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Appendices

Acronyms and abbreviations

Barcelona Convention	Convention for the Protection Of The Mediterranean Sea Against Pollution, 1976
Berne Convention	Convention on the Conservation of European Wildlife and Natural Habitats, 1979
Birds Directive	Council Directive of 2 April 1979 on the conservation of wild birds (79/409/EEC)
BSPAs	Baltic Sea Protected Areas
CBD	Convention on Biological Diversity, 1992
CCS	carbon capture storage
CFP	Common Fisheries Policy
CFP Framework Regulation	Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy
CMS	Convention on the Conservation of Migratory Species of Wild Animals, 1979
COLREGs	Convention on the International Regulations for Preventing Collisions at Sea, 1972
COP	Conference of Parties
EEZ	Exclusive Economic Zone
EIA	environmental impact assessment
EIA Directive	Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (85/337/EEC)
EU	European Union
EC	European Community
ECJ	European Court of Justice
Espoo Convention	Convention on Environmental Impact Assessment in a Transboundary Context, (Espoo 1991)
FAO	Food and Agriculture Organization of the United Nations
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
Helsinki Convention	Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992
HELCOM	Helsinki Commission
Hydrocarbons Directive	Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons
ICJ	International Court of Justice
ICZM	Integrated Coastal Zone Management
IMO	International Maritime Organization
IOC	Intergovernmental Oceanographic Commission

LOSC	United Nations Convention on the Law of the Sea, 1982
Marine Strategy Framework Directive	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)
MARPOL	The International Convention for the Prevention of Pollution from Ships, 1973
MPA	marine protected area
MSP	Maritime Spatial Planning
nm	nautical mile
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic, 1992
PSSA	Particularly Sensitive Sea Area
RFMO	regional fisheries management organisation
SEA	strategic environmental assessment
SEA Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
SES	Sea Enhancement Scheme
SOLAS	International Convention for the Safety of Life at Sea, 1974
SPAMI	Specially Protected Areas of Mediterranean Interest
UN Fish Stocks Agreement	United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 December 1995
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
VTM Directive	Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC

1 Introduction

1. Increased activity within Europe's marine waters has led inevitably to growing competition for finite maritime space.

2. Once ostensibly empty seas and oceans, used only for surface shipping and fishing, are now subject to competing claims for space from a range of different sectors and stakeholders. Static structures for energy production (including oil and gas extraction but also wind energy and in the future wave energy) compete with the needs of intensified shipping activity arising from more and ever larger vessels. A sea bed criss-crossed with pipelines and cables limits the scope for aggregate extraction and the deployment of bottom-tending fishing gears. Leisure uses and landscape values compete with new port developments and strengthened coastal defences that may be a necessary response to sea level rise resulting from climate change. In addition, the overall pressures imposed by population and economic growth, accompanied by technological developments that facilitate access to areas previously considered beyond the scope of human exploitation, threatens the maritime space needed for the survival of vital marine ecosystems and habitats.

3. The challenge, however, is not these activities are unregulated or indeed unplanned (indeed the contrary is usually true), rather that they are planned and regulated on a sectoral basis by different agencies each with its own specific legislative approach to the allocation and use of maritime space. The allocation of maritime space for navigation, for example, is typically determined by national maritime administrations on the basis of shipping legislation while space for energy production is often regulated by energy or industry ministries on the basis of specific energy legislation.

4. Without the means to coordinate a common approach to the allocation of maritime space for different sectors, the risk of problems of overlap and conflict between sectors and individual stakeholders is evident. There are also cross-border issues where developments in one European country (e.g. creation of a wind farm) may have implications for another country (e.g. visual impacts).

5. The relatively new notion of 'Maritime Spatial Planning' (MSP) has emerged as a means of resolving inter-sectoral and cross-border conflicts over maritime space. This Study examines a number of specific legal aspects of MSP.[1]

6. The background to the Study is the ongoing development of a Maritime Policy for the European Union (EU). On 10 October 2007 the European Commission adopted a Communication[2] setting out its vision for an Integrated Maritime Policy for the EU, together with a detailed action plan[3] setting out a work programme for the years ahead. This vision was welcomed by the European Council on 14 December 2007 and the Commission was invited to come forward with the initiatives and proposals contained in the action plan.

[1] The terms of reference of this Study are attached as Appendix A.
[2] COM (2007) 575, 10.10.2007, p. 6.
[3] SEC (2007) 1278, 10.10.2007, p. 8.

7. The consultation process organised by the European Commission in connection with the development of the Maritime Policy revealed broad stakeholder support for the introduction of MSP in European waters. One of the items to be included in the action plan is a road map to facilitate and encourage the further development of MSP in the Member States.

8. The aim of the Study is to contribute towards the development of the road map. While there have been a number of surveys of MSP practices in Member States, there has not yet been a comprehensive legal study on the constraints imposed by existing law. Neither has a complete picture of spatial planning practices in EU Member States been presented.

9. At the outset it is important to note that views vary greatly on the concept of MSP, its scope, and its links to existing instruments and approaches (e.g. Integrated Coastal Zone Management and the new Marine Strategy Framework Directive[4]). Indeed a number of different terms are used to describe MSP including 'marine spatial planning', 'integrated sea use management'[5], 'sea use planning', 'ocean management'[6], 'marine planning'[7] and 'maritime management'[8]. A number of definitions of MSP have been proposed and some examples of these are set out in Box 1.1.

Box 1.1 Definitions

The **United Kingdom** Department for Environment, Food and Rural Affairs (Defra) has suggested a definition of a 'marine plan' as "a strategic plan for regulating, managing and protecting the marine environment that addresses the multiple, cumulative and potentially conflicting uses of the sea."

In the **Netherlands** the objective of MSP in the context of the marine policy is stated to be to: 'enhance the economic importance of the North Sea and maintain and develop the international and ecological and landscape features by developing and harmonising suitable economic activities in the North Sea, taking into account the ecological and landscape features of the North Sea'.

The **Scottish Coastal Forum** has defined the purpose of MSP as: "two fold: (a) to secure sustainable and integrated development which balances and, where appropriate advances, economic, social and environmental objectives, and considers the implications of the ecosystem approach; and (b) to allocate space in inshore waters in a rational manner which minimises conflicts of interest and maximises synergistic relations."

One commentator (Young) has suggested that 'marine spatial planning or place-based management can be considered an integrated management of the full suite of human activities occurring in spatially demarcated areas identified through a procedure that takes into account biophysical, socioeconomic, and jurisdictional considerations

The **UNESCO** Intergovernmental Oceanographic Commission (IOC) has proposed a definition of MSP as follows:

'A process of analyzing and allocating parts of three-dimensional marine spaces to specific uses, to achieve ecological, economic, and social objectives that are usually specified through the political process; the marine spatial planning process usually results in a comprehensive plan or vision for a marine region. Marine spatial planning is an element of sea use management'.

[4] 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 OJ L 164 25.6.2008, p 19.
[5] Australia
[6] Canada's Oceans Act (1996, c. 31).
[7] UK Marine Bill.
[8] e.g. Norway and the Netherlands.

10. Such definitions provide a useful 'snap-shot' of the concept of MSP or its elements, although they have their limitations in trying to capture the key features of what is a complex and dynamic process.

11. Another way of understanding MSP is to compare it to spatial or land use planning in terrestrial environments.[9] Both types of planning regime seek to reconcile competing claims on the use of space and in doing so make use of plans and maps as well as 'zoning' different areas for different purposes. Furthermore, as will be seen below, in some countries the land based planning system is also used for MSP.

12. Nevertheless there are also significant differences that have the combined effect of rendering MSP a far more complex process than spatial planning on land ('land use planning'). First of all there is the dimensional aspect. Land use planning is primarily concerned with activities on the surface of the land.[10] To be effective, however, MSP must operate in three dimensions by simultaneously addressing activities that take place: (a) on the sea bed; (b) in the water column; and (c) on the surface (Figure 1-1).

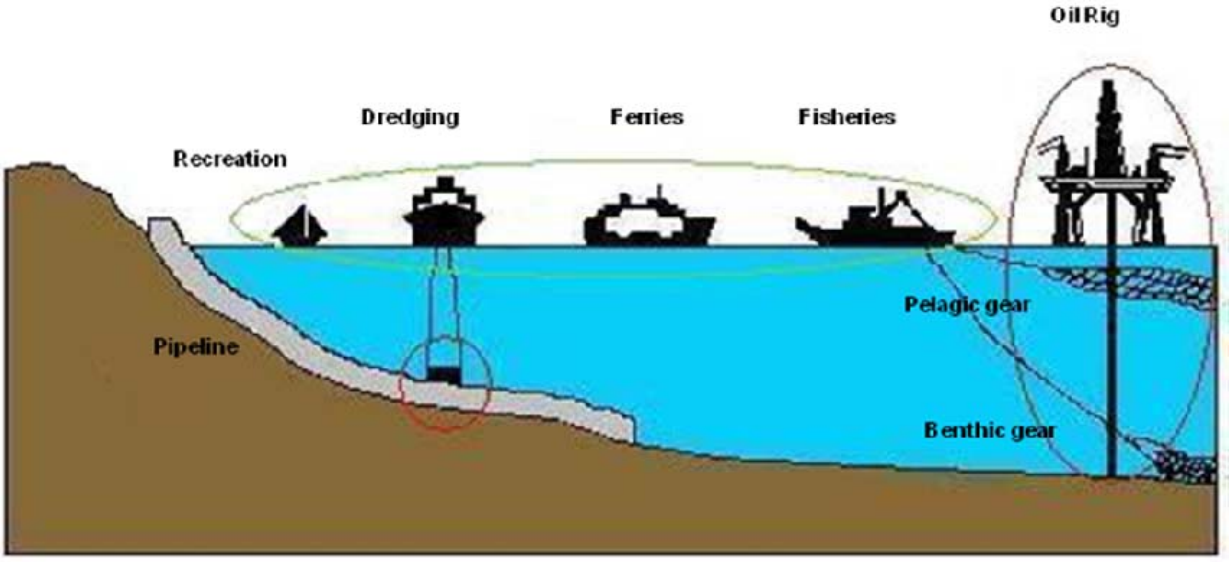

Figure 1-1: Water column view of potential areas of spatial conflict between users. Red & black zones; Permanent conflict is created by the stakeholder. Green zones; Temporary conflicts arising between stakeholders, commonly an issue dealing with mobile stakeholders & their location.

13. Second, land use planning is typically concerned with activities that involved a fair degree of permanence with regard to a specific area of land such as the construction of a building, road or other structure. MSP must however take account of both fixed

[9] UNESCO-IOC *Visions of Sea Change: Report of the First International Workshop on Marine Spatial Planning*, 2006, UNESCO-IOC, Paris at page 6.

[10] A land use plan may have direct or indirect impacts on activities beneath the ground (in terms of mineral abstraction for example) or above the ground (a land area that is zoned as a city may preclude the use of the airspace above that city as a flight corridor). But these restrictions are peripheral or incidental to the land use plan. They are not directly addressed in the plan itself except to the extent that they impact on surface land use.

structures, such as oil rigs and wind-farms, and temporary activities such as navigation (both surface and submarine) and capture fisheries (Figure 1-1 and Figure 1-2)

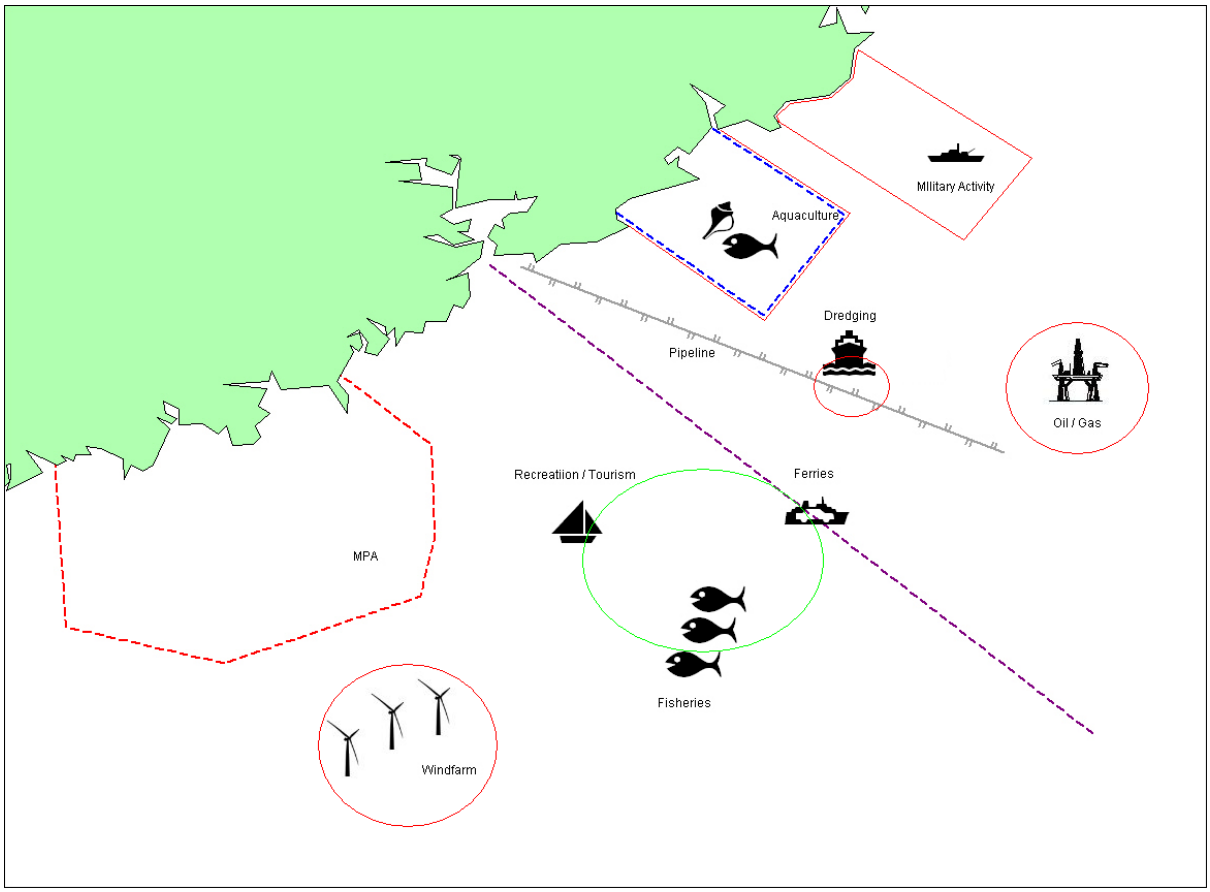

Figure 1-2: Plan view of potential areas of spatial conflict between users within the coastal zone. Red zones; Permanent conflict is created by the stakeholder. Green zones; Temporary conflicts that arise between stakeholders, commonly an issue dealing with mobile stakeholders & their location.

14. The third and perhaps most significant difference, however, concerns the nature of the legal rights that are subject to, and created by, the different planning regimes.

15. Most obviously, land use planning takes place against the background of private land tenure rights[11] the most significant of which in a European context is land ownership (although land tenure rights created on the basis of leases, licences and concessions may also have a significant role to play). Land tenure rights and land tenure regimes pre-date modern land use planning systems and in connection with a given land plot the existence of land tenure rights are usually a pre-requisite to the exercise of any rights conferred by a land use planning regime. Put another way: even if you have land use planning permission to build a structure in practice you will first need appropriate land tenure rights in respect of the land plot that is subject to the permission.

[11] A definition of land tenure proposed by FAO is 'the relationship, whether legally or customarily defined between people, as individuals or groups, with respect to land'. Food and Agriculture Organization of the United Nations *Land tenure and rural development* FAO Land Tenure Studies No. 3 (2002) FAO Rome at page 7.

16. In contrast the sea (including the column and surface) and sea bed are not subject to private tenure rights.[12] Moreover, as already mentioned, the regulation of activities in the maritime space typically takes place in general on the basis of:

    - a range of different sectoral laws;
    - a range of different sectoral plans adopted in accordance with those sectoral laws that typically allocate maritime space for different sectoral purposes (navigation clearways, fisheries 'no-take' zones, potential wind-farm sites etc.); and
    - in respect of many (but not all) activities, a range of different instruments described variously as 'permits', 'licences', 'consents', and 'authorisations'[13] issued by different agencies on the basis of those different sectoral laws (and pursuant to different priorities and policy objectives). Fishing licences, for example, are issued on the basis of fisheries legislation while licences to extract, say, gravel are issued on the basis of mineral legislation.

17. Therefore, although there are similarities between land use planning and MSP, there are also important differences that must be born in mind.

18. While it is beyond the scope of this Study to propose a definitive definition of MSP or to make recommendations as to how MSP should be undertaken, we suggest that it is possible to identify certain basic objectives for MSP. In the context of the Terms of Reference of this Study, this is a necessary step to be able to design indicators and evaluate progress towards MSP.

19. We suggest that in general terms the overall objective of MSP in the European context is to ensure the sustainable use and development of maritime areas under Member State jurisdiction, with the notion of sustainability including ecological, social and economic aspects.

20. In order to achieve this overall objective we propose that the sub-objectives of MSP are:
    - to prevent or reduce conflict between different sectoral interests in the maritime areas;
    - to simplify the process of permitting and licensing activities that take place within the maritime area;
    - to take account of the fact that Europe's maritime spaces are shared between different jurisdictions (at both inter-State and intra-State levels); and
    - to establish transparent and accountable decision making mechanisms that enable the effective coordination or integration of different sectoral interests, including the environment.

21. This approach is consistent with the definition proposed by UNESCO IOC which views MSP as a process and thus goes beyond the physical existence of one or more documents and/or maps that indicate the current and proposed allocation of maritime space among different sectors.

[12] Although as will be seen in the country studies in Part Four rights in the form of concessions, leases and licences, that are somewhat analogous to land tenure rights analogous to land tenure rights, or which may even be a type of land tenure right, may be typically granted in respect of the use of the sea bed.

[13] From a general legal perspective such terms are synonymous and are used interchangeably in this report in accordance with the given context.

22. As to its layout, this Study is set out in six parts including this introduction, with the other order of the parts following the order of the Terms of Reference of the Study. Part 2 examines the restrictions imposed by international and European Community law as regards MSP.

23. In Part 3, we propose a set of indicators to describe the status of MSP in Member States together with a set of instructions for their use. Part 4 summarises the content of a number of detailed national case studies which are attached as appendices to this Study while Part 5 contains an examination of the impacts of different governance structures on MSP, focussing again on the case study countries.

24. Finally, in Part 6 we summarise the conclusions of the Study.

2 Legal constraints on MSP imposed by international law and European Community law

25. This Part considers the extent to which international law, and in particular the branch of international law known as the Law of the Sea, and European Community law constrain or otherwise influence the ability of the Member States to engage in MSP within the waters under their jurisdiction or control.

26. Subparts 2.1 and 2.2 are dedicated to the analysis of the international law of the sea, other public international law and European Community law with regard to a wide range of human activities or uses of maritime space and explain in more detail which regulations open room for manoeuvre for States or contain constraints as to the planning of those activities or uses.

27. Subpart 2.3 deals with international agreements and European legislation contributing to a more holistic/integrated approach of MSP. Instruments looked at include requirements of public or cross-border consultation mechanisms or the prescription of (environmental) impact assessments as these ensure a wider balancing of interests when planning mostly economic activities in the maritime space.

2.1 The Law of the Sea

28. The Law of the Sea is the branch of (public) international law[14] that regulates the rights and duties of states and other actors recognised by international law, such as the European Community, concerning the sea and maritime affairs.

29. The sources of the Law of the Sea include customary international law as well as a range of multilateral and bilateral treaties and regulations adopted under them. The most important of these instruments is the United Nations Convention on the Law of the Sea[15] (LOSC) adopted at Montego Bay, Jamaica on 10 December 1982 and which entered into force some twelve years later on 16 November 1994.

2.1.1 The Law of the Sea Convention

30. Although not all States are party to the LOSC,[16] significant elements of the Convention are generally held to be declaratory of customary international law including those elements that are most relevant to this Study. In any event, the European Community and all of the Member States are parties to the LOSC.

31. The scope of the LOSC, which has been described as a "Constitution for the Oceans"[17], is extremely broad.[18]

[14] As opposed to private international law, sometimes known as the 'conflict of laws', which is concerned with determining the applicable law in trans-jurisdictional disputes.
[15] United Nations Treaty Series vol 1833, p.3
[16] The United States of America being a case in point.
[17] Remarks by Tommy Koh, Chair of the Third United Nations Conference on the Law of the Sea.

32. The LOSC balances the rights and interests of States acting in different capacities, for instance flag States, coastal States, port States, geographically disadvantaged and land-locked States as well as developed and developing States. Many of its provisions serve the interests of the international community as a whole. The latter include international communication (e.g. navigation), the sustainable use of marine living resources and the protection and preservation of the marine environment.

33. Part of this balance is accomplished by the division of the seas and oceans into maritime zones, some of which accrue automatically to any State that has a coastline, while others must be claimed by the coastal State in order to have legal effect. While not all coastal States have claimed contiguous zones, outside the Mediterranean Sea very few States geographically capable of having an exclusive economic zone of significant size have not claimed one (the notion of the 'exclusive economic zone' is discussed in section 2.1.1.4 below).[19] Among the Member States, only the United Kingdom is in this category, although the recently published Marine Bill provides for the United Kingdom to claim an exclusive economic zone to replace its existing 'Fishery Zone'.

34. Apart from these zoning provisions the LOSC does not contain any explicit provisions on MSP. The analysis of coastal States' scope for engaging in MSP activities thus has to start with the constraints set by the LOSC. These are different for each maritime zone.

2.1.1.1 Internal Waters

35. Internal waters are waters on the landward side of the baseline of the territorial sea (which concept is discussed in the next section).[20] The LOSC presumes that the coastal state has full sovereignty over its internal waters.

36. The LOSC does not limit the right of the coastal State to restrict entry into or transit of persons, ships and goods through its internal waters and ports. The coastal State is free to set laws, regulate any use, and use any resource.

37. The LOSC gives foreign vessels no right of passage within internal waters. The sole exception to this is found in Art. 8(2), which provides:

> Where the establishment of a straight baseline …has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage as provided in this Convention shall exist in those waters.

38. In summary, a coastal State enjoys the widest margin to submit its internal waters (including ports) to MSP, even as regards shipping and navigation.

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[18] Paragraph five of the preamble states that the LOSC seeks to establish "a legal order for the seas and oceans which will facilitate international communication, and will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment".

[19] Apart, that is, from States still claiming a 200 nm territorial sea. Information taken from UK Admiralty Notice to Mariners 12/08 <www.ukho.gov.uk/content/amdAttachments/2008/annual_nms/12.pdf>.

[20] LOSC, Article 8(1).

2.1.1.2 Territorial sea

39. Pursuant to the LOSC every coastal State has the right to a territorial sea up to a limit of twelve nautical miles (nm), measured from baselines that are to be determined in accordance with the LOSC.[21] In practice the breadth of the territorial sea that a coastal State can have will depend on the particular geographical circumstances: two States that face each other across a stretch of water that is less than 24 nm across will not both be able to have full 12 nm territorial seas. Instead it will be necessary for both States to delimit their maritime boundaries through negotiation.[22]

40. There are a number of rules pertaining to straight baselines, but a 'normal' baseline, which must be used wherever the conditions for using straight baselines are not satisfied, is the low-water line along the coast as marked on large scale charts officially recognised by the coastal State. The LOSC does, however, allow States to draw straight baselines across the mouths of rivers, harbour entrances and certain bays, which, of course, have to be published in large scale charts.[23]

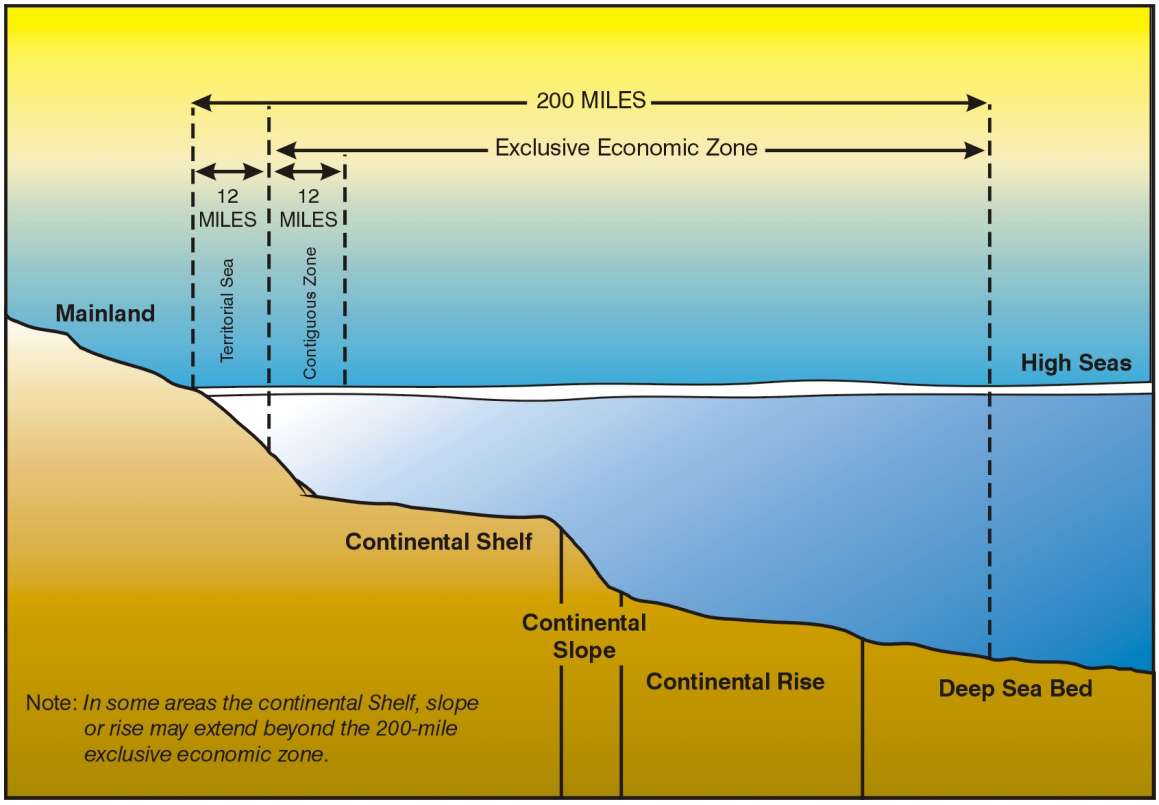

Figure 2.1 Maritime zones[24]

[21] LOSC, Article 3.
[22] Similar principles apply to the delimitation of the exclusive economic zones of States less than 400 nm apart, and in some cases even farther apart for the continental shelf where the rules of LOSC Article 76 give one or both States a *prima facie* entitlement to more than 200 nm of shelf.
[23] LOSC, Articles 3, 5 & 7.
[24] Based on the diagram contained in Churchill, R.R. & Lowe, A.V. *The Law of the Sea*, 3rd ed, Manchester, 1999 at page 25.

41. The LOSC recognizes a coastal State's sovereignty within its internal waters, its territorial sea and, where applicable, archipelagic waters. Article 2 of the LOSC states:

> 1. The sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea.
> 2. This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil.
> 3. The sovereignty over the territorial sea is exercised subject to this Convention and to other rules of international law.

42. A State's authority within these maritime zones is in principle absolute, except in so far as restricted by international law in relation for example, to the right of innocent passage of foreign vessels and the special rules for certain straits.

43. In other words the waters of the territorial sea and the land beneath those waters is as much part of the sovereign territory of a coastal State as any area of land that lies within its terrestrial borders.

44. As will be seen, for spatial planning this implies that there are only few constraints imposed by international law, most notably regarding shipping and navigation.

2.1.1.3 Contiguous zone

45. Within a zone contiguous to the territorial sea whose outer limit is a maximum of 24 nm from the baselines, a coastal State that claims such a zone has limited crime prevention and enforcement (but not legislative) powers for the purpose of customs, fiscal, immigration and sanitary matters.[25] In practical terms the contiguous zone has little impact if any on MSP.

2.1.1.4 Exclusive Economic Zone (EEZ)

46. Beyond its territorial sea a coastal State may claim an exclusive economic zone (EEZ) that may extend up to 200 nm from the baselines used for the measurement of the territorial sea.

47. In contrast to the territorial sea, in respect of which a coastal State has sovereignty, a more limited set of "sovereign rights" are conferred by the LOSC on coastal States in respect of their EEZs.

48. More specifically, within its EEZ a coastal State has sovereign rights relating to living and non-living resources and with regard to other activities for the economic exploitation and exploration of its EEZ, such as the production of energy. Article 56(1) states that:

> In the exclusive economic zone, a coastal State has:
>
> (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;

[25] LOSC, Article 33.

49. A coastal State also has the necessary jurisdiction related to these sovereign rights as well as jurisdiction for the establishment and use of artificial islands, installations and structures, marine scientific research and the protection and preservation of the marine environment.[26] These sovereign rights and jurisdiction conferred upon the coastal State imply the power to regulate the terms of use relating to those activities – including decisions with spatial significance. On the other hand the coastal State does not enjoy sovereignty in the fullest sense. Article 56(2) of the LOSC states:

> In exercising its rights and performing its duties under this Convention in the exclusive economic zone, the coastal State shall have due regard to the rights and duties of other States and shall act in a manner compatible with the provisions of this Convention.

50. Thus within the framework of the limited sovereign rights that are conferred by the relevant provisions of the LOSC, coastal States have the right to undertake MSP.

51. In other words coastal State regulatory competence in the EEZ is not plenary, but confined to the matters expressly indicated in the LOSC in respect of which sovereign rights or jurisdictional powers are granted to a coastal State. Moreover the LOSC subjects the exercise of this competence to various conditions and obligations explicitly foreseen, such as the right of any State to lay submarine pipelines and cables, and freedom of navigation of other States' vessels.[27] MSP activities undertaken by a coastal State must therefore take such rights and any activities that derive from such rights into account.

52. The construction of artificial islands, installations and structures in the EEZ is subject to the specific provisions contained in Article 60 of the LOSC. This article provides:

> 1 In the exclusive economic zone, the coastal State shall have the exclusive right to construct and to authorize and regulate the construction, operation and use of:
> (a) artificial islands;
> (b) installations and structures for the purposes provided for in article 56 and other economic purposes;
> (c) installations and structures which may interfere with the exercise of the rights of the coastal State in the zone.
> 2. The coastal State shall have exclusive jurisdiction over such artificial islands, installations and structures, including jurisdiction with regard to customs, fiscal, health, safety and immigration laws and regulations.

53. Article 60 of the LOSC goes on to authorise the coastal State to take precautionary measures as regards safety of navigation. These are described in more detail below in the section relating to navigation.

54. In the European waters outside the Mediterranean the coastal Member States have claimed EEZs or their equivalent.[28]

55. It is worth noting that only a few States, none of them Member States, have claimed EEZs in the Mediterranean Sea.[29] In recent years, however, several coastal States including Member States have established different types of zones for varying purposes.

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[26] LOSC Article 56(1)(b).

[27] Note that freedom of navigation in the EEZ is not absolute, but a balancing exercise between the coastal State and the flag State, inasmuch as by LOSC Article 58(3) its exercise is subject to due regard to the coastal State's rights and duties and compliance with its laws in so far as they are not incompatible with Part V of the Convention.

[28] With the exception of the UK as described above. Nevertheless, the UK has claimed an 'Exclusive Fishing Zone' that extends up to 200 nm.

56. For example France has declared an 'Ecology Protection Zone' in the Mediterranean Sea, claiming jurisdiction in this area over the protection and preservation of the marine environment, marine scientific research and the establishment and use of artificial islands, installations and structures. The scope of this zone does not include fisheries.

57. Beyond the territorial sea, Spain has claimed a fishery zone out to lines of equidistance between it and adjacent and opposite States. Malta has claimed a fisheries zone out to 25 nm from its baselines and Algeria and Libya have made similar claims extending 52 nm and 74 nm respectively. Croatia has claimed a 200 nm ecological and fishery protection zone.[30]

2.1.1.5 Continental shelf

58. As regards the continental shelf Article 76(1) of the LOSC provides:

> The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.

59. In other words some but not all coastal States may be entitled to an outer continental shelf that extends beyond the EEZ's maximum outer limit of 200 nautical miles (nm) from the baselines used for the measurement of the territorial sea.

60. With regard to its continental shelf, Article 77(1) of the LOSC provides that the coastal State exercises 'sovereign rights for the purpose of exploring it and exploiting its natural resources'. In other words, as with the rights of a coastal State over its EEZ, something less than full sovereignty is conferred. Article 77 (2) goes on to clarify that the rights of the coastal State are exclusive in that if it does not explore its continental shelf or exploit its natural resources no one else may undertake such activities without the express consent of the coastal State. Unlike the EEZ and contiguous zone, but like the territorial sea, the coastal State gains its continental shelf by operation of law, without the need to claim it: Article 77(3).

61. The sovereign rights of the coastal State regarding the continental shelf include the exploitation of living organisms belonging to sedentary species, drilling, tunnelling, and the use of artificial islands, installations, and structures. It follows that coastal States may also take the appropriate planning measures to regulate these activities.

62. Article 78(1) of the LOSC states that:

> The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters or of the air space above those waters.

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[29] Cyprus, Egypt, Morocco, Syria and Tunisia have claimed EEZs according to the UK Annual Notice to Mariners No 12 cited above.

[30] See also Papanicolopulu, I. "A Note on Maritime Delimitation in a Multizonal Context: The Case of the Mediterranean", (207) 38 *Ocean Development and International Law* 381 at 382-383, which also mentions legislation passed in Italy in 2006 providing for an as yet undeclared ecological protection zone, and the archaeological zones of Algeria, Cyprus, France, Italy and Tunisia.

63. Thus on the outer shelf beyond the 200 nm limit, the coastal State has no rights with regard to the waters superjacent to the sea-bed and the airspace above those waters, which have the status of high seas. Except to the extent necessary to make use of its economic rights on the continental shelf, it must avoid interference with navigation and other rights and freedoms of other States as laid down in the regime of the high seas.[31]

2.1.1.6 High seas

64. Beyond the outer limit of the EEZ (or of the territorial sea if no EEZ has been declared or equivalent rights claimed) the regime of the high seas applies.

65. All States enjoy the freedom of the high seas. Article 87 defines the scope of this freedom, stipulating that:

> 1.… It comprises, inter alia, both for coastal and land-locked States:
>
> (a) freedom of navigation;
> (b) freedom of overflight;
> (c) freedom to lay submarine cables and pipelines, subject to Part VI;
> (d) freedom to construct artificial islands and other installations permitted under international law, subject to Part VI;
> (e) freedom of fishing, subject to the conditions laid down in section 2;
> (f) freedom of scientific research, subject to Parts VI and XIII.
> 2. These freedoms shall be exercised by all States with due regard for the interests of other States in their exercise of the freedom of the high seas, and also with due regard for the rights under this Convention with respect to activities in the Area.

66. The limits to this freedom are laid down in Article 89 of the LOSC, which states that '(N)o State may validly purport to subject any part of the high seas to its sovereignty'.

67. As States' ability to make spatial plans is restricted to land and sea under their jurisdiction, it follows that States are excluded from making any area of the high seas subject to MSP as such, though they may regulate the activities of their own nationals there (which includes vessels flying their flag).

2.1.1.7 Implications of the LOSC zoning regime for MSP

68. Summing up, because the LOSC recognizes the sovereignty of the coastal State over its territorial sea (as well as its internal waters and, where applicable,[32] archipelagic waters) subject to the particular constraints imposed by international law, which relate primarily to navigation, the legal rights of coastal States to engage in MSP are essentially analogous to the rights they enjoy as sovereign States in respect of land use planning.

69. With regard to the EEZ and the continental shelf, however, because as already mentioned the basic relevant provisions in the LOSC in this area are generally held to be declaratory of customary international law, while these zones confer specified sovereign

[31] LOSC, Article 78(2).
[32] Archipelagic waters are not in fact relevant in the MSP context for the EU and its Member States, as, although the UK and probably Ireland satisfy the definition in LOSC Article 46 of an archipelagic State, by the rules in Article 47 they are not eligible to draw the archipelagic baselines within which such waters exist.

rights upon coastal States, the rights of those States to engage in MSP are limited to the exercise and protection of those rights.

70. As to the high seas, the international 'commons', coastal States may not claim the sovereignty or sovereign rights that would give the necessary legal effect to MSP activities affecting anyone other than their own nationals. The sole qualification is that they may claim all or part of the rights associated with an EEZ where the latter has not already been claimed. Thus in the Mediterranean Sea, the coastal Member States may in the absence of an EEZ nonetheless undertake MSP within any special zones that they have claimed beyond their territorial seas in connection with the purposes for which those zones were established (which must in any event not go beyond the purposes for which an EEZ may be established).

71. That qualification apart, the most that any State can do, as regards the high seas, is to regulate the activities of vessels that hold its nationality and which fly its flag, and of natural and legal persons of its nationality. The ascription of nationality to vessels is one of the most important means by which public order is maintained at sea. As well as indicating what rights a ship enjoys and to what obligations it is subject, the nationality of a vessel indicates which State is to exercise jurisdiction over the vessel (which may be concurrent with the jurisdiction of the coastal State in a relevant maritime zone). Nationality also indicates which State is responsible for the vessel in international law in cases where an act or omission of the vessel is attributable to its State, and which State is entitled to exercise diplomatic protection on behalf of the vessel.[33] The basic provisions on the nationality of ships are also set out in the LOSC.

72. Subject to the discussion that follows on fisheries and protected areas, the net effect is that there is little scope for States to undertake MSP in areas beyond national jurisdiction.

73. The process of delimiting Europe's maritime boundaries is, in fact, incomplete.[34] While in theory this situation may negatively impact on the MSP activities in practice potential

[33] Churchill, R.R. & Lowe, A.V. *The Law of the Sea*, *op cit*, at page 257.

[34] Besides the Rockall Plateau situation involving Denmark, Iceland, Ireland and the UK other maritime boundaries in respect of which the process of delimitation is incomplete in the Mediterranean Sea and Atlantic Ocean include: (a) Cyprus/Greece; (b) Cyprus/Lebanon; (c) Cyprus/Syria: (d) Cyprus/Turkey; (e) Greece/Turkey: (f) Croatia/Slovenia; (g) Croatia/Montenegro; (h) Albania/Montenegro; (i) Italy/Malta; (j) Malta/Libya (water column), (k) possibly Malta/Tunisia; (l) France/UK re fisheries jurisdiction: (m) Ireland/UK ditto; (n) Portugal/Spain (partly delimited by a 1970s treaty that has never entered into force); (o) Spain/UK; (p) France/Spain; (q) France/Italy (part-delimited); (r) Italy/Algeria; (s) Spain/Algeria; (t) Spain/Morocco; (u) Portugal/Morocco; and (v) Norway/Russia. As regards the Black Sea the delimitation of the following boundaries remains to be concluded: (a) Russia/Georgia; (b) Russia/Ukraine; (c) Romania/Ukraine (now before the International Court of Justice); (d) Bulgaria/Romania; (e) Bulgaria/Turkey; and (f) (possibly) Romania/Turkey. Maritime boundaries that remain to be delimited in the Baltic include those between: (a) Denmark/Poland; and (b) Estonia/Russia. See further Prescott, V. & Schofield, C. *The Maritime Political Boundaries of the World* (2nd ed), Martinus Nijhoff, 2004. There may also be instances where existing continental shelf boundaries transpire, in the light of new knowledge about the seabed, not to be long enough to delimit the entire continental shelf where it extends beyond 200 nm from the baselines. Prescott & Schofield mention Denmark/UK on the Rockall Plateau in this context. Also, despite there being a UK/Ireland shelf boundary already, France, Ireland, Spain and the UK have a joint submission before the Commission on the Limits of the Continental Shelf in respect of their overlapping entitlements in the Bay of Biscay and Celtic Sea, and only once its recommendations are received will they proceed to delimit the area *inter se*. In the case of Svalbard the issue is whether the conditions subject to which Norway's title was recognised, in particular the

scope for disputes/problems is no greater than as regards the regulation of any other maritime activity by the relevant coastal States.

2.1.2 Other international and regional agreements

74. Although the LOSC is by far the most important legal instrument in terms of the Law of the Sea, it is by no means the only one. The LOSC lays down a comprehensive regime of law for the world's oceans and seas; but in doing so in many fields it only provides the general rules, while assuming that detailed regulation is organised through other, specialised international bodies and specific international agreements on particular aspects of the law of the sea.

75. Therefore, although the LOSC should not be understood to be a framework convention in the manner of a number of subsequent environmental conventions,[35] it is nevertheless supplemented by a number of specific instruments, either in functionally defined areas (navigation, fishery, nature protection) or along geographical or regional lines. Both types of instrument – sector specific agreements and regional agreements – regulate issues that have the potential to impact on MSP.

76. Articles 237 and 311 of the LOSC define its relationship with such instruments. As to the general relationship between the LOSC and other international agreements Article 311 specifies that between parties the LOSC shall prevail over previous conventions on the law of the sea, and other previously concluded agreements if those are not in contradiction to the LOSC and do not prevent other States Parties of the LOSC from enjoying their rights or fulfilling their obligations under the LOSC.[36]

77. With regard to the conclusion of new agreements, Article 311(3) states:

> Two or more States Parties may conclude agreements modifying or suspending the operation of provisions of this Convention, applicable solely to the relations between them, provided that such agreements do not relate to a provision derogation from which is incompatible with the effective execution of the object and purpose of this Convention, and provided further that such agreements shall not affect the application of the basic principles embodied herein, and that the provisions of such agreements do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under this Convention.

78. As to the relationship between the LOSC and other conventions on the protection and preservation of the marine environment, Article 237 states that:

> 1. The provisions of this Part are without prejudice to the specific obligations assumed by States under special conventions and agreements concluded previously which relate to the protection and preservation of

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right of the nationals of the contracting Parties to exploit natural resources on equal terms on land and in the territorial sea under Arts 2 and 3 of the Treaty concerning the Archipelago of Spitsbergen (Paris, 9 February 1920; 2 LNTS 7) apply also to the EEZ. Some parties to the 1920 treaty have argued that the non-discrimination regime applies not only on the territory and in the territorial waters of Svalbard as specified by the treaty, but also in the EEZ. If this point of view were to prevail, it would necessitate a quasi-delimitation between the part of the Norwegian EEZ generated by Svalbard and the EEZ generated by other parts of Norway.

[35] Such as the United Nations Framework Convention on Climate Change, (New York) 9 May 1992, 31 ILM (1992). See Boyle, A.E 'Further Development of the Law of the Sea' 54 *ICLQ* July 2005 pp 563-584 at page 564.

[36] Articles 311(1) and 311(2).

> the marine environment and to agreements which may be concluded in furtherance of the general principles set forth in this Convention.
>
> 2. Specific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention.

79. Detailed technical standards have been established in global conventions, such as the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)[37], adopted under the auspices of the International Maritime Organization. Regional standards, usually more stringent, are contained in regional conventions such as the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)[38]. However the detailed technical arrangements of these agreements have to remain within the jurisdictional limits set by the LOSC if non-parties are expected to comply with them.

80. In addition there are a number of non-binding instruments which do not create legal obligations, but instead reflect agreement between States concerning the need to co-operate in identified issue areas. Those general norms or principles to become operational rules need further concretisation through agreements or direct implementation into domestic law; in either case State parties to those instruments have a wide margin of discretion[39].

81. An example of such an instrument is the Code of Conduct on Responsible Fisheries under the Food and Agriculture Organization of the United Nations (FAO).[40] It focuses on the balance between "the biological characteristics of the resources and their environment and the interests of consumers and other users." Although not binding, the Code has had a significant impact on the growing trend toward coordinated management and the promotion of sustainability in fishing activities in all ocean areas. It does not specifically discuss geographic-based measures directly relevant for MSP; however by focusing on the needs for conservation, restoration and sustainable use of ecosystems it supports indirectly designation of protected areas as an important instrument in achieving these objectives[41].

82. At the World Summit for Sustainable Development in 2002 a "plan of implementation" was adopted which includes a number of specific time-bound commitments, including "the establishment of a representative network of (marine protected areas)" by 2012. States are called on to maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in the high seas[42].

83. The plan in particular encourages States to:

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[37] 12 *ILM* (1973), 1319, 1434;
[38] 32 *ILM* (1993), 1068;
[39] See further Boyle, A.E. "Some Reflections on the Relationship of Treaties and Soft Law", in *International and Comparative Law Quarterly*, Vol. 48, No. 4 (Oct., 1999), pp. 901-913.
[40] Adopted by the Conference of the FAO at its 28th session on 31 October 1995; FAO doc 95/20/Rev.1.
[41] Young, T. R. "The Legal Framework for MPAs and successes and failures in their incorporation into national legislation" FAO Expert Workshop on Marine Protected Areas and Fisheries Management: Review of Issues and Considerations 2006.
[42] World summit on sustainable development – Plan of implementation; para. 31 a

> Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach,…the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012…and the integration of marine and coastal areas management into key sectors;..

2.2 European Community Law

84. As already mentioned, the European Community (EC) and all of the Member States are parties to the LOSC. Consequently as the European Court of Justice (ECJ) recognised in its judgment concerning a dispute between Ireland and the UK relating to the impact of the MOX plant at Sellafield on the marine environment:[43]

> The [LOS] Convention was signed by the Community and subsequently approved by Decision 98/392/EC[44]. It follows that, according to settled case-law, the provisions of that convention now form an integral part of the Community legal order.

85. In consequence EC law must respect and give effect to the provisions laid down in the LOSC.

86. On the other hand in accordance with the principle of conferred powers, the EC only has power to legislate in those areas where the treaty explicitly provides a legal basis to do so. Although the EC has not sought to legislate specifically on MSP, this does not mean that EC legislation is irrelevant. In this respect the most important and relevant EC legislation for the purposes of MSP relates to fishing and environmental protection (discussed in more detail below).

87. As regards the geographical scope of Community law, notwithstanding some earlier claims to the contrary it is now established that it applies within the EEZs of the Member States. In outline it had been argued that as an EEZ claimed by a Member State is not an integral part of that State's territory, the EC could not have jurisdiction over that area. By now it is well established however that EC law applies to all maritime areas over which Member States have jurisdiction.

88. In a case regarding the application for a declaration that Ireland had failed to fulfil its obligations under the EC Treaty by introducing certain restrictive measures in the fisheries sector the ECJ, when determining the geographical area to which a regulation applied, reached the conclusion that its territorial scope coincided with that of Community law in its entirety at any given time. The ECJ reasoned that this is the case also for all maritime waters coming under the sovereignty or within the jurisdiction of the Member States. Any extension of Member States' maritime zones automatically entailed the same extension of EC legislation's field of application. Thus also the EEZ or any other type of zone where a Member State exerts jurisdiction comes under the territorial scope of EC law[45].

89. Furthermore in the case of *Kramer*[46], the ECJ deduced from a legal basis for regulating fishing with a view to ensuring protection of fishing grounds and conservation of the

[43] Case C-459/03, Commission v. Ireland, [2006] ECR I-4635.
[44] Decision of 23 March 1998 (OJ 1998 L 179, p. 1)
[45] Case 61/77 Commission v Ireland [1978] ECR 417, paragraphs 45 to 51.
[46] Joined Cases 3/76, 4/76 and 6/76 Kramer [1976] ECR 1279, paragraphs 30/33.

biological resources of the sea (contained in the Accession treaty of 1972) that the rule-making authority of the Community also extends – in so far as the Member States have similar authority under public international law – also to fishing on the high seas.

90. In conclusion the whole *acquis* does apply outside of the territory of the Member States in so far as Member States are entitled to exert jurisdiction themselves. Community law extends spatially as far as the rulemaking authority of Member States under public international law. European Community legislation applies to the territorial sea, the continental shelf and also the EEZ of all Member States, as well as to the high seas as regards legislation on fishing by nationals of EU Member States.

2.3 Constraints regarding specific activities and uses

2.3.1 Navigation

91. As to safety of navigation, as a framework convention in this respect, the LOSC does not itself set out binding rules but confines itself to stating where the authority to make such rules lies.

92. In the EEZ and on the high seas it incorporates by reference the rules made by what it refers to as the "competent international organization"; the International Maritime Organization (IMO).[47]

93. By contrast, in the territorial sea in general, the coastal State is free to prescribe sea lanes and traffic separation schemes as it sees fit, and to visit non-compliance with penal consequences, and need only take into account the IMO's recommendations.

94. In waters where the interests of unimpeded navigation have required special regimes, by contrast – that is, straits used for international navigation - the coastal State must refer its proposals to the IMO for adoption, which in turn may adopt only such sea lanes and traffic separation schemes as are agreed with that State.

95. Although traffic separation schemes, of which there are many, are notified to the shipping community by means of Circulars in the COLREG.2 series available on the IMO website, the 1974 International Convention for the Safety of Life at Sea (SOLAS),[48] not the Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREG),[49] forms the legal basis of ships' routeing measures in the EEZ and on the high seas, including a minority that have mandatory as opposed to the more common recommendatory character.[50] The IMO Assembly in 1997 delegated the Maritime Safety Committee to act on the IMO's behalf in these matters. More than 120 traffic separation schemes have been adopted to date within European waters.[51]

[47] Although not named as such, the IMO is universally regarded as the body meant by this phrase.
[48] London, 1 November 1974; 1184 UNTS 3.
[49] Adopted on 20 October 1972 and entered into force on 15 July 1977; 1050 UNTS 16.
[50] IMO Assembly Resolution A.572(14) as regularly amended.
[51] See UK Admiralty's Annual Notice to Mariners No 17
www.ukho.gov.uk/content/amdAttachments/2008/annual_nms/17.pdf

96. The concept of the territorial sea as laid down in the LOSC foresees full sovereignty of the coastal State in this area (Article 2) with the exception of the right of innocent passage for foreign ships as provided by the Convention (Articles 17-32) and the more substantial rights of transit passage through certain straits used for international navigation (Articles 34-45). The principle that all ships have the right of innocent passage does not, however, impede the coastal State adopting laws relating to innocent passage.

97. The coastal State may *inter alia* regulate the protection of facilities, installations, cables and pipelines, the conservation of living marine resources, and the preservation of the environment of the coastal State. Article 21(1) states that

> The coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following:
>
> (a) the safety of navigation and the regulation of maritime traffic;
> (b) the protection of navigational aids and facilities and other facilities or installations;
> (c) the protection of cables and pipelines;
> (d) the conservation of the living resources of the sea;
> (e) the prevention of infringement of the fisheries laws and regulations of the coastal State;
> (f) the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof;
> (g) marine scientific research and hydrographic surveys;
> (h) the prevention of infringement of the customs, fiscal, immigration or sanitary laws and regulations of the coastal State.

98. In particular, a coastal State itself can impose the use of specified sea lanes and traffic separation schemes (Article 22(1)).[52] When establishing such measures the coastal State is obliged to take into account recommendations of the competent international organisation (i.e. the IMO), customary practices and the nature and density of the traffic (Article 22(3)).

99. In straits used for international navigation through which no high seas corridor exists (i.e. it is impossible to transit the strait without entering the territorial sea of one or other of the littoral States), the options of the coastal States are again more limited: The coastal State bordering such a strait may only adopt rules on sea lanes and traffic separation schemes where these are adopted by the competent international organisation (Article 41(4)). Moreover the range of legislation that can be adopted by the coastal State is limited. Bordering States may only adopt laws and regulations in respect of the safety of navigation, the prevention, reduction and control of pollution and the prevention of fishing. Article 42(1) prescribes:

> ….States bordering straits may adopt laws and regulations relating to transit passage through straits, in respect of all or any of the following:
> (a) the safety of navigation and the regulation of maritime traffic, as provided in article 41;
> (b) the prevention, reduction and control of pollution, by giving effect to applicable international regulations regarding the discharge of oil, oily wastes and other noxious substances in the strait;
> (c) with respect to fishing vessels, the prevention of fishing, including the stowage of fishing gear;
> (d) the loading or unloading of any commodity, currency or person in contravention of the customs, fiscal, immigration or sanitary laws and regulations of States bordering straits.

[52] LOSC, Article 22(1).

100. In the EEZ, all States enjoy the freedom of navigation subject to the relevant provisions of the LOSC (Article 58(1)). In exercising their rights in the EEZ of a third State, States must have due regard to the rights of the coastal State. The coastal State has in particular those functional limited jurisdictional rights granted by Article 56(1):

> In the exclusive economic zone, the coastal State has:
> (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
> (b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:
> (i) the establishment and use of artificial islands, installations
> and structures;
> (ii) marine scientific research;
> (iii) the protection and preservation of the marine environment;
> (c) other rights and duties provided for in this Convention.

101. In summary within the EEZ the coastal State has the right to exploit and regulate fisheries, construct artificial islands and installations and use the zone for other economic purposes.

102. Thus in the EEZ the freedom of navigation can only be controlled by the coastal State as a result of the exercise of the sovereign rights to exploit the resources of the EEZ or of the exercise of its jurisdiction, such as the creation of artificial islands, installations and structures and of safety zones around offshore installations (Articles 60(4) and 80). Those installations and safety zones may not however be established where they could interfere with recognized sea lanes essential to international navigation (Article 60 (7)).

103. In the context of rules on the control of pollution of the marine environment, Article 211(6)(a) and (c) provides for the possibility that navigation restrictions of the IMO might be applied if a State so requests.

104. Article 211(6) of the LOSC states:

> Where the international rules and standards … are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic, the coastal States, after appropriate consultations through the competent international organization with any other States concerned, may, for that area, direct a communication to that organization, submitting scientific and technical evidence in support and information on necessary reception facilities….

105. Article 211(6)(c) states that:

> If the coastal States intend to adopt additional laws and regulations for the same area for the prevention, reduction and control of pollution from vessels, they shall, when submitting the aforesaid communication, at the same time notify the organization thereof. Such additional laws and regulations may relate to discharges or navigational practices….

106. In summary, coastal States are entitled to take measures restricting navigation but are not entitled to legislate unilaterally on navigation even if this is necessary for the protection of sensitive marine areas[53].

107. The only provision in the LOSC on ice-covered areas, and their potential impacts on navigation, is Article 234.[54] It reads:

> Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.

108. In terms of maritime transport the EC has adopted a number of directives in order to transpose international agreements on security of shipping traffic or taken steps of its own to enhance safety of ships.[55] However these instruments have no direct bearing on MSP, with the exception of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC (the VTM Directive).[56]

109. The VTM Directive requires Member States to draw up plans whereby ships in distress may, if the situation so requires, be given refuge in their ports or any other sheltered area in the best conditions possible (see section 3(14)) below.

2.3.2 Fisheries

2.3.2.1 LOSC

110. The basic legal regime under international law regarding the extraction of fisheries resources (as well as the extraction of other renewable and non-renewable resources from the sea) is provided by the LOSC. In seeking to ensure the sustainable use of sea resources this regime seeks to reconcile an efficient fisheries industry with resource conservation and management.

111. Under the LOSC the rights and obligations of States relating to the conservation and management of marine living resources are again different according to where the resources are located.

112. All natural resources, including living resources found in the territorial sea or waters landward of it are under the sovereignty of the coastal State. Such sovereignty entitles

[53] Gellermann M., Stoll, P-T., Schwarz, K. and Wolf, R. „Nutzungsbeschränkungen in geschützten Meeresflächen im Bereich der Ausschließlichen Wirtschaftszone und des Festlandsockels“, Federal Agency for Nature Conservation, BfN 2007 – Skripten 194.

[54] This provision was inserted at Canada's behest to cover its Arctic Waters Pollution Prevention Act 1970 which, very controversially at the time, asserted jurisdiction out to 100 nm from the baselines.

[55] See further in connection with the development of EC maritime safety policy: http://ec.europa.eu/transport/maritime/safety/1978_en.htm

[56] OJ L 208, 5.8.2002, p. 10.

the coastal State to adopt laws and regulations in respect of the conservation and management of such resources (Articles 2 and 21(d)).

113. Within the EEZ, the coastal State has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, including all living resources (Article 56). Article 61 concerns the conservation of living resources. While Article 61(2) requires coastal States to ensure, through proper conservation and management measures, that the maintenance of the living resources in the EEZ is not endangered by overexploitation, the focus of the LOSC is on the utilisation of the living resources as demonstrated by Article 62(1). This Article states:

> The coastal State shall promote the objective of optimum utilization of the living resources in the exclusive economic zone without prejudice to Article 61.

114. This does not mean that the coastal State cannot restrict access to the living resources in the EEZ for its own or foreign nationals. This is evidenced by Article 62(4), which provides that:

> Nationals of other States fishing in the exclusive economic zone shall comply with the conservation measures and with the other terms and conditions established in the laws and regulations of the coastal State. These laws and regulations shall be consistent with this Convention and may relate, inter alia, to the following… (c) regulating seasons and areas of fishing, the types, sizes and amount of gear, and the types, sizes and number of fishing vessels that may be used;…

115. Since the LOSC provides that the coastal State can regulate areas of fishing, the coastal State can also regulate areas of "non-fishing", in other words areas in which fishing is restricted or forbidden ('no-take' areas) where this is necessary for conservation and management purposes.

116. On the high seas, all States enjoy the freedom of fishing (Article 87(e)), subject to their international obligations (Article 116 (a)), to the rights, duties and interests of coastal States (Article 116 (b)), as well as to the obligations of all States to cooperate for the conservation and management of the living resources of the high seas (Articles 117 to 119). Article 118 in particular provides that

> States shall cooperate with each other in the conservation and management of living resources in the areas of the high seas. States whose nationals exploit…living resources in the same area, shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned. They shall, as appropriate, cooperate to establish subregional or regional fisheries organizations to this end.

117. In other words the LOSC is largely confirmatory of the principle of customary law providing for freedom of fishing on the high seas subject, *inter alia*, to a general duty to co-operate in the conservation and management of high seas fish stocks, which will often entail entering into negotiations to agree any necessary conservation measures. To this end numerous such agreements have been concluded to establish regional fisheries management organisations (RFMOs). Such agreements are, however, as a matter of international law, only binding on the States which are party to them. No State, or group of States, can unilaterally impose conservation measures in respect of high seas fish stocks on another State, or on any vessel flying the flag of such a State.

118. In regulating international fishing beyond the limits of their EEZs, States depend on either direct co-operation between them or on international conventions and RFMOs to

adopt measures for management and conservation of living resources. The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 December 1995 (UN Fish Stocks Agreement)[57] obliges coastal States and States fishing on the high seas for straddling and highly migratory fish stocks (those that occur both within the EEZ of one or more States and in an adjacent or more distant area of high seas) to co-operate to ensure conservation and optimum utilisation of fish resources both within and beyond EEZs.

119. The UN Fish Stocks Agreement, which now has 71 parties including the European Community and all 27 Member States, has instituted a number of important substantive and procedural clarifications to the duty of cooperation, one of which has a bearing on MSP. Article 8(4) namely contains a notable addition to the norms of the LOSC limiting the access to the freedom of fishing on the high seas only to those States which are members of sub-regional or regional fisheries organisations or participants in conservation and management arrangements, or which agree to apply the measures established by such organisations or arrangements.

120. This strengthens the hand of RFMOs, in that States having a "real interest" in the relevant fishery are now obliged to pursue cooperation in relation to those stocks, either directly or through appropriate RFMOs. In other words, where the RFMO has the competence to establish conservation and management measures for such stocks, States must give effect to their duty to cooperate by joining the RFMO or applying the measures established by it, the only alternative being to refrain from fishing for the stocks concerned. The significance of this is that, as discussed below, such measures may have spatial planning elements.

2.3.2.2 Regional Agreements

121. RFMOs are recognised by LOSC (Articles 117, 118) and they are expected to establish conservation and management measures to facilitate joint assessment of stocks and ecosystems, and ensure that the biodiversity of aquatic habitats and ecosystems is conserved and endangered species are protected. Such measures thus qualify the freedom of fishing as envisaged by Article 116 a. One instrument used is the designation of controlled zones.

122. As for the EU, a variety of different regional instruments are in place. These include the Convention on Future Multilateral Co-Operation in North-East Atlantic Fisheries[58] which creates the North-East Atlantic Fisheries Commission (NEAFC), and the Agreement for the Establishment of a General Fisheries Commission for the Mediterranean (GFCM)[59]. The EC is also party to the International Convention for the

[57] Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 December 1995; 2167 UNTS 3.
[58] Created by the Convention on Future Multilateral Cooperation in the Northeast Atlantic Fisheries, London, 18 November 1980; 1285 UNTS 129.
[59] Rome, 24 September 1949; 126 UNTS 237.

Conservation of Atlantic Tunas (ICCAT)[60] which applies to the entire Atlantic Ocean and its adjacent seas including the Mediterranean, North, Baltic and Black Seas.

2.3.2.3 EC legislation

Moreover, the regulatory powers of EU Member States are also constrained by the Common Fisheries Policy (CFP). This is not only due to the principle of equal access laid down in the framework regulation of the CFP.[61] As a consequence of the transfer of exclusive competence on fisheries to the EC level, there are in fact only three instances where Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy[62] (the CFP Framework Regulation) refers to Member State measures.[63]

123. Within the EC, fisheries and aquaculture are governed by the CFP. The Treaty establishing the European Community, and in particular Article 37, determines that the European Community exercises its exclusive competence in conservation, management and exploitation of living aquatic resources, the aquaculture, and the processing and marketing of fishery and aquaculture products.

124. Responsibility for the implementation and enforcement of the management and conservation measures designed to implement the CFP lies with the Member States in accordance with their own national legal systems.

125. As to its scope, the CFP applies throughout the territories of the Member States, within 'Community waters' and in respect of the activities of 'Community fishing vessels' on the high seas. A 'Community fishing vessel' is a vessel that is registered in the Community and which flies the flag of a Member State, while the 'Community waters' are those waters under the sovereignty or jurisdiction of the Member States (with the exception of the waters adjacent to the overseas countries and territories which are listed in Annex II of the Treaty).[64] In other words, subject to this exception, the Community waters include the internal waters, the territorial seas and the EEZs or any other declared fishing zone of the Member States.

126. Article 102 of the Act of Accession[65] details:

> From the sixth year after accession at the latest, the Council, acting on a proposal from the Commission, shall determine conditions for fishing with a view to ensuring protection of the fishing grounds and conservation of the biological resources of the sea.

127. Based on this provision, the ECJ decided that the European Community has the full and exclusive competency to adopt measures relating to the conservation of the resources of the sea and that Member States are no longer entitled to exercise any power of their own in the matter of conservation measures in the Community waters under their

[60] Rio de Janeiro, 14 May 1966; 673 UNTS 63.
[61] See Art. 17(1) of the CFP Regulation.
[62] OJ L 240, 10.7.2004, p. 17.
[63] Arts 8, 9 and 10.
[64] Article 3 (a) of the CFP Regulation.
[65] Act of Accession annexed to the Treaty of Accession to the European Communities of the Kingdom of Denmark, Ireland, the Kingdom of Norway and the United Kingdom of Great Britain and Northern Ireland, Article 102 Official Journal L 073 , 27/03/1972, p. 35.

jurisdiction[66]. While it is disputed whether Member States still have the competency to establish MPAs for the purpose of protecting the marine environment that at the same time limit fishing in these areas (see infra), the competency to regulate fishing, also in the form of no-take zones lies with the Community. All aspects of fishing are covered by the CFP.

128. The CFP Framework Regulation provides a legal basis for the adoption of measures concerning conservation, management of resources and limitation of the environmental impact of fishing. The general objective of the CFP is to ensure the exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions (Article 2 (1)).

129. One of the key changes introduced by the reforms to the CFP in 2002 was the adoption of an ecosystem based approach to fisheries management.[67] The Community is required to apply the precautionary approach in taking measures designed to protect and conserve living aquatic resources, to provide for their sustainable exploitation and to minimize the impact of fishing activities in marine eco-systems (Article 2 (2)). Pursuant to the CFP Framework Regulation, the Council can establish Community measures governing access to waters and resources and the sustainable pursuit of fishing activities (Article 4 (1)). Article 4 (2) (g) (ii) authorizes the Council to introduce measures for each stock or group of stocks by adopting technical measures, including zones in which fishing activities are prohibited or restricted including for the protection of spawning and nursery areas. Furthermore Article 4 (2) (g) (iv) allows for "specific measures to reduce the impact of fishing activities on marine eco-systems and non target species";

130. On this basis the CFP may thus legislate for recovery plans for overexploited fish stocks and areas of protection for vulnerable habitats that have been or are in danger of being damaged by fishing activities. Article 17 stipulates the principle of equal access of all Community fishing vessels to waters and resources in all Community waters except for the territorial sea. In consequence as regards the EEZ these measures may only be taken by the Council. Even if the Community has not taken advantage of the possibility to designate no-take areas, Member States are barred from doing so on their own. The European Community thus has an instrument with a high potential for steering activities in the EEZ as to the exploitation of living resources.

131. However with regard to the territorial sea the regulation gives priority to the coastal State (Articles 9 and 17 (2)). Article 9 (1) states that:

> A Member State may take non-discriminatory measures for the conservation and management of fisheries resources and to minimise the effect of fishing on the conservation of marine eco-systems within 12 nautical miles of its baselines provided that the Community has not adopted measures addressing conservation and management specifically for this area.

[66] Judgment of the European Court of Justice of 5 May 1981, Case 804/79, Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, ECR 1981, p. 1045.

[67] Article 2(1) requires the Community to aim at 'a progressive implementation of an eco-system-based approach to fisheries management'.

132. Accordingly a coastal Member State may designate no take zones provided it does it in a non-discriminatory way as concerns other Member States[68].

133. As the regulation only regulates commercial fishing, fishing for sport and tourism is regulated by the Member States.

134. Besides protected areas that have the goal to control fishing and conserve fish resources, another category of marine protected areas (MPAs) follows a much wider approach. These MPAs have the primary goal to protect and preserve the marine environment.

2.3.3 Marine Protected Areas

2.3.3.1 LOSC

135. While the LOSC does not require the establishment of marine protected areas (MPAs), it is the source of States' authority to create and enforce them[69]. Pursuant to the LOSC, States have a duty to protect and preserve the marine environment and to exploit natural resources in accordance with this duty (Articles 192, 193).

136. Article 192 places all State parties under the general obligation "to protect and preserve the marine environment". Article 193 specifies that:

> States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.

137. Article 194(1) elaborates on the general obligation to protect and preserve the marine environment and provides:

> States shall take, individually or jointly as appropriate, all measures consistent with this Convention, that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities and they shall endeavour to harmonize their policies in this connection.

138. These obligations apply to all sea areas under the sovereignty and jurisdiction of the Member States as well as applying in principle to their activities on the high seas. Measures taken by parties to the Convention "shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life" (Article 194(5)). The provisions setting out these obligations include the option of declaring specific areas in which certain activities may be prohibited or restricted. However Article 194(4) puts a limit to a State's discretion with regard to the design of protection measures, by stating that:

> In taking measures to prevent, reduce or control pollution of the marine environment, States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and in pursuance of their duties in conformity with this Convention.

[68] Köppel, J., Wende, W., Herberg, A., Wolf, R., Nebelsiek, R. & Runge, K., "Naturschutzfachliche und naturschutzrechtliche Anforderungen im Gefolge der Ausdehnung des Raumordnungsregimes auf die deutsche Ausschließliche Wirtschaftszone", BfN Skripten 2006

[69] Young, T. R. *op cit.*

139. As regards areas outside coastal State jurisdiction, on what might be called the 'high seas proper' (excluding parts of the ocean that nominally retain the status of high seas but where zones relying on EEZ heads of jurisdiction have been claimed, e.g. in the Mediterranean and off the UK), the governing principle is Article 89 of the LOSC, by which no part of the high seas is capable of being reduced to the sovereignty of any State. This has a necessary spatial implication (that regulation of an area *qua* area is not permitted) which by definition strikes down any attempt at MSP by an individual State (or group of States acting in concert, which is how international law would view the EU for these purposes), at least to the extent that enforceability against all comers is in practice an essential element of any MSP regime.

140. That said, most experts on high seas governance take issue with the formerly widespread assumption that high seas marine protected areas are *per se* impossible; it is open to States: (a) to agree among themselves on a uniform or mutual recognition regime of the designation of marine protected areas on the high seas if they are willing to forgo enforcement on third State vessels; or (b) to adopt measures in the form of recommendations rather than obligations, in the expectation that these will eventually come to be seen as best practice, and thus will become indirectly but generally binding by virtue of provisions in Part XII of LOSCS such as Articles 207(3) and (4), 210(4) and (6) and 211(1) and (2), or (c) in theory at least act through the IMO to declare an area of the high seas as a PSSA (see next section).[70]

141. Lastly, States always have the possibility of enforcing high seas marine protected areas not on the high seas but in their own ports, making access to their ports conditional on foreign vessels having acted or refrained from acting in a particular way in the relevant part of the high seas[71]. Such a view is, however, likely to provoke controversy among freedom of navigation ideologues in certain Member States with strong shipping and naval interests.[72]

2.3.3.2 Protection of Sea Areas under IMO Conventions and Resolutions

142. Within the IMO framework two instruments are of especially high relevance as regards the establishment of protected areas. However, as the IMO's functional competence is limited to shipping – in particular safety of navigation and prevention of ship-source pollution – these instruments relate specifically to harm caused by the activities of international shipping.

143. A key convention is the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78). MARPOL defines certain areas as "Special Areas" in which

[70] Although this approach would require obtaining the agreement of the 167 member governments of IMO.

[71] As long as no positive right of access is given by some other treaty, such as the 1923 Convention and Statute on the International Regime of Maritime Ports (Geneva, 9 December 1923; 58 League of Nations Treaty Series 285).

[72] They have in their favour a New Zealand case representing this point of view, Sellers v. Maritime Safety Inspector [1999] 2 NZLR 44, in which the New Zealand legislation under which Sellers was prosecuted for leaving port without prescribed safety equipment on board was read down so as not to apply to foreign vessels, because that would interfere with their freedom of navigation on the high seas. Since the leading judgment in the Court of Appeal was delivered by Sir Ken Keith who now sits on the International Court of Justice (ICJ), this view, cannot simply be dismissed.

the adoption of special mandatory methods for the prevention of pollution is required. Under the convention, these Special Areas are provided with a higher level of protection than other sea areas.

144. Building upon MARPOL the IMO adopted Guidelines for the Designation of Special Areas and the Identification of Particularly Sensitive Sea Areas. A "Particularly Sensitive Sea Area" (PSSA) may lie within a broader "special area" designated under one of the Annexes to MARPOL 73/78. If this is the case, the relevant vessel discharge restrictions will also apply within the particularly sensitive sea area. The PSSA concept is a unique soft law concept devised by the IMO to provide protection for environmentally sensitive sea areas, both within and beyond national jurisdiction, from the harmful effects of international shipping activities.

145. A PSSA is defined as an "area which needs special protection through action by IMO because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to environmental damage by maritime activities".[73] In order to be identified as a PSSA, an area beyond or within the limits of the territorial sea should meet at least one of the criteria defined in the guidelines (uniqueness, high dependency, high representativeness, diversity, vulnerability).

146. The criteria relate to particularly sensitive sea areas within and beyond the limits of the territorial sea and may enclose different States' zones of jurisdiction. In PSSAs, special protective measures within the competence of IMO under the International Convention on the Safety of Life at Sea, 1974 (SOLAS 1974) may be proposed for adoption by the Maritime Safety Committee of IMO. These include *inter alia* "areas to be avoided" designations and traffic separation schemes. In contrast to most of the other measures traffic separation schemes are compulsory. These measures do not affect other uses of the areas such as resource exploitation, marine scientific research, military activities or tourism. Measures for PSSAs lying beyond the territorial sea have to be international in character, i.e. based on an existing treaty[74].

147. Designation as a PSSA does not in itself carry any legal significance, but is rather a framework for the adoption of particular measures available under pre-existing instruments.[75] As PSSA boundaries appear on international navigational charts and as the designation carries with it the associated protective measures recognized by the IMO as necessary to prevent damage to the ecosystem included in the PSSAs from international shipping, PSSA designation augments domestic protective measures. Thus it is rather an instrument to pursue spatial planning objectives than posing constraints for States' MSP.

148. Within Europe, in 2002 the IMO agreed to designate major parts of the Dutch, German and Danish Wadden Sea as a PSSA. The Wadden Sea became the 5th designated PSSA worldwide, but the first designated on the basis of a joint application by multiple States. In 2004 on the proposal of Belgium, France, Ireland, Portugal, Spain and the United

[73] "Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas", forming the Annex to IMO Assembly Resolution A.982(24) adopted on 1 December 2005
[74] Churchill, R.R. and Lowe, A.V. *op cit* at page 394.
[75] IMO Resolution A.982 (24) *op cit.*

Kingdom the Western European Waters were designated as a PSSA, while 2005 the entire Baltic Sea was so classified by the IMO as well as the Canary Islands.[76]

2.3.3.3 Regional Agreements

2.3.3.3.1 UNEP Regional Seas programme

149. The Regional Seas Programme of the United Nations Environment Programme (UNEP) is intended to foster regional co-operation for the benefit of the marine and coastal environment. Most of the Regional Seas initiatives function through non-binding action plans; some however have also adopted legally binding conventions, implemented through protocols, addressing specific issues such as *inter alia* protected areas. The Protocols are only framework documents which rely on States Parties to implement their provisions in national legislation.

150. Under the Regional Seas Programme, multilateral agreements have been adopted for eight regions with the objective of protecting the marine environment. Additional protocols dealing with specially protected marine areas have been concluded for some of them. For Europe only the Convention for the Protection of the Marine Environment and Coastal Regions of the Mediterranean[77] (Barcelona Convention) has been established within this framework.

151. For the Mediterranean the establishment of MPAs is recommended by the 1995 Protocol to the Barcelona Convention Concerning Mediterranean Specially Protected Areas and Biological Diversity in the Mediterranean.[78]

152. Article 4 of the 1995 Protocol provides a comprehensive statement of the objective of marine protected areas with strong antecedents in the 1992 Convention on Biological Diversity[79]. Article 4 provides:

> The objective of specially protected areas is to safeguard:
> (a) representative types of coastal and marine ecosystems of adequate size to ensure their long term viability and to maintain their biological diversity;
> (b) habitats which are in danger of disappearing in their natural area of distribution in the Mediterranean or which have a reduced natural area of distribution as a consequence of their regression or on account of their intrinsically restricted area;
> (c) habitats critical to the survival, reproduction and recovery of endangered, threatened or endemic species of flora or fauna;
> (d) sites of particular importance because of their scientific, aesthetic, cultural or educational interest.

[76] RESOLUTION MEPC.121(52) Adopted on 15 October 2004 DESIGNATION OF THE WESTERN EUROPEAN WATERS AS A PARTICULARLY SENSITIVE SEA AREA; RESOLUTION MEPC.101 (48) Adopted on 11 October 2002 IDENTIFICATION OF THE WADDEN SEA AS A PARTICULARLY SENSITIVE SEA AREA; RESOLUTION MEPC 136(53), DESIGNATION OF THE BALTIC SEA AREA AS A PARTICULARLY SENSITIVE SEA AREA, Adopted on 22 July 2005. RESOLUTION MEPC.134(53) Adopted on 22 July 2005 DESIGNATION OF THE CANARY ISLANDS AS A PARTICULARLY SENSITIVE SEA AREA

[77] Originally the Convention for the Protection of the Mediterranean Sea against Pollution, Baracoa, 16 February 1976; 1102 UNTS 27.

[78] Barcelona, 10 June 1995; 2102 UNTS 181.

[79] Rio de Janeiro, 5 June 1992; 1760 UNTS 79. See also Robin Warner, "Marine Protected Areas Beyond National Jurisdiction - Existing Legal Principles and Future Legal Frameworks" , 2001

(e) sites of biological and ecological value:
- the genetic diversity, as well as satisfactory population levels, of species, and their breeding grounds and habitats
- representative types of ecosystems, as well as ecological processes;
(f) sites of particular importance because of their scientific, aesthetic, historical, archaeological, cultural or educational interest.

153. The Protocol places a general obligation on parties "to protect, preserve and manage in a sustainable and environmentally sound way areas of particular natural or cultural value, notably by the establishment of specially protected areas (Article 3(1)(a) - called "Specially Protected Area of Mediterranean Interest" (SPAMI) and provides for a set of protective measures to use in case such an area is established, including the regulation of the passage of ships or the regulation or prohibition of any activity involving the exploration or modification of the soil or the exploitation of the subsoil.

154. The Protocol is applicable to all marine waters, irrespective of their legal status as well as to the seabed and subsoil and to coastal terrestrial areas designated by each party.

155. If a SPAMI is established on the high seas the protection measures are those prescribed by the State proposing the SPAMI: other parties must comply with measures but enforcement must be in accordance with international law[80].

2.3.3.3.2 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)

156. The scope of the OSPAR Convention is not restricted to pollution prevention but also requires the Contracting Parties to 'take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected'.[81]

157. In addition, the OSPAR Commission, established pursuant to the OSPAR Convention, may adopt non-binding recommendations and also binding decisions (Articles 10 (3) and 13).

158. Of particular relevance for the creation of MPAs is Annex V to the OSPAR Convention on the Protection and Conservation of the Ecosystems and the Biological Diversity of the Maritime Area and a related Biodiversity Strategy. It expands on the OSPAR Convention in terms of nature conservation provisions. In order to perform their obligations under the OSPAR Convention and the Convention on Biological Diversity, the Contracting Parties are obliged by Article 2 of Annex V:

- to take the necessary measures to protect and conserve the ecosystems and the biological diversity of the maritime area, and to restore, where practicable, marine areas which have been adversely affected; and

[80] Churchill, R.R. and Lowe, A.V. "The Law of the Sea", *op cit* 1999, p. 393
[81] Article 2(1)(a).

- to co-operate in adopting programs and measures for those purposes for the control of the human activities identified by the application of the criteria in Appendix 3.

159. Measures according to Annex V include the designation and the establishment of marine areas or rather a system of marine areas which need to be protected by means of appropriate programs and measures against the adverse effects of human activities. On the basis of experiences regarding the creation of Marine Protected Areas in mind, but beyond the scope of such activities, OSPAR and HELCOM have in general terms jointly committed to promote "cooperation in spatial planning between competent authorities, especially in the development of spatial planning tools for the maritime areas"[82].

2.3.3.3.3 The Convention on the Protection of the Marine Environment of the Baltic Sea Area (the 'Helsinki Convention')

160. The Convention on the Protection of the Marine Environment of the Baltic Sea Area (the 'Helsinki Convention') was signed in 1992 by all of the states bordering the Baltic Sea and the European Community. The Governing Body of the Helsinki Convention is the Helsinki Commission (HELCOM). Pursuant to_HELCOM Recommendation 15/5 (1994) on a System of Coastal and Marine Baltic Sea Protected Areas appropriate measures are to be taken by parties to establish a system of coastal and marine Baltic Sea Protected Areas (BSPAs). Special attention is to be paid to including marine areas outside the territorial waters. To make the BSPAs operational the establishment of management plans is suggested.

161. The Recommendation states:

> d) that management plans be established for each BSPA to ensure nature protection and sustainable use of natural resources. These management plans shall consider all possible negatively affecting activities, such as extraction of sand, stone and gravel; oil and gas exploration and exploitation; dumping of solid waste and dredged spoils; constructions; waste water from industry, municipalities and households; intensive agriculture and intensive forestry; aquaculture; harmful fishing practices; tourism; transport of hazardous substances by ship through these areas; military activities. In some areas a zoning system will be an appropriate means to facilitate the achievement of satisfactory protection. Appropriate guidelines for making such management plans shall be elaborated … incorporating corresponding guidelines of IUCN.[83]

162. In these guidelines options to regulate or compensate harmful human activities are outlined. These include *inter alia*: restriction of activities in extent; restriction of activities in space (including zoning); restriction of activities in time (ban of certain activities for a specific period, e.g., during breeding seasons or spawning periods); maintenance of sustainable and traditional use when appropriate; total ban of activities or demolition of construction (e.g., demolition of dykes); restoration, reintroduction.

163. As to the relation with the creation of MPAs under different jurisdictions especially as regards designation of Natura2000 sites (see below) the guidelines foresee:

[82] See No. 24c of the Statement on the Ecosystem Approach to the Management of Human Activities on the occasion of the Joint Ministerial Meeting of the Helsinki and OSPAR Commissions at Bremen 25./26 June 2003
[83] IUCN is the International Union for the Conservation of Nature.

- EU Member States are obliged to implement the regulations in the Birds and Habitats Directives by nominating and managing, inter alia, marine protected areas within the Natura 2000 network. Where Natura 2000 sites are also reported as HELCOM BSPAs, Contracting States should be under no obligation to take any further action. Where management plans for Natura 2000 sites exist, they will be sufficient.

2.3.3.4 The Convention on Biological Diversity and other international agreements

164. As seen above, LOSC obliges its parties in principle to protect the marine environment – including in the EEZ and on the continental shelf. The Convention on Biological Diversity (CBD),[84] to which the EC and the Member States are party, strengthens this obligation.

165. The jurisdictional scope of the CBD is specified in Article 4. This states:

> Subject to the rights of other States, and except as otherwise expressly provided in this Convention, the provisions of this Convention apply, in relation to each Contracting Party:
>
> (a) In the case of components of biological diversity, in areas within the limits of its national jurisdiction; and
>
> (b) In the case of processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction.

166. In other words the jurisdictional scope of the CBD applies to the territorial seas and to the EEZ as areas within the limits of national jurisdiction.

167. Article 3 expresses the general responsibility of all States to ensure that activities within their jurisdiction or control do not cause damage to the environment of areas beyond national jurisdiction.

168. In respect of areas beyond national jurisdiction, the Contracting Parties are urged to cooperate with other Contracting Parties directly or where appropriate, through competent international organisations for the conservation and sustainable use of biological diversity (Article 5). Article 8 of the Convention provides the following specific responsibilities for Contracting Parties in relation to protected areas, ecosystems and natural habitats within national jurisdiction:

> (a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;
> (b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or where special measures need to be taken to conserve biological diversity;
> (c) Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation or sustainable use;
> (d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;
> (e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas.

169. Moreover the Parties are required to prepare and update inventories of biological resources as a basis for planning and decision-making.

170. The CBD also obliges its parties to develop national strategies for the conservation and sustainable use of biological diversity, including the establishment of protected areas.

[84] 31 ILM (1992), 822.

171. Moreover it requires the Contracting Parties to integrate the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. However the CBD itself foresees that its provisions should be applied with respect to the marine environment consistently with the rights and obligations of States under the law of the sea (Article 22(2)).

172. As seen the CBD's jurisdictional scope is not limited to areas under national jurisdiction. Although it is clearly understood that any measures beyond the limits of national jurisdiction must be carried out within the framework of the LOSC legal regime, the CBD has stimulated the perception of ecosystems, habitats (and "areas") in the marine environment[85].

173. In 2004 the Parties to the CBD committed themselves to designating a system of representative, comprehensive and effectively managed MPAs by 2012. An open-ended working group was established which *inter alia* will assess the implementation. The working group will also address the establishment of MPAs outside national jurisdiction.[86]

174. At the 9th meeting of the Conference of the Parties held in May 2008, scientific criteria for identifying ecologically or biologically significant marine areas in need of protection, and scientific guidance for selecting areas to establish a representative network of marine protected areas were adopted. The Conference of Parties (COP) urged parties to apply these to identify areas in need of protection, in accordance with international law, including LOSC, and recognised that these criteria may require adaptation by parties if they choose to apply them within their national jurisdiction[87].

175. The Convention on the Conservation of Migratory Species of Wild Animals[88] (CMS) deals with particular species (or groups of species). The primary requirement imposed on Parties is to take measures to protect, manage and conserve their habitats. The CMS relies on the development of specialised agreements among the range States of particular listed species, under which they agree to management plans for the species' protection. These agreements most often combine a habitat focus with management plans but without reaching a "formal geographic protection".[89] They thus do not provide for direct constraints for MSP but can be regarded as drivers for the designation of protected areas.

[85] Czybulka, D. (2001). The Convention on the Protection of the Marine Environment of the north-east Atlantic, *in*: Thiel, H.; Koslow, J.A. (Ed.) (2001). *Managing risks to biodiversity and the environment on the high sea, including tools such as Marine Protected Areas - Scientific Requirements and Legal Aspects: Proceedings of the Expert Workshop held at the International Academy for Nature Conservation, Isle of Vilm, Germany, 27 February - 4 March 2001. BfN (Bundesamt für Naturschutz)-Skripten*, 43: p 181.

[86] COP 7 Decision VII/5, Kuala Lumpur, 9 - 20 February 2004

[87] See International Institute for Sustainable Development (IISD); Earth Negotiations Bulletin; Summary of the 9th Conference of the Parties to the Convention on Biological Diversity 19-30 May 2008; http://www.iisd.ca/download/pdf/enb09452e.pdf

[88] Bonn, 23 June 1979; 1651 UNTS 333.

[89] Young *op cit*, p.239.

176. Specific agreements include the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area[90] (ACCOBAMS) and the Agreement on Small Cetaceans of the Baltic and North Seas[91] (ASCOBANS).

2.3.3.5 European Community law

177. Two EC directives contain legal tools that could be used for the establishment of MPAs. These are Council Directive of 2 April 1979 on the conservation of wild birds (79/409/EEC)[92] (the Birds Directive) and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora[93] (the Habitats Directive). The Birds Directive calls for the establishment of Special Protected Areas (SPAs) for birds, while Special Areas of Conservations (SACs) for habitats or species are implemented through the Habitats Directive.

178. These directives are the means by which the Community meets its obligations as a signatory of the Convention on the Conservation of European Wildlife and Natural Habitats[94] (the 'Berne Convention'). Formerly there was a lack of clarity as to whether or not the two directives apply in the marine environment in the EEZ (or fishing zone) or on the continental shelf. It is now settled law, however, that both directives also apply to the EEZ as well as territorial waters.

179. The geographical coverage was referred to by the Commission[95]:

> … if a Member State exerts its sovereign rights in an exclusive economic zone of 200 nautical miles (for example, the granting of an operating license for a drilling platform), it thereby considers itself competent to enforce national laws in that area, and consequently the Commission considers in this case that the "Habitats" Directive also applies, in that Community legislation is an integral part of national legislation.

180. As the Habitats Directive regulates habitats beyond 12 nm offshore (listed in Annex 1 are "reefs" and "submerged sandbanks") and species occurring in the EEZ, its functional jurisdiction should be beyond doubt.

181. There is also political agreement at EU level that the Directives apply to the EEZ of those EU Member States that have declared EEZs. The Council of Ministers has also encouraged the Member States 'to continue their work towards the full implementation of the Birds and Habitats Directives in their exclusive economic zones'[96]. As to Member States not having declared an EEZ, following a ruling of the UK High Court, the Habitats Directive was found to apply to the UK Continental Shelf, and the waters above the seabed, up to a limit of 200 nautical miles from the baseline.[97]

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[90] Monaco, 24 November 1996; 2183 UNTS 303.
[91] New York, 17 March 1992; 1772 UNTS 217.
[92] OJ L 103, 25.4.1979, p. 1.
[93] OJ L 206, 22.7.1992, p. 7.
[94] Berne, 19 September 1979; 1284 UNTS 209.
[95] COM (1999) 363 final Communication from the Commission to the Council and the European Parliament "Fisheries Management and Nature Conservation in the Marine Environment" (p10)
[96] 2344th Council Meeting, Fisheries, 25 April 2001, Council Conclusions on the integration of environmental concerns and sustainable development into the Common Fisheries Policy, 8077/01, Luxembourg
[97] The Queen v. The Secretary of State for Trade and Industry *ex parte* Greenpeace Limited Case No: CO/1336/1999.

182. Thus each Member State is required to establish a national list of sites in proportion to the representation within its territory of the natural habitat types and the habitats of species listed in the Directives.

183. Despite the apparent readiness of Member States to act, however, progress in conserving Europe's marine biodiversity has been rather limited, especially as regards the impact of fisheries. A major constraint for the designation of fully-fledged MPAs has resulted from uncertainty as to who has competence for placing restrictions on commercial fishing activities: the European Community or the Member States. On the one hand Member States are responsible for the protection of sites (i.e. designated under the Birds and Habitats Directives) while on the other hand their ability to regulate fisheries activities has been unclear. The question at stake was if such restrictions may be based on legislation implementing the Habitats-Directive or may only be taken in the context of the CFP, and by whom – either by the Member State unilaterally or by the Council. As the answer to these questions has not been clear for quite some time, there was the urgent need for clarification[98]. In 2007 the European Commission issued guidelines for the establishment of the Natura 2000 network in the marine environment as well as a paper on the introduction of fisheries measures for marine Natura 2000 sites in order to give guidance to Member State authorities when preparing and requesting fisheries management measures under the CFP. These documents are not, however, of a legally binding nature.

2.3.3.6 Marine Strategy Framework Directive

184. 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[99] (the Marine Strategy Framework Directive) is intended to "constitute the environmental pillar of the future maritime policy" of the European Community[100].

185. The Marine Strategy Framework Directive requires the Member States to "take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest" (Art. 1 (1)). The Directive does not directly restrict any maritime activities, such as oil, gas and gravel extraction, shipping and fishing.

186. Instead the definition of "good environmental status" is based on a list of generic qualitative descriptors contained in an Annex to the Directive, stipulating, for example. that populations of all commercially exploited fish and shellfish in that Region are within safe biological limits (No. 3), or that 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 (No.6).

[98] For a comprehensive analysis as to the legal questions involved, see Owen, D., "Interaction between the EU Common Fisheries Policy and the Habitats and Birds Directives", Institute for European Environmental Policy, 2004.
[99] OJ L 164 25.6.2008. p 19.
[100] Recital 3 of the Directive.

187. Member States will be required to draw up national action plans at a later stage. As already noted the Marine Strategy Framework Directive clearly states that marine protected areas must be part of the national programmes of measures. Article 13 (4) states:

> Programmes of measures established pursuant to this Article shall include spatial protection measures, contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems, such as special areas of conservation pursuant to the Habitats Directive, special protection areas pursuant to the Birds Directive, and marine protected areas as agreed by the Community or Member States concerned in the framework of international or regional agreements to which they are parties.

188. Apart from Marine Protected Areas (MPAs), the Directive gives only general indications as to what type of measures must be taken to achieve a good environmental status. Measures proposed for inclusion in programmes of measures include *inter alia*[101]*:*

- Input controls: management measures that influence the amount of a human activity that is permitted.
- Management coordination measures: tools to ensure that management is coordinated.
- Spatial and temporal distribution controls: management measures that influence where and when an activity is allowed to occur.
- Mitigation and remediation tools: management tools which guide human activities to restore damaged components of marine ecosystems.

189. Thus the Directive proposes the use of instruments contributing to a structured spatial development which essentially could be part of MSP by the Member states. The Directive seeks to promote the integration of environmental considerations into all relevant policy areas by requiring that:

> Member States shall integrate the measures […] into a programme of measures, taking into account relevant measures required under Community legislation, in particular Directive 2000/60/EC, Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment and Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality, as well as forthcoming legislation on environmental quality standards in the field of water policy, or international agreements.

190. The Directive recognises that measures regulating fisheries management can be taken in the context of the CFP and specific measures for fishery conservation are not subject of the Strategy Directive. However, as its recitals 31-33 and Article 13 (5) indicate, there is a 'passerelle' provision from the Marine Strategy Framework Directive towards the CFP. The CFP must take into account the environmental impact of fisheries as well as the goals of the Marine Strategy Framework Directive. The link between sustainable fisheries management and a comprehensive nature protection regime is thus provided in principle, although in this area as well as in the more established context of Natura2000, it remains to be seen in how far these provisions will be put into effect.

2.3.3.7 Conclusion

191. In summary as regards the establishment of MPAs there are two major constraints. As regards the high seas: the current international legal framework is incomplete. For a long

[101] see Annex VI dealing with Programmes of measures referred to in Articles 13(1) and 24

time the consensus has been that there was neither a mandate at the appropriate level i.e. in the context of LOSC nor a process for the designation of integrated MPAs that would include the regulation of all human activities therein, for the purpose of the conservation and sustainable use of marine biodiversity. However, developments after recent decisions within the context of the CBD (see above) will have to be closely watched.

192. The EU rather than the individual Member States is probably better placed to address this issue on a global scale. On the other hand there appears to be scope at EU level for minimizing competition or overlap between existing legal regimes on nature protection especially in the EEZ on the one hand and fisheries on the other in order to provide for the designation of integrated MPAs.

2.3.4 Laying of pipelines and cables

2.3.4.1 LOSC

193. As regards the laying of pipelines and cables LOSC provides for two different legal regimes.

194. A coastal State cannot in general control the laying by other States of cables and pipelines passing through its EEZ. The LOSC expressly preserves their freedom to do so in Article 58(1). However Article 79(3) states that

> The delineation of the course of such cables and pipelines is subject to the consent of the coastal State.

195. Spatial planning of the coastal State in this case is limited but may take into consideration the potential negative effects of cables and pipelines e.g. as regards the protection of special ecosystems[102].

196. More comprehensive control by the coastal State is possible where the cable or pipeline is to come into the territory (including the territorial sea) of the coastal State. In this respect Article 79(4) provides that

> Nothing … affects the right of the coastal State to establish conditions for cables or pipelines entering its territory or territorial sea, or its jurisdiction over cables and pipelines constructed or used in connection with the exploration of its continental shelf or exploitation of its resources or the operations of artificial islands, installations and structures under its jurisdiction.

197. In those cases the coastal States' permission can be made dependent on accepting control over the location (e.g. excluding certain locations/areas) as well as other features of the whole cable or pipeline.

198. In addition where a cable or pipeline might interfere with the sovereign rights to exploit the resources of the EEZ the coastal state may equally impose restrictions.

199. Further restrictions on the laying of submarine cables and pipelines may be justified through reasons to prevent, reduce and control pollution of the marine environment from

[102] Wolf, R., "Rechtliche und naturschutzfachliche Aspekte beim Bau und Betrieb von Stromkabeln", Federal Agency for Nature Conservation, BfN 2004

pipelines (Article 79(2)). This provision thus provides for a concrete instrument for coastal States in order to fulfil their obligation under Articles 192 and 194 (see above).

2.3.4.2 Regional Agreements

200. Apart from general requirements regarding environmental impact assessment procedures (which are discussed below), under regional agreements no explicit recommendations on pipeline constructions as to the delineation of the routes have yet been established.[103]

2.3.5 Exploitation of non-living natural marine resources including oil and gas

2.3.5.1 LOSC

201. In and landward of the territorial sea, the coastal State has sovereignty over natural resources including non-living marine resources.

202. In the EEZ, the coastal State has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources of the seabed and its subsoil (Article 56.1 a), including non-living marine resources. Pursuant to Article 56(3) on the seabed these rights shall be exercised in accordance with Part VI of LOSC, which provides for the status of the continental shelf and its resources.

203. On the continental shelf, the coastal State has sovereign rights for the purpose of exploring and exploiting minerals and other non-living resources of the seabed and subsoil. Such rights are exclusive; if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State (Article 77). The exclusive right to authorize and regulate drilling on the continental shelf is granted to the coastal State by Article 81. If these activities are exclusive rights of the coastal State, it follows that the coastal State has a free hand in submitting them to MSP.

2.3.5.2 EC legislation

204. Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons[104] (the Hydrocarbons Directive) is of relevance in connection with this topic. In a declaratory way, the Hydrocarbons Directive makes clear that Member States retain the right to determine the areas within their territory from which sites for the production of hydrocarbons may be selected.

205. According to Article 2(1) of the Hydrocarbons Directive Member States retain the right to determine the areas within their territory (also with regard to their EEZ and continental shelf) to be made available for the exercise of the activities of prospecting,

[103] In this connection the ongoing NordStream pipeline EIA process, which is being undertaken within the overall framework of the Espoo Convention notwithstanding the fact that Russia is not party to that instrument provides an interesting example in this connection.
[104] OJ L 79, 29.3.1996.

exploring for and producing hydrocarbons. Moreover the Directive is predominantly concerned with non-discriminatory access.

206. However the Hydrocarbons Directive contains some provisions on the licensing process. Article 3(1) states that

> Member States shall take the necessary measures to ensure that authorizations are granted following a procedure in which all interested entities may submit applications.

207. In addition, Article 4 provides that:

> Member States shall take the necessary measures to ensure that:
>
> (a) if the geographical areas are not delimited on the basis of a prior geometric division of the territory, the extent of each area is determined in such a way that it does not exceed the area justified by the best possible exercise of the activities from the technical and economic points of view….;

208. EC law thus does not make any specifications regarding the overall spatial distribution of oil and gas exploitation, but does contain a constraint as to the possible extent of an area under exploitation.

2.3.5.3 Regional Agreements

209. HELCOM Recommendation 18(2) on Offshore activities dealing with installations relating to the exploration and exploitation of the seabed and its subsoil foresees that:

> a) the exploration or exploitation activity in the Baltic Sea Protected Areas (BSPA) should be excluded;
> b) the area in which any offshore exploration or exploitation activity is proposed to begin, should be environmentally assessed before the activity is permitted to start.

210. Equally the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Offshore Protocol) requires the setting up of an authorisation regime for the granting of licences. Article 4 (1) requires that:

> All activities within the Protocol Area, including erection on site of installations, shall be subject to the prior written authorisation for exploration or exploitation by the competent authority.

211. The Protocol has not yet entered into force though.

2.3.6 Extraction of sand and gravel

212. As to the international legal regime applying to the extraction of sand and gravel, the same rules apply as for the exploitation of oil and gas. Reference is therefore made to the section 2.3.5 above as concerns the presentation of the relevant provisions of LOSC. As regards EC law, no legislation pertinent to the extraction of sand and gravel exists.

213. As to regional agreements apart from the general provisions contained in the Offshore Protocols, HELCOM Recommendation 19/1 on Marine Sediment Extraction in the Baltic Sea Area recommends to the Contracting Parties to carry out all sediment extractions according to the specially developed guidelines and to carry out an Environmental Impact Assessment (EIA) prior to the extraction permit; extraction

permits for "Sensitive Areas" shall be granted only following special restrictions contained in the Guidelines annexed to the Recommendation.

2.3.7 Dumping

2.3.7.1 LOSC

214. Article 210 of the LOSC provides for the legislative powers of (coastal) States with regard to dumping at sea. Article 210 states:

> 1. States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment by dumping.
> 2. States shall take other measures as may be necessary to prevent, reduce and control such pollution.
> 3. Such laws, regulations and measures shall ensure that dumping is not carried out without the permission of the competent authorities of States….

215. For the territorial sea and the EEZ the Convention clearly foresees that any dumping shall not be carried out without the express prior approval of the coastal State, which has the right to permit, regulate and control such dumping (Article 210(5)). With a view to MSP this is of particular interest where the coastal States require that these activities may only be undertaken in designated areas.

216. The LOSC grants coastal States the right to enforce generally accepted international rules and standards vis-à-vis foreign vessels: pursuant to Article 216(1) laws and regulations adopted in accordance with Article 210 and applicable international rules and standards established through competent international organisations or diplomatic conferences for the prevention, reduction and control of pollution by dumping shall be enforced by the coastal State with regard to dumping within its EEZ or onto its continental shelf.

2.3.7.2 Regional Agreements

217. OSPAR places a general obligation on parties to take all possible steps to prevent and eliminate pollution by dumping at sea. Article 4 in connection with Annex II of the Convention places a general prohibition on any dumping of wastes or other matter except for those especially listed in the Annex. In addition OSPAR submits the dumping of certain wastes or other matter to an authorisation by the competent authorities of the Contracting Parties, or regulation (Article 4(1)(a)).

218. Within the framework of the Helsinki Convention, dredged materials may, in accordance with Article 11 of the Helsinki Convention and Annex V, be permitted to be dumped at sea. With regard to the dumping of dredged material at sea, Article 11 (2) of the Convention requires Contracting Parties to ensure that no such materials are dumped without permission issued by their appropriate competent authorities. Regulation 1 a) of Annex V of the Convention requires that dumping of dredged material containing harmful substances indicated in Annex I of the Convention is only permitted according to special guidelines adopted by the Commission.

2.3.7.3 Other international agreements

219. The original Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter[105] (the London Convention) imposed a system with three different categories: dumping of waste of category I was generally prohibited, waste of category II required a prior special permit, for waste of category III a prior general permit was needed.

220. Contracting Parties were required to designate an authority to deal with permits, keep records, and monitor the condition of the sea (Article VI, paragraph 1).

221. The 1996 Protocol to the London Convention[106] was agreed to further the Convention and, eventually, replace it. As of March 2008 the EU Member States having ratified the Protocol are Belgium, Bulgaria, Denmark, France, Germany, Ireland, Italy, Luxemburg, Slovenia, Spain, Sweden and the United Kingdom. Member States not already listed which are parties to the 1972 Convention are Cyprus, Finland, Greece, Hungary, Malta, the Netherlands, Poland and Portugal.[107] The Protocol prohibits all at-sea incineration of wastes, waste storage in the seabed, and all other waste dumping, except for a "reverse list" of substances that may be dumped at sea.

2.3.7.4 EC legislation

222. The law on waste management of the Community comprises general provisions on the treatment of waste, special provisions dealing with special categories of waste. Council Directive 75/442/EEC as codified by Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste[108] (the Waste Framework Directive) also applies to the release into seas or oceans including seabed insertion (D.7 of Annex IIA). Article 4 of the Waste Framework Directives requires:

> 1. Member States shall take the necessary measures to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and in particular:
> (a) without risk to water, air or soil, or to plants or animals; ….
> 2. Member States shall take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste.

223. Member States must establish or designate the competent authority or authorities to be responsible for the implementation of the Directive and draw up waste management plans.

2.3.8 Power generation

224. In the territorial sea, the coastal State has sovereignty over uses of the sea including energy production. As to the EEZ, the coastal States' sovereign rights explicitly include the production of energy from the sea: Article 56 of the LOSC specifically refers to the sovereign rights of a coastal State within its EEZ "with regard to other activities for the

[105] London, Mexico City, Moscow and Washington, 29 December 1972; 1046 UNTS 120.
[106] London, 7 November 1996; (1997) 36 *ILM* 1.
[107] Taken from the IMO status list spreadsheet
www.imo.org/includes/blastDataOnly.asp/data_id%3D22499/status-x.xls
[108] OJ L 114, 27.4.2006, p. 9.

economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds…".

225. Since the production of energy from the sea requires in any case the use of artificial islands, installations and structures, the provisions of LOSC relating to such man-made features will apply as an integral part of the legal regime relating to energy from the sea.

226. Pursuant to Article 60 the coastal State has the exclusive right for the construction of artificial islands as well as for the authorisation and regulation of their construction, operation and use. Accordingly the coastal State can also prohibit the construction of artificial islands for reasons of the protection and preservation of rare or fragile ecosystems. The right of establishment of artificial islands, installations and structures is limited by Article 60 (7), which provides that

> Artificial islands, installations and structures and the safety zones around them may not be established where interference may be caused to the use of recognized sea lanes essential to international navigation.

227. The coastal State, where necessary, may establish safety zones of up to 500 metres around such artificial islands, installations and structures in which it may take appropriate measures to ensure safety both of navigation and of the artificial islands, installations and structures (Article 60(4)).

228. The legal regime for the protection and preservation of the marine environment, as set forth in Part XII of LOSC, is pertinent for all marine resources and uses of the sea, including production of energy from the sea, thus also placing constraints on the coastal State's ability to engage in MSP regarding exploitation of offshore energy.

229. OSPAR has established guidance on assessments of the environmental impacts of, and Best Environmental Practice for, offshore wind farms in relation to location[109]. However this document does not include any new requirements or constraints but gives guidance on how to use existing instruments for conflict resolution.

2.3.9 Mariculture

230. Mariculture can be defined as marine fish farming, or the raising of marine animals and plants in the ocean. Although no reference is made to mariculture in LOSC, rights and obligations associated with such activity could be considered within the legal framework provided therein.

231. In the territorial sea, the coastal State has sovereignty over such activity. Also as regards the right of innocent passage the coastal State may regulate to keep passing traffic away from any fish farms, as Article 21 provides,

232. The coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following:

> (a) the safety of navigation and the regulation of maritime traffic;

[109] http://www.ospar.org/documents/dbase/decrecs/agreements/05-02e_Guidance%20Location%20OWFs.doc

(b) the protection of navigational aids and facilities and other facilities or installations…

233. In the EEZ, the coastal State has sovereign rights over mariculture, as such activity may be considered as being within the framework of "other activities for the economic exploitation and exploration of the zone" (Article 56(1)(a). On the other hand, whenever the coastal State needs to establish special areas for mariculture purposes in the EEZ, it is required to have due regard to the freedoms of navigation and communications enjoyed by all States therein (Article 58).

234. However, mariculture is actually practised primarily in proximity to the coast, entailing in general the application of national laws.

2.3.10 Military activities

235. In the territorial sea, the coastal State may only temporarily suspend innocent passage for its own military exercises. Article 25(3) states:

> The coastal State may, without discrimination in form or in fact among foreign ships, suspend temporarily in specified areas of its territorial sea the innocent passage of foreign ships if such suspension is essential for the protection of its security, including weapons exercises. Such suspension shall take effect only after having been duly published.

236. Thus there is no possibility to provide for the designation of special areas dedicated to military activities within the framework of national MSP.

237. Whether military exercises by non-coastal States are allowed within the EEZ of the coastal State still remains an open question. Some States consider that the carrying out of military exercises or manoeuvres, or the deployment of military installations in the EEZ is subject to the permission of the coastal State. However a majority considers that those activities are included within the exercise of the freedom of navigation or "other internationally lawful uses" of the sea.

238. Against this background the margin for the coastal State to regulate military exercises seems to be rather narrow. Flowing from the principle of sovereign immunity laid down in Articles 95 and 96 of LOSC for warships and other governmental ships on non-commercial service, not even measures regarding the protection and preservation of the marine environment, such as routeing measures, may be extended to foreign warships or any vessels owned by a State and operated on government service, as Article 236 states:

> The provisions of this Convention regarding the protection and preservation of the marine environment do not apply to any warship …

2.3.11 Carbon Capture Storage

239. For a long time the question whether carbon capture storage (CCS) is permissible in sub-seabed formations has been unclear. The question was considered under the international regime for dumping of wastes.

240. The LOSC's most pertinent provisions were meant to prevent, reduce and control marine dumping. Whether or not the long-term geological storage of carbon dioxide amounts to "dumping" under the Convention, Article 195 requires that in fulfilling their obligations under LOSC "…States shall act so as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another".

241. The main marine treaty regime of interest to offshore CCS is seen in the London Convention and its 1996 Protocol. The direct relevance of the Convention to offshore carbon storage is limited as the Convention assumed that dumping would be into the water column, and not directly into the seabed and its subsoil[110].

242. The 1996 London Protocol adopts a more extensive approach to dumping at sea than the London Convention as dumping also applies to any storage of wastes in the sea-bed and the subsoil thereof. The Protocol prohibits all dumping except for substances contained in a "reverse list". With the aim to allow for CCS carbon dioxide was added to this list by means of an amendment in 2006.[111]

243. This amendment enables storage of carbon dioxide beneath the seabed and specifies the conditions that carbon dioxide streams are injected into a sub-seabed geological formation, consisting overwhelmingly of carbon dioxide and no wastes or other matter are added for the purpose of disposal.

244. Going beyond the London Protocol, in June 2007 the relevant Annexes to the OSPAR Convention were changed, and will, when they enter into force, allow for the storage of carbon dioxide. In addition to the conditions of the London Protocol, under OSPAR the carbon dioxide streams need to be intended to be retained permanently and not lead to significant adverse consequences for the marine environment, human health and other legitimate uses of the maritime area.

245. Moreover the Contracting Parties are obliged to ensure that no streams shall be disposed of in sub-soil geological formations without authorisation or regulation by their competent authorities, implementing the relevant applicable decisions, recommendations and all other agreements adopted under the OSPAR Convention. In association with this a decision was adopted prescribing in more detail the procedure for issuing the authorisations as well as guidelines for Risk Assessment and Management of that activity. The Commission of the OSPAR Convention has also adopted a Decision to legally rule out placement of carbon dioxide into the water-column of the sea and on the seabed, because of the potential negative effects.[112]

2.3.11.1 EC legislation

246. On 23 January 2008 the European Commission proposed a Directive to provide for a legal framework for environmentally safe capture and geological storage of carbon dioxide in the EU. The Directive is supposed to apply to "the geological storage of carbon dioxide on the territory of the Member States, in their EEZs and on their

[110] International Energy Agency, "Legal Aspects of storing CO_2", 2005
[111] Adopted by the First Meeting of the Contracting Parties to the London Protocol on 2 November 2006
[112] OSPAR Decision 2007/1 to Prohibit the Storage of Carbon Dioxide Streams in the Water Column or on the Sea-bed, Ostend 29 June 2007.

continental shelves within the meaning of the United Nations Convention on the Law of the Sea"[113].

247. The proposal covers *inter alia* site selection and exploration permits, clarifying that Member States determine the areas to be made available for storage. Article 4 of the draft Directive on the selection of storage sites states:

> 1. Member States retain the right to determine the areas from which storage sites may be selected pursuant to the requirements of this Directive. …

248. The requirements especially include the following conditions: the geological formation shall only be selected as a storage site, if under the proposed conditions of use there is no significant risk of leakage, and if no significant negative environmental or health impacts are likely to occur and the suitability of a geological formation for use as a storage site is determined through a characterisation and assessment of the potential storage complex and surrounding area pursuant to criteria specified in the directive.

249. The draft Directive contains provisions on storage permits providing for (non-binding) review of draft permit decisions by the European Commission. This review is meant to guarantee a coherent application of the Directive. A further provision relevant in this context is the application of the Environmental Impact Assessment Directive[114] to CO_2 storage sites. The draft Directive requires Member States to establish or designate a competent authority or authorities responsible for fulfilling the duties established under this Directive. If more than one competent authority would be designated, the work of these authorities "shall be co-ordinated". As to transboundary co-operation, the draft Article 23 requires that:

> In cases of transboundary transport of CO_2, transboundary storage sites or transboundary storage complexes, the competent authorities of the Member States concerned shall meet the requirements of this Directive and of other relevant Community legislation jointly.

2.3.12 Marine scientific research

2.3.12.1 LOSC

250. As the coastal State has sovereignty over its territorial sea, this implies a wide margin to regulate also marine scientific research activities in and landward of this zone. Article 245 states:

> Coastal States, in the exercise of their sovereignty, have the exclusive right to regulate, authorize and conduct marine scientific research in their territorial sea. Marine scientific research therein shall be conducted only with the express consent of and under the conditions set forth by the coastal State.

251. Within the EEZ and on the continental shelf, coastal States have been given control over marine scientific research – including any research installations or equipment in the marine environment needed for such activities (Articles 60, 80 and 258). Other States or international organisations need the consent of the coastal State for any type of research

[113] Proposal for a Directive of the European Parliament and of the Council on the geological storage of carbon dioxide, COM (2008) 19 final.
[114] Directive 85/337/EEC as amended by 97/11/EC, discussed further below.

carried out in these zones. However the coastal State may withhold its consent only under specific conditions.

252. Article 246(5) foresees that:

> Coastal States may …in their discretion withhold their consent to the conduct of a marine scientific research project of another State or competent international organization in the exclusive economic zone or on the continental shelf of the coastal state if that project:
> (a) is of direct significance for the exploration and exploitation of natural resources, whether living or non-living;
> (b) involves drilling into the continental shelf, the use of explosives or the introduction of harmful substances into the marine environment;
> (c) involves the construction, operation or use of artificial islands, installations and structures referred to in articles 60 and 80;

253. A reason for denying consent may also be where a coastal State has declared a MPA in accordance with public international law, if and in so far as the proposed research could have negative effects on the MPA[115]. Thus the coastal state has power to regulate marine scientific research activities under all important aspects of spatial significance.

2.3.12.2 Other international agreements

254. A number of conventions aiming at the protection of the marine environment or nature conservation grant exceptions from protection measures for the purposes of marine scientific research.

255. For example Article 9(1) of the Berne Convention allows each contracting Party to make exceptions for the purposes of research from the provisions concerning the protection of habitats, provided that there is no other satisfactory solution and that the exception will not be detrimental to the survival of the population concerned.

2.3.13 Wrecks and other historic features

2.3.13.1 LOSC

256. The matter of underwater cultural heritage and historical and archaeological objects found in the seas is addressed in a somewhat contradictory fashion by mandating protection but preserving traditional exploitation rights. Article 303(1) states:

> States have the duty to protect objects of an archaeological and historical nature found at sea and shall cooperate for this purpose.

257. Article 303(3) provides that:

> Nothing in this article affects the rights of identifiable owners, the law of salvage or other rules of admiralty, or laws and practices with respect to cultural exchanges.

258. Moreover this provision anomalously gives coastal States 24 nautical miles of jurisdiction for the purpose of controlling traffic in underwater cultural heritage objects (Article 303(2)), but is silent as to the remainder of the EEZ and continental shelf.

[115] Gellermann M., Stoll, P-T., Schwarz, K. and Wolf, R., "Nutzungsbeschränkungen in geschützten Meeresflächen im Bereich der Ausschließlichen Wirtschaftszone und des Festlandsockels Federal", Agency for Nature Conservation 2007, BfN – Skripten 194.

However as the coastal State is entitled to take measures on its land territory and in its ports to control traffic in archaeological and historical objects, it has some scope to adopt measures in this respect.

2.3.13.2 Other international Agreements

259. The 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage[116], which is not yet in force, is intended to enable States to effectively protect and preserve their underwater cultural heritage. As a basic principle of the Convention the *in situ* preservation of underwater cultural heritage (i.e. on the seabed) must be considered as the first and preferred option before allowing or engaging in any activities directed at this heritage.

260. Under the Convention, Parties will have the exclusive right to regulate activities in their Internal Waters and their Territorial Sea (Article 7). For heritage found within the EEZ and the Continental Shelf, the Convention establishes a specific international cooperation regime encompassing reporting, consultations and coordination in the implementation of protective measures (Articles 9 to 11). Parties to the Convention are obliged to establish 'national authorities' who shall provide for the establishment, maintenance and updating of an inventory of underwater cultural heritage and ensure the effective protection, conservation, presentation and management of such heritage.

2.3.14 Recreation and tourism

261. There are no specific rules on tourism as such in international law. As "tourism" involves a variety of human activities, the existing rules of international law and the legal instruments identified above are applicable. Of relevance in this connection are those that relate to activities undertaken in connection with tourism such as navigation but also certain forms of fishing or the use of artificial islands, installations and structures.

2.3.15 Places of refuge

2.3.15.1 International Agreements

262. A customary international law obligation is recognised requiring to open otherwise closed ports to vessels in distress.[117] As to codified obligations, a limited number of global and regional conventions dealing with obligations to ensure that the effects of maritime accidents are minimised include specific provisions on places of refuge[118].

[116] Paris, 6 November 2001; (2002) 41 *International Legal Materials* 40. The following EU Member States have so far ratified the Convention: Lithuania, Portugal and Spain.
[117] Churchill & Lowe, *op cit* p. 63.
[118] See e.g. the amendments made, in September 2001, to Annex IV of the Helsinki Convention. A new Regulation 13 provides that the States Parties "shall, following-up the work of EC and IMO, draw up plans to accommodate, in the waters under their jurisdiction, ships in distress in order to ensure that ships in distress may immediately go to a place of refuge subject to authorisation by the competent authority; and … shall exchange details on plans for accommodating ships in distress". See also Part XII of the Declaration on the Safety of Navigation and Emergency Capacity in the Baltic Sea Area (Helcom Copenhagen Declaration), adopted on 10 September 2001. Article 16 of the 2002 Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea obliges the parties to "define national, subregional or regional strategies concerning reception in places of refuge, including ports, of ships in

While such obligations do not necessarily amount to a general obligation for coastal States to accommodate a ship in distress, their combined effect may clearly imply concrete international legal obligations for coastal States in a place of refuge situation and a limitation of their range of options available in dealing with the situation[119].

263. IMO guidelines on places of refuge for ships in need of assistance[120] are intended for use when a ship is in need of assistance but the safety of life is not involved. The guidelines recognise that, when a ship has suffered an incident, the best way of preventing damage or pollution from its progressive deterioration is to transfer its cargo and bunkers, and to repair the casualty. As such an operation is best carried out in a place of refuge the guidelines encourage coastal States to designate suitable places of refuge.

2.3.15.2 EC legislation

264. According to VTM Directive, Member States must establish plans for the identification of places of refuge for ships in distress. According to Article 20:

> Member States … shall draw up … plans to accommodate, in the waters under their jurisdiction, ships in distress. Such plans shall contain the necessary arrangements and procedures taking into account operational and environmental constraints, to ensure that ships in distress may immediately go to a place of refuge subject to authorisation by the competent authority. Where the Member State considers it necessary and feasible, the plans must contain arrangements for the provision of adequate means and facilities for assistance, salvage and pollution response.

265. The national plans must contain a geographical element, which is the designation of places of refuge[121].

2.4 Horizontal, procedural and other constraints

2.4.1 International agreements

2.4.1.1 Convention on Environmental Impact Assessment in a Transboundary Context[122] (Espoo Convention)

266. The Convention on Environmental Impact Assessment in a Transboundary Context adopted at Espoo on 25 February 1991[123] the (the Espoo Convention) was negotiated under the auspices of the United Nations Economic Commission for Europe. The European Community and all of its Member States are parties. The Convention sets out the obligations of Parties to assess the environmental impact of certain activities listed in an Annex to the Convention at an early stage of planning. Article 2(3) requires

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distress presenting a threat to the marine environment." In the North Sea framework, a detailed (interim) chapter on places of refuge was included in the Bonn Agreement Counter Pollution Manual (Chapter 26) in May 2002. See http://www.bonnagreement.org.

[119] Røsæg, E. and Ringbom H., "Liability and Compensation with Regard to Places of Refuge", Scandinavian Institute of Maritime Law, 2004

[120] Assembly Resolutions adopted in November 2003, 23 session, 24 November – 5 December 2003.

[121] HELCOM Maritime Group 2004, Note of the secretariat "Places of Refuge" (Helcom Maritime 3/2004)

[122] Espoo, 25 February 1991; 1989 UNTS 309.

[123] 30 ILM (1991), 802.

267. The 'Party of Origin'[124] must ensure that in accordance with the provisions of the Convention an environmental impact assessment is undertaken prior to a decision to authorise or undertake a proposed activity listed in Appendix I that is likely to cause a significant adverse transboundary impact.[125]

268. Most importantly the Espoo Convention also imposes general obligation on the contracting States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. There needs to be a possibility for the public of the other State concerned by the project to take part in the EIA procedure.

269. Article 2(6) states that

> The Party of origin shall provide, in accordance with the provisions of this Convention, an opportunity to the public in the areas likely to be affected to participate in relevant environmental impact assessment procedures regarding proposed activities and shall ensure that the opportunity provided to the public of the affected Party is equivalent to that provided to the public of the Party of origin.

270. The Convention applies to any "proposed activity" meaning "any activity or any major change to an activity subject to a decision of a competent authority in accordance with an applicable national procedure" (Article 1 (v)). The Convention applies directly to activities listed in Annex I to the Convention.

271. The Annex lists *inter alia* large-diameter oil and gas pipelines, trading ports which permit the passage of vessels of over 1,350 tonnes, major mining and offshore hydrocarbon production. For activities not listed States shall enter into discussions on whether one or more proposed activities not listed in Appendix I is or are likely to cause a significant adverse transboundary impact and thus should be treated as if it or they were so listed (Article 2.5).

272. Article 2(7) stipulates that:

> Environmental impact assessments as required by the Convention shall, as a minimum requirement, be undertaken at the project level of the proposed activity. To the extent appropriate, the Parties shall endeavour to apply the principles of environmental impact assessment to policies, plans and programmes.

273. However, in 2003 a Protocol on Strategic Environmental Assessment[126] was adopted which will require its Parties to evaluate the environmental consequences of their official draft plans and programmes. It has been signed by the European Community as well every Member State other than Malta, but ratified only by Bulgaria, the Czech Republic,

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[124] 'Party of Origin' means the State under whose jurisdiction a proposed activity is envisaged to take place (Article 1 (ii)).

[125] With regard to the scope of the Espoo Convention a key issue is the definition of "transboundary impact" in its Article 1(viii). This refers to areas within the jurisdiction of parties in terms broad enough to include the EEZ and continental shelf - i.e. to the continental shelf in all the ocean areas mentioned and to EEZs and other zones where declared in those oceans. While boundaries also exist between these zones and the high seas/seabed area beyond national jurisdiction, the definition of "Affected Party" in Art 1(iii) includes transboundary impact as an element, hence even if a party's activity on the high seas is specially affected in some way by another party's activity within or landward of its own EEZ, it will not come under the Convention.

[126] Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, Kiev, 21 May 2003, UN doc ECE/MP.EIA/2003/2.

Finland, Germany and Sweden.[127] It has not entered into force yet. Despite this, the obligations resulting from the Protocol can most likely be considered as being already implemented through the European Communities Directive on the assessment of the effects of certain plans and programmes on the environment (see below).

274. The Helsinki Convention in its Article 7 requires

> Whenever an environmental impact assessment of a proposed activity that is likely to cause a significant adverse impact on the marine environment of the Baltic Sea Area is required by international law or supra-national regulations applicable to the Contracting Party of origin, that Contracting Party shall notify the Commission and any Contracting Party which may be affected by a transboundary impact on the Baltic Sea Area.

275. The Helsinki Convention thus does not create a new obligation for an EIA but relies on other international agreements – basically the Espoo Convention – and amplifies the environmental protection dimension by imposing on Parties a duty "to ensure that potential impacts on the marine environment of the Baltic Sea Area are fully investigated" (Article 7.3).

2.4.1.2 OSPAR Convention

276. The OSPAR Convention does not directly require EIA. But with regard to transboundary pollution the Convention in its Article 21(1) requires that:

> When pollution originating from a Contracting Party is likely to prejudice the interests of one or more of the other Contracting Parties to the Convention, the Contracting Parties concerned shall enter into consultation, at the request of any one of them, with a view to negotiating a cooperation agreement.

277. By Article 21.3, such an agreement may define

> ….inter alia, … the areas to which it shall apply, the quality objectives to be achieved and the methods for achieving these objectives, including methods for the application of appropriate standards and the scientific and technical information to be collected.

2.4.1.3 Barcelona Convention

278. As to the Mediterranean, no general obligation to undertake an EIA exists within the framework of the Barcelona Convention. The Offshore Protocol[128] encourages the use of environmental impact assessments with a view to the granting of licences in protected areas (Article 21). Furthermore a new Protocol on Integrated Coastal Zone Management was adopted on 21 January 2008. Article 19, which is entitled 'Environmental Assessment' provides as follows:

> 1. Taking into account the fragility of coastal zones, the Parties shall ensure that the process and related studies of environmental impact assessment for public and private projects likely to have significant environmental effects on the coastal zones, and in particular on their ecosystems, take into consideration the specific sensitivity of the environment and the inter-relationships between the marine and terrestrial parts of the coastal zone.
> 2. In accordance with the same criteria, the Parties shall formulate, as appropriate, a strategic environmental assessment of plans and programmes affecting the coastal zone.
> 3. The environmental assessments should take into consideration the cumulative impacts on the coastal zones, paying due attention, *inter alia*, to their carrying capacities.

[127] UN treaties website, last updated mid-Nov 2007.

[128] Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil of 14 October 1994, not yet in force.

279. Consultation requirements are less strong than in the Helsinki and OSPAR Conventions and limited to cases where there is an "imminent danger to the environment due to pollution" (Article 26).

2.4.2 EC legislation

2.4.2.1 Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive)

280. Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment[129] (the SEA Directive) requires a formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment. The plans and programme that are subject to strategic environmental assessment are defined in Article 2 (a). This provision states

> 'plans and programmes' shall mean plans and programmes, including those co-financed by the European Community, as well as any modifications to them:
> — which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and
> — which are required by legislative, regulatory or administrative provisions;

281. Authorities which prepare and/or adopt such a plan or programme must prepare a report on its likely significant environmental effects and alternatives, propose mitigation measures, consult environmental authorities and the public, and take the report and the results of the consultation into account during the preparation process and before the plan or programme is adopted. They must also make information available on the plan or programme as adopted and how the environmental assessment was taken into account.

282. According to the SEA Directive an environmental assessment has to be carried out for plans and programmes which are likely to have significant environmental effects. The SEA Directive applies to plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, and which set the framework or future development consent of projects listed in Annexes I and II to the EIA Directive (see below). It also applies to plans and programmes requiring an assessment pursuant to Habitats Directive. The preparation of comprehensive marine spatial plans will thus most likely require a SEA according to the SEA Directive. Article 7 of the SEA Directive contains express provisions on transboundary consultation considers that the implementation in cases where a proposed plan or programme is likely to have significant effects on the environment in another Member State, or where a Member State likely to be significantly affected so requests.[130]

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[129] OJ L 197, 21.7.2001, p. 30.

[130] Mention can also be made of the potential relevance of Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances (OJ L 10, 14.1.1997, p. 13) (the Seveso II Directive) which aims to prevent major accidents involving dangerous substances and to minimise the adverse consequences of such accidents for man and the environment. It applies to establishments where dangerous substances are present in specified quantities (described in Annexes to the directive). Pursuant to Article 12 the Member States are required to ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in their land-use policies and/or other relevant policies through controls on, *inter alia*, the siting of new establishments, and new developments such as transport links

2.4.2.2 Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (EIA Directive)

283. Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment[131] (85/337/EEC) (the EIA Directive) requires the environmental consequences of certain public and private projects that are likely to have significant effects on environment by virtue, *inter alia*, of their nature, size or location to be assessed before authorisation. Article 2(1) provides:

> Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue *inter alia* of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects.

284. For some projects EIA is obligatory (Annex I), for others (Annex II), Member State authorities are required to determine through a case-by-case examination or general thresholds or criteria whether the project is to be made subject to an assessment (Article 4(2)(1)). In all cases the criteria of Annex III must be taken into account.

285. The projects that are subject to mandatory EIA pursuant to Annex I *inter alia* include a number that may take place within a maritime context:

- Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1 350 tonnes.
- Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes/day in the case of petroleum and 500 000 m³/day in the case of gas.
- Pipelines for the transport of gas, oil or chemicals with a diameter of more than 800 mm and a length of more than 40 km.

286. As regards activities listed in Annex II the following may also take place in the maritime area:

- intensive fish farming;
- reclamation of land from the sea;
- extraction of minerals by marine or fluvial dredging;
- deep drilling;
- installations for hydroelectric energy production;
- installations for the harnessing of wind power for energy production (wind farms);
- coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works; and
- marinas.

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and locations frequented by the public in the vicinity of existing establishments. In terms of MSP, therefore, it is at least arguable that a maritime spatial plan should also take account of Article 12. As to its overall scope it is important to note that the Seveso II Directive does not apply to a number of activities that are potentially relevant to maritime space. These include the transport of dangerous substances by sea or air (including loading and unloading at docks and wharves) as well as the transport of dangerous substances in pipelines (Article 4).

[131] OJ L 216, 3.8.1991, p. 40.

2.4.2.3 Habitats Directive

287. Article 6(3) of the Habitats Directive provides for a special impact assessment procedure with regard to the compatibility of plans and projects with the sites' conservation objectives:

> Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

288. As to the weighting process in case of a negative assessment, Article 6.4 lists the reasons as to why a plan or project may nevertheless be carried out and requires Member States to compensate for the damage:

> If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

289. Article 6(5) imposes even stricter requirements in cases where priority habitats or species are concerned:

> Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

290. The Directive thus contains some strong constraints as regards MSP for activities or maritime uses where sites protected under the Directive may be affected.

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

291. The broad scope of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy[132] (the Water Framework Directive or WFD) means that it has a number of implications for MSP.

292. The WFD seeks to establish a comprehensive framework for the protection of inland surface waters, groundwater, transitional waters and coastal waters. 'Coastal waters' are defined to include waters extending out to one nm from the baseline from which the breadth of the territorial sea is measured[133]. However, the term 'surface waters' is defined so as to include coastal waters as well as the territorial sea (described in the

[132] OJ L 327, 22.12.2000, p. 1.
[133] Article 2(7).

directive as the territorial waters) for some specific purposes.[134] In other words there is clearly a potential spatial overlap between the WFD and MSP activities.

293. In terms of MSP, first of all, the WFD calls for a form of zoning of water bodies. In outline, the Member States are required to identify and characterise 'artificial' surface water bodies and 'heavily modified' surface water bodies.[135] In the maritime context a number of North Sea Member States have, for example, characterized marine water bodies as heavily modified as a result of significant hydro-morphological pressures resulting from dredging in shipping routes.[136]

294. The Member States are next required: (a) to 'protect, enhance and restore' what can be described here as 'natural' water bodies (in other words water bodies that are neither artificial nor heavily modified[137]) so as to achieve by 2015 'good surface water status' (comprising 'good ecological status' and good chemical status, notions which are both defined in the directive)[138]; and (b) to protect and enhance artificial and heavily modified water bodies so as to achieve 'good ecological potential' and 'good surface water chemical status' by 2015[139].

295. A Member State may only lawfully permit the deterioration of the ecological status of a water body as a result of new modifications to its physical characteristics provided a number conditions laid out in Article 4(7) are met.[140] These include: (a) that all practical steps are taken to mitigate the adverse impacts; (b) the existence of reasons of overriding public interest; (c) the objectives cannot otherwise be achieved by reasons of technical feasibility or disproportionate cost; and (d) that the reasons for the deterioration are specifically set out in the relevant river basin management plan. In other words the WFD would not necessarily prevent physical alterations to the sea bed, such as the dredging of a new shipping channel through a 'natural' water body within coastal waters, although it certainly sets a relatively high threshold. The net effect is that the 'zoning' exercise undertaken through the identification of heavily modified and artificial (marine) water bodies on the basis of the WFD may well have implications for the zoning of future activities pursuant to MSP.

296. The second implication concerns the relationship between river basin management plans, referred to in the previous paragraph, and MSP. The 'river basin district'[141], and the 'international river basin district' in the case of shared river basins, is the basic unit of management foreseen in the WFD and coastal waters must be assigned to the nearest or most appropriate such district. River basin management plans must be prepared in respect of each river basin district by 2009[142] and will play a key role in fulfilling the

[134] Article 2(1).
[135] Article 5.
[136] HARBASINS WP1Document analysis: comparison of WFD, Article 5 implementation in estuaries and coastal zones in Belgium, Denmark, Germany, the Netherlands and United Kingdom, Working document, March 2007http://www.harbasins.org/index.php?id=96
[137] The Water Framework Directive does not actually use this term.
[138] Article 4(1)(a)(ii).
[139] Article 4(1)(a)(iii).
[140] Similar restrictions apply with regard to the deterioration from high status to good status of a body of surface water as the result of new sustainable human development activities.
[141] Article 2(15)
[142] Article 13 (6).

environmental objectives of the WFD. The minimum requirements for river basin management plans are contained in Annex VII of the WFD and while in practice much of their focus will likely be on inland waters, if prepared correctly they will also need to address relevant coastal waters. At the very least it will be necessary to ensure careful coordination between plans developed pursuant to MSP and river basin management plans developed in accordance with the WFD in order to prevent contradictions and conflict.

297. Finally, in respect of each river basin district the Member States are required to put in place the necessary administrative arrangements including the identification of the appropriate 'competent authority' responsible for the application of the WFD.[143] Similar trans-boundary arrangements are fore-seen for international river basin districts. Again in terms of MSP some form of coordination will likely be necessary with bodies created through such arrangements and indeed these existing mechanisms for cooperation may facilitate cross-border MSP.

2.5 Conclusions

298. This study has shown that EU Member States encounter relatively few constraints under international or EC law with regard to MSP in their internal waters and territorial seas.

299. Subject to the duty not to hamper innocent passage of foreign vessels, spatial planning involving prohibition of fishing is within the coastal State's power, while regulating navigation by way of shipping lanes requires no more than consultation with the IMO. It is also necessary to consult relevant neighbouring States regarding plans or projects in the territorial sea likely to have a significant adverse environmental impact across boundaries.

300. Within the EEZ spatial planning can be exercised with regard to the most important marine related activities including exploring and exploiting, conserving and managing living and non-living natural resources. Important constraints derive firstly from other States' freedom of navigation: within the EEZ coastal States are barred from unilaterally defining sea lanes for international navigation but have to rely on multilateral cooperation within the framework of the IMO. Secondly coastal States only have a limited influence on the laying of cables and pipelines of other States only passing through their EEZ: they may dictate where the cable or pipeline runs, but may not prevent its laying. Finally commercial fishing is regulated under the CFP. In the context of the CFP the European Community has not taken advantage of the possibility to designate no-take zones – an instrument with great potential for spatial management of exploitation of living resources in the marine environment. Moreover there is need for clarification from a legal perspective as to the question to what extent EU Member States are allowed to regulate fisheries conservation aspects in the context of the designation of marine protected areas for the purpose of nature conservation. To assist this, recent guidance has been produced by DG Environment of the European Commission on using fisheries controls within designated Natura 2000 sites. Member states have freedom to implement fisheries controls within their territorial seas (12nm) but if it is beyond 12nm

[143] Article 3(2).

member states are required to send a formal request to the EC which is then evaluated against the CFP, scientific advice and consultation of stakeholders[144].

301. On their continental shelves, States can take spatial planning measures governing all activities relating to exploring and exploiting, conserving and managing the living and non-living natural resources. Exceptions concern navigation, the laying of cables and pipelines, scientific research and, on any part of the shelf more than 200 nm from the baseline, fishing in so far as the gear does not come into contact with the seabed.

302. As to the high seas there is almost no room for MSP as such by individual States given that spatial planning that is enforced against foreign vessels would infringe the prohibition on subjecting the high seas to national sovereignty. Regulation of marine activities will have to be based exclusively on international cooperation within the framework provided for by international and in particular the Law of the Sea. The question of designation of nature protected areas in the high seas is challenging but has received recent international support.

303. Horizontal and procedural requirements under international and EC environmental law, including transboundary consultation requirements, have a direct impact on how MSP should be undertaken by the Member States.

[144] http://ec.europa.eu/environment/nature/natura2000/marine/index_en.htm

3 Measuring progress towards MSP

304. In the absence of a universally agreed definition of MSP, let alone a binding legal instrument at EC level or otherwise, how can the relative progress that Member States have made regarding MSP be assessed?

305. In order to assist in making such an assessment (and in accordance with the terms of reference) a simple set of indicators are proposed together with a set of instructions for preparing the indicators from readily available information.

306. The terms of reference asked for the set of draft indicators to be tested against the information available in the PlanCoast, BaltCoast and OSPAR reports that have recently been published and which provide information on coastal and maritime planning for these regions. [145] While these reports provide useful material, the studies were not approached in a consistent way and in some instances do not provide all the necessary information needed to complete the indicators. Therefore, to supplement this task the indicators were also tested using the information available from two of the case studies (UK and Germany). The countries selected for the test from the provided studies were the Netherlands and Italy.

307. What became clear from this exercise is that while the PlanCoast, BaltCoast and OSPAR reports were useful in assessing some of the indicators, it is necessary to collect supplementary information and ensure that the information available is consistent for each country.

308. From the outset, it must be acknowledged that the development of reliable indicators is not a simple task. Furthermore, as the objective of the indicators is to provide an idea of relative progress towards MSP it is clear that a simple 'yes/no' indicator would contribute little.

309. Consequently, on the basis of the proposed indicators a scoring guidepost from zero to five is proposed. The challenge then becomes to attribute an appropriate numeric value to each indicator in order to express the degree of progress.

310. A graded indicative scenario is postulated for each guidepost. The task for a person using the indicators is to seek to identify the scenario that most closely represents the factual situation in each case. There are not expected to be any intermediate values since this would pre-suppose a level of precision that is beyond the design of the indicators. In practice it is impossible to foresee every possible scenario and consequently an element of subjective judgment will arise in the (likely) event that the scenarios posited do not completely accord with the situation being assessed.

[145] BaltCoast (2004). Framework for the co-ordinated use of offshore areas - Conclusions and recommendations; PLANCOAST (2007). Synthesis report, State of art of coastal and maritime planning in the Adriatic region; OSPAR (2008). Draft Progress report on the development of an Overview of National Spatial Planning and Control Systems Relevant to the OSPAR Maritime Area presented by the ICG-MSP (Version 1 of 13 February 2008).

311. At the same time, though, it must be recognised that the complexity inherent in MSP, not least as a result of the number of actors/activities involved, is such that it is difficult to establish purely 'objective' criteria. In any event, as discussed in the introduction to this Study, it is unrealistic to assume that there is a single 'correct' approach towards MSP.

312. Furthermore it is necessary to stress that the proposed indicators cannot act as benchmarks towards a clearly defined outcome. Rather they can merely show relative progress towards a particular objective or set of objectives.

313. In terms of visual presentation, the fact that a range of numbered values are to be used allows the package of scores for each country to be presented in the form of a radar charts, as illustrated below.

3.1 The proposed indicators

314. The proposed indicators are:

- Policy and legal framework;
- Information management;
- Permitting and Licensing;
- Consultation;
- Sector conflict management;
- Cross-border cooperation;
- Implementation of MSP.

315. Transparency was also considered as an important element of MSP and has been integrated into the scoring guideposts of several of the indicators, notably Information Management, Consultation and Sector Conflict Management.

316. Before looking in more detail at the indicators themselves it is first appropriate to explain why these particular indicators were selected.

3.2 Rationale for the selection of the indicators

3.2.1 Policy and legal framework

317. The existence or otherwise of a legislative and policy framework that supports and promotes MSP, and allows for integration across sectors, is considered essential to the effectiveness and sustainability of MSP.

318. If existing legislation does not support and facilitate MSP processes, and the plan or plans that emerge from such processes, then it is difficult for such activities to have any genuine or long-term impact. Whether or not legislative provision is contained in a single integrated text or the coordination of a number of laws is a matter for national policy makers to determine. The key question is whether or not such legislation is in place. As such this is why it is proposed as the first indicator.

3.2.2 Data and information management

319. Data and information are fundamental to the management of any natural resource including maritime space. Both ecological/biological and social/economic data are required to make decisions on the allocation of space as well as to assess the implementation and progress of MSP. This indicator is therefore proposed as a means of assessing the effectiveness of data and information use for MSP activities.

3.2.3 Permitting and Licensing

320. As described in the introduction, permitting and licensing play a key role in many activities undertaken in the maritime area. In the context of MSP, permits or licences are the means whereby the overall objectives of MSP are translated into the rights and duties of individual actors.

321. The question is not so much whether activities in the marine area are subject to permits (and some activities such as navigation typically are not) but the extent to which the issue of permits is coordinated between different sectors (and sector agencies) as well as the overall objectives and priorities of the MSP process.

322. Furthermore, the process of applying for, determining and issuing permits has a cost both to the state and to individual applicants. The extent to which permitting procedures are transparent and simple therefore gives an indication as to their relative ease of use, indirectly to the cost to applicants and eventually the overall coherence of the spatial planning system.

3.2.4 Consultation

323. As a key objective of MSP is to ensure that different sectoral objectives and priorities for the use of maritime space are taken into account, consultation and the existence of consultation mechanisms has an important role to play in identifying different demands vis à vis a given maritime space.

324. Consultation, and the existence of mechanisms for consultation, also has a major role in minimising the risk of conflict between different sectors as far as the demand for maritime space is concerned as well as more positively in generating so-called ‘win-win’ scenarios. It is also important that consultation goes hand in hand with transparency so that stakeholders have the sufficient information to make informed comments or suggestions.

3.2.5 Sector conflict management

325. This indicator is proposed because of the risk of conflicts between different sectors in the absence of MSP. Mechanisms for reducing conflicts through MSP include the use of priority zones, and principles and criteria to arbitrate between conflicting plans.

3.2.6 Cross-border cooperation

326. This indicator is proposed by reason of the high degree to which MSP in the waters of one European country is likely to be affected by equivalent activities in neighbouring countries.

327. Other boundaries include land-sea boundaries, and boundaries between different administrations. This indicator can also capture positive elements of cross-border cooperation such as benefits if planning is coordinated between member states.

3.2.7 Implementation of MSP

328. Finally this indicator is proposed in order to assess the degree to which MSP actually takes place, how it is translated from the policy and legislative level into practice. This indicator also looks at the effectiveness of planning with regard to sustainable use and development of marine areas.

3.3 Draft table of indicators

MSP indicators							
	A. Policy and legal framework	**B. Data and information management**	**C. Permitting and Licensing**	**D. Consultation**	**E. Sector conflict management**	**F. Cross-border cooperation**	**G. Implementation of MSP**
0	No policy on MSP Sectoral legislation does not contribute to MSP in any material way	No /few spatial data exist on biological/ecological aspects (e.g. marine substrates, habitats, species) and no data on social/economic aspects (e.g. maritime activities.) No mechanisms in place for collection or dissemination of relevant information.	Open access – no restrictions or requirements for licensing	No consultation required nor taking place on plans or projects No transparency or information available on plans or projects	No mechanisms for dealing with/reducing conflicts in areas with high potential of conflicts	No mechanism for consulting with neighbours or coordinating across other boundaries (land/sea; administrative boundaries) beyond requirements of EC environmental law	No maritime plan (or sectoral plans) outlining maritime planning priorities and no mechanism for preparing a plan
1	Limited sectoral legislation e.g. *ad hoc* zoning of maritime areas for specific sectoral activities No policy on MSP	Basic biological data exist (e.g. depth and substrate type) for most of the coastal zone, but are not easily available to planners/stakeholders but no social/economic data	Unclear/non transparent or contradictory licence requirements Incomplete licensing regime. No inter–agency coordination	Voluntary consultation encouraged for some projects Information available on request for some projects	Ad-hoc mechanisms for dealing with/ reducing conflicts in areas with high potential of conflicts	*Ad hoc* mechanisms for consultation across boundaries Case by case basis	Informal non-binding sectoral plans Different contradicting sectoral plans
2	Sectoral legislation with no formal mechanisms to coordinate spatially	Biological data exist on marine substrates, habitats, main species	Comprehensive licensing regime. Unclear/non	Requirement for passive consultation for some projects	Indicative (non-binding) guidelines for dealing with/reducing conflicts	Non-binding national criteria for cross-boundary consultation (beyond	Formal sectoral plans with limited cross-sector and vertical coordination

	relevant decisions Draft MSP policy	of commercial interest and very limited social/economic data on some maritime activities (e.g. location and direct economic value for some activities) for the coastal zone. Lack of coordination on data collection, analysis and synthesis of information.	transparent procedures - licences from different agencies with different objectives. OR - unclear division of competences between different agencies either horizontally or vertically No inter-agency coordination	(e.g. newspaper adverts, notices) typically late in the process Information available on request for most projects	plus ad-hoc mechanisms	requirements of EC environmental law) Limited guidelines available	Sectoral plans reviewed and revised on an *ad-hoc* basis
3	Sectoral legislation and specified coordination mechanisms for spatially relevant Clearly defined MSP policy adopted but no MSP legislation yet Adoption of MSP legislation in progress	Good biological data exist on marine substrates, habitats, most species of commercial interest and biodiversity, for the coastal zone and some of the EEZ. Some socio-economic data available on some maritime activities (i.e. location and direct economic value), for the coastal zone and some of the EEZ. Some data are available in GIS format. Efforts are underway to collect further data. Data can be accessed where required but may not	Several different licences from different agencies Clear division of competences between institutions, not always effectively implemented Limited inter-agency coordination with respect to most aspects relevant to the allocation of permits Information to applicant on permitting process is available	Requirement for active consultation on a limited number of plans (may be sectoral) and projects Consultation of limited number of representative stakeholders Information on selected plans and projects made available to the public through a limited number of mechanisms (e.g. meetings)	Clear procedures and binding principles adopted for conflict resolution	Mutual rules guiding trans-boundary co-operation, ensuring permanent exchange of Information (e.g. bi-lateral agreements) Voluntary guidelines on cooperation and coordination across sub-national boundaries (i.e. land/sea boundaries, administrative boundaries)	Formal sectoral plans and define binding objectives for the overall MSP process Some cross-sector and vertical coordination Sectoral plans reviewed and revised on a regular basis.

		be well coordinated (e.g. data held by many different institutions, different formats used, different access procedures). Basic analysis and synthesis of data into useful information.					
4	Comprehensive MSP legislation adopted but not yet implemented.	Comprehensive biological data exist on marine substrates, habitats, ecosystem functions, all species of commercial interest, and biodiversity for the coastal zone and most of the EEZ. Some social/economic data exist (i.e. location and direct & indirect economic values) for most sectoral activities in the coastal zone and most of the EEZ. Most data are available in GIS format. Efforts are underway to collate existing data into an integrated, comprehensive GIS-based central data facility. Data are processed into useful information and relatively easy to	Several different licences required for a specific activity but clear and coordinated procedures Clear division of competences effectively implemented Inter-agency coordination with respect to all aspects relevant to the allocation of permits Easily available and transparent information on permits.	Requirement for active consultation on most plans (may be sectoral and projects) Findings have to be documented Information on most plans and projects made available to the public through a number of forms (e.g. newspapers, meetings, websites)	Clearly defined and binding procedures, as well as principles and objectives for decision making Binding general priorities.	Mandatory trans-boundary consultation procedures based on binding national criteria and mutual rules guiding co-operation Guidelines on cooperation and coordination across sub-national boundaries accepted as normal practice (i.e. land/sea boundaries, administrative boundaries	A comprehensive plan/system with spatially defined priorities in place with some limited implementation. Good cross-sector and vertical coordination

		access where required. Efforts are underway to provide complete coverage of the EEZ.					
5	Comprehensive MSP legislation adopted and implemented - Adoption of any necessary subordinate legislation. - Law has stood the passage of time. - No serious litigation.	Comprehensive data exist on marine substrates, habitats, ecosystem functions, all species of commercial interest, biodiversity and maritime sectoral activities for the coastal zone and the whole EEZ. Comprehensive social/economic data on maritime activities (i.e. location, economic, social and cultural values) for the coastal zone and the whole EEZ. All data are processed into useful information and available in GIS format and most have been collated into an integrated, comprehensive GIS-based central data facility. Data are easily available, and effectively disseminated where required.	Streamlined transparent process with information readily available No contradictions Simplified and clear procedures Clear mechanism to coordinate/ manage overall decision making process for the allocation of space <u>*or*</u> One stop shop – a single application process that can cover multiple licence applications and take into account the overarching MSP objectives	Requirement for active consultation on all plans and projects Information on most plans and projects activity promoted to the public through a number of forms (e.g. newspapers, websites, meetings) Findings are reflected in the decision. Consideration documented Procedures for revisions and consultation on evaluation	Clearly defined procedures, as well as principles and objectives for decision making Priorities agreed within a geographic context to guide decision making Compensation measures for persisting conflicts.	Mandatory trans-boundary consultation procedures implemented with joint decision making and conflict resolution Legislation and related mechanisms for cooperation and coordination across sub-national boundaries (i.e. land/sea boundaries, administrative boundaries	A comprehensive plan/system defining legally binding priorities within a geographic context has been developed and is being effectively implemented at regional and national levels Effective cross-sectoral and vertical coordination Monitoring mechanisms in place Regular reviews undertaken and plans evaluated in this light

3.4 Instructions for preparing the performance indicators

329. Within the table of performance indicators columns A – G are broad descriptions of criteria/performance indicators to be looked at when evaluating MSP frameworks. Numbers 1-5 in each indicator category are Scoring Guideposts. Scoring Guideposts are specific statements or questions against which the situation applying to MSP is measured.

330. They are descriptions of different "performance" levels meant to articulate a graded scale for assessment purposes. The levels described are not necessarily natural steps or thresholds that will apply to a given situation in a particular Member State; hence some interpretation and adaptation is likely to be needed. In this context some allowance should be made for revision of the guideposts as they are applied in more and more specific cases.

331. They range from an indicative "perfect practice" (5) at the upper end, representing the level that would be expected in a theoretically "complete" MSP system, to the lower end where virtually nothing is happening that contributes to any notion of coordinated planning of maritime areas (0). Five different levels above zero are proposed in order to allow for a sufficient scale for differentiation.

332. The descriptions of the guideposts are intended to allow for variability in the interpretation and application of the indicators of MSP. They should be used as example descriptions of different levels rather than as ultimate performance targets. With growing experience of maritime planning assessment the guideposts will need further development.

333. These indicators could be scored on the basis of information gathered in case studies (i.e. expert opinion) and member state questionnaires, and could finally be verified by member states. It will be important that a rigorous and systematic documentation is used of why a certain score is chosen. This could be achieved by providing justifications against each of the scores and indicating where the information can be found within the case study (see Appendix C – Testing the draft indicators).

3.4.1 The policy and legal framework

334. The key question here is whether there is policy and/or legislation in place that deals especially with and explicitly addresses the objectives for MSP described above.

335. The underlying idea is that the system addresses the allocation of space in the marine environment in a comprehensive/integrated manner instead of just looking at certain uses/activities and dealing with it on the basis of sectoral legislation.

336. The overall guideline of the MSP system should be that of sustainable use and management of maritime areas.

337. Possible intermediate solutions regarding legislation could include mechanisms providing for some coordination between decisions with spatial relevance. The score will

follow the ideal-typical stages from a policy on comprehensive MSP over transposition into legislation and finally its implementation.

3.4.2 Data and information management

338. Biological/ecological (e.g. marine substrates, habitats, species, biodiversity) and social/economic data (e.g. location, economic and social value of maritime activities) form the basis of decisions on the allocation of maritime spaces to different activities and uses and the ability to measure the impact of planning decisions.

339. The existence and availability of data for the decision-making and planning agencies is therefore essential for planning activities to take place.

340. The score reflects an increasing amount and quality of data on marine substrates, distribution and location of species, habitats and maritime activities and the extent of maritime areas to which they apply.

341. In the case of a lack of data, efforts to collect them are taken into account. The ready access to data as well as the presentation of information is also considered.

3.4.3 Permitting and Licensing

342. This section deals with the extent to which uses of/activities in the maritime area are subject to licensing procedures and how they are dealt with.

343. The idea is that making activities subject to licensing is a precondition for planning activities. The legal framework for issue of licences or permits should be clear and efficient, but most importantly the institutional set-up (jurisdiction and cooperation/coordination) should be designed in a way to allow for a final decision that is dealing with all aspects of a permit in a comprehensive, integrated and consistent manner.

344. Therefore guiding questions are on the (legal) relationship between all authorities (on different levels [local, regional or national] or sectors) involved in licensing issues, whether there is a clear division of competencies and on the degree of coordination between them. The last aspect is clearly the most important one, as the underlying idea is that the overall set-up should allow for all relevant aspects/impacts of the licensing decision to be dealt with in an integrated and comprehensive manner. The score will reflect growing degrees of clarity of jurisdictions and the ability of the system to provide for an integrated and comprehensive decision.

345. As the necessity of coordination and usually the effectiveness is growing with a decreasing number of actors involved, a higher score will be obtained if fewer agencies are involved. However this is not necessarily the case. Depending on the design a more segmented system may also produce integrated, comprehensive decisions.

3.4.4 Consultation

346. Guiding questions for this section are to what extent does preparation of comprehensive spatial planning decisions include stakeholder consultation and how the consultation influences the outcome?

347. Stakeholder consultation is important to ensure all relevant aspects are considered before taking a decision and it plays an important role in conflict resolution. The score will take into consideration the legal character of consultation requirements (binding or not), the character of the consultation envisaged (active or passive seeking of opinions, active or passive distribution of information, discussion on statements/objections with applicant and stakeholder) as well as the potential for integration of findings into decision making.

348. Scores also take into account the relative transparency of the process and the degree to which sufficient information is available for stakeholders to make informed and timely comments.

349. The question is also what is done to ensure that results from the consultation are taken into consideration? Documentation could be a basic requirement in this respect. A higher score could, for example, be obtained when the decision has to state reasons where observations of stakeholders are not taken into account.

3.4.5 Sector conflict management

350. This indicator covers rules for dealing with conflicts when allocating activities/uses either comprehensively or when issuing a permit. Guiding questions are firstly regarding the level of potential conflict and what kind of mechanisms are in place to deal with conflicts arising.

351. Those mechanisms may consist of principles, objectives and criteria allowing for separation as far as possible of conflicting uses, contributing to an efficient and sustainable use of maritime areas. This requires a thorough analysis of the applicable legislation and is, of course, subject to interpretation. Focus is therefore placed on the existence and the legal character (binding or not) of those mechanisms.

352. The underlying idea is that clear and pre-determined general principles and priorities will lead to consistent practice and therefore to a structured spatial management process, even though conflicts may still arise. In addition, they contribute to a situation where decisions are widely accepted and a speeding up of the decision making process because agencies can rely on the decisions manifested in the defined principles, objectives and criteria. The score will reflect the existence of mechanisms intended to reduce conflicts when allocating maritime activities and uses, their potential to achieve conflict reduction, as well as their legal character/binding effect.

3.4.6 Cross-border cooperation

353. The Cross-Border Cooperation indicator assesses the extent to which a given system provides for transboundary planning. As the marine environment is characterized by its openness and general lack of clearly visible natural boundaries (other than at its

landward boundary), MSP decisions within a given legal jurisdiction are likely to have impacts on neighbouring jurisdictions, especially as regards environmental and economical issues. A natural marine eco-system will often extend across two or more legal boundaries (both within and between national jurisdictions). The designation of an MPA, for example, requires close cooperation in order to ensure effective protection. The land-sea boundary should also be considered in this context.

354. Mechanisms for cross-border cooperation range from information exchange through to consultation and more integrated joint planning processes. Cooperation in terms of comprehensive MSP as well as in planning of trans-national projects may be considered. The score increases as cooperation on projects develops into cooperation on comprehensive planning, with the degree to which implementation is prescribed as well as the legal character of the obligation to co-operate (binding or not) being taken into account. The highest score is allocated in cases where planning is based on joint decision-making.

3.4.7 Implementation of MSP

355. The final performance indicator reflects actual progress in the development of a Marine Spatial Plan, or a series of integrated plans. Whereas the indicator "Policy and legal framework" deals exclusively with the question of whether MSP is being addressed at the policy and legal level, this indicator takes a closer look at the characteristics of the actual planning tools adapted to the maritime area.

356. The underlying idea for the scoring guideposts is that a planning system should provide a geographic context and operate under clearly defined principles and priorities articulated in an agreed and functional plan. The geographic context of planning should reflect an ecosystem-based management approach, as the most appropriate approach to guarantee a sustainable development of oceans and seas. As before, it should be differentiated between binding and non-binding requirements in plans or for plan-making.

357. The score increases from a situation of separate sectoral plans to coordination through overarching principles and objectives, towards effective implementation of a comprehensive plan with a comprehensive geographic context.

3.5 Testing the indicators

358. The application of the performance indicators was tested on four countries using two types of information sources. Firstly, the indicators were evaluated for Italy and the Netherlands on the basis of information contained in existing reports (PlanCoast for the former and OSPAR for the latter). Secondly, the indicators were evaluated for two of the case study counties based on information compiled as part of this study (see Part 4): Germany and the UK.

359. The results of this testing of the indicators are presented in the tables attached as Appendix C.

4 MSP in specific Member States

360. Having examined the constraints imposed on Member States by international and EC law and considered the means of measuring progress with regard to MSP it is next useful to examine in more detail the practices for planning and licensing maritime activities in specific Member States.

361. The Member States that were selected for this exercise were France, Germany, Greece, Poland and the United Kingdom. Why these five Member States out of a possible 27?

362. In fact this particular selection, which was agreed with the European Commission at the 'kick off' meeting for this Study, was made for a number of clear reasons. First of all it was considered useful to include a range of Member States that have made variable progress as regards MSP. Next it was considered useful to include Member States that have coastlines on different European Seas (namely the Baltic Sea, the North Sea, the Atlantic Ocean and the Mediterranean Sea). It was also considered appropriate to examine the experience of so-called 'old' Member States, such as France and Germany, and the experience of newer Member States such as Poland. Finally, and in connection with Part 5, it was considered appropriate to consider a range of countries with different governance structures.

363. For ease of legibility the actual detailed country studies are attached as Appendices to the main text of the Study (they are attached as Appendices E to H).

364. In this Part the findings are briefly summarised for each country and then some preliminary observations are drawn.

4.1 France

365. Although France has a long maritime tradition the maritime sector has historically been less of a focus than in other near and neighbouring countries. This is reflected in the legal framework, where the cornerstone of legislation on the territorial waters, being an extension of the concept of the terrestrial public domain, focuses exclusively on the sea bed and does not address the water column.

366. Likewise, spatial planning tools that have been developed for the planning of activities in the coastal zone are primarily conceived for terrestrial activities or for on shore activities using marine waters. To date, the management of maritime zones off the French coastline is not integrated and is characterized by a sectoral approach with the involvement of scores of authorities. With the development of integrated approaches, such as integrated coastal zone management (ICZM) and ecosystem management, there has, however, been a shift towards a more holistic approach as regards planning maritime activities.

367. For example in 2006 the legislation on creation of protected areas was amended to allow for the creation of marine parks in the waters under French sovereignty (internal and territorial sea) with possible extension into adjacent waters under French jurisdiction (the EEZ).

368. This instrument is based on an integrated and participatory approach to management through spatial planning of activities and the involvement of local authorities and various user groups in the decision-making process with a view to ensuring the protection and sustainable development of marine resources and ecosystems. In addition, the law establishes a specialized agency to coordinate the national network of marine protected areas. There is also a project for identifying zones for the development and exploitation of marine energy resources (wind farms, waves and currents) led by the Environment and Energy Control Agency.[146]

369. One of the main MSP tools is the 'Sea Enhancement Scheme' (SES)[147] introduced in 1983, which may be established in respect of areas in the coastal zone with a view to setting out the fundamental orientations for management and protection of terrestrial and maritime areas. It includes the zoning of activities in the area considered, i.e. identification of areas reserved for industrial development, mariculture and recreational activities and specifies measures for the protection of the marine environment. Although to date only two SES have been approved in continental France, SES is viewed as a valuable tool for the planning of activities in the marine environment. It is expected that SES will remain the central instrument for the planning of maritime activities for the next few years and that more SES will be adopted. Besides efforts to improve the SES efficiency by decentralizing the decision-making process and by involving local authorities and user groups through broad participation, France has - largely on the impulsion of EU initiatives- taken steps to review its maritime policy and reform its institutional and legal framework relating to maritime activities. The development of new GIS tools will assist the Government in the decision-making process and increase its capability in the planning of maritime activities. Determination and prioritization of clear objectives will be instrumental in developing integrated planning mechanisms. Issues such as the distribution of powers between different levels of government, particularly the role of local coastal authorities in maritime areas adjacent to their jurisdiction, decision-making processes in respect of maritime activities and balance between economic development and environment protection need to be addressed.

4.2 Germany

370. In Germany the debate on the introduction of spatial planning to maritime areas started at the end of the 1990s, as it was seen that the technical and economic progress would allow for an increased demand to use offshore areas especially for economic activities.

371. However the process eventually triggering MSP derived from political and economic interest in the development of offshore wind energy exploitation. In order to reach its ambitious carbon dioxide reduction targets the Federal Government had set the target of doubling the share of renewable energies by the year 2010. Off-shore wind energy is supposed to contribute largely to this[148].

372. For investors to consider projects on the scales necessary to reach these targets, a stable and predictable planning framework was required. Spatial planning could identify and

[146] *Agence de l'environnement et de la maîtrise de l'énergie.*
[147] *Schémas de mis en valeur de la mer.*
[148] By 2010, 2000 to 3000 MW power are expected from offshore wind energy production

broadly allocate areas to certain activities and thus contribute to a speeding up of the decision making process.

373. A first (sectoral) step to steer maritime spatial development was taken when in 2002 the possibility to designate "particularly suitable areas for wind farms" in the EEZ was introduced. At the same time a legal basis for the declaration of protected areas in the EEZ was established; the combination of those two instruments should provide for a structured spatial development with view to wind energy exploitation and allow avoiding use conflicts. Preparations for comprehensive MSP were underway since 2001.

374. The Federal coastal States (*Länder)* were to extend their spatial structure plans to their respective parts of the territorial sea. Moreover the federal government had been asked to develop guidelines for the development of the EEZ. With effect from 2004 an amendment to the Federal Spatial Planning Act was introduced extending its jurisdiction to the EEZ and giving the federal government competence to organize spatial planning in the EEZ. Spatial plans covering the territorial sea exist in Lower Saxony and Mecklenburg-Western Pomerania (in effect since June 2006 and May 2005). The extension of the state spatial plan of Schleswig-Holstein to the territorial sea is still ongoing. Maritime spatial plans for the German EEZ in the North Sea and the Baltic Sea have been released in early July 2008 and are open for public consultation until September 2008.

375. As provided for in the Federal Spatial Planning Act these plans may contain (binding) goals or (non-binding) principles to be taken into account when weighing interests and making discretionary decisions. Moreover they may *inter alia* designate priority areas and areas where specific activities are prohibited. MSP is thus expected to benefit from the characteristics generally credited to the legal spatial planning framework: it has a high potential to steer spatial development in a comprehensive and balanced manner as the multi-layered planning process comprises different instruments which reflect the super-ordinate, cross-sectoral decisions. At the same time the system leaves room for sufficient flexibility. Moreover it secures a rather broad involvement of governmental institutions as well as other relevant stakeholders. It is, however, too early to analyse whether these positive qualities have successfully transposed into MSP the basic framework for a coherent development and management of Germany's maritime areas, namely the territorial sea and the EEZ.

4.3 Greece

376. In Greece spatial planning of maritime activities is governed by a broad range of regulations, including transposed international and European legislation. A holistic approach is absent and instead specific maritime activities are mainly addressed in sectoral legislation.

377. Often the planning of a maritime activity is ruled by a number of regulations, and the same legislation may apply to a range of different activities. Furthermore, many authorities have jurisdiction depending on the activity implemented in the marine environment.

378. Recently, the regulatory background for spatial planning seems to be improving through the elaboration of the National Spatial Plan and certain sectoral spatial plans; however, there do not seem to be any developments in the short and medium term towards a comprehensive practice for MSP.

4.4 Poland

379. The planning of maritime activities in Poland is regulated by a complex set of international, EC and national legislation.

380. National legislation applicable is partially specific for maritime activities (MSP, fishing, and shipping) and partially of general nature (environmental protection, nature conservation, as well as general requirements of spatial planning and construction permits). It seems there are no major problems in application of this legislation (no major legal constrains) although some of the requirements are often neglected (e.g. SEA requirements).

381. In practice MSP is not too developed: no formal spatial plan for maritime areas has yet been adopted, so all the activities are authorised by individual decisions.

4.5 United Kingdom

382. Planning of maritime activities in the UK is regulated by a complex array of international, European Community, regional, national, devolved and local legislative controls. Much of this legislation is sectoral, applying to specific activities or users of the marine environment.

383. The management of UK waters is complicated by the devolution of responsibility for domestic affairs from central government to Wales, Scotland and Northern Ireland.

384. There are many overlapping jurisdictions for maritime planning and licensing, with a duplication of powers and no single authority with an overview of all activities being planned in the maritime environment.

385. The development of a new Marine Bill may help to overcome some of the existing legal constraints. A draft Marine Bill was published in April 2008, with the aim of introducing a new legislative framework for the seas, based on MSP.[149]

4.6 Observations

386. Clearly among these five countries there are variations in the degree of progress as far as MSP is concerned. Typically a wide range of actors at different levels of government are involved in permitting in a range of activities on the basis of sectoral plans.

[149] Defra. 2008. *Draft Marine Bill*. Department for Environment, Food and Rural Affairs. Available at: http://www.official-documents.gov.uk/document/cm73/7351/7351.pdf

387. Only Germany appears to have made genuine progress towards a more integrated approach, although the proposed Marine Bill may alter the picture as far as the UK is concerned.[150]

388. Mechanisms for conflict resolution between stakeholders remain relatively under-developed. What is also interesting to note is the degree to which environmental legislation, in particular that relating to EIA and SEA and the provisions of the Arhus Convention[151] on stakeholder consultation, provides the main mechanism for stakeholder consultation.

[150] And indeed the relative progress of the two countries can be compared using the indicators presented in Part Three. See Appendix C.

[151] Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, adopted at Aarhus, Denmark, 25 June 1998 38 *ILM* (1999), 517. The EC and the Member States are party to the Convention which is implemented through Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC.

5 Relationship between MSP and governance

389. Each Member State clearly faces its own unique challenges in connection with the development of effective MSP. The range of variables include: the size and nature of the maritime space, the types of competing use encountered there, as well as applicable legal and institutional arrangements. A potentially important variable in this regard is the governance structure provided for in the constitutional arrangements of each Member State.

390. One additional reason why the five case study countries were chosen was the difference in their governance structures.

391. Specifically France, Greece and Poland are unitary states. The French State has in particular a long tradition of centralisation, albeit a tradition that has been modified over recent years as the result of moves towards decentralisation and regionalisation.

392. Germany by contrast is a federal state while the UK comprises four separate countries: England, Scotland, Northern Ireland and Wales. In states with complex governance structures, such as Germany and the UK, the constitutional arrangements typically determine not only which entity has law making powers as regards elements of MSP but also which level of government has primary competence over the territorial sea.

393. In the UK, for example, the management of UK waters is complicated by the devolution of responsibility for domestic affairs from central government to Wales, Scotland and Northern Ireland. Here, the territorial seas are the responsibility of the relevant devolved administrations (the Welsh Assembly, the Scottish Executive, the Northern Ireland Assembly, and the central UK Government in the case of England). The Marine Bill, which includes a legislative framework for a MSP system, is being prepared for the UK. The Bill will provide for the development of a UK marine policy statement that will set out a series of policies and objectives for all UK waters, from which a number of regional/local marine spatial plans across the four UK administrations will be able to work.

394. In the case of Germany, the primary responsibility for MSP up to 12 nm lies with the *Länder* as part of their regional plans, while responsibility for MSP within the EEZ lies at the federal level. In this case, and also in the case of Sweden, the legislation for land spatial planning is extended to 12nm.

395. So what is the relationship between the governance structure and effective MSP? To a certain extent it can be argued that given the relative lack of overall progress in MSP it is premature to consider the relationship between the effective implementation of MSP and different governance structures. With this consideration, it may only be possible to analyse what impact a governance structure has on the ability of a country to engage in the process of designing a comprehensive MSP system.

396. At first sight it would seem reasonable to assume that centralized governance structures would favour progress on MSP. However, the findings of the country studies do not seem to support this assumption.

397. Germany – characterized by a federal set-up and a rather complex system of shared jurisdictions between the federal states and the federal government as regards legislation and enforcement – has made considerable progress in extending and adopting the traditional spatial planning regime to its marine areas. In more centralized States, such as France, Poland and Greece, MSP has progressed to different degrees, and is still more sectoral in nature. The situation of the UK – with a particularly complex governance structure that involves three separate yet related legal systems – is somewhere in between with existing governance arrangements being both fragmented and sectoral, but with plans to drastically revise this through the proposed Marine Bill.

398. Although the sample size is small, this leads to a preliminary conclusion that the type of governance structure of a country does not necessarily affect that country's ability to develop and implement MSP. Centralisation may be useful at a certain degree to ensure the coordination of national plans (particularly in the EEZ), but decentralisation may also facilitate improved consultation and therefore conflict prevention and/or resolution. As the country study of France demonstrates, it may even be the case that further decentralization in the decision-making process is necessary for improving the effectiveness of (maritime) spatial planning tools.

399. Currently, it seems that one of the key driving factors for the introduction of more integrated, comprehensive maritime spatial systems is the extent of competing economic demands on the space and interest to develop economic activities in maritime areas. This is the case for Germany where there has been a particular interest in increasing exploitation of offshore wind energy, and this has exposed a range of potential spatial conflicts that need addressing.

400. In contrast, the drive for MSP in some other countries has been less, as a result of a relatively lower level of activity in the maritime zone. In France it has been observed that despite having jurisdiction on one of the largest maritime zones in the world, development of economic maritime activities has not been a priority of the French Government, which is focusing primarily on rural areas (agriculture, industry). Similarly for Poland, there are relatively few activities in the Baltic Sea (limited to fishing, shipping as well as oil and gas extraction), and therefore there has been less of a need for MSP.

401. The following diagram illustrates the different aspects and issues that are at stake. A centralised system with many activities may be easier to coordinate (top left hand square), but if this is combined with a large number of activities it is likely to have a higher chance of conflict as stakeholders are less involved in the planning process (top right hand square). However conversely a decentralised system with a large number of activities may be difficult to coordinate (bottom right hand corner) so will need to create some system by which planning takes place at the appropriate level but that there is some means of national coordination (**Figure 5-1**).

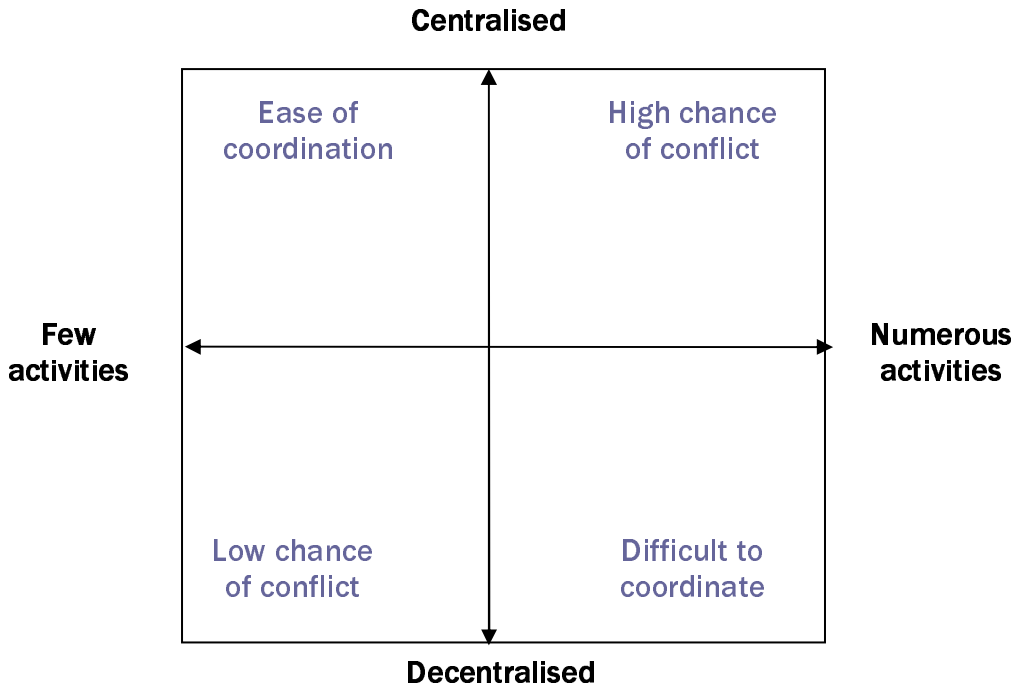

Figure 5-1 Illustration of the challenges of coordination and reducing conflicts in MSP

402. The growing potential for user conflicts and the need for security of investment require a stable and coherent legal planning framework. In Germany, the wind energy industry has been keen for MSP in the EEZ to provide a stable and predictable framework for their investments. However, this may not always be the case. In the UK, the industry has cautioned against what it perceives to be a rigid spatial planning approach which would perhaps restrict future developments and innovation. For example, defining zones for wind farms based on current technical limits while developments in the future may allow for locations out of current abilities i.e. deep water.

403. It is therefore apparent that while the governance structure of a country does not necessarily assist or hamper the development of MSP, the type of governance structure is likely to affect the type of MSP that emerges.

404. One important aspect to consider is the degree to which MSP legislation covers the seabed and the water column. In France, for example, the planning laws are an extension of those for the land and only cover the seabed. This may restrict MSP in the future where activities such as fishing and dredging, and structures that use the water column are not necessarily covered.

405. Spatial planning legislation is also likely to affect the ease of implementing Integrated Coastal Zone Management (ICZM). While no Member State has yet implemented ICZM strategies, they are in the process of developing these as part of the EU ICZM Recommendation of 2002[152], pursuant to which Member States were asked to undertake national stocktaking exercises, develop national strategies and take part in

[152] 2002/413/EC, Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of integrated coastal zone management, OJ L148 of 6.6.2002.

cooperation at the European level. An evaluation of ICZM in Europe[153], reported that one of the key constraints is the legal division between spatial planning of land and sea based activities (especially in North Sea states e.g. UK). This is slightly easier where spatial planning covers both land and sea areas, although this normally only goes up to the territorial sea e.g. in both Germany and Sweden municipal plans can be extended to 12nm but not into the EEZ.

406. Institutional frameworks will also determine what sort of instruments may be used for MSP. In Germany these include regional (*Länder*) plans for the territorial seas and national EEZ plans, whereas in France Sea Enhancement Schemes (SES) have been used in some areas as the main instrument. In Greece the plans are still on a sectoral basis and MSP elements are likely to be contained in Special Framework plans for Tourism, Industry and also for Coastal areas.

407. Spatial planning is also often implemented through permitting and licensing decisions and the development of criteria and principles for arbitrating between conflicting demands is a key tool. In Germany and within the Mecklenburg-Vorpommern 12nm zone plan nature protection has absolute priority in defined 'priority areas' and high priority in 'reservation areas'. The use of wind farms is restricted to 'suitable areas' but must be a minimum distance from the shoreline of 10-15nm. In Sweden, areas of national interest (for nature protection) have priority and can be stated within municipal plans that extend to 12nm.

408. The nationally defined criteria used to screen 'significant' developments under Environment Impact Assessments (EIA) are another tool for arbitrating between nature protection and development aims. These differ in different countries and could be usefully assessed in a follow-up study to assist an understanding of how they contribute to MSP.

[153] Evaluation of ICZM in Europe (2006) http://ec.europa.eu/environment/iczm/pdf/evaluation_iczm_report.pdf

6 Conclusions

409. On the basis of this Study a number of observations can be made and conclusions drawn. These are considered preliminary given that MSP is a relatively new concept and there is as yet limited experience in its implementation across Member States.

410. First of all, EU Member States encounter relatively few constraints under international or EC law with regard to MSP in their internal waters and territorial seas. Constraints for Member States in their territorial seas include the need to undertake EIA in respect of proposed developments and to examine alternatives (but only past certain criteria set by the country) and the requirements to consult neighbouring states regarding plans or projects in the territorial sea that may have significant trans-boundary environmental impacts.

411. Within the EEZ, MSP can be undertaken in connection with the most important maritime related activities including the exploration and exploitation, conservation and management of living and non-living natural resources. Other constraints that exist for coastal Member States arise in connection with the freedom of navigation (particularly as far as ships' routing is concerned) and which may require consultation with the IMO; the limited influence on the laying of cables and pipelines by other States; and the fact that commercial fishing is regulated under the CFP. Similar constraints apply regarding the continental shelf.

412. With regard to the Mediterranean Sea, the ability of Member States to engage in MSP beyond their territorial seas up to 200 nm is limited to the scope of the purpose for which specific protection zones have been claimed (as no EEZs have been declared in this area).

413. With regard to the high seas (beyond 200 nm), the scope for MSP by individual States is extremely limited, although particularly in the context of the establishment of MPAs there is growing interest in multilateral approaches.

414. SEA and EIA requirements established under international and EC law, transboundary consultation requirements, have implications as to how MSP should be undertaken as does the Water Framework Directive.

415. The national studies for France, Germany, Greece, Poland and the United Kingdom show that progress towards MSP remains variable. Germany has made considerable progress with developing maritime spatial plans for some sub-national regions (up to 12nm) and has recently launched a public consultation on the national maritime spatial plans for the EEZ[154]. The UK is currently going through the process of drafting a Marine Bill which will address and consolidate a number of MSP issues. France, Poland and Greece still have a wide range of sectoral legislation, and the need for a coordinated MSP approach has not yet arisen given the relatively low levels of conflicting maritime activities. However, instruments are emerging such as the Sea Enhancement Schemes in

[154] http://www.bsh.de/de/Das_BSH/Bekanntmachungen/Raumordnung_in_der_AWZ.jsp

France and the Special Framework Plans for Tourism, Industry and Coastal areas in Greece that contribute to the objectives of MSP.

416. A preliminary finding is that a country's governance structure does not in itself appear to impact progress in this regard. Key drivers towards MSP include: the intensity of activities and need to resolve potential conflicts; support and demand for planning from the industry; and sufficient resources to address the issue. However, the governance structure and current legislation will affect the type of MSP that emerges.

417. Some of the legal issues that affect the outcomes of MSP in Member States includes the degree to which spatial legislation is compatible between land and sea (with implications for the coastal zone); the division of responsibilities for planning and whether it is the central or regional government that plans for the territorial seas (12nm) and the EEZ; the degree to which the planning legislation covers both the sea bed and the water column; and the legal form of implementation of MSP e.g. through plans, or principles and criteria.

418. A draft set of indicators, together with instructions for their use, has been prepared and tested on the basis of readily available information. These indicators have also been refined based on discussions with the Commission, and are now based on the following categories: Policy and legal framework; Information management; Permitting and Licensing; Consultation; Sector conflict management; Cross-border cooperation; and Implementation and evaluation of maritime spatial plans.

419. As requested in the terms of reference, the indicators were testing using countries in the Plancoast, Baltcoast and OSPAR reports. The countries selected were: Italy, the Netherlands, Germany and the UK. It was found that there was not sufficient information within these reports to fully assess the indicators. Information from the case studies was used to supplement the assessments for Germany and the UK. This shows that an assessment of the status of these indicators for all Member States would require collection of additional information and validation by the Member States.

420. The next step for the indicators will be to design a detailed methodology for their application across all Member States and then use the results to show how the Commission can support and promote the process of MSP both in each case and Community-wide.