

2009/10 Status Report on the OSPAR Network of Marine Protected Areas



OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the "OSPAR Convention") was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. It has been ratified by Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and the United Kingdom and approved by the European Community and Spain.

Convention OSPAR

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. La Convention a été ratifiée par l'Allemagne, la Belgique, le Danemark, la Finlande, la France, l'Irlande, l'Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord, la Suède et la Suisse et approuvée par la Communauté européenne et l'Espagne.

Acknowledgement

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Cover photo

Western part of the Svalbard archipelago selected by Norway as an OSPAR Marine Protected Area in 2009. Photograph taken by Mr Morten Ekker. The photograph shall not be used for any other purpose without prior permission from the copyright holder.

Contents

| The OSPAR Network of Marine Protected Areas (MPAs) in the North-East Atlantic as of May | |
|--|-----|
| 2010 | 4 |
| Executive Summary | 5 |
| Récapitulatif | 5 |
| Background | 7 |
| Evolution of the OSPAR Network of Marine Protected Areas | 7 |
| Most recent reportting | 8 |
| 5 th Annual Reporting of new MPAs (1 January 2009 – 31 May 2010) | 8 |
| MPA nominations in 2010 | 8 |
| MPA nominations in 2009 | 8 |
| Previous reporting | 9 |
| 4 th Annual Reporting of MPAs (1 January 2008 – 31 December 2008) | 9 |
| 3rd Annual Reporting of MPAs (1 January 2007 – 31 December 2007) | .10 |
| 2 ^{na} Annual Reporting of MPAs (10 April 2006 – 31 December 2006) | .11 |
| Initial Reporting of MPAs (2005 - 9 April 2006) | .11 |
| Analysis of the OSPAR Network of Marine Protected Areas in 2010 | .12 |
| Distribution of MPAs in Contracting Parties' national waters | .12 |
| Overall good coverage in coastal waters | .17 |
| Distribution of MPAs in OSPAR Regions | .17 |
| Overall good coverage in the Greater North Sea and the Celtic Seas | .20 |
| Ecological Coherence of the OSPAR Network of MPAs | .21 |
| Background | .21 |
| Three initial spatial tests looking at the ecological coherence of the OSPAR MPA Network | .24 |
| Management of OSPAR MPAs | .30 |
| Summary Information on the Management of OSPAR MPAs as provided by Contracting Parties | 32 |
| Preliminary conclusions on the Management of OSPAR MPAs | .34 |
| Proposals for OSPAR Marine Protected Areas in Areas beyond National Jurisdiction (ABNJ) | .35 |
| Background | .35 |
| Elaboration of proposals for OSPAR MPAs in ABNJ | .35 |
| Existing OSPAR MPA on an extended continental shelf of a Contracting Party | .37 |
| Proposed OSPAR MPAs in ABNJ | .37 |
| Recent developments affecting the proposals for OSPAR MPAs in ABNJ | .40 |
| Current status of the proposals for OSPAR MPAs in ABNJ | .41 |
| Conclusions on the Status of the OSPAR Network of Marine Protected Areas in 2010 and | |
| Ways Forward | .43 |
| Conclusions | .43 |
| Ways forward | .43 |
| Annex I – List of OSPAR Marine Protected Areas | .45 |
| Annex II – Overview maps of Contracting Parties' national waters and OSPAR MPAs | .51 |

The OSPAR Network of Marine Protected Areas (MPAs) in the North-East Atlantic as of May 2010¹



Figure 1. OSPAR Network of Marine Protected Areas²

¹ All figures, tables and maps in this Status Report provide information on the OSPAR Network of MPAs as of May 2010.

² For the purpose of visibility, OSPAR Marine Protected Areas (in red) have in this map been slightly increased. A number of the smaller sites otherwise would not be visible in this illustration showing (almost) the entire OSPAR Convention area.

Executive Summary

The year 2010 has been agreed by the OSPAR Commission as the target date for having completed an ecologically coherent network of well-managed marine protected areas. This Status Report aims to summarise the information made available by Contracting Parties (CPs) on their respective MPAs nominated to OSPAR and on this basis assess to what extent the target has been achieved.

In the period 2005-2010 eleven of the twelve OSPAR Contracting Parties bordering the North-East Atlantic have selected and nominated sites as components of the OSPAR Network of Marine Protected Areas. The contributions by Contracting Parties differ substantially regarding distribution of sites across coastal and offshore waters as well regarding overall coverage of their national waters by OSPAR MPAs.

In 2010, the OSPAR Network of MPAs consists of 159 sites collectively covering 147 322 km² in the North-East Atlantic³. This, however, corresponds to only 1.06% of the OSPAR maritime area. As the vast majority of sites have been designated in CPs' territorial waters, overall coverage of coastal waters by OSPAR MPAs is consequently higher at 13.5%. Overall coverage of offshore areas, *i.e.* the Exclusive Economic Zones of Contracting Parties, by OSPAR MPAs remains very low at 0.57%. No MPA has yet been established entirely in Areas beyond National Jurisdiction which make up about 40% of the OSPAR maritime area. The distribution of MPAs across the five OSPAR Regions is likewise imbalanced, resulting in major gaps of the Network of MPAs. The Greater North Sea and the Celtic Seas are the best represented OSPAR Regions, with 5.46% and 3.53% coverage by OSPAR MPAs respectively. While coverage of the Arctic Waters is at 1.36%, both the Bay of Biscay and Iberian Coast and the Wider Atlantic have less than 1% protected by OSPAR MPAs.

Comprehensive conclusions on the ecological coherence of the OSPAR Network of MPAs are currently not possible due to the unavailability of relevant ecological data on the distribution of species and habitats in the OSPAR maritime area. Considering the spatial arrangement of its components, as summarised above, the OSPAR Network of MPAs cannot be judged to be *ecologically coherent* yet. As no sufficiently detailed information on the management of sites has been made available by Contracting Parties, it remains similarly impossible at this time to comprehensively conclude on the extent to which OSPAR MPAs are *well managed*. While in general a number of sites are subject to management regimes, including conservation objectives, management plans and specific regulatory measures, no evidence on their effectiveness in achieving the goals for which these were established has been provided. Management plans and measures for the other sites are still being prepared.

Récapitulatif

L'année 2010 a été déterminée par la Commission OSPAR comme étant la date cible pour l'obtention d'un réseau écologiquement cohérent de zones marines protégées (ZMP) bien gérées. Le présent rapport d'avancement a pour but de résumer les informations mises à la disposition des Parties contractantes sur leurs ZMP respectives désignées à OSPAR et d'évaluer, en se fondant sur ces informations, dans quelle mesure l'objectif a été atteint.

Au cours de la période 2005-2010, onze des douze Parties contractantes OSPAR bordant l'Atlantique du Nord-Est ont sélectionné et désigné des sites à titre de composantes du réseau de ZMP OSPAR. Les contributions des Parties contractantes varient grandement en matière de distribution des sites

³ This report was prepared before developments at the OSPAR 2010 meeting, which will be covered in the next report on the OSPAR network of MPAs

dans les eaux côtières et du large ainsi que de couverture d'ensemble de leurs eaux nationales par des ZMP OSPAR.

Le réseau de ZMP OSPAR se compose en 2010 de 159 sites d'une superficie totale de 147 322 km² dans l'Atlantique du Nord-Est, ce qui ne représente cependant que 1.06% de la zone maritime OSPAR. La vaste majorité des sites ont été désignés dans les eaux territoriales des Parties contractantes et la couverture d'ensemble des eaux côtières par les ZMP OSPAR, à savoir 13.5%, est donc plus élevée. La couverture d'ensemble des zones du large, c'est-à-dire les zones économiques exclusives des Parties contractantes, par les ZMP OSPAR se maintient à un niveau très bas de 0.57%. Aucune ZMP n'a encore été créée complètement dans des zones au-delà de la juridiction nationale qui représentent environ 40% de la zone maritime OSPAR. La distribution des ZMP dans l'ensemble des cinq Régions OSPAR est de même déséquilibrée, entraînant des intervalles importants dans le réseau de ZMP. La mer du Nord au sens large et les mers celtiques sont les Régions OSPAR les mieux représentées, leur couverture par des ZMP OSPAR étant de 5.46% et 3.53% respectivement. Le golfe de Gascogne et la cote ibérique ainsi que l'Atlantique au large possèdent moins de 1%, de ZMP OSPAR, alors que la couverture des eaux arctiques représente 1.36%.

Il est actuellement impossible de tirer des conclusions exhaustives sur la cohérence écologique du réseau de ZMP OSPAR car les données écologiques pertinentes sur la distribution des espèces et des habitats dans la zone maritime OSPAR ne sont pas disponibles. On ne peut pas encore considérer que le réseau de ZMP OSPAR est *écologiquement cohérent* étant donné la distribution spatiale de ses composantes. Il est de même impossible, à l'heure actuelle, de tirer des conclusions exhaustives sur la mesure dans laquelle les ZMP OSPAR sont *bien gérées*. En général, un certain nombre de sites sont soumis à des régimes de gestion, notamment des objectifs de conservation, des plans de gestion et des mesures réglementaires spécifiques mais on ne dispose d'aucune preuve de leur efficacité lorsqu'il s'agit d'atteindre les objectifs. Des plans et des mesures de gestion pour les autres sites sont encore en cours de préparation.

Background

The Sintra Ministerial Statement, adopted at the meeting of the OSPAR Commission at Sintra, Portugal, on 22-23 July 1998, included the commitment that the OSPAR Commission will promote the establishment of a network of marine protected areas to ensure the sustainable use and protection and conservation of marine biological diversity and its ecosystems.

This process was enhanced by the Bremen Ministerial Statement, adopted by the First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions in Bremen, Germany, on 25-26 June 2003, as it established the commitment to complete by 2010 a joint network of well-managed marine protected areas that, together with the Natura 2000 network, is ecologically coherent,

The aims of the OSPAR MPA Network have been set out as

- to protect, conserve and restore species, habitats and ecological processes which have been adversely affected by human activities;
- to prevent degradation of, and damage to, species, habitats and ecological processes, following the precautionary principle; and
- to protect and conserve areas that best represent the range of species, habitats and ecological processes in the maritime area.

Recommendation 2003/3 of the Convention for the Protection of the marine Environment of the North-East Atlantic (OSPAR Convention) sets out that in the years subsequent to 2005, Contracting Parties should report by 31 December to the OSPAR Commission on any OSPAR Marine Protected Areas (MPAs) that they have selected (or deselected) and on any corresponding management plans that they have adopted or substantially amended in that year. In 2006, the OSPAR Biodiversity Committee (BDC) agreed that annual reports on the status of the OSPAR Network of MPAs should be prepared in the period up to 2010.

This document presents the 5th Status Report on the OSPAR Network of Marine Protected Areas compiled by Germany as lead party on OSPAR MPAs and provides an updated assessment taking into account those Marine Protected Areas that OSPAR Contracting Parties have reported to the OSPAR Commission in the period 1 January 2009 up to 31 May 2010.

Since the year 2010 has been determined by the OSPAR Commission as the target date for having completed an ecologically coherent network of well-managed marine protected areas, this Status Report aims to summarise the information made available by Contracting Parties on their respective MPAs nominated to OSPAR and on this basis assess to what extent the target has been achieved.

Evolution of the OSPAR Network of Marine Protected Areas

This section recapitulates the gradual development of the OSPAR Network of Marine Protected Areas as a result of the selection and nomination of sites by Contracting Parties in the time period 2005–2010. At the outset, it presents for the first time the annual overview of MPAs that have been nominated by Contracting Parties as components of the OSPAR Network in the period 2009-2010.

Most recent reportting

5th Annual Reporting of new MPAs (1 January 2009 – 31 May 2010)

In the 2009-2010 reporting period, new sites nominated by Denmark, Ireland, the Netherlands Norway, and Sweden increased the number of OSPAR MPAs from 125 to 159 with a substantial area increase from 51 907 km² to 147 322 km². Both Ireland and the Netherlands have for the first time reported MPAs to the OSPAR Commission.

MPA nominations in 2010

Sweden has contributed Natura 2000 sites to be included in the OSPAR Network of MPAs, collectively covering 726 km².

On the west coast bordering Norway, Sweden has established the *Koster-Väderö Archipelago* MPA, covering 606 km² of territorial waters. The area is encompassing the Koster archipelago and the Väderö Islands and the 65 km long and up to 250 m deep Koster-Väderö Trough. Due to the influence by the Atlantic the area hosts a high diversity of biotopes and species. Of the 6000 marine species that have been identified in Kosterhavet, about 200 are found nowhere else in Sweden. In particular there are very rich deep hard bottom habitats with the only known live *Lophelia* reef in Sweden at a depth of 80 m. Also kelp forests, maërl beds and soft corals are found within the MPA. Together with the OSPAR MPA *Ytre Hvaler* nominated by Norway, the area covers an entire ecosystem (see also information below on the MPA nominations by Norway in 2010).

With a view to protect and conserve a coastal bank area representative for the Swedish East coast in the Kattegat, the *Morups bank* MPA (5.67 km²) has been established. This relatively small bank is characterised by rock and stones with rich algae vegetation and rich fauna of polychaete worms, particularly at depths of 20 - 30 meters.

With a view to protect representative offshore banks in the eastern Kattegat, Sweden has nominated *Stora Middelgrund and Röde Bank* (114 km²). These banks still seem to have a rather intact ecological structure, providing potentially important seed areas for a variety of invertebrates associated with hard bottoms and kelp beds, as well as for fishes.

Norway has nominated the *Ytre Hvaler National Park* as an OSPAR MPA, covering 340 km² of the Hvaler-Fredrikstad archipelago, situated in the coastal areas of south eastern Norway. It hosts a rich diversity of species both on land and in the sea while being a popular recreational area. The national park includes terrestrial areas, but for the purpose of designating this area as an OSPAR MPA only the marine part of the national park has been included. The national park borders up to the *Kosterhavet Marine National Park* in Sweden. These national parks were established in close collaboration between the Norwegian and Swedish regional governments. The management of the sites will also be coordinated between Norway and Sweden. Due to the close relationship between the two areas they are now nominated to the OSPAR Network of MPAs as a jointly managed transboundary MPA. For practical reasons separate nomination proformas have been elaborated for the areas from each of the two Contracting Parties (see information above on the MPA nominations by Sweden in 2010). Two MPAs previously nominated by Norway, *i. e. Tisler* and *Fjellknausene* are now encompassed in the *Ytre Hvaler National Park*. These two areas therefore have been withdrawn from the OSPAR Network of MPAs as independent components, as they are now covered by the new Ytre Hvaler MPA.

MPA nominations in 2009

Ireland has selected 19 Natura 2000 sites as a contribution to the OSPAR Network of MPAs. For a list of these sites, please see Annex I. The sites have been designated to protect particularly the following

species and habitats that OSPAR has identified as being threatened or in decline: intertidal mudflats, *Lophelia pertu*sa reefs, maërl beds, *Zostera* beds and Harbour porpoises (*Phocoena phocoena*). The total area covered by these sites is 4136 km², of which 1593 km² are in Irish territorial waters and 2543 km² in the Exclusive Economic Zone. The sites are located to the north, south, east and west of Ireland and offshore on the edge of Ireland's inner Continental Shelf and contribute to the Network coverage in the Celtic Seas (OSPAR Region III). While no formal management plans have yet been prepared or implemented, management measures are already taken in these sites.

Denmark has decided to contribute six additional marine Natura 2000 sites in the OSPAR area as components of the OSPAR Network of MPAs. Three of these new sites, namely *Skagens Gren* (2705 km²), *Gilleleje Flak og Tragten* (151 km²), *Thyborøn Stenvolde* (79 km²), are situated crossing territorial waters and the Danish Exclusive Economic Zone (EEZ), while the other three, namely *Jyske Rev Lillefiskerbanke* (242 km²), *Store Rev* (109 km²) and *Gule Rev* (429 km²) are situated entirely in the EEZ. A formal approval by the European Commission will be required before these are finally nominated as OSPAR MPAs. The designation of all these MPAs has taken place following the provisions of the EC Birds and Habitats Directives (92/43/EEC), while also the management of the sites will take place under these Directives. Management plans will be prepared for both existing and newly designated Natura 2000 sites.

The **Netherlands** has nominated five Natura 2000 sites as components of the OSPAR Network of MPAs, together covering approximately 8 400 km² in the Greater North Sea (OSPAR Region II). Three of these sites are situated in the Dutch territorial waters, namely the *Noordzeekustzone* (*ca.* 1400 km²), the *Voordelta* (ca. 900 km²), and the *Vlakte van de Raan* (226 km²). Two sites have been designated in the Dutch Exclusive Economic Zone, namely the *Doggerbank* (4718 km²), and the *Klaverbank* (1 238 km²). All these areas will be designated according to Dutch legislation of the Nature Conservation Act and the Flora and Fauna Act in 2010. The management plan for the *Voordelta* has been finalised and is currently being implemented. Management plans for the other MPAs will be set at the latest three years after their designation in 2010.

Norway has nominated three sites covering a total area of 78 411 km² in the territorial waters around the Svalbard archipelago. The three areas, namely *Svalbard West* (20 033 km²), *Svalbard East* (55 573 km²) and *Bjørnøya* (2805 km²) consist of the marine parts of four existing nature reserves and seven national parks within the archipelago. They are grouped into three OSPAR MPAs based on an evaluation of geography, biology and legal status of existing environmental protection measures. The major part of these sites is situated within the Barents Sea. The northern parts extend into the High Arctic maritime province. Each of the four nature reserves and seven national parks, from which the three OSPAR MPAs originate, is established by separate national regulations. The degree of protection and restrictions varies between the ten areas. Svalbard and the sea territory out to 12 nm are protected through the Svalbard Environmental Act. Svalbard falls within the perimeter of the Barents Sea management plan. In addition, separate management plans for each of the national parks and nature reserves are, or will be, elaborated. The nomination of these three MPAs by Norway has not only substantially increased the coverage of the OSPAR Network of MPAs in the Arctic Waters (OSPAR Region I) but also more than doubled the total coverage of the Network.

Previous reporting

4th Annual Reporting of MPAs (1 January 2008 – 31 December 2008)

France has nominated *La Mer d'Iroise*, off the coast of western Brittany, as a component to the OSPAR Network of MPAs. This site is situated in the coastal waters with a total area of 3431.75 km² extending across the boundaries of OSPAR Region II, the Greater North Sea (1758.43 km²) and

OSPAR Region III, the Celtic Seas (1673.32 km²). It has not yet been reported as a Natura 2000 area. No information on management has been reported.

Germany has nominated an additional set of six MPAs⁴ to the OSPAR Network of which three sites are located in the Exclusive Economic Zone (EEZ), namely the *Dogger Bank* (1700 km²), the *Borkum Reef Ground* (625 km²) and the *Sylt Outer Reef – Eastern German Bight* (5600 km²); while the other three sites are situated in territorial waters, namely the *Schleswig-Holstein Wadden Sea National Park and adjacent Coastal Areas* (4524,55 km²), the *Steingrund* (174,50 km²), and *Helgoland mit Helgoländer Felssockel* (55,09 km²). All of these sites have previously been established as Natura 2000 areas (SCI, SPA) and are located within OSPAR Region II, the Greater North Sea. The total area protected has in 2008 increased by 4723 km². For the *Schleswig-Holstein Wadden Sea National Park and adjacent Coastal Areas* for which (sectoral) national and an overall trilateral management plan(s) exist; for the OSPAR MPA *Helgoland mit Helgoländer Felssockel* and the SPA within the OSPAR MPA *Sylt Outer Reef – Eastern German Bight* ordinances according to national law are implemented. Management plans for the remaining sites are being prepared.

Iceland has nominated its first set of seven MPAs as components to the OSPAR Network, of which four sites are located in the Exclusive Economic Zone: namely *Hornafjarðardjúp Coral Reef 1* (7.89 km²), *Hornafjarðardjúp Coral Reef 2* (31.27 km²), *Skaftárdjúp Coral Reef 1* (7.36 km²), and *Skaftárdjúp Coral Reef 2* (22.31 km²), while the other three sites are situated in the coastal waters, namely *Eyjafjörður Hydrothermal Vents 1* (0.12 km²), *Eyjafjörður Hydrothermal Vents 2* (0.56 km²), and *Reynisdjúp Coral Reef* (9.45 km²). All of these MPAs are within OSPAR Region I, the Arctic, and together cover an area of about 78.96 km². No information on management has been reported.

Spain has nominated *El Cachucho* (2349,66 km²), also known as the *Le Danois Bank*, to the OSPAR Network of MPAs. This site is situated in Spain's Exclusive Economic Zone about 65 km off the northern coast of the Iberian Peninsula in the Cantabrian Sea. It is located within OSPAR Region IV, the Bay of Biscay and Iberian Coast. This MPA has also been proposed as a site of Special Community Importance (SCI) for the European Network Natura 2000. The relevant authorities are in the process of establishing natural resources and fishing management plans for the area.

The **United Kingdom** has nominated a set of eight additional SACs as components to the OSPAR Network of MPAs, all of which have become Natura 2000 sites since 2005. This includes five offshore/EEZ SACs, namely *Braemar Pockmarks* (5.18 km²; OSPAR Region II), *Scanner Pockmarks* (3.35 km²; OSPAR Region II), *Haig Fras* (481.34 km²; OSPAR Region III), *Stanton Banks* (817.87 km²; III) and *Darwin Mounds* (1377.26 km²; V) and three inshore/coastal waters SACs, namely *Severn Estuary* (721.96 km²; OSPAR Region III), *Dee Estuary* (134.47 km²; OSPAR Region III) and *Humber Estuary* (336.40 km²; OSPAR Region II). These sites together cover an area of about 3877.83 km². For all of these MPAs, management measures, arising from requirements of the Habitats Directive 92/43/EEC, are being developed and taken forward.

3rd Annual Reporting of MPAs (1 January 2007 – 31 December 2007)

In the 2007 reporting period, new MPAs nominated by Denmark, Spain and Portugal increased the number of sites from 87 to 106 with an area increase from 26 619 km² to 38 178 km². At the same time, the UK withdrew one site previously nominated and recalculated its total area coverage by MPAs.

⁴ It has to be noted that the MPA *Sylt Outer Reef – Eastern German Bight* incorporates and thus supersedes the *SPA Eastern German Bight*, which was nominated to OSPAR during 2005. This (old) smaller site now lies inside the newly designated larger OSPAR MPA, and therefore OSPAR was invited to remove the former from the OSPAR MPA list and database. A similar situation applies with regard to the MPAs nominated in coastal waters. They are either within (*Steingrund*) or extend (*Helgoland mit Helgoländer Felssockel*) the previously nominated *Seabird Protection Area Helgoland* or extend the *Schleswig-Holstein Wadden Sea National Park* and adjacent Coastal Areas).

Denmark reported its first OSPAR MPAs, 18 sites totalling 5398.66 km². Seven of the 18 sites are within their Exclusive Economic Zone (EEZ). All of these MPAs are Natura 2000 sites with the same boundaries. Please refer to Annex I with regards to their names and further details.

Spain likewise reported its first OSPAR MPA, a conglomerate of four sites under the name *Islas Atlanticas de Galicia*, totalling 85.42 km² in territorial waters. This MPA is a Natura 2000 site, with similar boundaries, but somewhat larger (85.24 km² vs. 71.38 km²).

Portugal reported it's eighth and at the same time largest site, the *Sedlo Seamount* with an area of 4012.53 km², increasing the total area being protected to 5698.25 km². This MPA is situated within the Portuguese EEZ, but it is not a Natura 2000 site at all. As noted in the 2006 Status Report, of the EU Member States, only Portugal Azores has nominated sites that are not wholly Natura 2000 sites, which was an important development. Of the eight Portuguese sites, four are not Natura 2000 at all, and the remaining four are larger and more extensive than the smaller Natura 2000 sites contained within them.

The **United Kingdom** submitted updated GIS files and provided area calculations for all of its sites, except for its three Northern Ireland MPAs. One site was withdrawn, due to its negligible marine area, reducing the total number of UK sites to 55. However, with renewed calculations, the total area of the UK sites increased from the 2005 estimation of 9858.41 km² to 11 921.27 km².

2nd Annual Reporting of MPAs (10 April 2006 – 31 December 2006)

In the 2006 reporting period, new MPAs nominated by Portugal increased the number of sites from 81 to 87, and the total Network area increased from 25 426 km² to 26 619 km².

Portugal reported six additional areas as components of the OSPAR Network of MPAs. These MPAs are situated in the waters surrounding the Azores, of which two sites (*Faial-Pico channel, Corvo Island*) are in territorial waters, three in the EEZ (*D. João de Castro Seamount, Lucky Strike Hydrothermal Vent Field*, *Menez Gwen Hydrothermal Vent Field*), and one on the extended continental shelf (*Rainbow Hydrothermal Vent Field*). This amounts to 497.42 km² in territorial waters, 640.88 km² in Portugal's EEZ, and 22.15 km² on the extended continental shelf, totalling 1160.45 km². Only Portugal has nominated an MPA on the continental shelf beyond the EEZ.

It should be noted that due to the extension of the first year's reporting deadline, most of the MPAs in the initial report were actually put forward in the period between January and April 2006. This meant that the second reporting period was less than a calendar year.

Initial Reporting of MPAs (2005 - 9 April 2006)

The 2005 MPA nominations are summarized below in the order they were received.

Portugal:

One site, *Formigas/Dollabarat Bank*, within the waters of the Azores, was reported to MASH 2005. It was the first OSPAR MPA nomination. It is a nature reserve with a delimited area of 525.27 km², extending to below 1500 m in depth. Of that, 36.28 km² is also a Natura 2000 site, down to the 200 m isobath.

Norway:

Six sites were reported in December 2005. The six sites are: *Selligrunnen* (Nature Reserve), *Røstrevet, Sularevet, Iverryggen, Tisler,* and *Fjellknausene*, the latter five of which have fisheries closures to bottom-tending gear. The six in total cover an area of about 1905.39 km².

Germany:

Two extensive sites were reported in January 2006, and two more in April 2006. The sites are: *Helgoland Seabird Protected Area* (a Natura 2000 SPA), *Schleswig-Holstein Wadden Sea* (National Park and Natura 2000 SCI), *SPA-Eastern German Bight* (Natura 2000 SPA), and *Lower Saxony Wadden Sea National Park* (Natura 2000 SPA and SAC). The sites comprise a total of 11 922.78 km². In all, more than 90% of German coastal waters are also OSPAR MPAs, with large sections of the EEZ waters included as well.

Sweden:

Six sites were reported in January 2006: *Koster-Väderö Archipelago* (some enhanced protections including fisheries restrictions), *Gullmarn Fjord* (also with enhanced protections), *Nordre Älv Estuary* (fisheries closures), *Kungsbacka Fjord* (nature reserve), *Fladen*, and *Lilla Middelgrund*. The six sites overlap Natura 2000 sites, and cover a total of 971.77 km². *Fladen* and *Lilla Middelgrund* both have portions extending into the EEZ (37.62 km² and 159.21 km², respectively).

UK:

Fifty-six sites were reported as OSPAR MPAs in January 06. All sites are also Natura SACs, and total 11 921.27 km². Please refer to Annex I with regards to their names and details.

France:

Eight sites were reported in March 2006: *Réserve Naturelle Nationale de la Baie de Somme, Réserve Naturelle de l'Estuaire de la Seine, Réserve Naturelle Nationale du Domaine de Beauguillot, Réserve Naturelle de la Baie de l'Aiguillon, Réserve Naturelle de la baie de Saint Brieuc, Archipel des Sept îles, Réserve Naturelle de Moëze-Oléron, and Réserve Naturelle du Banc d'Arguin.* They are all Natura 2000 sites and together cover an area of about 274.53 km².

Analysis of the OSPAR Network of Marine Protected Areas in 2010⁵

The OSPAR Network of Marine Protected Areas in 2010 comprises a total of 159 sites that have been nominated by 11 of the 12 coastal Contracting Parties in the period 2005 – 2010. These sites, collectively, cover 147 322 km² of the OSPAR maritime area in the North-East Atlantic. Despite the efforts by Contracting Parties in establishing the OSPAR Network of MPAs, only 1.06 % of the OSPAR maritime area is currently covered by OSPAR MPAs.

Distribution of MPAs in Contracting Parties' national waters

All but one coastal Contracting Parties (CPs) have in the period 2005 – 2010 nominated MPAs to the OSPAR Commission. However, the contributions by CPs regarding number of MPAs nominated, MPA coverage and distribution in their respective national waters differ substantially. Please refer to Annex I for a list of all existing OSPAR MPAs to date, and Annex II for illustrations of each CP's national waters showing the respective MPAs. Table 1 indicates the number of sites per CP and associated area subject to MPAs. As can be inferred from Table 1, there is no direct relationship between the number of MPAs nominated and the total area protected as the sizes of MPAs varies substantially.

⁵ Sources of data and information on the OSPAR Marine Protected Areas: The analysis of the OSPAR Network of Marine Protected Areas (MPAs) is based upon the data and information provided by Contracting Parties in the process of nominating their MPAs to the OSPAR Commission and subsequently to the OSPAR database of Marine Protected Areas held at the German Federal Agency for Nature Conservation (BfN). All calculations are made with reference only to the OSPAR maritime area as defined in the OSPAR Convention, excluding overseas territories and territories of Contracting Parties in the Baltic and Mediterranean Seas.

| OSPAR Contracting Party | OSPAR MPAs | MPA coverage in Territorial Waters (km ²) | MPA coverage in Exclusive Economic Zones (km ²) | MPA coverage Total (km ²) |
|----------------------------|---------------|---|---|---|
| Data: a 6 | 0 | | | |
| Beigium | 0 | 0 | 0 | 0 |
| Denmark | 24 | 3.536 | 4.867 | 8.359 |
| France | 9 | 3.598 | 0 | 3.598 |
| Germany | 6 | 8.968 | 7.917 | 16.885 |
| Iceland | 7 | 10 | 69 | 79 |
| Ireland | 19 | 1.593 | 2.543 | 4.137 |
| Netherlands | 5 | 2.434 | 5.880 | 8.313 |
| Norway | 8 | 78.509 | 2.091 | 80.601 |
| Portugal | 8 | 1.022 | 4.679 | 5.700 |
| Spain | 2 | 85 | 2.398 | 2.483 |
| Sweden | 8 | 1.047 | 211 | 1.258 |
| United Kingdom | 63 | 13.057 | 2.807 | 15.864 |
| | | · | · | |
| Total | 159 | 113.860 | 33.462 | 147.322 |

|--|

Figure 2 shows the OSPAR Network of MPAs in the OSPAR maritime area and the boundaries of the Exclusive Economic Zones of Contracting Parties⁷. For the purpose of visibility, OSPAR Marine Protected Areas (in red) have in this map been slightly increased. A number of the smaller sites otherwise would not be visible in this illustration showing (almost) the entire OSPAR Convention area.

⁶ In 2007, Haelters et al. (MUMM) proposed the western part of the "Westhinder" as an OSPAR-MPA for the conservation of the gravel beds. A report by Degraer et al (MUMM) in 2008 proposed a ca 1000 km² area (in the SW of the Belgian part of the North Sea) as a potential Site of Community Importance (Habitats Directive). Following a public consultation, Belgium notified this site in 2010 to the European Commission and the federal administration is presently assessing whether or not (part of) its MPA network can be proposed as OSPAR-MPAs.

⁷ The boundaries of Contracting Parties' Exclusive Economic Zones have been obtained from the open source VLIZ Maritime Boundaries Geodatabase (http://www.vliz.be/vmdcdata/marbound/). It it noted, that not all of these boundaries as shown in the map have been officially declared by Contracting Parties.



Figure 2. OSPAR Marine Protected Areas and Exclusive Economic Zones of OSPAR Contracting Parties

Figure 3 provides an illustrative comparison between Contracting Parties regarding the relative distribution of their respective OSPAR MPAs across territorial waters and Exclusive Economic Zones. While France is the only CP that so far has nominated MPAs only in its territorial waters, Norway has > 95% and the United Kingdom and Sweden both > 80% of their protected areas situated up to 12 nautical miles from the shoreline. The other CPs, with the exception of Germany, have all more than 50% of their OSPAR MPAs situated in their EEZs, with Spain > 90% and Iceland and Portugal > 80%. Germany's OSPAR MPAs are spread almost equally across territorial waters and its EEZ. Denmark and Ireland also have a relatively balanced proportioning of about 40 % of their OSPAR MPAs situated in their EEZ.



Figure 3. Distribution of OSPAR MPAs across Contracting Parties' territorial waters and Exclusive Economic Zones in the North-East Atlantic (as of May 2010)

It has to be noted that even though 6 of the 11 Contracting Parties have more than 50% of their MPAs situated in their respective Exclusive Economic Zones, overall only 22% of the protected area has been designated in offshore areas (see Table 1)⁸.

Figure 4 highlights a number of additional aspects regarding the distribution and coverage of OSPAR MPAs in Contracting Parties' national waters⁹. For each CP¹⁰, the distribution and total area coverage of MPAs nominated to OSPAR in its territorial waters and EEZ, respectively, is shown (brown/blue colour of vertical bars). Furthermore, the horizontal bars indicate the relative coverage (in %) of OSPAR MPAs in its territorial waters, the EEZ and overall in its national waters (light brown/light blue/red, respectively).

Figure 4 illustrates the differences between CPs regarding the extent to which their national waters are subject to OSPAR MPAs. In this context, it needs to be taken into account that the total area of CPs' national waters differs substantially (see Figure 2 above for an illustration of CPs' marine areas under national jurisdiction.)

⁸ This is mainly due to the extensive MPAs designated by Norway in the territorial waters around the Svalbard archipelago (ca. 78 000 km²). Without these three MPAs, the distribution of protected areas across territorial waters and EEZ would almost be balanced.

⁹ The area calculations have been made with regards to the OSPAR maritime area only, *i.e.* without including the overseas territories of Contracting Parties and marine territories of Contracting Parties in the Baltic (Denmark, Germany and Sweden) or the Meditarrenan (France and Spain).

¹⁰ The area calculations for Denmark have been made for the mainland only, *i.e.* without including the territories of Greenland and the Faroes Islands.



Figure 4. MPA coverage in Contracting Parties' national waters (as of May 2010)

Amongst the OSPAR Contracting Parties, Norway has by far the highest absolute MPA coverage (> 80 000 km²) and a high absolute and relative coverage of MPAs in its territorial waters. However, due to the extensive area of its national waters, the overall relative coverage of OSPAR MPAs is at 3.9%. The Netherlands and Denmark for instance, both having designated about 8000 km² as OSPAR MPAs, show a relative MPA coverage of 13%¹¹ and 11%¹² respectively overall in their national waters. Sweden has 9.7 % of its national waters covered by MPAs. Although the UK has nominated by far the most OSPAR MPAs (63), collectively covering about 15 900 km² and 8 % of its territorial waters, the overall proportion of their national waters protected is at 2.1%. In Germany, about 16 885 km² have been designated as OSPAR MPAs. Due to the comparatively smaller marine area under its jurisdiction, the OSPAR MPAs represent about 70% of its territorial waters and 30 % of its Exclusive Economic Zone, and overall about 40% of its national waters. In contrast, coverage of national waters by OSPAR MPAs in France, Ireland, Spain and Portugal remains at 1.5%, 1%, 0.8% and 0.5%¹³, respectively. The proportion of Icelandic national waters covered by MPAs. No MPAs have so far been nominated by Belgium.

There has been an overall tendency by Contracting Parties to designate and nominate MPAs in nearshore areas. Of the 159 MPAs reported to OSPAR, by far the majority, *i. e.* 111 sites, have been designated in Contracting Parties' territorial waters. A total of 15 sites are situated crossing the borders between territorial waters and Exclusive Economic Zones. Only 33 sites are situated entirely in the EEZ. While one site has been designated (by Portugal Azores) on an extended continental shelf, no MPA has yet been established entirely in areas beyond national jurisdiction.

Figure 5 clearly illustrates that overall the marine area protected abruptly diminishes further away from the shoreline.

¹¹ The Netherlands determines a coverage of 15 % of OSPAR Marine Protected Areas in their national waters, excluding the estuaries.

¹² Area calculations only consider national waters adjacent to mainland Denmark, excluding the marine areas of Greenland and the Faeroe Islands.

¹³ Area calculations only consider the marine areas adjacent to mainland Portugal and around the Azores archipelago in the OSPAR maritime area.



Figure 5. MPA coverage in relation to the distance from the shoreline (as of May 2010)

Overall good coverage in coastal waters

The imbalance in the overall distribution of MPAs, with a tendency towards nearshore sites, should be noted and to the extent possible levelled out.

At the same time it is also worth acknowledging that in the OSPAR maritime area, as a result of the collective contributions by Contracting Parties, overall about 13.5% of the territorial waters are currently covered by Marine Protected Areas (total area protected is 113 860 km²).

This seemingly good overall coverage is a result mainly of extensive MPAs designated in the coastal waters of certain (sub-) regions, generally in the Greater North Sea and the Celtic Seas, and particularly by Germany, Norway, mainland Denmark and the Netherlands, all of which have set aside an even higher proportion of their territorial waters as MPAs. Consequently, MPA coverage in the coastal waters of other OSPAR Regions is comparatively lower and still deserves further attention.

The relatively low overall coverage of MPAs in the North-East Atlantic (1.06%) is explained by the relatively small proportion of the Exclusive Economic Zones protected (33 462 km² corresponding to 0.52%) and the vast areas in OSPAR Regions I (Arctic Waters) and V (Wider Atlantic) that are beyond national jurisdiction and where up until now no MPA has been designated.

Distribution of MPAs in OSPAR Regions

Figure 6 shows the Network of MPAs in the OSPAR maritime area and the boundaries of the five OSPAR Regions. For the purpose of visibility, OSPAR Marine Protected Areas (in red) have been slightly increased in this map. A number of the smaller sites otherwise would not be visible in this illustration showing (almost) the entire OSPAR Convention area.



Figure 6. Distribution of MPAs across OSPAR Regions

As in Contracting Parties national waters, the distribution of OSPAR Marine Protected Areas across the OSPAR Regions is likewise imbalanced.

The Arctic Waters (OSPAR Region I), host more than half of the total area of the Network of MPAs, almost entirely due to the nomination of three extensive MPAs around the Svalbard archipelago. Of the two Contracting Parties bordering Region I, Iceland and Norway, the latter is responsible for 99% of the area nominated in this Region as MPAs. Although a larger area is designated as OSPAR MPAs in the Arctic Waters than in all the other Regions combined, due to the vast size of this Region, these MPAs still only represent about 1.36%.

The Greater North Sea (OSPAR Region II) hosts the most sites and is the best represented Region in the Network of MPAs. It has the most riparian states of all OSPAR Regions and all but one have contributed sites to the Network. The second largest total coverage by MPAs is a result of the nominations by Denmark, France, Germany, the Netherlands, Norway, Sweden, and the United Kingdom. As of today, 5.46% of the Greater North Sea is covered by the Network of MPAs.

The Celtic Seas (OSPAR Region III) show the second best coverage of OSPAR MPAs with 3.53% being protected. This is the result of the nominations made by the two riparian states Ireland and the United Kingdom.

The Bay of Biscay and Iberian Coast (OSPAR Region IV), with France, Portugal and Spain being the only riparian states, has the fewest MPAs and the smallest total area covered by the Network. With four sites selected by France, two by Spain and no site at all by mainland Portugal, only 0.47 % of this Region are currently covered by the Network of MPAs.

The Wider Atlantic (OSPAR Region V) hosts all MPAs nominated by Portugal Azores, a number of sites designated by Ireland and one site nominated by the UK. No MPAs have yet been established in this Region by Iceland, the Faroe Islands/Denmark, Spain or mainland Portugal whose Exclusive Economic Zones all extend into the Wider Atlantic. On the other hand the extensiveness of the Wider Atlantic is partly explaining the lowest relative MPA Network coverage (0.15 %) of all Regions. It should also be noted that until recently, most of Region V, was considered to be an Area beyond National Jurisdiction (ABNJ), where no individual Contracting Party (CP) had the legal basis to designate a Marine Protected Area. See 'Proposed OSPAR MPAs in Areas beyond National Jurisdiction (ABNJ)' for more information on the efforts to designate MPAs including important changes over the past years regarding jurisdiction in Region V.

| OSPA | AR Region | Area (km²) | Total area covered by OSPAR MPAs (km²) | Proportion covered by OSPAR MPAs (%) |
|------|---------------------------------|---------------|---|---|
| I | Arctic Waters | 5 922 675 | 80 337 | 1.36 % |
| II | Greater North Sea | 766 785 | 41 902 | 5.46 % |
| Ш | Celtic Seas | 366 352 | 12 949 | 3.53 % |
| IV | Bay of Biscay and Iberian Coast | 539 228 | 2 511 | 0.47 % |
| V | Wider Atlantic | 6 366 023 | 9 623 | 0.15 % |
| | | | | |
| OSPA | AR maritime area | 13 961 666 | 147 322 | 1.06 % |

Table 2. MPA coverage in OSPAR Regions (as of May 2010)



Figure 7. MPA coverage in OSPAR Regions (as of May 2010)

Overall good coverage in the Greater North Sea and the Celtic Seas

It is worth noting that the proportion covered by OSPAR Marine Protected Areas is comparatively good in the Greater North Sea (Region II) and the Celtic Seas (Region III), with 5.46% and 3.43% respectively. This is the result of the collective efforts by Contracting Parties bordering these Regions, namely Denmark, France, Germany, Ireland, the Netherlands, Norway, Sweden, and the United Kingdom, in nominating MPAs to the Network.

With a view to increase the MPA coverage in the Bay of Biscay (Region IV), further selection of sites would be necessary from France, mainland Portugal and Spain.

In the Arctic Waters (Region I), on one hand, further efforts would have to be made by Iceland and Norway in establishing protected areas. In addition, contributions by both the Faeroe Islands and Greenland, in accord with the responsible authorities in Denmark, would be needed if the MPA Network is envisaged to evenly cover all biogeographic regions and provinces in the North-East Atlantic.

In the Wider Atlantic (Region V), the increase of OSPAR MPAs would require contributions by those Contracting Parties whose Exclusive Economic Zones or claims for extended continental shelves range into the Region, namely Faeroe Islands/Denmark, France, Iceland, Ireland, Portugal, Spain, and United Kingdom. Furthermore, collective action by the OSPAR Commission would be required to designate MPAs in those areas that remain beyond national jurisdiction.

Ecological Coherence of the OSPAR Network of MPAs

Background

OSPAR Recommendation 2003/3 sets out the aim to establish the OSPAR Network of Marine Protected Areas and to ensure that by 2010 it is an *ecologically coherent network* of well-managed marine protected areas.

The concept of *ecological coherence* nowadays is commonly used in the context of establishing protected area networks. While it has already been referred to, in the EC Habitats Directive (1992) and the Convention on Biological Diversity (1992) amongst others, it has been adopted by HELCOM and OSPAR in 2003 as an overarching concept for their respective efforts in establishing networks of MPAs. However, no specific definition for the term 'ecological coherence' has yet been formally agreed upon internationally and only a few theoretical concepts and practical approaches have been developed for an assessment of the ecological coherence of a network of MPAs.

In adopting the Joint OSPAR/HELCOM Work Programme on MPAs, in 2003 OSPAR and HELCOM agreed to develop common theoretical and practical aspects of what would constitute an ecologically coherent network of marine protected areas.

OSPAR and HELCOM have generally agreed that an ecological coherent network of MPAs

- interacts with and supports the wider environment;
- maintains the processes, functions, and structures of the intended protected features across their natural range; and
- functions synergistically as a whole, such that the individual protected sites benefit from each other to achieve the two objectives above.

Additionally, the network may also be designed to be resilient to changing conditions (*e.g.* climate change).

A number of propositions have been brought forward and discussed, both within OSPAR and HELCOM, on how to ensure and analyse the ecological coherence of MPA networks. It has been acknowledged that this is work in progress and that theoretical concepts as well as practical approaches and methods will need to be developed further and refined over time as the general knowledge of marine ecosystems and the availability of data on ecosystem components increase.

Within OSPAR the following theoretical and practical framework to address the ecological coherence of the MPA Network has so far been adopted:

- Guidance on developing an ecologically coherent Network of OSPAR Marine Protected Areas; (Reference Number: 2006-3)
 This document sets out 13 key principles to assist in interpreting the concept of an ecologically coherent network of MPAs in the context of the OSPAR maritime area.
- Guidance for the design of the OSPAR Network of Marine Protected Areas: a selfassessment checklist; (Reference Number: 2007-6)
 This document provides a checklist to assess the ecological coherence of a network of MPAs at different scales; *e.g.* local, regional, national, or international areas.
- Background Document to support the assessment of whether the OSPAR Network of Marine Protected Areas is ecologically coherent; (Publication Number: 320/2007)

The Background Document summarises existing literature on ecological coherence of MPA networks, and describes possible criteria and guidelines for assessing whether the OSPAR Network is ecologically coherent. It builds upon the Guidance document on developing an ecologically coherent network of OSPAR MPAs (Reference Number: 2006-3) and groups the 13 principles set out in the Guidance under four assessment criteria, which when taken together, are considered both necessary and sufficient to assess the ecological coherence of a MPA network. These main assessment criteria are

- Adequacy/Viability;
- o Representativity;
- o Replication;
- Connectivity.

In practice, these criteria should take into account the size of MPAs, the coverage of species and habitats by MPAs, the distribution of MPAs across biogeographic regions, the number of replicate sites for specific features of interest, as well as between-site connections at different scales.

Several eco-coherence principles, indicators and questions have been put forward in the above OSPAR documents. The Guidance document outlines thirteen principles; the Background Document outlines four criteria and 30 assessment guidelines; and the Self-Assessment lists five questions directly related to the eco-coherence criteria, three other questions regarding factors that influence eco-coherence, and three more questions regarding factors that influence the assessment of eco-coherence.

Over time though, OSPAR had to accept that a comprehensive analysis of the ecological coherence of the OSPAR Network of MPAs, as originally envisaged in the OSPAR guidance, would for the time being not be possible due to the limited availability of ecological data, in particular on the distribution of species populations and habitats in the North-East Atlantic and their actual proportion being effectively covered by OSPAR MPAs.

From the overall set of responses to a data questionnaire sent out to Contracting Parties in 2007, and repeated annual requests to provide relevant data, it has to be inferred that for many Contracting Parties bio-physical spatial data are not readily available and/or assembling them for use by OSPAR is not a priority.

Recognising this current lack of detailed ecological data, the need became apparent for practical approaches which can be applied in the absence of such data.

The Background Document (Publication Number: 320/2007) already noted that ecological coherence is a holistic concept reliant on many constituent parts, and that tests might rather indicate when it has *not* been perfectly achieved, *i.e.* some of the parts are missing or not functioning as they should. Thus, the degree to which an MPA network is – or is not – ecologically coherent must be stated as likelihood, based on a continuum of progressively more detailed tests, until a test is not met. It should therefore involve a process of staged assessments, beginning with an initial assessment that is straightforward and achievable.

In consequence and on the basis of previous work three initial spatial tests have been identified as a means of making an initial evaluation of whether the OSPAR Network of MPAs may be ecologically coherent or not. These tests, considered as a starting point to complement the guidelines and principles, are described in the:

 Background Document on three initial spatial tests used for assessing the ecological coherence of the OSPAR MPA Network (Publication Number: 360/2008)

This document describes three initial spatial tests which evaluate whether the network is:

- i) spatially well distributed, without more than a few gaps;
- ii) covers at least 3% of most (seven of the ten) relevant Dinter biogeographic provinces; and
- iii) represents most (70%) of the OSPAR threatened and/or declining habitats and species (with limited home ranges), such that at least 5% [or at least three sites] of all areas in which they occur within each OSPAR Region is protected.

These tests aim to identify whether an MPA network shows the first signs of ecological coherence. They should be seen as the first step in a multiple step assessment. However, until the MPA network has passed these three initial tests there is no need to scale up the assessment process.

These initial tests have already been applied in the 2007 and 2008 OSPAR Reports on the progress made in developing the OSPAR Network of Marine Protected Areas (Publication Numbers: 359/2008, 389/2009, respectively). For an updated application of these tests on the MPA Network in 2010, see "Three initial spatial tests looking at the ecological coherence of the OSPAR MPA Network" below.

A secondary and wholly complementary approach to assessing ecological coherence has been developed that focuses on the way in which representative features (*i.e.* species and habitats) are incorporated within the OSPAR Network of MPAs. This approach is described in:

 A matrix approach to assessing the ecological coherence of the OSPAR MPA Network (MASH 08/5/6-E)

This matrix addresses six elements of network ecological coherence that have been recognised as important constituent parts:

- i) Features;
- ii) Representativity;
- iii) Replication;
- iv) Connectivity;
- v) Resilience; and
- vi) Adequacy/Viability.

It proposes clear success criteria that are required to assess the likelihood that these elements are adequately represented within the network, drawn from both agreed OSPAR guidance on developing an ecologically coherent network of OSPAR MPAs (Reference Number: 2006-3), international scientific literature and expert judgement. This approach is envisaged to be applied at the OSPAR maritime area level as well as at a biogeographical level.

Effectively applying this matrix methodology, however, requires additional datasets on the respective features covered by OSPAR MPA. Hence, as already outlined above, the availability of sufficient data is yet again the main constraint regarding the application of this approach.

The Working Group on Marine Protected Areas, Species and Habitats (MASH) has in 2008 invited the United Kingdom and France to apply this matrix approach to assessing the ecological coherence of

the OSPAR MPA Network in the English Channel as a test case. Conclusions on the practicability of this method and on the ecological coherence of the network of MPAs in the English Channel are not yet available.

Three initial spatial tests looking at the ecological coherence of the OSPAR MPA Network

The following three tests are considered as a first basic step in a multi-staged assessment procedure to assess the ecological coherence of the OSPAR Network of MPAs. They have been identified recognising the current lack of detailed ecological data and the need to apply approaches which can be applied in the absence of such data. Additional more sophisticated tests have to be developed and subsequently applied.

The tests are ordered according to ease of assessment, as well as descriptive power, and therefore should be applied in the order given. The numerical *threshold limits* suggested in these tests should not be confused with *targets*; they should rather be seen as cut-off points beneath which ecological coherence has clearly not been achieved. Further background on these tests is provided in OSPAR Publication 360/2008.

Test 1: Is the OSPAR MPA Network spatially well distributed, without more than a few major gaps?

The various illustrations provided in previous sections of this report (see <u>Figures 1, 2 and 6</u>) of the OSPAR Network of MPAs clearly indicate that overall the sites are not yet spatially well-distributed across the OSPAR maritime area and its regions. The vast majority of sites is situated in coastal waters and clustered around the central latitudes. Offshore sites are still limited in number and sizes, while no MPA has formally been established exclusively in Areas beyond National Jurisdiction (ABNJ) yet.

It should be noted however, that on a coarse scale OSPAR MPAs in the Greater North Sea, including the Kattegat and Skagerrak (OSPAR Region II) and the Celtic Seas (OSPAR Region III) are distributed fairly even along the coastlines throughout these Regions. MPAs in the Azores archipelago can also be considered to be well distributed. The Svalbard archipelago in this context is unique as the entire territorial waters are covered by MPAs.

Applying the approximate *rules of thumb* guidance provided in the Background Document (360/2008) on what constitutes 'not more than a few major gaps'¹⁴, it can be inferred that the spatial arrangement of MPAs in Regions II and III shows first signs of ecological coherence.

However, considering the spatial gaps between OSPAR MPAs in Regions II and III and those in Regions I, IV and V, as well as the limited number of MPAs in offshore areas or the non-existence of sites in ABNJ, overall the Network of MPAs can not yet be judged to be well distributed.

If the MPA Network is generally not well-distributed in space, then it is very likely not connected and/or representative, and probably is not replicated and/or adequate. Thus, it is very likely not ecologically coherent.

Test 2: Does the OSPAR MPA Network cover at least 3 % of most (seven of the ten) relevant Dinter biogeographic provinces¹⁵?

¹⁴ "Major gaps between MPAs": in coastline/near shore spaces wider than 250 km, offshore/EEZ spaces bigger than 500 km diameter circle (~200 000 km²); in far offshore and high seas waters, spaces larger than approximately one million square kilometres (1 000 000 km²).

¹⁵ Dinter 2001. Biogeography of the OSPAR Maritime Area. German Federal Agency for Nature Conservation (BfN), Bonn. 167 pp.

This test considers primarily Representativity and Adequacy, and infers some Connectivity and Replication.

The ten biogeographic provinces of the OSPAR maritime area relevant for this test have been marked in bold in Table 3 and are shown in Figure 8. Due to their ice cover and extreme remoteness, the remaining Dinter (sub-) provinces are not treated in this test. This test does not require usage of Dinter sub-provinces. Thus, the three Norwegian coastal sub-provinces are treated together as one province, as are the two Lusitanean sub-provinces. In addition, for the purpose of this initial test, the two temperate pelagic provinces (*Cool-temperate* and *Warm-temperate waters*) shall also be interpreted to include deeper waters and the seafloor. Hence, the Dinter pelagic and benthic classes have been assessed together.



Figure 8. MPA coverage in biogeographic provinces (according to the classification by Dinter, 2001)¹⁶

¹⁶ For the purpose of visibility, OSPAR Marine Protected Areas (in red) have in this map been slightly increased. A number of the smaller sites otherwise would not be visible in this illustration showing (almost) the entire OSPAR Convention area.

| BIOME | REGION | SUBREGION | PROVINCE | Area protected (km²) | MPA coverage (%) |
|------------------------------|-----------------|----------------------------|--|----------------------------|------------------------|
| Shelf & Continental Slope | Arctic | | North-East Greenland Shelf | 0 | 0.00 |
| Shelf & Continental Slope | Arctic | | Northeast Water Polynya | 0 | 0.00 |
| Shelf & Continental Slope | Arctic | | High Arctic Maritime | 11.021 | 1.36 |
| Shelf & Continental Slope | Arctic | | Barents Sea | 67.317 | 5.83 |
| Shelf & Continental Slope | Arctic | | South-East Greenland - North Iceland Shelf | 0 | 0.00 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | Norwegian Coast (Finnmark & Skagerrak & West Norwegian) | 2.966 | 0.72 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | South Iceland- Faeroe Shelf | 79 | 0.03 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | Boreal | 44.060 | 6.23 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | Boreal-Lusitanean | 8.893 | 1.95 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | Lusitanean-Boreal | 3.473 | 2.31 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | Lusitanean (Cool & Warm) | 1.004 | 0.85 |
| Shelf & Continental Slope | Atlantic | East Atlantic Temperate | Macaronesian Azores | 812 | 3.60 |
| (Holo) Pelagic | Arctic/Atlantic | | Cool-temperate Waters | 59.647 | 0.89 |
| (Holo) Pelagic | Atlantic | | Warm-temperate Waters | 11.657 | 0.33 |

Table 3. MPA coverage in biogeographic provinces (according to the classification by Dinter, 2001)

This test shows that only two of the ten biogeographic provinces considered in this test surpass the 3% threshold coverage by OSPAR Marine Protected Areas: *Boreal* (6.23%) and *Macaronesian Azores* (3.60%). Only two more of these biogeographic provinces show more than one percent coverage, namely *Lusitanean-Boreal* (2.31%) and *Boreal-Lusitanean* (1.95%).

It is worth noting that as a result of the nomination by Norway in 2009 of three Marine Protected Areas around the Svalbard archipelago a substantial proportion of the *Barents Sea* is now protected (*i.e.* 5.83% in comparison to 0.00% in 2008).

Altogether, this test demonstrates that most of the biogeographic provinces in the North-East Atlantic have less than 3% coverage by OSPAR MPAs. Therefore, the OSPAR Network of MPAs is likely not covering adequate and representative proportions of the various biogeographic provinces in the North-East Atlantic, and is hence unlikely to be ecologically coherent in that respect.

Test 3: Are most (7%) of the OSPAR threatened and/or declining species and habitats (with limited home ranges) represented in the OSPAR Network of MPAs, such that at least 5% [or at least three sites] of all areas in which they occur within each OSPAR Region is protected?

"Species with limited home ranges" refers to species that in their adult life stage are either fixed in place (sessile), or generally range only over short distances, as would be found in most reserves, on a scale of hundreds of meters. According to the OSPAR List of threatened and/or declining species and habitats (Reference Number: 2008-6), this would only refer to the listed invertebrates. The square-bracketed text should only be used in regions where the spatial data are not available. In those cases, counting sites (and noting their area) is the only way forward. It is expected that the collection of spatial data on threatened and/or declining species and habitats listed by OSPAR will remain an OSPAR priority, and eventually the bracketed text can be removed from this test.

This third initial test, including its square-bracketed text, can not be conducted as neither is comprehensive spatial data available regarding the distribution of species and habitats across the OSPAR maritime area, nor is the reporting by Contracting Parties on these features within their respective MPAs complete.

On this basis, no reliable conclusions can be drawn on the adequacy or representativity of the OSPAR Network of MPAs regarding the protection it provides for the species and habitats listed by OSPAR.

The following charts provide an illustrative overview of the respective number of OSPAR MPAs designated for the species and habitats listed by OSPAR as threatened and/or declining.



Figure 9. Number of OSPAR MPAs hosting habitats listed by OSPAR as threatened and/or declining (as of May 2010)



Figure 10. Number of OSPAR MPAs hosting species listed by OSPAR as threatened and/or declining (as of May 2010)

These illustrations provide some indications on the level of attention that the species and habitats listed by OSPAR have received by Contracting Parties in designating Marine Protected Areas.

The charts do not show, however, those features that are not yet included in OSPAR MPAs; these are identified below.

Habitats

The relatively best represented habitats are Intertidal mudflats and *Zostera* beds, each found in 23 OSPAR MPAs. *Lophelia pertusa* reefs are protected in 13 sites throughout the North-East Atlantic. For all other threatened and/or declining habitats less than ten MPAs have been designated. The deep sea habitats are found in less than five MPAs. These findings naturally coincide with the fact that most MPAs have been designated in coastal waters, leaving offshore areas mostly and areas beyond national jurisdiction entirely unprotected.

It is critical to note that two of the habitats listed by OSPAR, namely Coral gardens and *Cymodocea* meadows, have not at all been covered by any OSPAR MPA yet.

Species

The relatively best represented species are the Sea lamprey (*Petromyzon marinus*) and the Harbour porpoise (*Phocoena phocoena*), found in 20 MPAs each. The Allis shad (*Alosa alosa*) is found in 14 OSPAR MPAs. All other threatened and/or declining species have less than ten MPAs designated for their protection.

It is critical to note that the following species listed by OSPAR as threatened and/or declining have not at all been covered by any OSPAR MPA yet: Ivory gull (*Pagophila eburnean*); Steller's eider (Polysticta *stelleri*), Thick-billed murre (*Uria lomvia*), Sturgeon (*Acipenser sturio*), European eel (*Anguilla Anguilla*); Portuguese dogfish (*Centroscymnus coelolepis*); Gulper shark (*Centrophorus granulosus*); Leafscale gulper shark (*Centrophorus squamosus*); Houting (*Coregonus lavaretus*) oxyrhinchus); Long-snouted seahorse (*Hippocampus guttulatus*); Porbeagle (*Lamna nasus*); Thornback skate/ray (*Raja clavata*); White skate (*Rostroraja alba*); North-East Atlantic Spurdog (*Squalus acanthias*); Angel shark (*Squatina squatina*); Bowhead whale (*Balaena mysticetus*); and Northern right whale (*Eubalaena glacialis*).

While the number of MPAs hosting a specific species or habitat does not allow any direct conclusion on the adequacy of protection for that feature, the fact that quite a number of features have not yet been included at all in any OSPAR site on the other hand indicates that the OSPAR MPA Network can not yet be judged to be adequate or representative regarding the protection it provides for the species and habitats listed by OSPAR.

In order to assess whether the level of protection for these species and habitats might be adequate, more data on the distribution of species and habitats throughout the OSPAR maritime area would be needed as a basis against which the proportion covered by MPAs can be assessed. Furthermore, also the effectiveness of the management, *i.e.* the actual protection provided for these features against potentially adverse effects of human activities in the respective sites would have to be taken into account.

Preliminary conclusions on the ecological coherence of the OSPAR MPA Network

A comprehensive analysis of the ecological coherence of the OSPAR Network of Marine Protected Areas is currently not possible due to the persistent lack of ecological data, particularly on the distribution of species and habitats in the North-East Atlantic. In the absence of such data, only basic approaches can be conducted that allow for an assessment to what extent the scope of ecological coherence has *not* been achieved rather than to determine if it has been achieved.

For the time being, only coarse assessments of the spatial arrangement of the MPA Network can be applied. Initial assessments demonstrate that the OSPAR Network of MPAs currently is unlikely to be ecologically coherent as the overall Network covers only about 1% of the North-East Atlantic, and only two of the ten relevant biogeographic provinces show a coverage higher than 3%. Also the distribution of MPAs throughout the OSPAR maritime area remains uneven with the majority of sites situated in coastal waters and in OSPAR Regions II and III. If the MPA Network is generally not well-distributed in space, then it is very likely not connected and/or representative, and probably not replicated and/or adequate.

OSPAR Regions II and III however, *i. e.* the Greater North Sea and the Celtic Seas with 5.46% and 3.43% MPA coverage respectively, host a large number of MPAs along the shorelines that generally offer replicate sites for certain features and probably provide for some connectivity between the sites.

However, no reliable conclusions can be drawn on the adequacy or representativity of the OSPAR Network of MPAs regarding the protection it provides for the species and habitats listed by OSPAR as threatened or declining and for other aspects of biodiversity. More data on the distribution of these species and habitats throughout the OSPAR maritime area would be needed as a basis against which the proportion covered by MPAs can be assessed.

Overlap between the OSPAR and the Natura 2000 MPA network

Almost all of the 144 MPAs so far reported to OSPAR by EU Member States largely overlap existing Natura 2000 sites. The nominations by Portugal Azores are an important exception, as four Portuguese sites are not included in the Natura 2000 network, and for the others, smaller Natura 2000 sites are nested within a larger OSPAR MPA. Furthermore, France and Spain in 2008 each have reported one MPA to OSPAR that has not (yet) been established as Natura 2000 site.

However, given that the marine geographical scope of the OSPAR Network is larger (including Areas beyond National Jurisdiction) than the EU marine waters area, and that the ecological criteria for MPA

selection within OSPAR are broader (including a list of threatened and/or declining species and habitats that is different and adds to the relevant species and habitats listed in the EU Directives), it can be inferred that as long as nominations are mostly limited to existing Natura 2000 sites then it is unlikely that the OSPAR Network's ecological goals will be met.

It should also be noted that only a few existing marine Natura 2000 sites (29 sites, collectively covering 3 754 km²¹⁷) are not included in the OSPAR Network of MPAs. It can be concluded, that these networks from the perspective of EU Member States overlap to a very large extent; that consequently there is limited scope for enhancing the OSPAR Network by including the remaining Natura 2000 sites, and that ultimately additional sites selected upon the basis of the OSPAR criteria would need to be established to ensure the ecological objectives set for both these networks in the future.

Overall, this initial assessment on the ecological coherence of the OSPAR MPA Network indicates that notwithstanding the developments during the past years, the network cannot be considered to be ecologically coherent by the reporting year 2010. This coarse assessment, including the initial tests outlined above, has to be seen as a first basic step in a multi-staged assessment procedure to evaluate the ecological coherence of the OSPAR Network of MPAs. Additional more sophisticated tests should be developed and subsequently applied.

Management of OSPAR MPAs

Within OSPAR, MPAs are understood as areas for which protective, conservation, restorative or precautionary measures have been instituted for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment.

The OSPAR Recommendation 2003/3 sets out the aim to establish the OSPAR Network of Marine Protected Areas and to ensure that by 2010 it is an ecologically coherent network of *well-managed* marine protected areas.

Regarding the management of OSPAR MPAs, the Recommendation specified, amongst others, the following programmes and measures:

"3.3 The relevant Contracting Party should

- a. "develop for each area selected [as an OSPAR MPA] a management plan, in accordance with the management guidelines18, to achieve the aims for which the area has been selected;
- b. determine what management measures would be appropriate in the light of those guidelines, and either:
 - (i) where it has the competence to adopt such measures, initiate the processes under its domestic legislation to establish such measures; or
 - (ii) where the competence to adopt such measures lies with another authority or international organisation, or where the consent of an international organisation is needed for the adoption of such measures, take steps to seek the adoption by the international organisation of those measures or, as the case may be, the consent of the international

¹⁷ Based on a comparison of the OSPAR Network of MPAs and the listing of marine Natura 2000 sites as documented in November 2009 at the European Environment Agency (EEA); Source: http://www.eea.europa.eu/data-and-maps/data/natura-2000

¹⁸ OSPAR Guidelines for the Management of Marine Protected Areas in the OSPAR maritime area (Reference Number 2003-18); Amended by BDC 2006 (BDC 2006 Summary Record (BDC 0610/1) § 3.46) through the inclusion of Appendix 1.

organisation to those measures. Any cases covered by this sub-paragraph should be reported to the OSPAR Commission."

Furthermore, it set out the following:

"3.5 Where a Contracting Party is required, under the EC Birds Directive¹⁹ or the EC Habitats Directive²⁰, to designate any area in the maritime area (whether wholly or partly) as a Special Protection Area or a Special Area of Conservation;

- a. the Contracting Party may report that area to the OSPAR Commission as a component of the OSPAR Network of Marine Protected Areas, as if the Contracting Party had selected it as such; but
- b. the Contracting Party should be under no obligations under this Recommendation to take any action in respect of that area, subject to sub-paragraph (c) below; and
- c. where the Contracting Party has reported that area to the OSPAR Commission as a component of the OSPAR Network of Marine Protected Areas, it should send to the OSPAR Commission copies of any reports which it makes to the European Commission about that area."

With a view to support and harmonise efforts by Contracting Parties in establishing adequate management regimes for OSPAR MPAs, OSPAR has developed and agreed upon 'Guidelines for the Management of Marine Protected Areas in the OSPAR maritime area' (Reference Number 2003-18), as well as 'Guidance to assess the effectiveness of management of OSPAR MPAs: a self-assessment scorecard' (Reference Number 2007-5).

Although a conceptual framework for managing MPAs has been developed by OSPAR, until now it is not possible to conduct a comprehensive analysis of the extent to which the OSPAR Marine Protected Areas are actually 'well managed' by the concerned authorities.

The sole reason for this is that generally Contracting Parties have not submitted to OSPAR sufficiently detailed information on the management of their respective OSPAR MPAs that would allow for such an analysis.

On one hand, it has to be considered that a number of MPAs have only been established recently and therefore management plans for these sites are not yet available and/or management measures are not yet implemented. When nominating new sites to OSPAR most Contracting Parties have made references to on-going or envisaged national processes to develop management measures/plans for the respective MPAs. This is particularly the case for those OSPAR MPAs that are at the same time Natura 2000 sites.

Then again, for those OSPAR MPAs where management regimes are already in place but still no detailed reports have been submitted by Contracting Parties on the effectiveness of the regulatory measures, it can be assumed that the provision of more detailed information has been hampered by limited resources (personnel/time) to process the information for submission to OSPAR or low degree of priority to attend to this subject.

¹⁹ Council Directive 79/409/EEC on the conservation of wild birds.

²⁰ Council Directive 92/43/EEC on the conservation of habitats and wild fauna and flora.

Summary Information on the Management of OSPAR MPAs as provided by Contracting Parties

Denmark

The Danish OSPAR MPAs, all being Natura 2000 sites, will be subject to Natura 2000 management plans. Draft plans are expected to be sent for public consultation in 2010. After the public consultation and subsequent processing of the comments received, the Natura 2000 management plans will be finalized. The Danish Agency for Spatial and Environmental Planning will inform OSPAR, when the plans are submitted for public consultation, and also when they are finally adopted. Management plans will be prepared for both existing and newly designated Natura 2000 sites. Denmark has in 2009 implemented a new designation of marine habitats sites. Management plans for these areas will be drafted in the 2nd Plan period in 2015.

France

No information has been made available on the management of the French OSPAR MPAs.

Germany

Two of the OSPAR MPAs in German territorial waters, the *Schleswig-Holstein Wadden Sea National Park* and the *Lower Saxony Wadden Sea National Park* are managed according to the national park act. Several management plans that cover different sectoral aspects exist, *e.g.* salt-marsh management, mussel fisheries management. An overall management plan, the Trilateral Wadden Sea Plan (WSP)²¹, is being implemented by the three States bordering the Wadden Sea, *i. e.* Denmark, The Netherlands and Germany. The WSP entails the common policies, measures, projects and actions of the countries for their joint efforts to fulfil the ecological targets set for Wadden Sea. For the OSPAR MPA *Helgoland mit Helgoländer Felssockel* and the SPA within the OSPAR MPA *Oestliche Deutsche Bucht/Sylter Aussenriff* ordinances according to national law are implemented. Management plans for the remaining MPAs are currently being developed.

Iceland

In the seven Icelandic OSPAR MPAs, human activities that might damage the area are prohibited or allowed by special permission only. Regulation 1140/2005 on conservation of coral areas along the south coast prohibits all fishing activities with bottom-contacting gears in those five Icelandic OSPAR MPAs that have been established specifically for the protection of coral reefs.

Ireland

All OSPAR MPAs are subject to management requirements of the EC Habitats or Birds Directive.

The Netherlands

A management plan for the *Voordelta* MPA has been finalised and is currently being implemented (http://www.rijkswaterstaat.nl/images/Beheerplan%20Voordelta_tcm174-192599.pdf). Management plans for the other OSPAR MPAs are being prepared and will be finalised three years after their final designation in 2010 at the latest.

Norway

Selligrunnen is temporary protected by the national Nature Conservation Act as a nature reserve (Norwegian regulation number 605, 08.06.2000 – "Forskrift om midlertidig vern av Selligrunnen naturreservat, Leksvik kommune, Nord-Trøndelag"). The purpose of the regulation is to protect corals

²¹ http://www.waddensea-secretariat.org/management/Plan.html

and associated organisms in the area against all damage and destruction. All potentially damaging human activities are illegal. The OSPAR MPAs Rostrevet, Sularevet Iverryggen, Tisler, and Fjellknausen are all fisheries protected areas. Norwegian regulation number 1878, 22.12.2004 "Forskrift om utøvelse av fisket i sjøen" § 66 - states that the use of bottom trawl is illegal in this area. The three OSPAR MPAs around the Svalbard archipelago consist of four nature reserves and seven national parks, all of which have been established by separate national regulations. The degree of protection and restrictions varies between these areas. Svalbard and the sea territory out to 12 nm are protected through the Svalbard Environmental Act. Svalbard falls within the perimeter of the Barents Sea management plan. In addition, separate management plans for each of the national parks and nature reserves are, or will be, elaborated. The management of the Ytre Hvaler national park is described in national regulations. A management plan is currently being elaborated and a draft is expected to be finished by April 2010. The management plan process includes extensive consultations with stakeholders, and is based on methods developed by The Conservation Measures Partnership (CMP; www.conservationmeasures.org). Ytre Hvaler National Park and the Kosterhavet Marine National Park in Sweden were developed in close collaboration between the Norwegian and Swedish regional governmental offices. The management of the sites will also be co-ordinated between Norway and Sweden. The management of the national park is governed by the County Governor of Østfold as a temporary solution. A more permanent management scheme will be determined based on a model for management of protected areas currently under development by the Norwegian government.

Portugal

The OSPAR MPA *Formigas Bank* is subject to legislation that prohibits almost all extractive activities in the area. Tuna fishing is still allowed under minor obligations. For the *Corvo Island and Faial-Pico Channel* a management plan is proposed. The area includes a no-take area declared under the regulation of limpet collection. Under the BIOMARE project, this area was declared a Long Term Biodiversity Research Site and an All Taxa Biodiversity Inventory Site. The Portuguese law "DL no. 140/99" protects a fraction of the area in the *D. João de Castro Seamount* MPA as SCI. Under the BIOMARE project, this area was declared a Long Term Biodiversity Research Site. For the other sites, management proposals have been prepared, but no statutory management plans have yet been established.

Spain

Management plans (Natural Resources Management Plans, Fisheries Management Plans) for the two MPAs, namely *El Cachucho* and *Islas Atlanticas*, are currently being developed in line with the EC Habitats and Birds Directive.

Sweden

The *Kungsbacka Fjord* is protected as a nature reserve according to the Swedish Environmental Code and management measures, including a monitoring programme, will be introduced and implemented in the area according to the proposed management plan. Certain areas of the reserve are periodically closed for all activities and visitors. *Lilla Middelgrund* and *Fladen* should be managed as marine nature reserves with regulation against certain uses, such as windmill establishments, sand and gravel excavation and certain fishing practices. The Swedish Environmental Protection Agency (EPA) has selected these MPAs as areas where no kind of exploitation should take place. *Nordre älv estuary* is a nature reserve according to the Swedish Environmental Code. The fishery is regulated according to the Fishery Act. There are temporal closures for net fishing in the inner part of the estuary with the aim of protecting salmon and trout. There is a bird protection area in the north western part of the estuary. A management plan for the whole area is being developed. The *Koster-Väderö archipelago* is already protected in accordance with the Fishery Act, with which the shrimp fishery has been restricted. Shrimp trawling (the only trawling permitted in the coastal zone) is restricted with the aim of protecting sensitive bottom habitats and also fish by the use of excluding devices. Although the *Koster-Väderö archipelago* is not a nature reserve, the Environmental Code (Chapter 7 §§ 27, 28 and 29) covers the area. It means that the area has a status as an area of protection to prevent and manage different activities that may cause a threat to the favourable conservation status of the habitats and species in the area. Furthermore, shore protection according to the Code with restrictions against e. g. building houses and constructions on the seaside and landside of the shoreline is in place. The *Koster-Väderö archipelago* and its characteristic landscape is a very popular tourist area in Sweden. Restrictions on *e.g.* outdoor recreation and sports may need to be addressed in the future. No management plan for the area has been developed so far. However, as set out in an agreement, fishermen have committed themselves to lift the trawl at certain places in the fishing area where the reefs are located. Monitoring of the compliance with this agreement is essential. The northern part of the area is bound to the Norwegian border and on the Norwegian side of the border the *Lophelia* reef and reef patches continues. Contact has been established with the Norwegian authorities with the aim to develop a scheme for a transboundary management of the area as a marine national park.

UΚ

All OSPAR MPAs are subject to management requirements of the EC Habitats or Birds Directive. The UK will send to the OSPAR Commission any reports which it submits to the European Commission about these areas.

Preliminary conclusions on the Management of OSPAR MPAs

A Marine Protected Area can be considered to be 'well managed', if the respective management regime ensures that, ultimately, the objectives for which the site has been established are achieved. In the case of OSPAR MPAs, these objectives generally refer to protecting, maintaining and, where in the past impacts have occurred, restoring populations of species, habitats, ecosystems or ecological processes of the marine environment.

The situation and progress on ensuring effective management of OSPAR MPAs varies substantially among the different sites nominated by Contracting Parties. According to references made by CPs (general note during reporting and/or personal communication), quite a number of MPAs are subject to general or specific management regulations, including conservation objectives and management plans, but detailed information on the effectiveness of these measures has not been made available to OSPAR. For many sites though, management regimes, including management plans, are still in preparation and far from being effectively implemented. This can be explained to some extent by the fact that a number of OSPAR MPAs/Natura 2000 sites have only recently been established.

Considering that no reports have yet been made available to OSPAR providing evidence that the management of a specific OSPAR MPA has actually been successful in achieving the objectives that have been set for that MPA, it is not possible to state that OSPAR MPAs, generally, are 'well managed'. This shall not mean that there are no well-managed MPAs included in the OSPAR Network, rather that documented evidence has not been available for this Report.

In this context, it seems worthwhile to review the reporting process and requirements set out by OSPAR with a view to allow for a straightforward sharing of information on the management of marine protected areas by OSPAR Contracting Parties.

Then again bearing in mind the conclusions of the 'OSPAR Quality Status Report 2010' (in prep.) with regards to the status of species and habitats in the North-East Atlantic, it is safe to assume that overall also the management of MPAs still needs to be strengthened with a view for the OSPAR Network of MPAs to make a distinct contribution to improve the status of biodiversity and ecosystems in the OSPAR maritime area.

Proposals for OSPAR Marine Protected Areas in Areas beyond National Jurisdiction (ABNJ)

Background

One of the distinct differences between the OSPAR Network of Marine Protected Areas and the network of Natura 2000 sites established under the EC Birds and Habitats Directives²² is that the OSPAR Network is envisaged to encompass areas in the Wider Atlantic (OSPAR Region V) that are beyond the jurisdiction of coastal states. These areas, covering approximately 40% of the OSPAR maritime area, host extensive deep sea areas lying between Svalbard in the Arctic Waters and Iceland, and a large section of the Mid-Atlantic Ridge (MAR) between Iceland and Portugal Azores with abyssal plains to the east and west of the Ridge (see Figure 11).

The 2003 Ministerial Commitment to establish an ecologically coherent network of well managed MPAs by 2010 included a clear remit to identify and designate MPAs in these areas, usually referred to as Areas beyond National Jurisdicion (ABNJ).

The protection of the marine environment and biodiversity in ABNJ has in recent years also attracted great attention at the global level, in particular in the context of the United Nations General Assembly (UNGA), the legal framework established by the UN Convention on the Law of the Sea (UNCLOS) and the Convention on Biological Diversity (CBD).

OSPAR has in this context assumed a pioneering role as a regional organisation to protect marine ecosystems and biodiversity in ABNJ and gained increasing attention at a global level.

Being aware of the shared responsibilities and the need for a collaborative approach, OSPAR has at the same time aimed at strengthening mutual exchange and cooperation with the various relevant international competent authorities responsible for the management of specific human activities in ABNJ, including the North-East Atlantic Fisheries Organisation (NEAFC), the International Seabed Authority (ISA), and the International Maritime Organisation (IMO).

Although until May 2010, no MPA has yet been finally designated entirely in ABNJ²³, considerable efforts have been made in the last years with a view to extend the Network of MPAs to encompass unique ecosystems in the high seas and deep seas of the North-East Atlantic.

Elaboration of proposals for OSPAR MPAs in ABNJ

Designation of a Marine Protected Area in an Area beyond National Jurisdiction (ABNJ) in the North-East Atlantic requires collective agreement and action by the OSPAR Commission. Any proposal for an OSPAR MPA in ABNJ prepared by either a Contracting Party or a Non-Governmental Organisation (NGO) needs to be considered by all Contracting Parties.

In 2003, a map of the OSPAR maritime area has been prepared as a spatial planning tool indicating those areas that do not fall under any Contracting Party's jurisdiction and that therefore would be

²² Council Directive 79/409/EEEC on the Conservation of wild birds (EC Birds Directive); Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive).

²³ The Rainbow hydrothermal vent field MPA nominated by Portugal in 2006 is situated on the extended continental shelf of the Azores, and as such, the water column in this area is considered high seas. See 'Proposals for OSPAR MPAs in Areas beyond National Jurisdiction' below, for more information.

considered ABNJ (Figure 11). At that time²⁴, ABNJ have been determined by marking the boundaries of the Exclusive Economic Zones (EEZ) of Contracting Parties EEZs at 200 nautical miles from the shoreline. Other possible delimitations of CPs' EEZ were not taken into account.



Figure 11. Areas beyond National Jurisdiction in the OSPAR maritime area (as defined in 2003)

Over the years, a number of proposals to designate OSPAR MPAs in ABNJ have been developed taking into account data and information derived from international research programmes in the North-East Atlantic (*e. g.* Mar-Eco, Eco-Mar). Proposals have originally been prepared by WWF and the University of York²⁵, subsequently reviewed by the International Council for the Exploration of the Sea (ICES) in 2008 (ICES Advice 2008 Book 1), and gradually finalized by the relevant OSPAR bodies,

²⁴ It has to be noted that since 2003 a number of Contracting Parties have made submissions to the UN CLCS for an extension of the limits of their continental shelves. These submissions have substantially changed the jurisdiction in these areas. See "Recent developments affecting proposals for OSPAR MPAs in Areas beyond National Jurisdiction", below, for more information.

²⁵ The University of York has been working on these proposals under a contract (2008-2010) provided by the German Federal Agency for Nature Conservation (BfN).

namely the Intersessional Correspondence Group on Marine Protected Areas (ICG-MPA), the Working Group on Marine Protected Areas, Species and Habitats (MASH) and the Biodiversity Committee (BDC).

Existing OSPAR MPA on an extended continental shelf of a Contracting Party

Already in 2006 and in response to a proposal previously prepared by WWF, Portugal formally nominated the **Rainbow Hydrothermal Vent Field** as a Marine Protected Area to the OSPAR Network of MPAs. While this area has originally been considered to be an ABNJ, Portugal considered the site to be situated on its extended continental shelf, *i. e.* the natural submerged prolongation of the landmasses of the Azores Archipelago. Although a submission by Portugal for an extended continental shelf to be presented to the UN Commission on the Limits of the Continental Shelf (CLCS) was still in process, Portugal recognised its obligations under UNCLOS Article 192 to protect and preserve the marine environment, as well as the precautionary principle, and assumed responsibility for protecting this area even prior to the final conclusion of the CLCS.

Proposed OSPAR MPAs in ABNJ

The following proposals (see Figure 12) have been developed with a view for OSPAR to designate Marine Protected Areas in Areas beyond National Jurisdiction of the OSPAR maritime area that, collectively form a network of sites covering essential parts of the different biogeographic regions and provinces of the Wider Atlantic (OSPAR Region V).

All these proposals are supported by 'nomination proformas' that provide general information on the area concerned, detailed information on ecological and practical considerations in the selection of these sites, as well as conservation objectives²⁶.

The first sub-set of proposed MPAs, namely the *Charlie-Gibbs Fracture Zone (CGFZ)*, the *Reykjanes Ridge*, and the *Mid-Atlantic Ridge north of the Azores*, are intended to complement each other by covering representative sections of the Mid-Atlantic Ridge, including the CGFZ itself and areas to the north and south of it. The boundaries were chosen to incorporate a range of depths from approximately 1500 m to 2500 m in order to cover a range of bathymetric complexity and thus a wide variety of habitats both to the east and west of the ridge.

Charlie-Gibbs Fracture Zone/CGFZ (324 000 km²)

The proposed area covers the northern part of the Mid-Atlantic Ridge (MAR), including the Charlie-Gibbs Fracture Zone, the Maxwell Fracture Zone and the seamounts Faraday and Hecate, and in the north a section of the Reykjanes Ridge. The proposed boundaries encompass representative sections of the MAR north and south of the Charlie-Gibbs Fracture Zone, and the meandering Subpolar front that separates cool northern waters from warmer southern waters and sustains a relatively high abundance and biomass across the food web. The Subpolar front usually lies just south of the Charlie-Gibbs Fracture Zone, but varies in position.

Reykjanes Ridge (50 900 km²)

The Reykjanes Ridge forms the northernmost part of the Mid-Atlantic Ridge. The boundaries proposed for this northern site cover the central portion of the Reykjanes Ridge south of Iceland encompassing an area of habitat important to a wide variety of species living from the seabed to the surface layers.

Mid-Atlantic Ridge north of the Azores (93 600 km²)

²⁶ Nomination proformas for the proposed OSPAR MPAs in ABNJ can be obtained from the OSPAR Secretariat.

The proposed Marine Protected Area is located on the Mid-Atlantic Ridge in the sub-tropical North Atlantic. It is situated south of the major biogeographic divide along the Mid-Atlantic Ridge, the Charlie-Gibbs Fracture Zone, and north of the Azores archipelago.

The second sub-set of proposed MPAs consists of a number of seamounts that are situated in representative biogeographic regions of the Wider Atlantic Region. All the proposed areas include seamount habitat which is listed as a priority threatened or declining habitat by OSPAR. Seamount habitat in addition qualifies as a 'Vulnerable Marine Ecosystem (VMEs)' in relation to high seas fisheries according to criteria developed by the United Nations Food and Agriculture Organisation (FAO). Seamount communities are also listed as habitats that are examples of 'Ecologically or Biological Significant Areas (EBSAs)' according to criteria developed by the Convention on Biological Diversity (CBD) for identifying candidate sites for protection in areas beyond national jurisdiction.

Milne Seamount Complex (20 900 km²)

The Milne Seamount is located about 1000 km to the west of the Mid-Atlantic Ridge. It rises to within 1000 m of the surface and is associated with several other seamounts, including the nearby Williams peak which rises to within 2000 m of the surface. The proposed area encompasses a cluster of unnamed seamounts around the Milne and Williams seamounts. The proposed area is considered to be representative for an open ocean seamount complex in the North Atlantic.

Altair Seamount (4400 km²)

Altair seamount is situated in the North Atlantic just North West of the Azores and close to the Mid-Atlantic Ridge. It is thought that this seamount is a representative example of seamounts of the OSPAR maritime area to the west of the Mid-Atlantic Ridge.

Antialtair Seamount (2200 km²)

Antialtair seamount is found in the North Atlantic just north east of the Azores. It is thought that this seamount is a representative example of seamounts of the maritime area to the east of the Mid-Atlantic Ridge.

Josephine Seamount Complex (19 370 km²)

The Josephine Seamount was named for the Swedish Corvette Josephine, whose crew discovered this feature in 1869 while conducting a scientific expedition in the North Atlantic. It can be considered as the first seamount discovered as a direct result of oceanic explorations. Josephine Seamount belongs to the Lusitanian seamounts and represents the westernmost point of east-west trending series of banks and seamounts separating the Tagus and Horseshoe Abyssal Plains, also known as the Horseshoe Seamount Chain. It is located to the east of the Mid-Atlantic Ridge and is a component of the Azores-Gibraltar complex. It is oval-shaped with a minimum water depth of 170 m at the southern end and almost flat top surface of ~150 km² within the 400 m depth contour and ~210 km² within the 500 m depth contour. There are very steep south, south-west and south-east slopes down to water depths of 2000 – 3700 m. Towards the NNW the seamount extends into northward sloping ridge about 1000 m deep.

Furthermore, a proposal has been prepared to protect Vulnerable Marine Ecosystems that are representative of ecosystems typical of the continental margin in the temperate North-East Atlantic:

Rockall and Hatton Banks (97 300 km²)

The Rockall and Hatton Banks form the eastern and western parts of the Rockall Plateau respectively, which also includes the George Bligh Bank to the North and the Rockall-Hatton Basin in the centre. The boundaries for the proposed Marine Protected Area were selected based on the presence of benthic fauna such as *Lophelia pertusa* reefs and other delicate structures and on the distribution of sensitive pelagic and demersal species, including marine mammals and fish. The boundaries cover a depth zone down to 2000 m, which is an area that can be readily targeted by fishing gear.

The Rockall and Hatton Banks proposal, however, has been set aside for the time being by the meeting of the MASH Working Group in October 2008 following concerns brought forward by the UK and Ireland, that the seabed within the proposed area is expected to be subject to submissions for an extended continental shelf by a number of States, namely the UK, Ireland, Iceland and Denmark (on behalf of the Faeroe Islands) and that it is not possible to say at this stage which of these four states (if any) may eventually assume sovereign rights over the continental shelf in the proposed area. Furthermore, the proposed sites for Rockall & Hatton Banks intruded into Irelands' national EEZ.



Figure 12. Proposals for OSPAR MPAs in ABNJ

Recent developments affecting the proposals for OSPAR MPAs in ABNJ

Since 2009, the proposals for OSPAR MPAs in ABNJ have been substantially affected by the following international decisions/developments:

- (1) In April 2009, the North East Atlantic Fisheries Commission (NEAFC) has decided to close five areas on the Mid-Atlantic Ridge to bottom fisheries with a view to protect Vulnerable Marine Ecosystems (VMEs) in ABNJ of the North-East Atlantic. Pursuant to the competence of NEAFC, this implies that fishing activities by vessels flying the flags of NEAFC Contracting Parties or Co-Operating Non-Contracting Parties, with fishing gear which is likely to contact the seafloor during the normal course of fishing operations, are prohibited within these areas. The combined size of the closed areas is estimated at 333 000 km². As shown in Figure 13, these closed areas largely overlap with four of the proposed OSPAR MPAs (*i.e.* CGFZ, Mid-Atlantic Ridge north of the Azores, Altair Seamount, Antialtair Seamount), while the area closure by NEAFC on the Reykjanes Ridge lies next to the proposed MPA by OSPAR. No area has been closed to bottom fisheries by NEAFC in the proposed OSPAR MPAs Milne Seamount and Josephine Seamount.
- (2) In the course of 2009, a number of OSPAR Contracting Parties have made submissions to the Commission on the Limits of the Continental Shelf (CLCS), pursuant to article 76, paragraph 8, of the United Nations Convention on the Law of the Sea (UNCLOS) of 10 December 1982, regarding the establishment of the outer limits of their continental shelf beyond 200 nautical miles²⁷. In consequence, all the areas proposed for OSPAR MPAs in ABNJ apart from the Milne Seamount are now (partly) encompassed by the outer limits for an extended continental shelf as submitted by these Contracting Parties (see Figure 13).

²⁷ See http://www.un.org/Depts/los/clcs_new/commission_submissions.htm for details of the submissions made in 2009 by the United Kingdom of Great Britain and Northern Ireland, Ireland, Iceland, Denmark, Norway, Portugal, and Spain.





Current status of the proposals for OSPAR MPAs in ABNJ

The Charlie-Gibbs Fracture Zone (CGFZ) has already been approved in principle as a potential MPA in ABNJ by the OSPAR Commission in 2008. At the meeting of the OSPAR Commission in 2009, conservation objectives for the CGFZ MPA have been endorsed and a conclusion was made to focus on finalising this proposal with the aim for its adoption by the OSPAR Ministerial Meeting in 2010.

The OSPAR Commission in 2009 has also endorsed the conservation objectives set out for the proposed MPAs Reykjanes Ridge, Mid-Atlantic Ridge north of the Azores, Milne Seamount, Altair Seamount, Antialtair Seamount, and Josephine Seamount, and agreed that all these areas are approved in principle as potential MPAs in ABNJ to be included as components of the OSPAR Network of MPAs²⁸. Considering that only the Milne Seamount is situated completely outside any area covered by a submission to the CLCS, a distinction was suggested between this proposal and the

²⁸ The approval of these MPAs was subject to study reservations from some Contracting Parties at the time of finalising this document.

other five *(i.e.* Reykjanes Ridge, Mid-Atlantic Ridge north of the Azores, Altair Seamount, Antialtair Seamount, and Josephine Seamount) that are all (at least partly) encompassed by submissions for an extended continental shelf.

Table 4 sets out the current jurisdiction in the porposed OSPAR MPAs in Region V regarding the seabed and the water column, respectively.

| Proposed OSPAR MPA | Jurisdiction |
|--|---|
| Charlie-Gibbs Fracture Zone | Northern area: |
| | Seabed subject to submission by Iceland for an extended continental shelf |
| | Water column beyond national jurisdiction |
| | Southern area: |
| | Seabed and water column remain Area beyond National Jurisdiction |
| Milne Seamount | Seabed and water column remain Area beyond National Jurisdiction |
| Reykjanes Ridge | Seabed subject to submission by Iceland for an extended continental shelf |
| | Water column above beyond national jurisdiction |
| Altair Seamount | |
| Antialtair Seamount | Seabed subject to submission by Portugal for an extended |
| Josephine Seamount | continental shelf |
| Mid-Atlantic Ridge north of the Azores | Water column above beyond national jurisdiction |

Table 4. Jurisdiction within the proposed OSPAR MPAs in ABNJ

Since the meeting of the OSPAR Commission in 2009, considerable efforts have been undertaken to move forward with these proposals with a view to allow for their final adoption by OSPAR, including:

- a. revision of the nomination proformas to reflect changes in jurisdiction;
- b. identification of management measures that could be implemented by OSPAR Contracting Parties in the proposed MPAs;
- c. identification of management measures that could be considered by other competent authorities, including North East Atlantic Fisheries Commission (NEAFC), International Seabed Authority (ISA), and International Maritime Organisation (IMO);
- d. organisation of an informal stakeholder workshop with other competent authorities for a mutual exchange on potential management measures for the proposed OSPAR MPAs; including
- e. compilation of a draft agreement between competent authorities (including OSPAR) on the management of selected areas in ABNJ within the OSPAR maritime area;
- f. identification of options for the establishment of the CGFZ MPA in the light of the submission by Iceland on the outer limits of the extended continental shelf that encompass the northern half of the CGFZ proposal.

The final designation of any of these proposals for OSPAR Marine Protected Areas in the Wider Atlantic Region is subject to future considerations and agreement by all Contracting Parties.

Conclusions on the Status of the OSPAR Network of Marine Protected Areas in 2010 and Ways Forward

Conclusions

- In the period 2005 2010 eleven of the twelve OSPAR Contracting Parties bordering the North-East Atlantic have selected and nominated sites as components of the OSPAR Network of Marine Protected Areas. The contributions by Contracting Parties differ substantially regarding distribution of sites across coastal and offshore waters as well regarding overall coverage of their national waters by OSPAR MPAs.
- In 2010, the OSPAR Network of MPAs consists of 159 sites collectively covering 147 322 km² in the North-East Atlantic. This, however, corresponds to only 1.06 % of the OSPAR maritime area.
- Distribution of MPAs across the five OSPAR Regions is imbalanced, as is the spreading of sites across coastal and offshore waters, resulting in major gaps of the Network of MPAs.
- As the vast majority of sites have been designated in CPs' territorial waters, overall coverage of coastal waters by OSPAR MPAs is consequently higher at 13.5%. Overall coverage of offshore areas, *i.e.* the Exclusive Economic Zones of Contracting Parties, by OSPAR MPAs remains very low at 0.57%. No MPA has yet been established entirely in Areas beyond National Jurisdiction which make up about 40% of the OSPAR maritime area.
- The Greater North Sea and the Celtic Seas are the best represented OSPAR Regions, with 5.46% and 3.53% coverage by OSPAR MPAs respectively. While coverage of the Arctic Waters is at 1.36%, both the Bay of Biscay and Iberian Coast and the Wider Atlantic have less than 1% protected by OSPAR MPAs.
- Coverage of threatened and/or declining species and habitats listed by OSPAR in the selected sites varies substantially depending upon the feature. Whereas some features are specifically protected in 20 or more sites, quite a number of species and habitats are not at all protected by OSPAR MPAs yet.
- Comprehensive conclusions on the ecological coherence of the OSPAR Network of MPAs are currently not possible due to the unavailability of relevant ecological data on the distribution of species and habitats in the OSPAR maritime area. Considering the spatial arrangement of its components, as summarised above, the OSPAR Network of MPAs cannot be judged to be ecologically coherent yet.
- As no sufficiently detailed information on the management of sites has been made available by Contracting Parties, it remains impossible at this time to comprehensively conclude on the extent to which OSPAR MPAs are *well managed*. While in general a number of sites are subject to management regimes, including conservation objectives, management plans and specific regulatory measures, no evidence on their effectiveness in achieving the goals for which these were established has been provided. Management plans and measures for the other sites are still being prepared.

Ways forward

• With a view to establish an ecologically coherent network of Marine Protected Areas throughout the North-East Atlantic, efforts are required to designate further MPAs, particularly in offshore areas and in Areas beyond National Jurisdiction. Taking into account the targets set out in the Plan of Implementation of the World Summit on Sustainable Development (WSSD 2002) on "[...] the establishment of marine protected areas consistent with

international law and based on scientific information, including representative networks by 2012 [...]²⁹ and in the framework of the Convention of Biological Diversity (CBD 2004) to have "at least 10% of each of the world's ecological regions effectively conserved"⁸⁰, the MPA coverage in general would have to be increased, while specific attention should be directed to further develop the OSPAR Network in the Arctic Waters, the Bay of Biscay and Iberian Coast, and in the Wider Atlantic.

- The identification and selection of additional sites as components of the Network of MPAs should be guided to the extent possible by a systematic approach with a view to cover adequate and representative proportions of species and habitats across the various biogeographic regions and provinces throughout the OSPAR maritime area. Common understanding and agreement amongst Contracting Parties what would constitute adequate and representative proportions will be needed for further work.
- More data on the distribution of species and habitats throughout the OSPAR maritime area and in MPAs established to provide for their conservation or restoration needs to be collated and made available to OSPAR with a view to allow for a more comprehensive approach to assess the ecological coherence of the MPA Network. Further development of practicable assessment approaches and subsequent collective agreement by CPs on their application is desirable.
- More efforts by Contracting Parties should be directed towards ensuring that the management
 of sites is effectively achieving the goals for which the MPAs have been established.
 Practicable means of reporting should be agreed upon with a view to allow for an assessment
 of the different management regimes in place. This should also benefit the mutual exchange
 between relevant authorities of CPs regarding experiences made with different MPA
 management approaches and measures and the identification of best practices.

²⁹ WSSD Plan of Implementation, IV. Protecting and managing the natural resource base of economic and social development; § 31 (c)

³⁰ CBD COP 7 Decision VII/30 Annex II, Goal 1, Target 1.1. Though this target has not been confirmed formally within the work of the OSPAR Commission on establishing the Network of MPAs, it nevertheless provides a general benchmark against which the efforts of OSPAR Contracting Parties in setting aside proportions of their national waters as MPAs and the overall coverage of the OSPAR Network of MPAs could be evaluated.

Annex I – List of OSPAR Marine Protected Areas

(as of May 2010)

| Contracting Party | OSPAR ID / Natura 2000 | OSPAR MPA | Year of Nomina tion | Location | Area (km²) |
|----------------------|---------------------------|--|---------------------------|----------------------------|---------------|
| - | O-DE-0916491 | National Park Schleswig- | 2005 | Territorial | 4602.75 |
| Germany | | Holsteinisches Wattenmeer | | Waters | |
| | O-DE-1003301 | Doggerbank | 2008 | Exclusive Economic Zone | 1695.71 |
| | O-DE-1209301 | Sylter Aussenriff/ | 2008 | Exclusive | 5596.05 |
| | | Oestliche Deutsche Bucht | | Economic Zone | |
| | O-DE-1813491 | Helgoland mit Helgoländer Felssockel | 2005/ 2008 | Territorial Waters | 1618.18 |
| | O-DE-2104301 | Borkum-Riffgrund | 2008 | Exclusive Economic Zone | 625.23 |
| | O-DE-2306301 | Nationalpark Nieder- sächsisches Wattenmeer | 2005 | Territorial Waters | 2747.4 |
| Denmark | O-DK-003X202 | Hesselø med omliggende stenrev | 2007 | Territorial Waters | 42.14 |
| | O-DK-00DX032 | Farvandet nord for Anholt | 2007 | Exclusive | 1.95 |
| | | | | Economic Zone | |
| | | | | Territorial Waters | 347.75 |
| | O-DK-00DX146 | Anholt og havet nord for | 2007 | Territorial Waters | 132.36 |
| | O-DK-00FX010 | Strandenge på Læsø og havet syd herfor | 2007 | Territorial Waters | 667.16 |
| | O-DK00FX112 | Skagens Gren og Skagerrak | 2009 | Exclusive Economic Zone | 1411.73 |
| | | | | Territorial Waters | 1293.19 |
| | O-DK-00FX257 | Havet omkring Nordre Rønner | 2007 | Territorial Waters | 186.37 |
| | O-DK-00FX345 | Læsø, sydlige del | 2007 | Exclusive Economic Zone | 104.4 |
| | | | • | Territorial Waters | 261.04 |
| | O-DK00VA171 | Gilleleje Flak og Tragten | 2009 | Exclusive Economic Zone | 2.22 |
| | | | · | Territorial | 148.85 |
| | O-DK-00VA247 | Kims Ryg | 2007 | Exclusive Economic Zone | 23.95 |
| | O-DK-00VA248 | Herthas Flak | 2007 | Territorial Waters | 13.88 |
| | O-DK-00VA249 | Læsø Trindel og Tønneberg Banke | 2007 | Exclusive Economic Zone | 7.52 |
| | | | | Territorial Waters | 74.13 |
| | O-DK-00VA251 | Briseis Flak | 2007 | Exclusive Economic Zone | 7.51 |
| | O-DK-00VA252 | Schultz Grund | 2007 | Economic Zone | 23.81 |
| | O-DK00VA257 | Jyske Rev, Lillefiskerbanke | 2009 | Economic Zone | 242.06 |
| | O-DK00VA258 | Store Rev | 2009 | Exclusive Economic Zone | 109.49 |
| | O-DK00VA259 | Gule Rev | 2009 | Territorial Waters | 43.78 |

| | | | | Evolusiva | 400.00 |
|---------|--------------|--|------|----------------------------|---------|
| | | | | Economic Zone | 429.22 |
| | O-DK-00VA299 | Lysegrund | 2007 | Territorial Waters | 16.44 |
| | O-DK-00VA301 | Lønstrup Rødgrund | 2007 | Territorial Waters | 93.33 |
| | O-DK-00VA302 | Knudegrund | 2007 | Territorial Waters | 7.52 |
| | O-DK-00VA303 | Hastens Grund | 2007 | Exclusive Economic Zone | 23.22 |
| | | | | Territorial Waters | 7.32 |
| | O-DK-00VA340 | Sandbanker ud for Thyborøn | 2007 | Territorial Waters | 63.58 |
| | O-DK-00VA341 | Sandbanker ud for Thorsminde | 2007 | Territorial Waters | 63.96 |
| | O-DK-00VA347 | Sydlige Nordsø | 2007 | Exclusive Economic Zone | 2438.02 |
| | | | | Territorial Waters | 36.49 |
| | O-DK00VA348 | Thyborøn Stenvolde | 2009 | Exclusive Economic Zone | 41.77 |
| | | | | Territorial Waters | 36.66 |
| Spain | O-ES-0000001 | Islas Atlanticas | 2007 | Territorial Waters | 84.99 |
| - | O-ES-0002 | El Cachucho | 2008 | Exclusive Economic Zone | 2398.47 |
| France | O-FR-0009 | La Mer D'Iroise | 2008 | Territorial Waters | 3432.06 |
| | O-FR-2210068 | Baie de Somme | 2005 | Territorial Waters | 34.09 |
| | O-FR-2300121 | Estuaire de la Seine | 2005 | Territorial Waters | 85.06 |
| | O-FR-2510046 | Domaine de Beauguillot | 2005 | Territorial Waters | 5.37 |
| | O-FR-5300066 | Baie de Saint-Brieuc | 2005 | Territorial Waters | 10.59 |
| | O-FR-5310011 | Les Sept Iles | 2005 | Territorial Waters | 3.49 |
| | O-FR-5410028 | Marais de Moeze | 2005 | Territorial Waters | 2.12 |
| | O-FR-7200679 | Banc d'Arguin | 2005 | Territorial Waters | 0.85 |
| | O-FR-5200659 | Baie de l'Aiguillon | 2005 | Territorial Waters | 24.59 |
| Ireland | O-IE-002965 | Roaringwater Bay and Islands MPA | 2009 | Territorial Waters | 142.58 |
| | O-IE-002967 | Malahide Estuary MPA | 2009 | Territorial Waters | 8.09 |
| | O-IE-002968 | North Dublin Bay MPA | 2009 | Territorial Waters | 14.74 |
| | O-IE-002969 | Galway Bay Complex MPA | 2009 | Territorial Waters | 144.07 |
| | O-IE-002971 | Dundalk Bay MPA | 2009 | Territorial Waters | 52.35 |
| | O-IE-002972 | Mullet/Blacksod Bay Complex MPA | 2009 | Territorial Waters | 140.61 |
| | O-IE-002973 | Cummeen Strand/Drumcliff Bay (Sligo Bay) MPA | 2009 | Territorial Waters | 49.19 |
| | O-IE-002974 | Tramore Dunes and Backstrand MPA | 2009 | Territorial Waters | 7.53 |

| | O-IE-002978 | Tralee Bay and Magharees Peninsula, West To Cloghape MPA | 2009 | Territorial Waters | 116.27 |
|-------------|--------------|--|------|----------------------------|-----------|
| | O-IE-002979 | Kilkieran Bay and Islands | 2009 | Territorial Waters | 213.07 |
| | O-IE-002980 | Kenmare River MPA | 2009 | Territorial Waters | 432.82 |
| | O-IE-002981 | Mulroy Bay MPA | 2009 | Territorial Waters | 32.09 |
| | O-IE-002984 | Blasket Islands MPA | 2009 | Territorial Waters | 226.92 |
| | O-IE-002985 | Kingstown Bay MPA | 2009 | Territorial Waters | 0.8 |
| | O-IE-002987 | Belgica Mound Province MPA | 2009 | Exclusive Economic Zone | 410.94 |
| | O-IE-002988 | Hovland Mound Province MPA | 2009 | Exclusive Economic Zone | 1086.63 |
| | O-IE-002989 | South-West Porcupine Bank MPA | 2009 | Exclusive Economic Zone | 329.31 |
| | O-IE-002990 | North-West Porcupine Bank MPA | 2009 | Exclusive Economic Zone | 716.43 |
| | O-IE-002997 | Ballyness Bay MPA | 2009 | Territorial Waters | 12.36 |
| Iceland | O-IS-0001 | Hornarfjardardjup coral reef 1 | 2008 | Exclusive Economic Zone | 7.89 |
| | O-IS-0002 | Hornarfjardardjup coral reef 2 | 2008 | Exclusive Economic Zone | 31.27 |
| | O-IS-0003 | Skaftardjup coral reef 1 | 2008 | Exclusive Economic Zone | 7.36 |
| | O-IS-0004 | Skaftardjup coral reef 2 | 2008 | Exclusive Economic Zone | 22.31 |
| | O-IS-0005 | Reynisdjup coral reef | 2008 | Territorial Waters | 9.45 |
| | O-IS-0006 | Hverastrytur i Eyjafirdi | 2008 | Territorial Waters | 0.12 |
| | O-IS-0007 | Hverastrytur i Eyjafirdi, north of Arnanesnöfum | 2008 | Territorial Waters | 0.56 |
| Norway | O-N-001 | Selligrunnen | 2005 | Territorial Waters | 0.57 |
| | O-N-002 | Rostrevet | 2005 | Exclusive Economic Zone | 315.53 |
| | O-N-003 | Sularevet | 2005 | Exclusive Economic Zone | 973.35 |
| | | | | Territorial Waters | 11.6 |
| | O-N-004 | lverryggen | 2005 | Exclusive Economic Zone | 620.93 |
| | O-N-007 | Ytre Hvaler | 2009 | Territorial Waters | 340 |
| | VV00002564 | Svalbard West | 2009 | Exclusive Economic Zone | 53.27 |
| | | | | Territorial Waters | 11730.6 |
| | VV00002566 | Svalbard East | 2009 | Exclusive Economic Zone | 107.94 |
| | | | | Territorial Waters | 63 640.48 |
| | VV00002569 | Bjørnøya | 2009 | Exclusive Economic Zone | 20.22 |
| | . | | _ | Territorial Waters | 2786.2 |
| Netherlands | O-NL-2003062 | Noordzeekustzone | 2009 | Territorial Waters | 1416.05 |
| | O-NL-2008001 | Doggerbank | 2009 | Exclusive Economic Zone | 4639.38 |

| | O-NL-2008002 | Klaverbank | 2009 | Exclusive Economic Zone | 1240.12 |
|----------|--------------|---------------------------------------|------|-------------------------------|---------|
| | O-NL-2008003 | Vlakte van de Raan | 2009 | Territorial Waters | 198.93 |
| | O-NL-4000017 | Voordelta | 2009 | Territorial Waters | 818.88 |
| Portugal | O-PT-020001 | Formigas Bank | 2005 | Territorial Waters | 524.15 |
| | O-PT-020005 | Lucky Strike hydrothermal vent | 2006 | Exclusive Economic Zone | 191.39 |
| | O-PT-020006 | Menez Gwen hydrothermal vent field | 2006 | Exclusive Economic Zone | 95.01 |
| | O-PT-020007 | Rainbow hydrothermal vent field | 2006 | Extended Continental Shelf | 22.17 |
| | O-PT-020008 | Sedlo Seamount | 2007 | Exclusive Economic Zone | 4015.97 |
| | O-PT-COR0001 | Corvo Island | 2006 | Territorial Waters | 257.45 |
| | O-PT-FAI0005 | Faial-Pico Channel | 2006 | Territorial Waters | 240.17 |
| | O-PT-MIG0022 | D. JoÆo de Castro seamount | 2006 | Exclusive Economic Zone | 354.09 |
| Sweden | O-S-0510058 | Kungsbackafjorden | 2005 | Territorial Waters | 78.68 |
| | O-S-0510126 | Lilla Middelgrund | 2005 | Exclusive Economic Zone | 88.98 |
| | | | | Territorial Waters | 89.42 |
| | O-S-0510127 | Fladen | 2005 | Exclusive Economic Zone | 7.85 |
| | | | | Territorial Waters | 95.95 |
| | O-S-0510186 | Stora Middelgrund och Röde bank | 2009 | Exclusive Economic Zone | 114.16 |
| | O-S-0510187 | Morups bank | 2009 | Territorial Waters | 5.66 |
| | O-S-0520043 | Nordre älvs estuarium | 2005 | Territorial Waters | 70,83 |
| | O-S-0520170 | Kosterfjorden- Väderöfjorden | 2005 | Territorial Waters | 592.32 |
| | O-S-0520171 | Gullmarsfjorden | 2005 | Territorial Waters | 113.69 |
| United | O-UK-0012566 | Kenfig / Cynffig | 2007 | Territorial Waters | 2.69 |
| Kingdom | O-UK-0012687 | Yell Sound Coast | 2007 | Territorial Waters | 8.23 |
| | O-UK-0012694 | Monach Islands | 2007 | Territorial Waters | 32.77 |
| | O-UK-0012696 | North Rona | 2007 | Territorial Waters | 5.12 |
| | O-UK-0012711 | Mousa | 2007 | Territorial Waters | 5.28 |
| | O-UK-0012712 | Cardigan Bay / Bae Ceredigion | 2007 | Territorial Waters | 953.7 |
| | O-UK-0013025 | Solway Firth | 2007 | Territorial Waters | 423.65 |
| | O-UK-0013027 | Morecambe Bay | 2007 | Territorial Waters | 551.9 |
| | O-UK-0013030 | Severn Estuary/ Môr Hafren | 2008 | Territorial Waters | 722.66 |
| | O-UK-0013031 | Drigg Coast | 2007 | Territorial Waters | 7.08 |
| | O-UK-0013036 | Flamborough Head | 2007 | Territorial Waters | 62.06 |

| O-UK-0013039 | Luce Bay and Sands | 2007 | Territorial Waters | 479.36 |
|--------------|---|------|----------------------------|---------|
| O-UK-0013107 | Thanet Coast | 2007 | Territorial Waters | 27.6 |
| O-UK-0013111 | Plymouth Sound & Estuaries | 2007 | Territorial Waters | 57.05 |
| O-UK-0013112 | Fal & Helford | 2007 | Territorial Waters | 61.89 |
| O-UK-0013114 | Lundy | 2007 | Territorial Waters | 30.56 |
| O-UK-0013116 | Pembrokeshire Marine / Sir Benfro Forol | 2007 | Exclusive Economic Zone | 118.95 |
| | | - | Territorial Waters | 1251.65 |
| O-UK-0013117 | Pen Llyn a'r Sarnau / Lleyn Peninsula and the Sarnau | 2007 | Territorial Waters | 1441.75 |
| O-UK-0013690 | Essex Estuaries | 2007 | Territorial Waters | 382.47 |
| O-UK-0013694 | Isles of Scilly Complex | 2007 | Territorial Waters | 266.77 |
| O-UK-0013695 | St. Kilda | 2007 | Territorial Waters | 245.41 |
| O-UK-0014787 | Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru | 2007 | Territorial Waters | 1.99 |
| O-UK-0016612 | Murlough SAC | 2005 | Territorial Waters | 111.86 |
| O-UK-0016618 | Strangford Lough SAC | 2005 | Territorial Waters | 149.32 |
| O-UK-0017069 | Papa Stour | 2007 | Territorial Waters | 20.66 |
| O-UK-0017070 | Loch nam Madadh | 2007 | Territorial Waters | 18.35 |
| O-UK-0017072 | Berwickshire and North Northumberland Coast | 2005 | Territorial Waters | 651 |
| O-UK-0017075 | The Wash & North Norfolk Coast | 2007 | Territorial Waters | 1044.47 |
| O-UK-0017076 | Chesil & The Fleet | 2007 | Territorial Waters | 12.42 |
| O-UK-0017077 | Lochs Duich, Long and Alsh Reefs | 2007 | Territorial Waters | 23.67 |
| O-UK-0017096 | Faray and Holm of Faray | 2007 | Territorial Waters | 7.21 |
| O-UK-0019802 | Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) | 2007 | Territorial Waters | 45.54 |
| O-UK-0019803 | Sunart | 2007 | Territorial Waters | 54.84 |
| O-UK-0019806 | Dornoch Firth and Morrich More | 2007 | Territorial Waters | 69.38 |
| O-UK-0019808 | Moray Firth | 2007 | Territorial Waters | 1514.48 |
| O-UK-0019839 | Moine Mhor | 2007 | Territorial Waters | 2.88 |
| O-UK-0020020 | Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd | 2007 | Territorial Waters | 631.9 |
| O-UK-0020025 | Glannau Mon: Cors heli / Anglesey Coast: Saltmarsh | 2007 | Territorial Waters | 9.03 |
| O-UK-0030041 | Firth of Lorn, Marine | 2007 | Territorial Waters | 209.62 |

| O-UK-0030055 | Rathlin Island SAC | 2005 | Territorial Waters | 31.43 |
|--------------|--|------|----------------------------|---------|
| O-UK-0030059 | Solent Maritime | 2007 | Territorial Waters | 93.47 |
| O-UK-0030061 | South Wight Maritime | 2007 | Territorial Waters | 196.31 |
| O-UK-0030067 | South East Islay Skerries | 2007 | Territorial | 14.82 |
| O-UK-0030069 | Sanday | 2007 | Territorial Waters | 109.78 |
| O-UK-0030076 | Alde-Ore & Butley Estuary | 2005 | Territorial Waters | 11.08 |
| O-UK-0030131 | Dee Estuary/ Aber Dyfrdwy | 2008 | Territorial Waters | 134.6 |
| O-UK-0030170 | Humber Estuary | 2008 | Territorial Waters | 336.64 |
| O-UK-0030172 | Isle of May | 2007 | Territorial Waters | 3.32 |
| O-UK-0030182 | Eileanan agus Sgeirean Lios mor | 2007 | Territorial Waters | 11.36 |
| O-UK-0030190 | Loch Creran | 2007 | Territorial Waters | 12.26 |
| O-UK-0030192 | Loch Laxford | 2007 | Territorial Waters | 12.12 |
| O-UK-0030202 | Y Fenai a Bae Conwy / Menai Strait and Conwy Bay | 2007 | Territorial Waters | 264.66 |
| O-UK-0030209 | Loch Moidart and Loch Shiel Woods | 2007 | Territorial Waters | 2.84 |
| O-UK-0030230 | Ascrib, Isay and Dunvegan | 2007 | Territorial Waters | 25.75 |
| O-UK-0030273 | Sullom Voe | 2007 | Territorial Waters | 26.94 |
| O-UK-0030289 | Treshnish Isles | 2007 | Territorial Waters | 18.54 |
| O-UK-0030292 | Tweed Estuary | 2007 | Territorial Waters | 1.55 |
| O-UK-0030311 | Firth of Tay and Eden Estuary | 2007 | Territorial Waters | 151.27 |
| O-UK-0030317 | Darwin Mounds | 2008 | Exclusive Economic Zone | 1380.14 |
| O-UK-0030353 | Haig Fras | 2008 | Exclusive Economic Zone | 481.36 |
| O-UK-0030354 | Scanner Pockmark | 2008 | Exclusive Economic Zone | 3.35 |
| O-UK-0030357 | Braemar Pockmarks | 2008 | Exclusive Economic Zone | 5.18 |
| O-UK-0030359 | Stanton Banks | 2008 | Exclusive Economic Zone | 818.16 |

Annex II – Overview maps of Contracting Parties' national waters and OSPAR MPAs

(as of May 2010)

Denmark



France



Germany



Iceland



Ireland



Netherlands



Norway



Portugal



Spain



Sweden



United Kingdom





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OSPAR's vision is of a clean, healthy and biologically diverse North-East Atlantic used sustainably

ISBN 978-1-907390-34-0 Publication Number: 493/2010

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