition, once they are finalized, the plans must be accessible to all. Although the directive does not delve into specific ways of sharing the plans, best practices can be shared between countries, some of them being very creative in putting together **user-friendly tools** to share not only the plans but also information about the MSP process with the public.

Public participation – Planning phase deliverables	Macro-principle
A comprehensive public consultation involving all relevant stakeholders has been run by public authorities, results and outcomes are made publicly available and inputs from public consultation are taken into account in the drafting of the plan	Governance
Transparent decision making process, including the public sharing of relevant documents used to make decisions and information on compliance assessments and the subsequent action plans	Governance
Relevant stakeholders and authorities, and the public concerned have access to the plans once they are finalized	Governance

¹²⁴ MSPD, Recital 21, Article 9.1.

¹²⁵ MSPD, Article 9.1.

¹²⁶ MSPD, Article 9.2.

¹²⁷ WWF, *Achieving Ecosystem-Based Marine Spatial Plans*, February 2020.

¹²⁸ Ibid.

Data & knowledge (article 10)

What the directive says about use and share of data

According to the MSPD, “Member States shall organize the use of the best available data, and decide how to organize the sharing of information, necessary for maritime spatial plans”.¹²⁹ To do so, they must be “encouraging the relevant stakeholders to share information” and make “use of existing instruments and tools for data collection”.¹³⁰

Use and share of data in practice

In fact, securing and using reliable long-term data of environmental descriptors and human activities is key to determine trends on marine species and activities, and to account for ecosystem capability and capacity to recover from human induced changes.¹³¹ To do so, funding for data collection must also be secured or facilitated through the MSP process. High quality spatial data should be shared and utilized across administrative and sectoral borders guaranteeing that decisions are based on appropriate information and that the end-users themselves can evaluate the usability and quality of the spatial data and maps for their purposes.¹³² When data gaps are identified, new data collection processes must be set up to support the drafting of the plans. Additionally relevant existing data from sectors involved in the MSP process should be used, such as AIS data or fisheries data for instance.

Furthermore, experts' feedback indicates that the issue in MSP is often not the lack of data itself but rather the ability to provide planners with relevant information extracted from this data. As a consequence, it is crucial that tools, methods and expert knowledge is used to translate data into actionable information fit for planning purposes. This could be delivered by i.e. environmental agencies and then fed into the process or/and by the use of tools such as sensitivity maps.

In any case, the lack of data should by no means constitute a reason for not incorporating environmental issues in planning. In such instances, the precautionary principle shall prevail.

Delivering on the use and share of data at a design phase

During the design phase, the MSP process should collect **the best data available** and **organize its sharing**. The data collected should come from **various stakeholders**, and break administrative and border silos. Lastly, it should be **accessible** to all MSP stakeholders. Tools should be devised to translate this data into actionable information fit for planning purposes. In the face of data gaps, the precautionary approach should be adopted.

Data & knowledge – Planning phase deliverables	Macro-principle
The plan is based on the best available data, including trends on marine species and activities and the ecosystem's capability and capacity to recover from human induced changes. In the face of data gaps, new data collection processes are set up to support the drafting of the plans and the precautionary principle applies	Conservation
High quality spatial data is shared publicly and utilized across administrative and sectoral borders, tools are devised to translate this data into actionable information fit for planning purposes, and end users can evaluate the usability and quality of spatial data and maps	Governance

¹²⁹ MSPD, Article 10.1.

¹³⁰ MSPD, Recital 24.

¹³¹ WWF, *Achieving Ecosystem-Based Marine Spatial Plans*, February 2020.

¹³² Ibid.

Cross-border cooperation (articles 1, 11 & 12)

What the directive says about cross-border cooperation

Based on the MSPD provisions, “Member States bordering marine waters shall cooperate with the aim of ensuring that maritime spatial plans are coherent and coordinated across the marine region concerned. Such cooperation shall take into account, in particular, issues of a transnational nature”.¹³³ Likewise, the MSPD states that “Member States shall endeavor, where possible, to cooperate with third countries on their actions with regard to maritime spatial planning in the relevant marine regions and in accordance with international law and conventions, such as by using existing international forums or regional institutional cooperation”.¹³⁴ Furthermore, when addressing cooperation among Member States, the directive also makes a reference to “networks or structures of Member States’ competent authorities”.¹³⁵

Cross-border cooperation in practice

In fact, adopting a holistic approach to regional seas and **transcending national borders** is necessary for the implementation of an ecosystem-based approach. This must include **cross border cooperation in planning and aggregate assessments** of sea uses, coastal construction and development, as well as large-scale mapping of major ecological features and future human activities.¹³⁶ Successful collaboration should be based on **regular communication across countries** including sharing information on plans (planning areas, spatial scales, temporal planning, binding vs non-binding nature of plans, and status of MSP within the national planning system); planning priorities (sectors and topics that are addressed in plans, including level of detail); and MSP procedures (meaning responsible authorities, progress and delivery of MSP process, publication of documents and draft plans, consultation periods and stakeholder hearings). Countries should also **share the monitoring and evaluation** of the plans via a mechanism or sharing process that is cross-boundary, as well as work in collaboration to **implement jointly** the plans especially spanning sectors that operate across borders (i.e. shipping).

In practice, cross-border MSP cooperation projects have for instance been implemented in the Baltic with the Coast4us project, which involved four countries (Estonia, Finland, Latvia, and Sweden) and supported an holistic approach to the Baltic Sea basin planning. In the Baltic, the HELCOM-VASAB Maritime Spatial Planning Working Group also set up a specific cross-border coherence task force. The task force aims at creating a common understanding on the coherence of the plans, and put together a checklist to help countries identify the important aspects of cross-border coherence that can be found both in the MSP plans and in the practices of cross-border collaboration (planning and collaboration processes).¹³⁷

Delivering on cross-border cooperation at a design stage

It is vital that cross-border cooperation occurs during the design phase of the plans. For instance, neighbouring countries should set up **joint MSP working groups and networks, such as those developed under the auspices of RSCs, the Espoo (EIA) Convention**¹³⁸ or projects such as Coast4us. Likewise, it is important that Member States participate in **regional working groups**, such as those organized through Regional Sea Conventions or by the EU. Once the design phase has been completed, plans should be **articulated and consistent between countries**. For instance, they should explain how they fit into broader regional spatial management measures, or how they have factored in **cumulative impacts across borders**.

¹³³ MSPD, Article 11.1.

¹³⁴ MSPD, Article 12.

¹³⁵ MSPD, Article 11.2.b.

¹³⁶ WWF, *Achieving Ecosystem-Based Marine Spatial Plans*, February 2020.

¹³⁷ Communication from the WWF observer in HELCOM-VASAB Maritime Spatial Planning Working Group.

¹³⁸ According to the United Nations Economic Commission for Europe, the Espoo (EIA) Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It is complemented with the Kyiv Protocol on SEA. More information is available at: <https://unece.org/more-convention>

Cross-border cooperation – Planning phase deliverables	Macro-principle
Cross-boundary mechanisms in planning, for instance through joint MSP working groups and regular communication across countries including sharing information on plans, planning priorities and MSP procedures; as well as for sharing processes of monitoring and harmonising evaluation across regional seas, and preferably all EU seas	Governance
Large-scale cross-border mapping of major ecological features and future human activities as well as aggregated cross-border assessments of sea uses, coastal construction and development, and cumulative impacts	Conservation
Consistent plans across borders coherent with major ecological features	Conservation

Competent authorities (article 13)

What the directive says about competent authorities

According to the MSPD, “each Member State shall designate the authority or authorities competent for the implementation of this Directive”.¹³⁹

Competent authorities in practice

It is important that the authority/ies designated have an ocean-wide, legal and cross-sectoral responsibility. To support an ecosystem-based approach to MSP, the designated authority/ies must include a balanced representation of government powers from the various administrations involved in the MSP process (Ministries of Environment and/or the Sea, Transport, Energy, Economy, etc.) and have the capacity and mandate to enforce the plan. Still to deliver on EB-MSP, the competent planning authority also has to make sure that it cooperates with relevant authorities of different sectors involved and impacted by the MSP process and nature conservation agencies. For instance, it is vital that authorities implementing the MSFD and the MSPD have effective dialogues. Lastly, as the directive mentions, a clear designation of authorities also support cross-border cooperation.¹⁴⁰

Delivering on competent authorities at a designing phase

In the design phase of the plans, competent authorities must therefore be **officially designated**, given a **relevant mandate** and trusted with the **powers needed to implement and enforce the plans, with attention paid to the balance of power in the decision-making process** to ensure the ecosystem-based approach is applied. They **cooperate** with relevant authorities of different sectors involved and impacted by the MSP process and nature conservation agencies. The implementation of the plan also implicitly requires the plans to be **binding**. This means they must be **regulatory and enforceable**. At minimum, marine spatial plans must be binding for public authorities’ decision-making on maritime uses.

Competent authorities – Planning phase deliverables	Macro-principle
The planning authority/ies are officially designated and include a balanced representation of government powers from the various administrations involved in the MSP process (Ministries of Environment and/or the Sea, Transport, Energy, Economy, etc.). They have dialogues with relevant authorities of different sectors involved and impacted by the MSP process and nature conservation agencies and have the capacity and mandate to enforce the plan	Monitoring, enforceability and funding

¹³⁹ MSPD, Article 13.1.

¹⁴⁰ MSPD, Recital 20.

6. METHOD FOR ASSESSING EUROPEAN NATIONAL MARITIME SPATIAL PLANS

Assessing the output of the designing phase of EU maritime spatial plans, i.e. the plans before they are implemented, is a critical step. It allows gauging whether the plans are on the right track to deliver on key MSP objectives and provides options for amendments before they enter into force. Further, many of the MSP deliverables, such as transparency in the drafting of the plans or public consultation, also fundamentally lie in the designing phase and do not require the implementation of the plans to be assessed. Lastly, in the case of the European maritime spatial plans, it is an obligation for the European Commission to deliver a report on the implementation of the directive within the first year of the plan's publication, and therefore to evaluate the designing phase of Member States' MSP work. However, methods to assess the EU plans are still lacking. Based on the analysis of the Maritime Spatial Planning Directive and the WWF expertise, the below section offers a method to assess the designing phase and plans drafted by the Member States.

6.1. Navigating the maps: a “compass” tool for plans assessment

In the MSP evaluation literature, evaluation is defined as *“an assessment of the extent to which a plan is achieving its aims [...] based on clear criteria that will help assess the effectiveness of the MSP process”*¹⁴¹, as well as *“the assessment of achievements against some predetermined criteria, usually set of standards or management objectives”*.¹⁴²

The MSP directive establishes objectives and requirements for the marine spatial plans. The challenge however remains to turn these broad indications into concrete and measurable assessment indicators. For instance, how does one practically evaluate whether a plan “promotes the co-existence of activities” or “takes into account land-sea interactions”? The analysis of the MSPD thematic provisions through an EBA lens has already answered this challenge. Most specifically, the expected deliverables at a designing phase have been further detailed (see 4.3).

Another challenge is to propose an assessment method capable of displaying results in a reader-friendly format, while allowing for easy comparison of the plans to identify general trends with regards to the directive's implementation, best-practices, but also to identify those areas where Member States performed poorly. A “compass-card” approach constitutes one of the best ways of reaching those objectives. It gathers all the indicators that are to be assessed in a single visual tool, which allows for a snapshot evaluation. “A la carte” compass cards can also be prepared, when the assessment focuses on specific macro-indicators.

As a matter of example, see annex 1 for a compass score card, developed by the WWF UK office to assess Marine Protected Areas (MPAs) management. The annex 1 features the visual representation of the compass, together with the list of indicators, and an example of how a score is attributed.

Building a compass tool first requires building a list of concrete indicators: what general elements are to be looked at to deliver the assessment? As mentioned above, the MSPD has already been analysed through the EBA lens to single out specific macro and sub indicators, especially those relevant to the designing phase.

¹⁴¹ Jay, Stephen., 2017, op. cit.

¹⁴² Ehler, Charles., and Fanny Douvère., 2011, op. cit.

Once the indicators have been identified, the next step is to associate each of them to a score, thereby performing the assessment exercise.

A simple scoring system associates three levels of success in delivering on the indicator's objective(s):

- Zero point/visual code red would be associated with a failure to achieve the indicator's objective(s)
- Half a point/visual orange code would be associated with an a need for improvement, an indicator partly achieved
- One point/visual code green would be associated an indicator successfully achieved

Indicator		
No/Not achieved	Partly/Partly achieved	Yes/Achieved
<i>Justification</i>		
Scoring		
Score: 0	Score: 0.5	Score: 1

Once the scoring exercise has been completed, the compass tool is ready to process the information to produce reader-friendly visualizations of the assessment. At this point, it is important to note that the scoring system aims at providing a first quick snapshot of the state of play of a given indicator. Yet, it cannot be considered enough for a solid assessment, which must be supported by and rooted in a thorough analysis of the indicator's situation. To this end, it is imperative that justifications are provided when scores are attributed. This not only justifies the score attributed, but can also be used to identify shortcomings and best practice, vital to improve any public policy and its implementation. That way, the assessment also provides a qualitative evaluation, which is then quantified through the scoring system to obtain graphic visualizations.

Based on the scoring attributed to the sub-indicators, an average score can then be calculated for each macro-indicator, be it a MSPD thematic macro-indicator or a WWF-principle macro-indicator.

	Score
Macro-indicator	Average score of sub-indicators
Sub-Indicators	Score (0/0,5/1)

As an example, the below table displays an assessment box for the MSPD thematic macro-indicator "land-sea interaction".

MSPD thematic macro-indicator – Land-sea interaction				
Sub-indicators	Score			Comment: explanation of the score attributed
	0	0.5	1	
Identification and analysis of land sea interactions: the relevant coastal uses and activities have been identified and their effects on the marine environment analysed	x			No.
Integration of the maritime dimension of some coastal uses or activities and their impacts in the plans: measures have been proposed to address those effects through the marine spatial plans		x		Partly.
Identification and consistent articulation with other relevant policies such integrated coastal management or the Water Framework Directive-related legislations			x	Yes.
General scoring macro-indicator	1.5			0 + 0.5 + 1
Average scoring macro-indicator	0.5			((general scoring/number of sub-indicators) > (1.5/3))

6.2. A comparative approach to specific plans and its limits

The compass card method allows for simple comparison from one plan to another. In fact, a single compass card is able to represent visually the comparative performance of two different plans.

	Score	
	Plan A	Plan B
Macro-indicator	Average score sub-indicators	Average score sub-indicators
Sub-Indicators	Score (0/0,5/1)	Score (0/0,5/1)

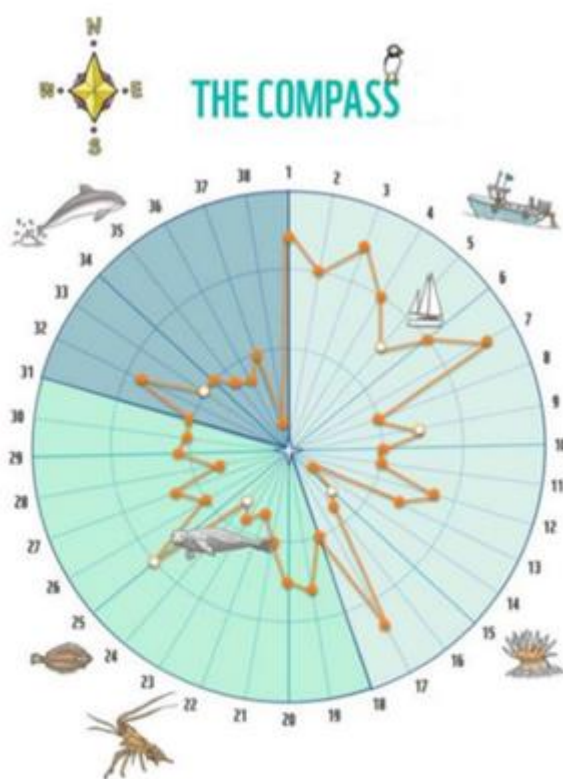
Similarly, this method can be used to calculate and visualize the average score of all plans assessed in a single card. For instance, to calculate the average score for a sub-indicator assessed in two plans A & B, it is only necessary to calculate: (Average score the macro-indicator in plan A + Average score the macro-indicator in plan B)/2.

	Score		
	Plan A	Plan B	Average plans
Macro-indicator	Average score sub-indicators	Average score sub-indicators	Average score of the macro-indicator in plan A & B
Sub-Indicators	Score (0/0,5/1)	Score (0/0,5/1)	Average score of the sub-indicator in plan A & B

However, it is important to note that not all indicators are suited to comparative assessments between countries or even within countries, from one plan to another. While some indicators only rely on the Member State action and responsibilities, others are much more context-related and impacted by factors Member States have little control on. In that perspective, comparing two Member States on the basis of context-related indicators is sometimes not relevant, and could prove unfair to those States facing complex situations. For instance, while public participation mechanisms lie on the hand of the States, the capacity to deliver on cross-border cooperation very much depends on broader geopolitics and the relationship of the Member States with its neighbours, especially when those are non-EU Member States. In such instances, those indicators will be deemed non-applicable in the assessment scoring.

ANNEXES

Annex 1: Compass example



- 1 Identify important areas for species & habitats
- 2 Identify stakeholders & their interests
- 3 Set up stakeholder participation process
- 4 Assess condition of important areas for species & habitats
- 5 Create socio-economic baseline
- 6 Identify pressures impacting species & habitats
- 7 Set MPA boundary based on areas of ecological importance
- 8 Establish zoning for activities
- 9 Establish management rules for zoned areas
- 10 Create a management body to set and monitor strategy
- 11 Create a management committee to implement the strategy
- 12 Establish environmental MPA objectives
- 13 Established socio-economic MPA objectives
- 14 Identify benefit sharing rules
- 15 Develop alternatives for displaced activities
- 16 Create clear lines of responsibility for governance
- 17 Ensure the MPA has legal status
- 18 Publicly communicate about the MPA
- 19 Support an active & inclusive stakeholder engagement process
- 20 Develop a management plan
- 21 Ensure adequate MPA staff
- 22 Ensure adequate infrastructures and equipment
- 23 Enforce management rules
- 24 Create a business plan fund long-term MPA management
- 25 Capacity build skills needed to run the MPA
- 26 Create education programme linked to MPA objectives
- 27 Monitor biological, social and economic factors
- 28 Monitor management activities against performance
- 29 Build a sense of responsibility for the MPA by stakeholders
- 30 Demonstrate the authorities take responsibility for the MPA
- 31 Effectively implement the management plan
- 32 Sustain & build on community involvement
- 33 Demonstrate that MPA is achieving objectives
- 34 Demonstrate that MPA is improving ecological condition
- 35 Demonstrate that MPA is providing socio-economic benefits
- 36 Report progress to the community
- 37 Update management plan/rules based on monitoring data
- 38 Create sustainable income stream to cover management costs

Example of a WWF UK Compass Card - Source: <https://ukseasproject.org.uk/cms-data/reports/Compass%20Report.pdf>

Have important stakeholders and their interests been identified?			
No Stakeholders have been identified	Stakeholders have been identified ad-hoc	Stakeholders have been systematically identified	Stakeholders have been systematically identified along information about their knowledge attitudes and perceptions
Score: 0	Score: 1	Score: 2	Score: 3

Example of one of the questions and possible answers for a stage of the WWF UK Compass Card

Source: <https://ukseasproject.org.uk/cms-data/reports/Compass%20Report.pdf>

Annex 2: Summary indicators lists for the EB MSPD planning phase deliverables

Chapter 5 identified the MSPD provisions intertwined with the EB MSP objective. Interpreted through an EBA lens, it explored their content and extracted their relevant deliverables at a design phase of the MSP cycle. If EB MSP is to be achieved against the legal requirements set up by the MSPD, those are the elements that need to be found in the plan or performed during the planning phase. They can be classified based on the EB MSPD macro-indicators, as well as based on the key WWF EB MSP Principles.

EBA-MSPD thematic provisions macro-indicators classification

Land sea interaction (article 7)
Identification and analysis of land sea interactions: the relevant coastal uses and activities have been identified and their effects on the marine environment analysed
Integration of the maritime dimension of some coastal uses or activities and their impacts in the plans: measures have been proposed to address those effects through the marine spatial plans
Identification and consistent articulation with other relevant policies such integrated coastal zone management or the Water Framework Directive-related legislations

Thriving Nature (articles 3, 5, 6 & 8)
Effective SEA, in line with the Strategic Environmental Assessment directive provisions
Environmental impact assessments for projects falling within the MSP process, in line with the Environmental Impact Assessment directive, associated with proposal and appropriate measures to address them based on the mitigation hierarchy
Application of the precautionary principle and the principle of preventive action
Cumulative impact assessment of all activities at sea on the marine environment ensuring that planned activities in combination do not exceed the carrying capacity of the sea or limit achievement of Good Environmental Status
Appropriate sensitivity mappings and reflections of sensitive areas in the drafting of the plan
Baseline environmental studies and identification of ecosystem services and functionality
Integration of a coherent, well-connected and representative network of marine protected areas and areas of ecological importance in the plan as well as ensuring connectivity through respective provisions outside MPAs, in line with the Biodiversity Strategy spatial targets, and associated with management plans
Identification of areas suitable to restoration activities followed by restoration plans
Adoption of a long term perspective and especially identification of how MSP can support adaptive conservation strategies to cater for spatial changes in ecosystems (e.g. migration of species, change of critical conditions for habitats), including the further exploration of the potential for including climate refugia in MSP and explanation about how the MSP contributes to the NECP for instance through strengthening the capacity of the ocean to store carbon
Ensure that maritime spatial plans are in line with and support environmental provisions and objectives of relevant interconnected policies, such as Birds and Habitats directives, the MSFD, the CFP, and the Biodiversity Strategy, i.e. MSP foresees MPA network covering at least 30% of the marine area, with 10% strictly protected and proposing where needed high biodiversity areas to be added to MPA network

Sustainable Blue Economy (articles 3, 5 & 6)
Baseline economic studies and economic impact assessment
Definition of clear economic objectives, focusing on sustainable development and aligned with the sustainable blue economy and finance principles as well as with the timeline and objectives of interrelated policies
MSP foresees areas for offshore renewable energy development that are sufficient for just energy transition and climate goals, and are located in areas compatible with biodiversity recovery and resilience

Social aspects (articles 3, 5 & 6)
Social, political, cultural baseline studies and appropriate impact assessments for local communities
Clear political, social and cultural objectives associated with measures and obtained through an open and participative consultation process

Policy coherence (article 6)
Identification of and alignment of the plan with the relevant interconnected policies at national, EU, regional, international level, of their targets, and timeline

Coexistence and distribution (articles 5 & 8)
Identification of spatial and temporal utilization of maritime space for different sea uses and activities
Analysis of ocean uses interactions and reduction of conflicts that can potentially lead to social tensions, accidents/pollution events, especially, ensure that no conflicts occur between maritime sectors and area based conservation management measures
Identification of sustainable multi-purpose uses

Public participation (article 9)
A comprehensive public consultation involving all relevant stakeholders has been run by public authorities, results and outcomes are made publicly available and inputs from public consultation are taken into account in the drafting of the plan
Transparent decision making process, including the public sharing of relevant documents used to make decisions and information on compliance assessments and the subsequent action plans
Relevant stakeholders and authorities, and the public concerned have access to the plans once they are finalized

Data & knowledge (article 10)

The plan is based on the best available data, including trends on marine species and activities and the ecosystem's capability and capacity to recover from human induced changes. In the face of data gaps, new data collection processes are set up to support the drafting of the plans and the precautionary principle applies

High quality spatial data is shared publicly and utilized across administrative and sectoral borders, tools are devised to translate this data into actionable information fit for planning purposes, and end users can evaluate the usability and quality of spatial data and maps

Cross-border cooperation (articles 11 & 12)

Cross-boundary mechanisms in planning, for instance through joint MSP working groups and regular communication across countries including sharing information on plans, planning priorities and MSP procedures; as well as for sharing processes of monitoring and harmonising evaluation across regional seas, and preferably all EU seas

Large-scale cross-border mapping of major ecological features and future human activities as well as aggregated cross-border assessments of sea uses, coastal construction and development, and cumulative impacts

Consistent plans across borders coherent with major ecological features

Competent authorities (article 13)

The planning authority/ies are officially designated and include a balanced representation of government powers from the various administrations involved in the MSP process (Ministries of Environment and/or the Sea, Transport, Energy, Economy, etc.). They have dialogues with relevant authorities of different sectors involved and impacted by the MSP process and nature conservation agencies and have the capacity and mandate to enforce the plan

WWF EB MSP macro-principles classification

Based on their associated WWF EB MSP macro-principles, the EB MSPD design-phase deliverables can also be classified as follow:

Conservation	Derived from MSPD:
Identification and analysis of land sea interactions: the relevant coastal uses and activities have been identified and their effects on the marine environment analysed	Recitals 9, 16, 18 Article 1(2) Articles 4 (2), (5) Article 6(2)(a) Article 7
Effective SEA, in line with the Strategic Environmental Assessment directive provisions	Recital 23 Articles 5 & 6
Environmental impact assessments for projects falling within the MSP process, in line with the Environmental Impact Assessment directive, associated with proposal and appropriate measures to address them based on the mitigation hierarchy	Recital 23 Articles 5 & 6
Application of the precautionary principle and the principle of preventive action	Recital 14 Articles 5 & 6
Cumulative impact assessment of all activities at sea on the marine environment ensuring that planned activities in combination do not exceed the carrying capacity of the sea or limit achievement of Good Environmental Status	Recital 14 Recital 22 Articles 5 & 6
Appropriate sensitivity mappings and reflections of sensitive areas in the drafting of the plan	Articles 5 & 6
Baseline environmental studies and identification of ecosystem services and functionality	Recitals 13, 14 Articles 5 & 6
Integration of a coherent, well-connected and representative network of marine protected areas and areas of ecological importance in the plan as well as ensuring connectivity through respective provisions outside MPAs, in line with the Biodiversity Strategy spatial targets, and associated with management plans	Recital 15 Articles 5 & 6 Article 8
Identification of areas suitable to restoration activities followed by restoration plans	Articles 5 & 6
Adoption of a long term perspective and especially identification of how MSP can support adaptive conservation strategies to cater for spatial changes in ecosystems (e.g. migration of species, change of critical conditions for habitats), including the further exploration of the potential for including climate refugia in MSP and explanation about how the MSP contributes to the NECP for instance through strengthening the capacity of the ocean to store carbon	Recital 13, 14, 15, 19 Articles 4 (5), 5(2), 8(1)
Ensure that maritime spatial plans are in line with and support environmental provisions and objectives of relevant interconnected policies, such as Birds and Habitats directives, the MSFD, the CFP, and the Biodiversity Strategy, i.e. MSP foresees MPA network covering at least 30% of the marine area, with 10% strictly protected and proposing where needed high biodiversity areas to be added to MPA network	Recital 15 Articles 6 (1)(c), 7(2)

The plan is based on the best available data, including trends on marine species and activities and the ecosystem's capability and capacity to recover from human induced changes. In the face of data gaps, new data collection processes are set up to support the drafting of the plans and the precautionary principle applies	Recitals 14, 24, Article 6(1)(e), 10
Large-scale cross-border mapping of major ecological features and future human activities as well as aggregated cross-border assessments of sea uses, coastal construction and development, and cumulative impacts	Recitals 16, 23 Articles 4(5), 5, 6, 8(1), 11, 12
Consistent plans across borders coherent with major ecological features	Article 1(2), 4(5), 11, 12

Transparency & governance	Derived from MSPD:
Integration of the maritime dimension of some coastal uses or activities and their impacts in the plans: measures have been proposed to address those effects through the marine spatial plans	Recitals 9, 16, 18 Article 1(2) Articles 4 (2), (5) Article 6(2)(a) Article 7
Identification and consistent articulation with other relevant policies such integrated coastal zone management or the Water Framework Directive-related legislations	Recitals 9, 16, 18 Article 1(2) Articles 4 (2), (5) Article 6(2)(a)(c) Article 7
Baseline economic studies and economic impact assessment	Articles 5(1), 6(1)(b), 10(2)(a)
Definition of clear economic objectives, focusing on sustainable development and aligned with the sustainable blue economy and finance principles as well as with the timeline and objectives of interrelated policies	Recitals 3, 4, 5, 14, 15, 19, Articles 1(1), 5(1), 5(2), 6(2)(b),7(2)
MSP foresees areas for offshore renewable energy development that are sufficient for just energy transition and climate goals, and are located in areas compatible with biodiversity recovery and resilience	Recitals 3, 4, 5, 14, 15, 19, Articles 1(1), 5(1), 5(2), 6(2)(b),7(2)
Social, political, cultural baseline studies and appropriate impact assessments for local communities	Recital 23 Articles 5(1), 6(1)(b), 8(2), 10(2)(a)
Clear political, social and cultural objectives associated with measures and obtained through an open and participative consultation process	Recital 21

	Articles 5(1), 6(2)(b)(d), 8(2), 9
Identification of and alignment of the plan with the relevant interconnected policies at national, EU, regional, international level, of their targets, and timeline	Recital 15 Articles 6 (1)(c), 7(2)
Identification of spatial and temporal utilization of maritime space for different sea uses and activities	Recital 19, Article 4(5), 8
Analysis of ocean uses interactions and reduction of conflicts that can potentially lead to social tensions, accidents/pollution events, especially, ensure that no conflicts occur between maritime sectors and area based conservation management measures	Recitals 8, 11, 16, 19 Articles 4(5), 5(1), 8
Identification of sustainable multi-purpose uses	Recital 19 Article 5(1)
A comprehensive public consultation involving all relevant stakeholders has been run by public authorities, results and outcomes are made publicly available and inputs from public consultation are taken into account in the drafting of the plan	Recital 21 Articles 6(2)(d), 9
Transparent decision making process, including the public sharing of relevant documents used to make decisions and information on compliance assessments and the subsequent action plans	Recitals 2, 9 Articles 6(2)(d), 9, 10
Relevant stakeholders and authorities, and the public concerned have access to the plans once they are finalized	Articles 9, 14(1)
High quality spatial data is shared publicly and utilized across administrative and sectoral borders, tools are devised to translate this data into actionable information fit for planning purposes, and end users can evaluate the usability and quality of spatial data and maps	Recitals 14, 24 Articles 6(2)(e), 9(1), 10
Cross-boundary mechanisms in planning, for instance through joint MSP working groups and regular communication across countries including sharing information on plans, planning priorities and MSP procedures; as well as for sharing processes of monitoring and harmonising evaluation across regional seas, and preferably all EU seas	Recitals 3, 9, 20 Articles 1(2), 6(2)(f)(g), 11, 12

Monitoring, enforceability and funding	Derived from MSPD:
The planning authority/ies are officially designated and include a balanced representation of government powers from the various administrations involved in the MSP process (Ministries of Environment and/or the Sea, Transport, Energy, Economy, etc.). They have dialogues with relevant authorities of different sectors involved and impacted by the MSP process and nature conservation agencies and have the capacity and mandate to enforce the plan	Recital 20, 21 Articles 9, 13, Annex Competent Authorities



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