



Spatial planning for the 'blue economy'

Maritime spatial planning and integrated coastal management

SUMMARY *The increasing use of seas and coasts for economic activities, the 'blue economy,' leads to growing and competing demands for maritime space.*

Allocation of space at sea helps to avoid conflicts between different uses (e.g. wind and wave energy, fishing, oil and gas exploitation, cables and pipelines, shipping, tourism, defence, environmental protection), which also often cross national boundaries.

Maritime spatial planning (MSP) is a relatively new approach to overall planning of the use of seas and coastal areas. Benefits of MSP include efficient use of maritime space, prevention of conflicts, faster decision-making, reduced costs and a better investment climate. A few EU Member States (MS) already have an MSP process.

In March 2013, the European Commission proposed a Directive that would oblige MS to make maritime spatial plans and coordinate them with other MS. The planning process and the content of the plans would remain the responsibility of the MS. The European Parliament has supported initiatives on MSP since as early as 2007.

While the proposal is supported by the offshore wind industry because it provides more certainty for investments, environmentalists welcome the application of the ecosystem approach, coordination between countries, and public consultation.



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Glossary

Maritime spatial planning (MSP): the process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives.

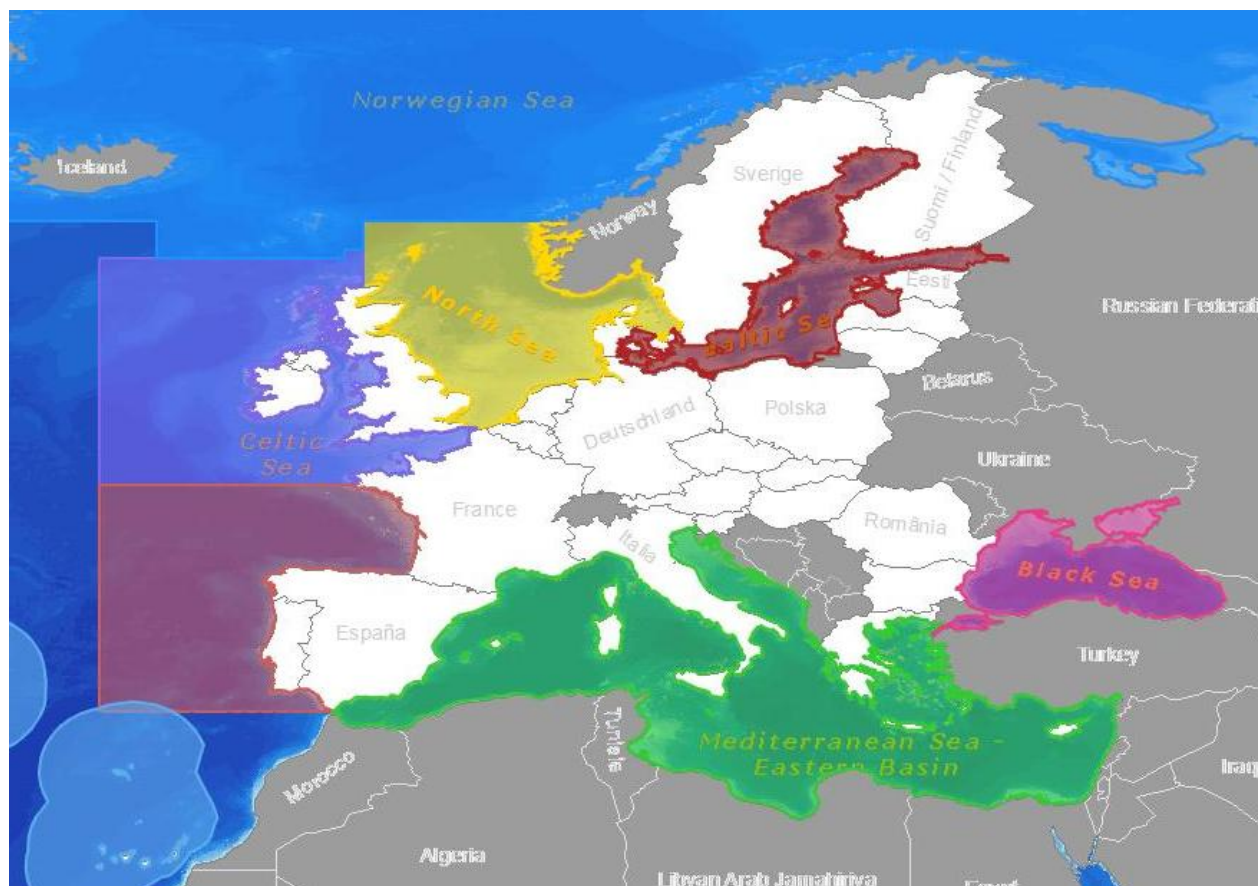
Integrated coastal zone management (ICZM): a process for planning and coordinating the sustainable use of coastal waters and land.

Ecosystem-based management: an integrated approach that considers an entire ecosystem, including humans, with the goal of maintaining a healthy, resilient and productive ecosystem that can provide goods and services.

Introduction

In addition to traditional uses of the seas and coasts (such as shipping, fishing, tourism and defence), there are increasing – and sometimes conflicting – demands on maritime space: oil and gas exploration, wind energy, wave energy, undersea cables and pipelines, aquaculture, extraction of gravel and sand, as well as the protection of wildlife and marine ecosystems.

There are inherent connections between sea-based activities and coastal areas. For example, shipping and fishing need port infrastructure, gas or electricity produced offshore must be transported to terrestrial distribution grids by pipeline or cable, and

Figure 1: European oceans and seas

Arctic Ocean, Baltic Sea, Black Sea, Mediterranean Sea, Atlantic Ocean, Bay of Biscay and Atlantic Iberian Coast, Celtic Sea, North Sea (clockwise from top)

Source: [European Atlas of the Seas](#), European Commission, DG Mare

coastal ecosystems include both land and sea areas.

There may be conflicts between human uses of the sea (e.g. between offshore wind development and fishing), or between human uses and nature (e.g. between port developments and protected areas).

These multiple demands for access to the same space create a need for maritime spatial planning and integrated coastal management – processes for analysing and allocating the distribution of human activities in seas and on coasts.

Canada and Australia were among the first countries to develop integrated approaches for the protection and development of their coastal waters in the 1990s. Some European countries have established maritime spatial plans in the last decade.

MSP differs from land-based spatial planning in a number of respects:

- three-dimensional planning is more important, as the sea space includes the surface, the water column and the seabed,
- some activities like fishing or tourism have greater seasonality,
- activities like fishing and shipping extend over large areas,
- in most cases, there is no private ownership or exclusive rights of access to sea areas,
- marine ecosystems are complex and interactions are less understood than in terrestrial ones,
- ecosystems and the impact of activities extend across national boundaries.

EU policy context

EU policy and legislation

The integrated maritime policy (IMP) for the EU ([COM\(2007\) 575](#)) and the corresponding action plan ([SEC\(2007\) 1278](#)) provide a framework to coordinate the development of sea-based activities in an ecosystem-focused approach.

The Marine Strategy Framework Directive ([2008/56/EC](#)), the environmental pillar of the IMP, aims to achieve 'good environmental status' of the EU's marine waters by 2020, and to protect the resource base on which marine-related economic and social activities depend. It requires MS to develop a sea-basin based strategy for their marine waters, using an approach covering whole ecosystems. This strategy must include an environmental assessment, targets and monitoring programmes.

Other relevant environmental legislation includes the [Water Framework Directive](#), which applies to coastal waters, the [Birds and Habitats Directives](#), which establish the Natura 2000 network of protected areas, [Directive 85/337/EEC](#) requiring an environmental impact assessment for public and private projects, and [Directive 2001/42/EC](#) which requires a strategic environmental assessment at an early stage for major plans and projects, including maritime planning. The [Biodiversity Strategy](#) includes actions to complete the Natura 2000 network, especially in the marine environment, and to combat overfishing and improve marine biodiversity.

Relevant EU initiatives include the '[blue growth](#)' initiative and [Limassol declaration](#), the [Marine Knowledge 2020](#) initiative, the [ICZM Recommendation](#), the [common fisheries policy](#), the [Renewable Energy Directive](#), the [Motorways of the Sea initiative](#) and the [strategy on climate change adaptation](#).

International agreements

International agreements concerning European seas have taken a spatial approach, covering individual sea basins.

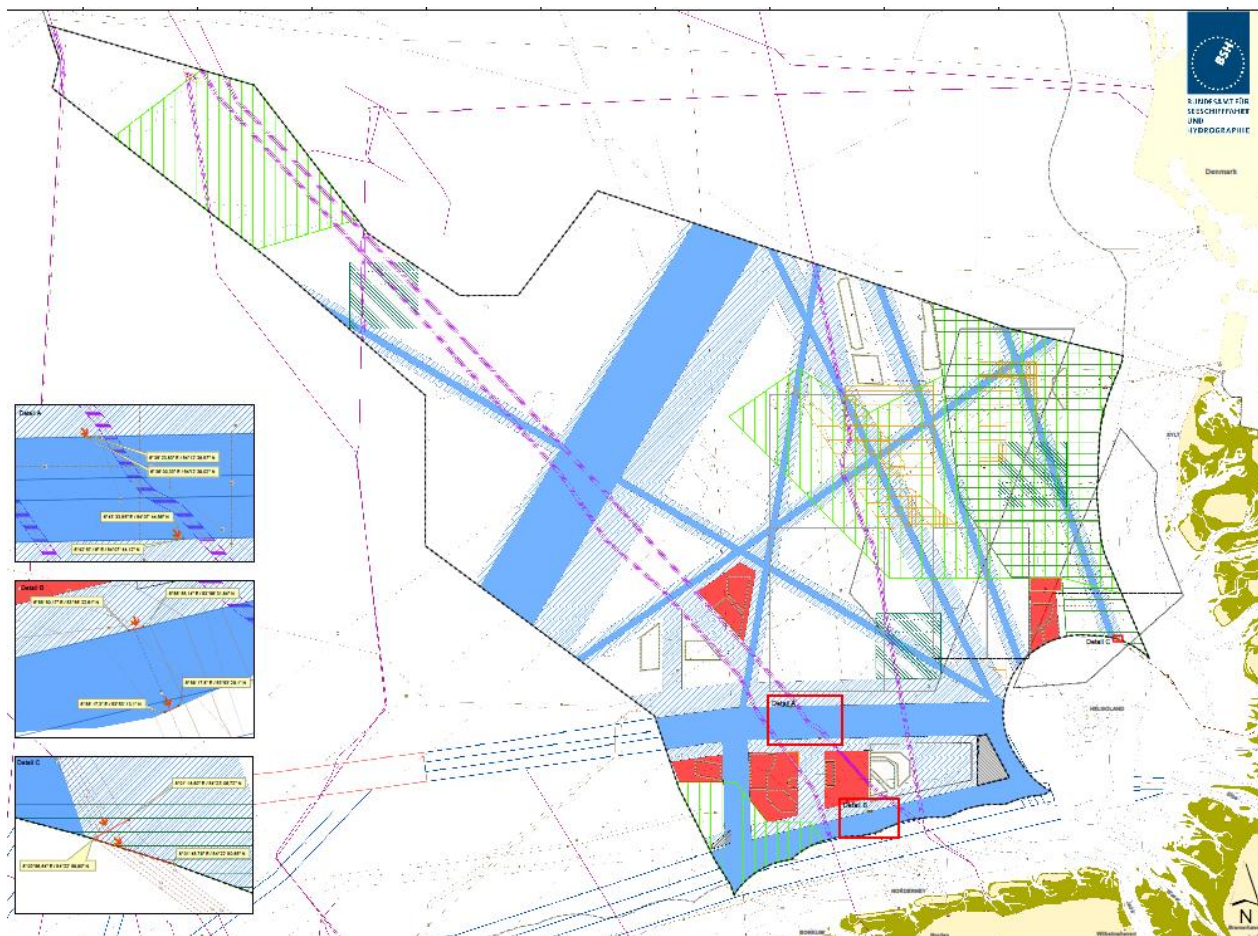
The [Barcelona Convention](#) for the protection of the Mediterranean Sea against pollution was adopted in 1976. Over time, its mandate has been widened to include planning and the integrated management of the coastal region. The [Protocol on Integrated Coastal Zone Management in the Mediterranean](#), in force since 2011, establishes a framework for ICZM in the Mediterranean.

The [United Nations Convention on the Law of the Sea](#) (1982) defines different maritime zones for coastal states, for which maritime spatial plans may be established.

Territorial sea: a coastal state enjoys full sovereignty in a zone up to 12 nautical miles (NM) from the coast.¹

Exclusive economic zone (EEZ): a coastal state may establish an exclusive economic zone not extending beyond 200 nautical miles from its coast. In this zone, the coastal state has sovereign rights to explore and exploit, conserve and manage natural living or non-living resources of the waters, the seabed and its subsoil, and to exploit the zone for other purposes, such as the production of energy from the water, currents and winds. It has jurisdiction with regard to the establishment and use of artificial islands, installations and structures, marine scientific research and environmental protection.

Continental shelf: a coastal state exercises sovereign rights over the resources of the seabed and subsoil. Coastal states have jurisdiction over their continental shelf with regard to the establishment and use of artificial islands, installations and structures; drilling of the continental shelf; cables and pipelines used in connection with exploration or exploitation of the continental shelf. The continental shelf may extend up to 400 nautical miles from the coast, depending on the depth of the seabed.

Figure 2: Maritime spatial plan for German North Sea EEZ

Blue: shipping lanes, purple: pipelines, red: offshore wind, green: Natura 2000 nature conservation areas

Source: [Ordinance on Spatial Planning in the German Exclusive Economic Zone in the North Sea of 21 September 2009](#)

Other regional conventions include [OSPAR](#) for the North Atlantic, the [Bucharest Convention](#) for the Black Sea, and the Helsinki Convention ([HELCOM](#)) for the Baltic Sea. The latter has set up an [MSP working group](#).

The [UNESCO MSP initiative](#) helps countries establish MSP through documentation, sharing of good practice and training. The United Nations Environment Programme has called for the widespread introduction of MSP, and the Convention on Biological Diversity has produced a [study on MSP](#).

European projects

The [Seanergy 2020](#) project has analysed existing international spatial planning instruments and the national MSP approaches in the EU with respect to offshore energy production, and produced a

number of recommendations on policies for removing MSP-related obstacles to offshore renewable energy production.

The project [BaltSeaPlan](#) used a learning-by-doing approach to overcome the lack of MSP legislation in most Baltic Sea countries. The project developed pilot plans for eight demonstration areas.

The [Plan Bothnia](#) project has developed a draft maritime spatial plan for the Bothnia Sea, shared by Sweden and Finland.

The project [Transboundary Planning in the European Atlantic](#) is developing a regional approach to cross-border MSP.

MSP in EU Member States

Belgium was among the first MS to implement an operational, multiple-use

planning system in its marine waters, based on the EEZ Act of 1999 and the Marine Protection Act of 1999, [revised in 2012](#) with new provisions for MSP. Belgium is currently working on a new integrated plan to replace its 2003 North Sea Masterplan.

In **Germany**, responsibility for MSP in the territorial sea (within the 12 NM limit) rests with the federal states (*Länder*), as part of their regional planning functions. The federal government has responsibility for MSP in exclusive economic zone up to 200 NM. [Spatial plans](#) for the North Sea and the Baltic Sea were adopted in 2009. The plans include priority areas for offshore wind energy development.

In the **United Kingdom**, the [Marine and Coastal Access Act 2009](#) establishes an integrated planning system for managing seas and coasts, a new decision-making framework as well as streamlined regulation and enforcement. The [Marine Policy Statement](#) sets out objectives, and forms the basis for marine plans and marine licensing.

Portugal's legal framework for MSP is based on the National Ocean Strategy of 2006, which aims to integrate sectoral policies and defines principles for both MSP and ICZM.

In **Poland**, MSP pilot projects have been developed, starting in 2008. MSP was integrated into Poland's national spatial development concept of 2011.

In **the Netherlands**, the Water Act provides a legal basis for MSP, and the National Water Plan of 2010 includes two main offshore wind energy areas.

Although no MSP system is in place, **Denmark** pre-selected 23 sites for offshore wind development in 2007. In 2010, Denmark set up a working group to develop an MSP approach.

Offshore wind energy

The space requirements of [offshore wind farms](#) have been an important factor in the emergence of maritime spatial planning approaches. In 2011, there were 53 offshore wind farms with a total capacity of 3.8 GW in ten European countries, using around 2 400 km² of sea space. Reliable spatial plans give offshore wind project developers confidence to invest €2.4 billion annually in the EU.

Total capacity should increase to 40 GW by 2020, using 25 000 km² of sea space, and to 150 GW by 2030, meeting 14% of total EU electricity demand and making a significant contribution to the EU's renewable energy targets.

Some EU Member States and Norway plan to establish a North Sea supergrid which would distribute offshore wind energy to the littoral states.

A comprehensive analysis of [national MSP regimes in the EU](#), produced by the Seanergy 2020 project, identifies three approaches, all of which can be effective:

- creation of a specific legal framework for MSP,
- extension of basic (land-use) spatial planning regimes to sea,
- amendment to existing related legislation.

Impacts of maritime spatial planning

As MSP is a relatively new approach, experiences of it are limited.

MSP is a tool which aims to provide a stable and predictable framework, indispensable for businesses to plan for medium and long-term investments. With an established spatial plan, the decision-making process for individual projects can be simplified and

accelerated, and costs can be reduced.

A [study on the economic effects of MSP](#) estimates that maritime activities in the EU created value added of €104 billion in 2010. It identifies three categories of MSP impacts:

- Lower coordination costs
- Lower transaction costs
- Enhanced investment climate

The study estimates that MSP could bring the following economic effects by 2030: a reduction of transaction costs by €0.4 to €1.8 billion, and gains of €0.155 to €1.6 billion through acceleration of investments in offshore wind and aquaculture.²

The UK estimates that its marine planning system cost around £34 million to set up and £1 million per year to maintain. On the other hand, the benefits are estimated at around £47 million.³

In Germany, the cost of an environmental assessment for a wind farm (normally around €1 million) can be reduced or eliminated because the federal government has already produced a strategic environmental assessment for its spatial plan that includes priority areas for wind farms.

The time needed for the licensing process of German offshore wind farms has been shortened by about one year, from 3-4 years to 2-3 years since maritime spatial plans were adopted.

Proposed MSP Directive

On 13 March 2013, the European Commission adopted a [proposal for a Directive on Maritime Spatial Planning and Integrated Coastal Management](#), which would require MS to draw up maritime spatial plans and integrated coastal management strategies, using an ecosystem-based approach. The proposal aims to facilitate sustainable growth in the 'blue economy' – renewable energy installations, oil and gas exploitation, maritime shipping, fishing, aquaculture and tourism.

Each MS remains responsible for its own planning process and the contents of the plans. However, MS would have to ensure public participation, establish cross-border cooperation, and organise the collection and exchange of data and information. MS would be required to designate competent authorities.

The legislative proposal was preceded by a roadmap on MSP ([COM\(2008\) 791](#)), a communication on the achievements and future development of MSP ([COM\(2010\) 771](#)), a [consultation](#) in 2011, and an [international conference on MSP](#) in 2012.

European Parliament position

In its [resolution of 12 July 2007](#) on a future maritime policy, the EP welcomed ecosystem-based MSP as a tool to foster sustainable economic development, while ensuring the protection of the marine environment.

In 2008, the EP adopted an amendment to the EU budget, to finance the [OURCOAST](#) project, which supports the exchange of experiences and best practices in sustainable coastal planning and management.

The [resolution of 21 October 2010](#) on IMP welcomed the roadmap on MSP.

The same year, MEPs established the "[Seas and Coastal Areas](#)" intergroup, chaired by Corinne Lepage (ALDE, FR), as a way to improve exchanges on maritime policies which fall under the competences of various committees.

On 19 March 2013, the Transport and Tourism Committee nominated Gesine Meissner (ALDE, DE) as [rapporteur](#) for the proposed MSP Directive.

Stakeholder positions

[Environmental NGOs](#) (Seas at Risk, Birdlife International, WWF and the North Sea Foundation) welcome the requirements for coordination between MS, the ecosystem approach and the use of strategic environmental assessment and public consultation. They point out that environmental commitments are to be respected, and insist that work on the MSP Directive should not further delay the designation and management of Marine Protected Areas, notably under the Birds and Habitats Directives.

The [European Wind Energy Association](#), supports the Commission proposal, which would allow the offshore wind industry to plan investments and facilitate the creation of a European offshore electricity grid.

Main references

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<http://www.library.ep.ec>

<http://libraryeuroparl.wordpress.com>

Endnotes

- ¹ The 'baseline' for calculating the distance from the shore is the low-water line; 1 nautical mile equals 1 852 metres. Ships of other states have a right of 'innocent passage' in territorial waters. Beyond the territorial zone, there is a 'contiguous zone' of 12 nautical miles, in which a coastal state has law enforcement powers. Areas outside the mentioned zones, the 'high seas', are international waters. The Convention was ratified by the EU and its Member States.
- ² These results are based on a number of assumptions and should be interpreted with care. The [case studies](#) in the annex to the study concern MSP in Portugal and the development of a transnational electricity grid in the North Sea. In both cases, potential future developments were analysed because of a lack of actual experience.
- ³ Source: [13 myths of marine spatial planning](#), / Charles N. Ehler, Marine ecosystems and management, April-May 2012.