

OSPAR CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE NORTH-EAST ATLANTIC

MEETING OF THE BIODIVERSITY COMMITTEE (BDC)

VLISSINGEN (FLUSHING): 20 – 24 NOVEMBER 2000

Inventory of existing Marine Protected Areas (MPA) Presented by the Netherlands and WWF

Background

1. At IMPACT1999, The Netherlands presented a Progress report on the Inventory of existing Marine Protected Areas (IMPACT 99/6/1).
2. As follow-up, IMPACT1999 agreed that (IMPACT 99/15/1):
 - ◆ The Netherlands would send a database file containing all information to the contact persons before 1 December 1999. Contracting Parties were invited to send requested information before 1 March 2000. The Netherlands would manage the data and produce the required maps. An analysis of the data would be reflected in a report, which would be forwarded to the Biodiversity Committee 2000 and to the MPA project team for due consideration.
 - ◆ The Netherlands would analyse the completed data set in the light of the establishment of a network of MPAs, taking into account:
 - The distribution (number and extent) of MPA's in the OSPAR area
 - The size of the area in relation to the objective of protection
 - The sort of legislation
 - The proportion of the coastline covered
3. At the second MPA Workshop on Vilm (June 2000) the Netherlands submitted a subsequent report on this issue (MPA 00/2/1). It was then agreed that the Netherlands with assistance of WWF would complete an intermediate report (including tables and maps) evaluating the data collected so far, which could be revised when new information is required.
4. Subsequently, OSPAR2000 adopted the OSPAR programme Development of a System of Marine Protected Areas in the OSPAR Maritime Area as at OSPAR 00/8/1, Annex 3 (Source: IMPACT 99/15/1, Annex 13). According to this programme (§ 4.2.) the first draft compilation of existing and proposed MPAs should be finalised as soon as possible and the results should be discussed in the framework of the MPA Programme.
5. The report on the Inventory of existing Marine Protected Areas (MPA), prepared by the Netherlands and WWF, is attached.
6. By presenting this report, the Netherlands considers its action on the Inventory of existing Marine Protected finalised.

Action requested

7. BDC is invited to:
 - a) consider the attached report and comment as appropriate;
 - b) examine and adopt the conclusions of the report (chapter 3);
 - c) examine and adopt the recommendations of the report (chapter 4).

Inventory of Marine Protected Areas in the OSPAR Area

October 2000

AIDEnvironment



Inventory of Marine Protected Areas in the OSPAR Area

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1 Introduction

At IMPACT1998 a first (incomplete and not accurate) draft of an inventory of existing Marine Protected Areas (MPA) was presented by the Netherlands as lead country.

Definition MPA

The following definition of MPA (for this purpose only) is used: a part of the maritime area with known size and place for which management measures apply which may result in (some level of) protection for the ecosystem or parts thereof.

At the IMPACT 1999 meeting the Netherlands presented a progress report (IMPACT 99/6/1-E). Not all the information requested was received from the Contracting Parties and thus a final report could not be prepared. It was agreed that as a follow-up Contracting Parties would submit additional information, and the Netherlands would manage the data and produce the required maps. An analysis of the data would be reflected in a report, which would be forwarded to the Biodiversity Committee 2000 and to the MPA project team for due consideration.

The Netherlands would analyse the completed data set in the light of the establishment of a network of MPAs, taking into account:

- The distribution (number and extent) of MPA's in the OSPAR area
- The size of the area in relation to the objective of protection
- The sort of legislation
- The proportion of the coastline covered

At the second MPA Workshop on Vilm (June 2000) the Netherlands submitted a subsequent report on this issue (MPA 00/2/1). It was then agreed that the Netherlands with assistance of WWF would complete an intermediate report (including tables and maps) evaluating the data collected so far, which could be revised when new information is required.

Subsequently, OSPAR2000 adopted the OSPAR programme Development of a System of Marine Protected Areas in the OSPAR Maritime Area as at OSPAR00/8/1, Annex 3 (Source: IMPACT 99/15/1, Annex 13). Thereby this inventory is included in the first step of this Programme. According to this programme (§ 4.2.) the first draft compilation of existing and proposed MPAs should be finalised as soon as possible and the results should be discussed in the framework of the MPA Programme.

This report presents the inventory of existing MPAs in the OSPAR area on basis of (an analysis of) the database as filled by the Contracting Parties.

2 Description and analysis of the database of existing MPAs

2.1 Introduction

This report gives a description and analysis of the data available in the database. In this phase no checking, correction or addition of data was performed.

The database was collected on basis of the data submitted by the CPs in response to the questionnaire. Information was requested on:

- site name;
- geographical position: latitude and longitude (centre of area);
- relationship to the coast: the site has terrestrial, intertidal, subtidal to 3 nautical miles (nm), subtidal 3 to 12 nm and/or offshore (> 12 nm) characteristics;
- size: the marine component covers a surface of less than 1 km², 1-10 km², 10-100 km², 100-1000 km², or is larger than 1000 km²;
- whether the site is designated for the protection of the habitat (inter- and/or subtidal) and/or species (shellfish, birds, mammals, fish, and/or other benthic species);
- statutory legislation: national legislation, EU Habitats and/or Birds Directive, Fisheries, Ramsar, Biosphere reserves, World Heritage Sites;
- other information.

Results

The Netherlands received information from Belgium, Denmark, European Commission DG XIV, France, Germany, Iceland, Ireland, Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom. Two countries submitted very extensive lists: United Kingdom and Norway. Data from the latter were condensed to municipalities, resulting in seemingly fewer sites.

Map 1 (in Annex) and table 1 present overviews of all MPAs submitted to the database.

Since the database is built upon national contribution, first a description per country is given, followed by an overall analysis.

Table 1 Statistics of reported OSPAR MPAs

		location					size (km2)					habitats	
Contracting Party	MPAs total	offshore	terrestrial	intertidal	subtidal to3nm	3nmto12 nm	<1	1 to10	10 to100	100 to 1000	>1000	subtidal	intertidal
Belgium	1	0	0	0	1	0	0	0	0	1	0	1	0
Danmark	52	0	0	0	0	0	11	0	20	20	1	0	0
France	59	0	55	0	0	0	7	17	29	6	0	0	0
EU	29	17	0	26	27	28	0	0	1	0	28	0	0
Germany	5	0	4	4	4	0	1	0	1	1	2	4	4
Iceland	39	16	16	17	11	6	6	6	6	10	11	3	14
Ireland	18	0	1	1	1	0	1	0	0	0	0	1	1
Netherlands	10	0	9	8	7	2	2	3	0	3	2	7	9
Norway	119	0	119	119	1	0	66	32	15	5	0	0	0
Portugal	11	0	11	8	7	0	1	2	3	5	0	7	8
Azores	21	1	18	18	18	0	0	2	16	1	1	19	18
Spain	32	0	31	18	1	0	1	13	9	1	0	1	8
Sweden	90	0	0	90	90	0	84	2	3	1	0	0	1
UK	1111	2	295	356	75	2	414	398	238	52	6	51	208
	1597	36	559	665	243	38	594	475	341	106	51	94	271

Table 1 Statistics of reported OSPAR MPAs (continued)

		species					legislation						
Contracting Party	MPAs total	shellfish	birds	mammals	fish	other benthic species	National legislation	EU Habitat Directive	EU Birds Directive	Fisheries legislation	Ramsar	Biosphere reserve	World Heritage site
Belgium	1	1	1	0	1	0	1	1	1	0	1	0	0
Danmark	52	0	0	0	0	0	0	52	0	0	0	0	0
France	59	0	5	0	0	0	16	0	41	0	5	1	0
EU	29	0	0	0	29	0	0	0	0	29	0	0	0
Germany	5	4	5	3	4	4	5	0	4	0	3	3	0
Iceland	39	0	10	3	20	0	39	0	0	0	1	0	0
Ireland	18	1	1	1	1	1	17	0	10	0	6	2	0
Netherlands	10	10	10	10	10	10	8	5	5	3	5	1	0
Norway	119	0	50	0	0	0	118	0	0	0	6	0	0
Portugal	11	4	9	0	5	1	8	7	9	0	8	0	0
Azores	21	15	7	15	1	2	8	15	7	15	0	0	0
Spain	32	1	20	1	6	0	30	0	7	0	9	2	0
Sweden	90	0	58	30	0	1	90	29	57	0	4	0	0
UK	1111	7	323	19	72	0	809	50	116	72	67	7	1
	1597	43	499	82	149	19	1149	159	257	119	115	16	1

2.2 Analysis per country

The analysis is based on the information the countries provided.

Belgium	Belgium mentioned only one marine protected area. It is a near shore subtidal area in size class 100-1000 km ² with protection fish and birds as protection targets. It concerns a RAMSAR site, and is now proposed as a Habitats Directive NATURA 2000 area, for which national legislation is under construction.
Denmark	Denmark mentioned 52 marine protected areas. However, the information provided by Denmark is incomplete: it contains only data on locations and size. No information is given on the habitat type or relation to the coast, and on the aim of protection. Only EU Habitat Directive areas are included and no areas under national or other international protection. Several sites are definitively not in the OSPAR area but belong to the Baltic area. Furthermore neither the NE Greenland National Park, nor any information on the Faraoer is included.
EU	<p>The 29 areas mentioned by the EU (DG XIV) refer only to zones where fisheries regulations apply. Most of the areas are indicated as stretching from intertidal to offshore. The areas aim to protect different fish species during different seasons, and/or by different gear-type restrictions.</p> <p>These zones cover extensive areas: except one area (Logan Bay), all of them are larger than 1000 km². No EU Habitat Directive and EU Bird Directive areas are submitted.</p>
France	In total 59 areas were indicated, according to the following categories: espace du Conservatoire du littoral et des Rivages lacustres, parc national, réserve naturelle, réserve naturelle volontaire, arrêté réfectoral de protection de biotopes (= legislation on department level), zone de protection de biotopes, zone de protection spéciale (Bird Directive), zone de la conservation RAMSAR and parc naturel régional (= regional nature park). For this questionnaire they were divided in four categories: national legislation, Bird Directive, Ramsar and Biosphere. However, the database contains no information on which parts of the maritime area are included in the MPAs, nor on protection aims (except for 5 indications of bird protection (all Ramsar sites)). More than half of the areas are EU Birds

Directive areas (41 of 59). There are 16 areas protected under national/ regional legislation (Arrêté Préfectoral de Biotope or Parc Régional), no EU Habitat sites, 5 Ramsar, and one Biosphere Reserve (Iroise: zone de transition). Additional information on legal instruments and IUCN categories was also submitted.

There are no areas protected larger than 1000 km², six (11 %) between 100 and 1000 km². About half of the MPAs is between 10 to 100 km², the rest smaller.

Germany

The five protected areas mentioned are all under national legislation. Full information on these areas is submitted. There are no offshore areas in the EEZ included. Three of the 5 protected areas in total cover the Wadden Sea to a great extent. Another 2 are situated around Helgoland. The Wadden Sea sites are designated as National Park to conserve the original and characteristic features of the Wadden Sea landscape and the Islands as a whole, and a biotope for the species that are living there. Fisheries in the Wadden Sea are regulated by the National Park legislation.

One of the areas is only terrestrial (Lummenfelsen der Insel Helgoland). One area is protected for birds only, the rest is protected for several species (shellfish, fish, mammals and other benthic species) or habitat types (subtidal or intertidal). None of the areas are currently protected under the EU Habitat Directive, all but one are protected under international legislation (Birds Directive, Ramsar, or Biosphere).

Iceland

Icelandic territories hold 39 protected areas. No information on international protection status was supplied. In contrast to other CP's, Iceland has relatively large MPAs: 54% are more than 100 km², and 28% are over 1000 km². Iceland also has many offshore areas (16 = 41%), some beyond the 200 m depth line and all under national legislation. This relates to the fact that a lot of these are regulating fisheries (20 = 51%). Most of these areas are completely banned for otter, pelagic and long line fisheries. Additional information was given on the Act of fishing in Iceland's Exclusive Fishing Zone.

Most of the remaining protected areas have a terrestrial component, traditional land-use allowed but no access during nesting season. The main targets of protection are intertidal habitats, birds, and fish.

Ireland

Ireland mentioned 18 MPAs. Only for the area Lough Hyne information is included about the area type, size, and protection targets. For one area (Little Skellig) only the location was given. Over half of the areas are protected under de EU Birds Directive (10 = 55%), one-third under Ramsar (6), and two areas as a Biosphere reserve. Sites to be protected under the EU Habitats Directive could not yet be given.

The Netherlands

The Dutch list of ten MPAs contains four areas which are only proposed for protection under the national legislation (Natuurbescherminswet), one is designated already. So only 6 areas actually have legal protection status. All five Ramsar areas are also protected or proposed (1) for protection under de EU Birds and EU Habitat Directive. There is one Biosphere Reserve, the Waddensea, as it is for Germany and Denmark (the latter not indicated as such in the database). Fisheries are mentioned to be regulated only in the Delta area (Voordelta, Westerschelde, and Oosterschelde). All areas are protected for several habitat (sub- and/or intertidal) and/or species (fish, shellfish, mammals, birds and other benthic species) reason. All but one area contain a terrestrial component. There are no offshore areas proposed, and only one extending over 3 nautical miles (Voordelta).

Norway

For the purpose of plotting the data, the long list (348) of areas was condensed to 119 sites, representing the centres of every municipality, containing one or more MPAs. All of them are under national legislation and restricted to the intertidal (and terrestrial) zone, except for one (Svalbard) stretching into the near subtidal zone (< 3 nm). For Svalbard however no information on size, protection targets or instruments was supplied. Only 6 areas are protected internationally; all of them under Ramsar. The names and statutory of the separate areas are also presented. 50 areas are specified as being protected specifically for birds. No information is available on other reasons for protection than birds. Most sites are small islands with a marine component. More than half (55%) of the areas is smaller than 1 km² (n=66); 82% is smaller than 10 km² (n=98).

Most municipalities have areas which are protected as nature reserves (Naturreservat), some are bird sanctuaries (fuglefredningsområder), landscape protected areas (landskapsvernområder), wetlands (våtmarksområder) or seabird colonies (Sjøfugl-områder). Areas regulated under the fisheries legislation are not included, so not even the Sula Reef and Iverryggen (2nd reef protected from trawling) appear. At the WWF Workshop in Brest, 1999, (OSPAR 00/8/2) the Norwegian situation was described in more detail (see Box 1).

Box 1: MPAs in Norway (From: WWF MPA workshop report Brest 1999 (OSPAR 00/8/2) (M.B. Knoph))

Norway alone has over 300 protected areas involving some marine elements, most of which are nature reserves for birds. In 1995, an analysis of the entire coast was undertaken, and areas suitable for marine protection were mapped. After conflicts between fisheries and protection interests, the government produced a white paper on the coastal zone, featuring:

- conflict resolution by local influence
- local management
- a working group comprising government, fisheries / aquaculture interests, and environmental organizations (including WWF)
- use of protection categories best suited to the purpose of protection in the area.

Although this white paper was a step forward in creating a network of MPAs, it had certain weaknesses, particularly concerning the willingness to put restrictions on fishing and aquaculture. There was little focus on the precautionary principle, so that – in theory – damage could be done before protection would be conferred. OSPAR Annex V was mentioned only very briefly, and the focus was limited to coastal areas, with little attention to the sea beyond the territorial limit of 4 nautical miles. The white paper will be presented to the Norwegian parliament, probably in the spring of 2000. Once adopted by parliament, a working group on MPAs in Norway will be established, in which WWF Norway will be invited to participate.

One of the highest priority marine habitats in Norway are the reefs of *Lophelia pertusa*, and the country's Sea Fisheries Act prohibits the destruction of known reefs. Special protection is afforded to the Sula reef, the world's largest known deepwater coral reef. Unfortunately, according to reports by fishers, these reefs are undergoing massive destruction from bottom trawling, and the associated line and net fisheries (redfish, saithe, ling, blueling, tusk) are declining. Next steps will involve mapping, suggesting new areas for protection, and promoting regulations on fishing gear in addition to the establishment of MPAs.

Portugal and Azores

The mainland of Portugal has 11 areas, whilst 21 areas around the Azores are protected. Data for these areas are (nearly) complete. For one location no data are given except its location (Ponta dos Rosais). There is only one off-shore area in size class

100-1000 km² mentioned by the Azores. For two areas it is indicated that they are only terrestrial. Most areas (59%) are in size class 10 – 100 km², there is only one very small (< 1km²) terrestrial area in Portugal, and one large area (> 1000 km²) in the Azores. Most of the areas are protected for habitat (26 = 81%) as well as species reasons (mostly shellfish, birds and mammals). Half of the areas is under national legislation.

Portugal

The 11 mainland MPAs of Portugal all have a terrestrial component and do not extend beyond the 3 nautical miles zone. The protected areas in Portugal are relatively large, five are larger than 100 km² (46 %) and protect a wide range of species and habitats, no mammals however. Many of the areas (8 = 38%) are protected under national legislation, 8 as Ramsar area, 9 as EU Birds Directive area and 8 under the EU Habitats Directive. Areas with fisheries restrictions are not included. Two of the 11 sites are only terrestrial. However, one of these sites, Berlengas, is known to be protected under national law and includes a considerable sea area around the island.

Azores

Azores MPAs indicated under national legislation are governed by the Azores Regional Government. The Azores mentioned 21 MPAs. Eight of these areas are under national legislation yet but the Azores Government and their advisory body, the University are very active in order to develop effective protection and management plans. 15 areas aim at protection of mammals, in 15 fisheries are regulated and also 15 are EU Habitats Directive sites. Of the latter, one is the only offshore area, Banco D. João de Castro, a seamount with its top 7 m below sealevel. There are no Ramsar areas mentioned in the Azores.

Spain

Spain is working on an inventory of habitats in the maritime area and its application to the OSPAR Convention. A preliminary list of 32 areas was contributed, of which the information contains however several gaps (no information on co-ordinates for 3, no information on area size for 8 sites). As they are outside the OSPAR area no information on the Canary Islands is included. There are no large (> 1000 km²) or offshore areas protected. 13 areas (41%) are 1- 10 km², 9 (28 %) 10 – 100 km². Of 13 sites is indicated that they are terrestrial only.

All but 2 fall under national or regional Natural Protected Areas law. Of the two areas not protected under national

legislation, one area (Barayo) has no protection status indicated at all, the other one is protected under the EU Birds Directive, as a Ramsar area, and Biosphere reserve. The main purpose of protection is birds (20 sites = 63%), some for intertidal habitats (8 sites = 25 %) and fish (6 sites = 19 %). Most areas are protected for more than one aim. Sites under fisheries legislation are not included. None of the areas was proposed for the EU Habitats Directive, but 7 are protected under the EU Birds directive, 9 under Ramsar and 2 as Biosphere Reserves.

Sweden

Sweden has 90 sites in the OSPAR area, all of these under national legislation. Of these 57 (63%) are under the EU Birds Directive, and 29 (32%) are proposed for the EU Habitat Directive. Except for two sites, the only protection values are birds (58 = 64%) and mammals (30 = 33%). Sites under fisheries legislation or for safeguarding fish stocks are not included.

All sites have in common that they are restricted to the coastal area (both inter- and/or subtidal) and their small size (93% is smaller than 1 km²). There are no terrestrial and off-shore sites mentioned. The one larger area Gullmarn (100 - 1000 km²) is protected for 'other benthic species' and only under national legislation. Sweden is now in the state of proposing offshore areas to be protected under the EU Habitats Directive.

United Kingdom

In total 1111 Marine Protected Areas are localised, this means that 70 % of all sites mentioned OSPAR are in the UK!
However, for 548 sites (49 %) none of the, in the questionnaire requested, protection targets (or instruments other than national legislation) are indicated.

414 (37%) areas are smaller than 1 km², 73% is smaller than 10 km², and 6 areas are larger than 1000 km² (3 under the EU Habitat Directive and 3 under fisheries regulations). There are only four areas outside 3 nautical miles of which two offshore: the mackerel box and a purse seine exclusion zone. 57 (5 %) sites are indicated as being terrestrial only.

Protection reasons are mainly birds (323 sites, that is 29 %) and intertidal areas (208 sites = 19 %). All kinds of protection zones are included: 18 areas are protected for non-marine habitats or species, 700 of the 809 national statutory areas are SSSI, 116 areas are NNR (National Nature Reserves), 52 Areas of

Outstanding Natural Beauty (AONB), 140 sites of geological interest, and 72 fisheries restriction zones. It is not known which of these areas are preliminary (have a 'proposed' status). 73% of the areas is protected nationally and otherwise protected internationally.

Table 2: Categories of protection in the sites submitted by the UK

legislation	size				
	< 1km ²	1-10 km ²	10-100 km ²	100-1000 km ²	> 1000 km ²
AONB ¹	12	13	5	3	0
MNR ²	1	1	1	0	0
NNR ³	32	44	36	4	0
SSSI ⁴	329	266	94	12	0
protect. non marine specs&habs	31	59	36	8	0
sum national	370	305	118	15	0
EU Habitat Dir.	5	14	17	10	3
EU Birds Dir.	32	44	31	9	0
Ramsar	2	25	30	10	0
Fisheries legislation	9	23	28	8	3
Biosphere Reserve	0	3	4	0	0
World Heritage	0	1	0	0	0
no info	2	1	17	0	0
total	414	398	238	52	6

¹ AONB: Area of Outstanding Natural Beauty

² MNR: Marine Nature Reserve

³ NNR: National Nature Reserve

⁴ SSSI: Site of Special Scientific Interest

In box 2 some more information on the implementation of the EU Habitats Directive in the UK is presented.

Box 2: EU Habitats Directive and MPAs in the UK (From: WWF MPA workshop report Brest 1999 (OSPAR 00/8/2)(Dan Laffoley, English Nature)).

Measures taken pursuant to the EU Habitats Directive are to take account of economic, social, and cultural requirements and regional and local characteristics.

In the United Kingdom, the EU Habitats Directive has been transposed into law, and English Nature is charged with advising the government on implementation. To date, special habitats for birds have been protected under the Birds Directive, and 36 Special Areas of Conservation have been established, 16 of which are coastal. SACs now cover one third of the coast in England, making conservation the majority stakeholder in coastal management.

Implementing the EU Habitats Directive in England provides some useful lessons for MPA planning in general, for example:

- One of the biggest jobs in the process was identifying all of the legal powers responsible for managing the coast, and this aspect should not be underestimated.
- Getting stakeholder input requires time, often more than originally anticipated.
- Coastal MPAs must be linked with terrestrial areas.
- MPAs require buffer zones, rather than tight boundaries.
- Adequate funding is essential. The provision of £4 million over four years to produce management schemes for 12 sites allowed the initiative to move from theory to reality.

2.3 Overall analysis

The following analysis is based on the raw data as currently available from the CPs in the database as described above, without any filtering or correction. Due to the very large amount of areas submitted by the UK, statistics are dominated by data from this C.P. However, it appears that proportional figures are in most cases quite stable: in this sense there is little difference between the UK data and the rest of the database.

In Map 1 (Annex) and Table 1 overviews of the MPAs in the database have already been presented.

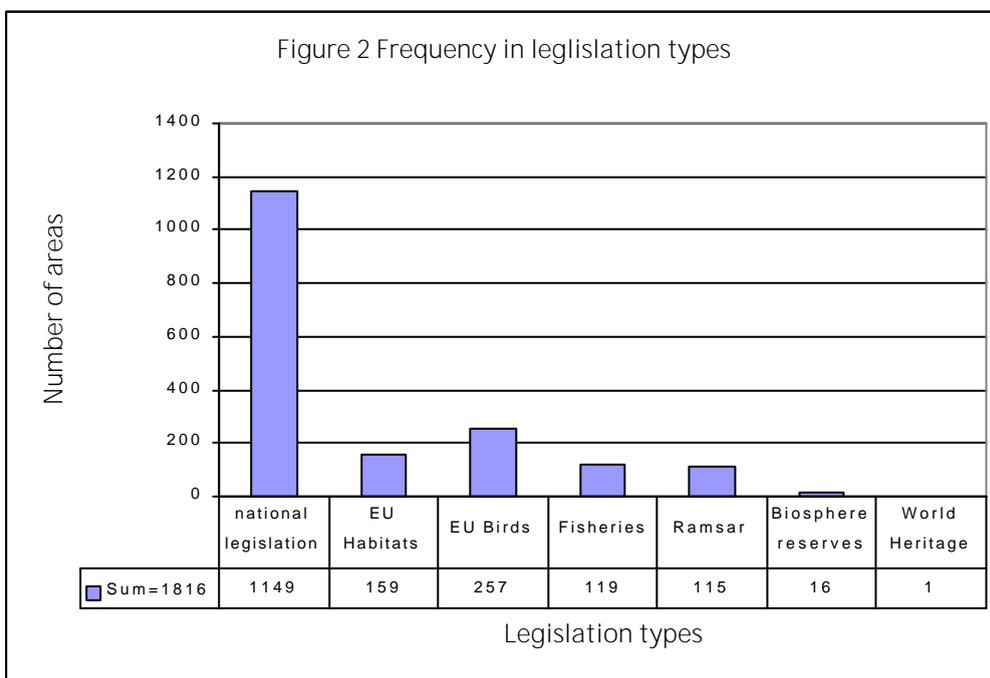
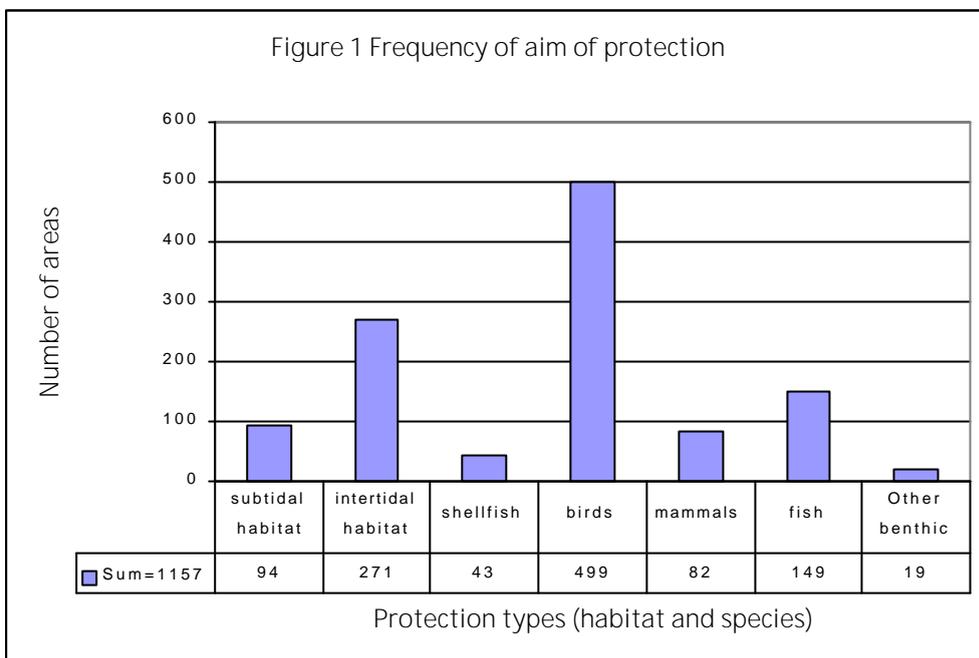
2.3.1 Protection targets

Figure 1 shows the distribution of the areas over the mentioned protection targets. Protection for birds (499=31%) and for intertidal habitat (271= 17%) are the largest categories. Half of the areas is protected for species reasons (birds, fish, shellfish, mammals (Map 2) or other benthic species), 23% for habitat reasons (subtidal and/or intertidal) (see Map 3). Many areas are protected for more than one protection category.

2.3.2 Legal protection regime

Protection regimes are shown in figure 2. Of the areas 72 % are protected by (a wide range of) national protection legislation, 465 (29 %) are protected (or proposed) under one or more of the mentioned international regimes (not including fisheries regulations; see Map 4). The most important international legislation types are the EU Birds Directive (16 %), EU Habitats Directive (10%) and Ramsar (7.2 %). Of the areas 7.5% are governed by (national or international (EU)) fisheries regulations. Only one area is protected as a World Heritage area, nominated by the UK. It should be noted that several

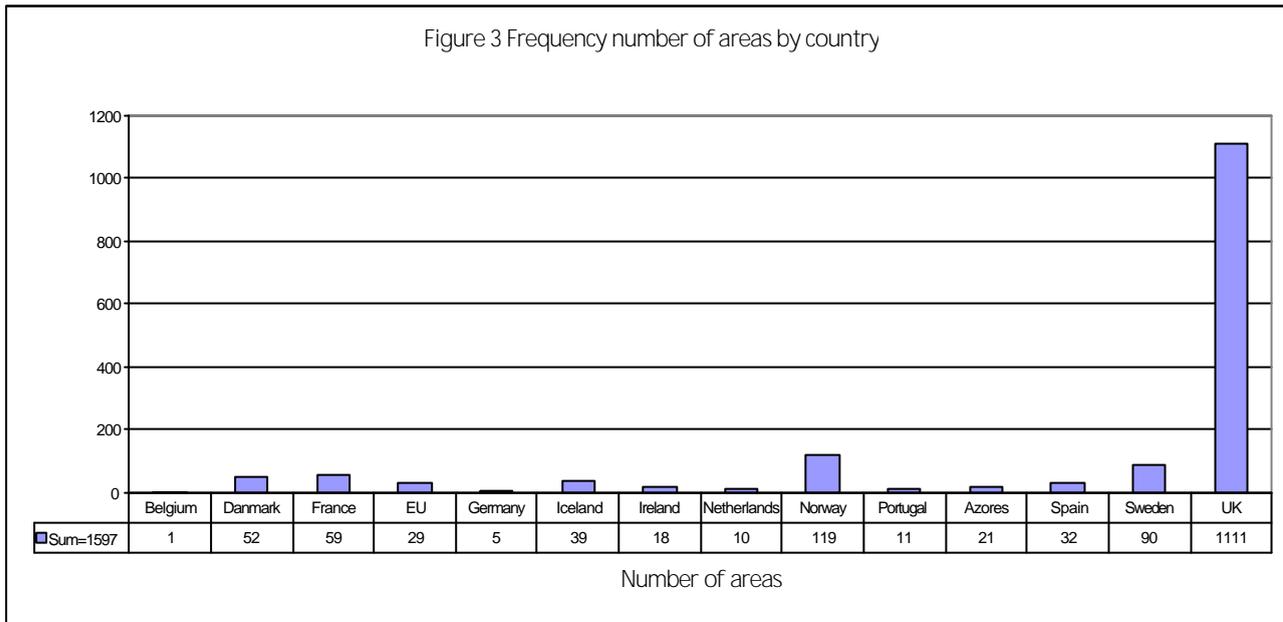
sites are submitted by C.P.s that have a “proposed” or similar status. Their status is not always clear as many are in the middle of a process of designation.



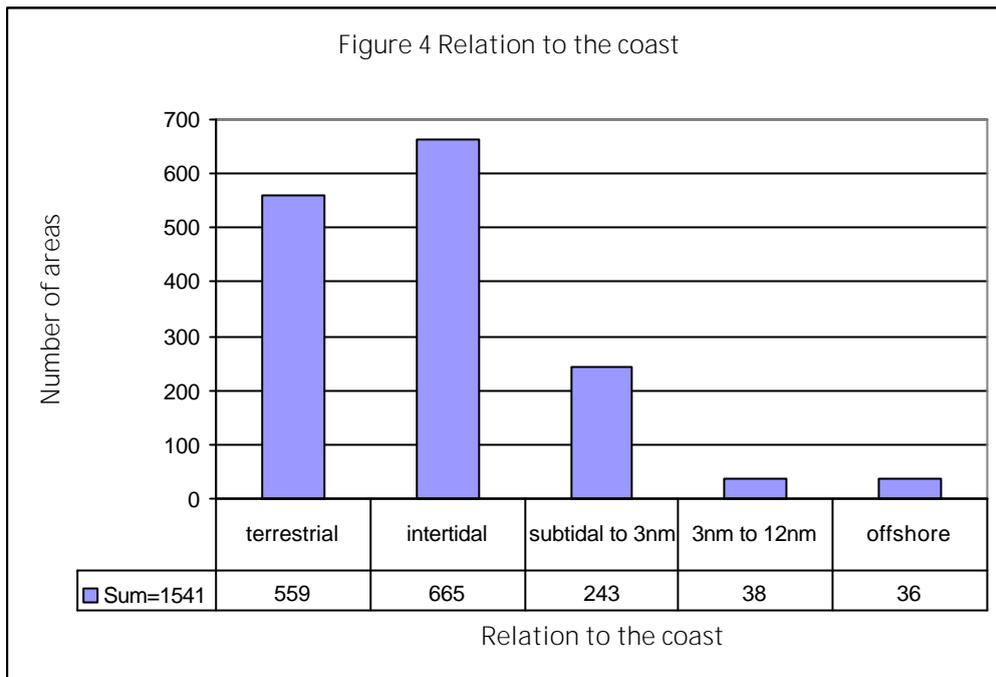
2.3.3 Geographical features

Map 1 (Annex) shows the locations of all submitted MPAs, table 1 and figure 3 show the distribution over the CPs. The two most striking features of the data are the very small proportion of non-coastal sites (> 3 nautical miles offshore) and the enormous proportion of sites stemming from the UK (70 %).

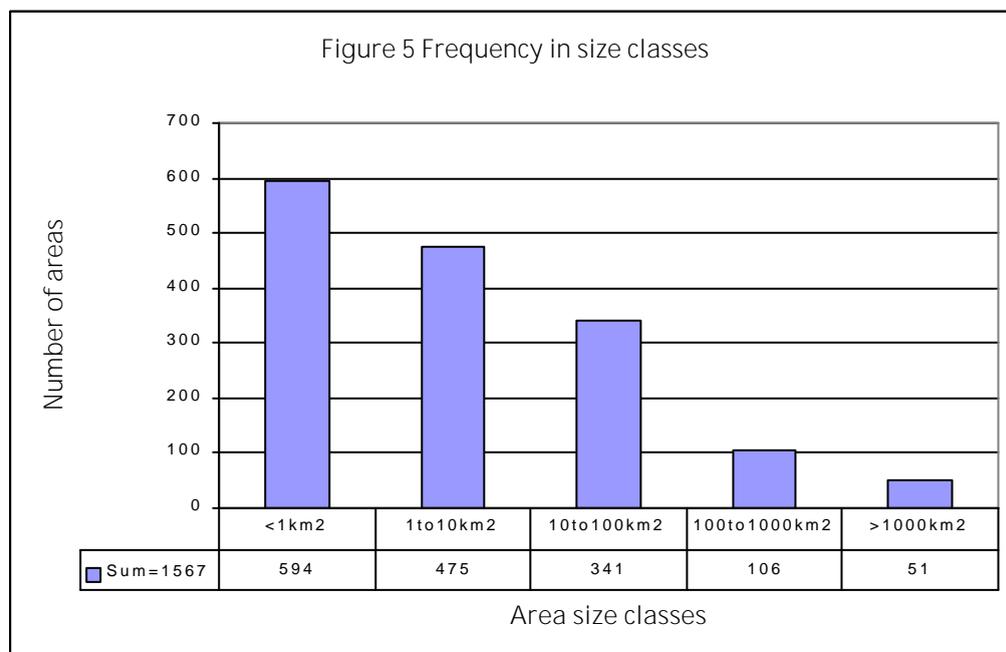
Figure 3 Frequency number of areas by country



Only 2.3 % of the MPAs include off-shore areas and only 2.4 % areas from 3 to 12 nautical miles off the coast (figure 4). The offshore MPAs stem from the EU, Iceland, the Azores and the UK only (Map 5); the EU and Iceland together being responsible for 91% of the off-shore MPAs (see also below). The data do not allow drawing any conclusion on the protected fraction of the defined subareas (relation to the coast) or habitat categories.



As figure 5 shows, most MPAs are small. That is 67% of the mentioned areas are smaller than 10 km², 37% is even smaller than 1 km². Especially Sweden and Norway have a relatively large number of areas smaller than 1km².



2.3.4 Relation between geographical features and protection targets

41 of the 51 areas larger than 1000 km² only relate to fisheries management (Map 6). The other ten are: Breidafjörður (Iceland), Ilhéus das Formigas e Recife do Dollabarat (Azores), Pembrokeshire Islands/Ynysydd Sir Benfro, the Wash and Orth Norfolk Coast, Moray Firth (UK), Wadden Sea (Denmark, Germany 2x, Netherlands), and part of the North Sea (Netherlands, proposed EU Bird Directive site).

Of the 36 offshore areas only one relates to other measures other than fisheries management (the Azores' Banco D. João de Castro) . Similarly, in the 3 – 12 nautical miles zone only two such areas exist: the Netherlands' Voordelta and the British Skomer Mnr.

As Map 3 shows, in large stretches of the OSPAR area apparently no protection of sub- and intertidal habitats occurs.

3 Conclusions

1. It is a big task to collect significant amounts of information from such a large area as the OSPAR area and from so many Parties involved. Standardised data collection of this type is absent.
2. The current database contains many gaps (missing areas, missing requested information on included areas), mistakes (*e.g.* inclusion of areas with no relevant protection or outside the OSPAR area) and substantial inconsistencies, mainly due to different interpretations by CPs (*e.g.* concerning inclusion of fisheries regulated areas, of nationally regulated areas, of terrestrial only areas, of proposed areas). This makes a statistical treatment of the data impossible. In addition, more than one third of the included sites is not aimed at protection of targets (species or habitats) as specified in the questionnaire.
3. On basis of the requested information only a rough picture of MPAs in the OSPAR could be constructed anyway. Rather important information, *e.g.* on specific species or habitats protected, on the size of the population or of the habitat area under protection and in total, and on the contents of the protection regime was not requested.
4. Therefore the database does indeed only allow for the construction of a rough picture. This picture indicates that of the 1597 protected areas identified, hardly any (3 !) occur beyond the 3 nautical miles zone, apart from areas where fisheries restrictions apply. It also indicates that the number of sites as well as areas with specific protection targets or regimes are very unevenly distributed over the CPs in the OSPAR area (70 % of the number of areas is from the UK). Of the 1597 areas submitted, 465 (29 %) are protected under (or proposed for) one or more of the international regimes included in the questionnaire (not including fisheries regulations) (Map 4).
5. No protection of sub- and intertidal habitats is reported for large parts of the OSPAR area (see Map 3). The database does not allow any conclusion on the fraction of the coastline that is under protection.
6. Since no information is included on specific species or habitats and very little on protection regimes, it is impossible to say anything about the effectiveness of protection or on the connection between MPAs in the different countries.

4 Recommendations

1. Any further collection of data and development of the database should be preceded by and dependent upon clear identification of and focus on information needs. It should only be pursued if it is clearly linked to other parts of the work of the OSPAR Biodiversity Committee such as the assessment of species and habitats in need of protection and the development of a system of Marine Protected Areas in the OSPAR Maritime Area
2. Proper focus and standardisation, defined beforehand, is very important to obtain useful information. As an example, IUCN categories could well be used to classify the protection status of areas. Focus should be on species and habitats that need protection. Important added value of OSPAR would be in taking into account the presence of species and habitats in more than one C.P. and the presence of species in different areas during different periods of time (depending on season or on phase in life cycle).
3. In view of the strong variance and uneven distribution in protection situation and approaches as observed in this survey, there is ample room for OSPAR to improve marine protection in its area by a structured MPA approach. This holds for both the coastal zone and beyond 3 nautical miles. In the latter hardly any protected areas exist, in the former protection needs and efficiency cannot be assessed on basis of the current database. In addition, for large parts of the OSPAR area no protection of sub- or intertidal habitats is reported. Therefore, the selection of species and habitats that need protection already under way should be strongly pursued.

Annex

Map 1 Distribution of all MPAs

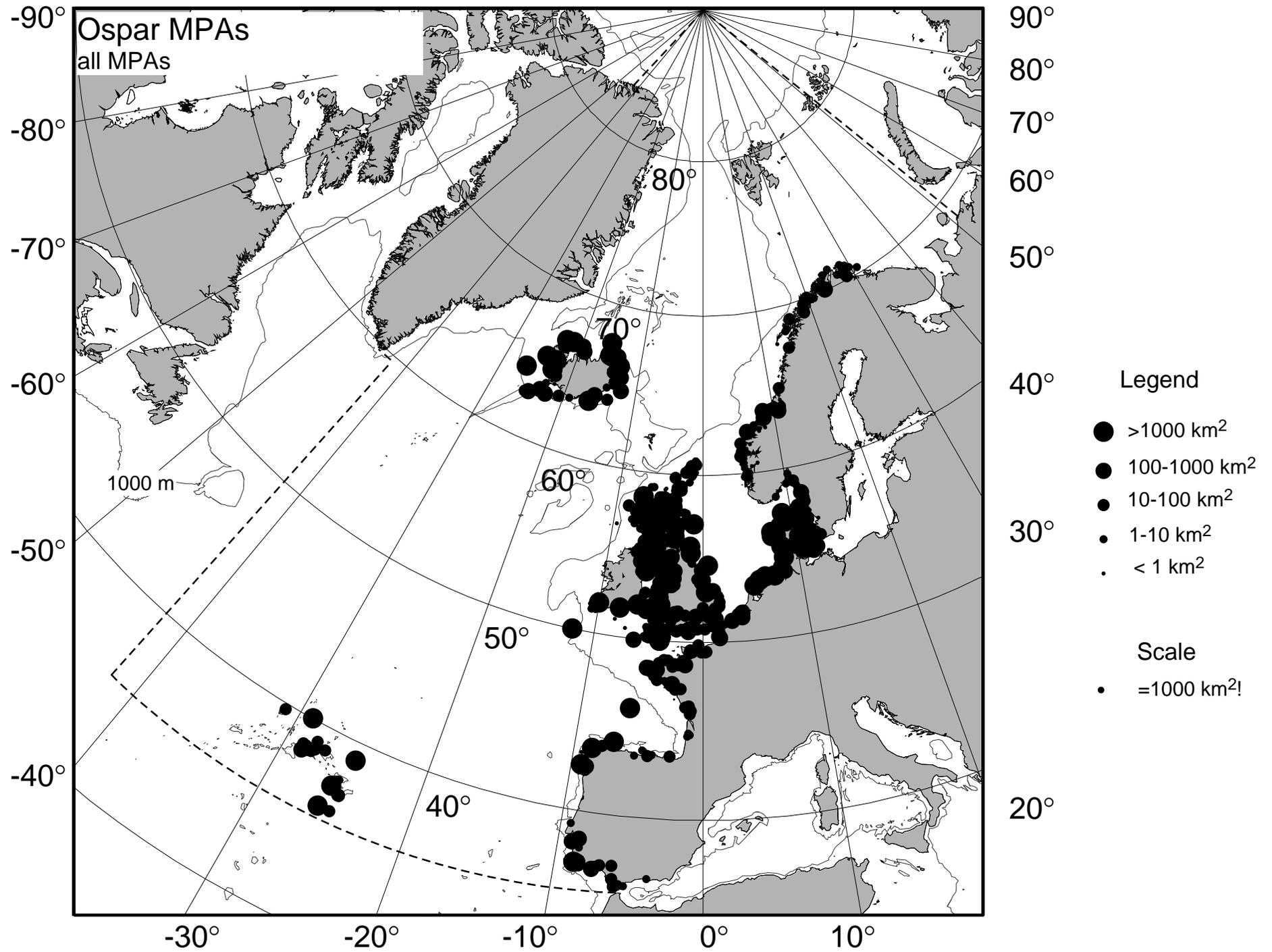
Map 2 Mammals

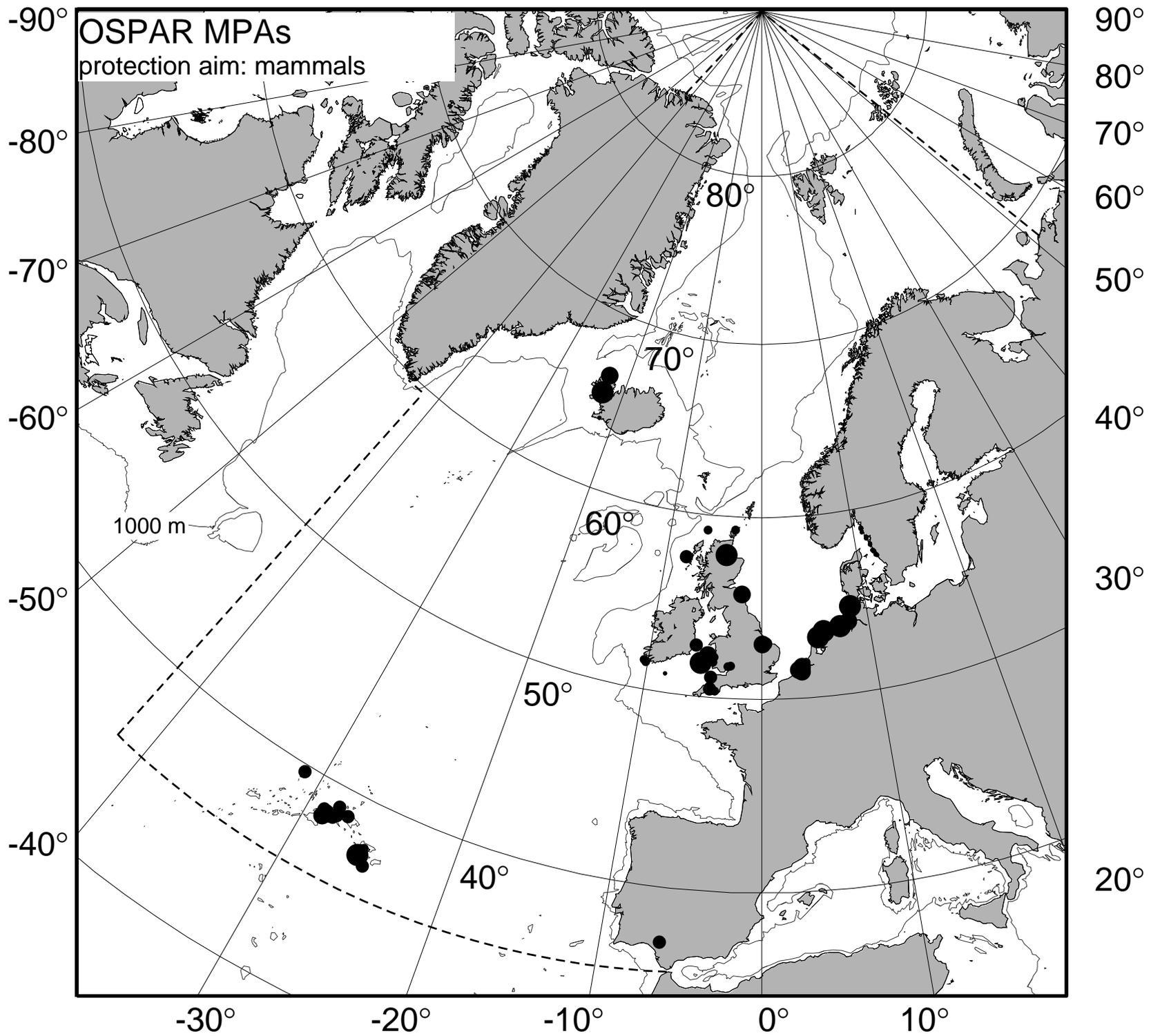
Map 3 Littoral habitats

Map 4 International legislation

Map 5 Offshore areas

Map 6 Areas larger than 1000 km²



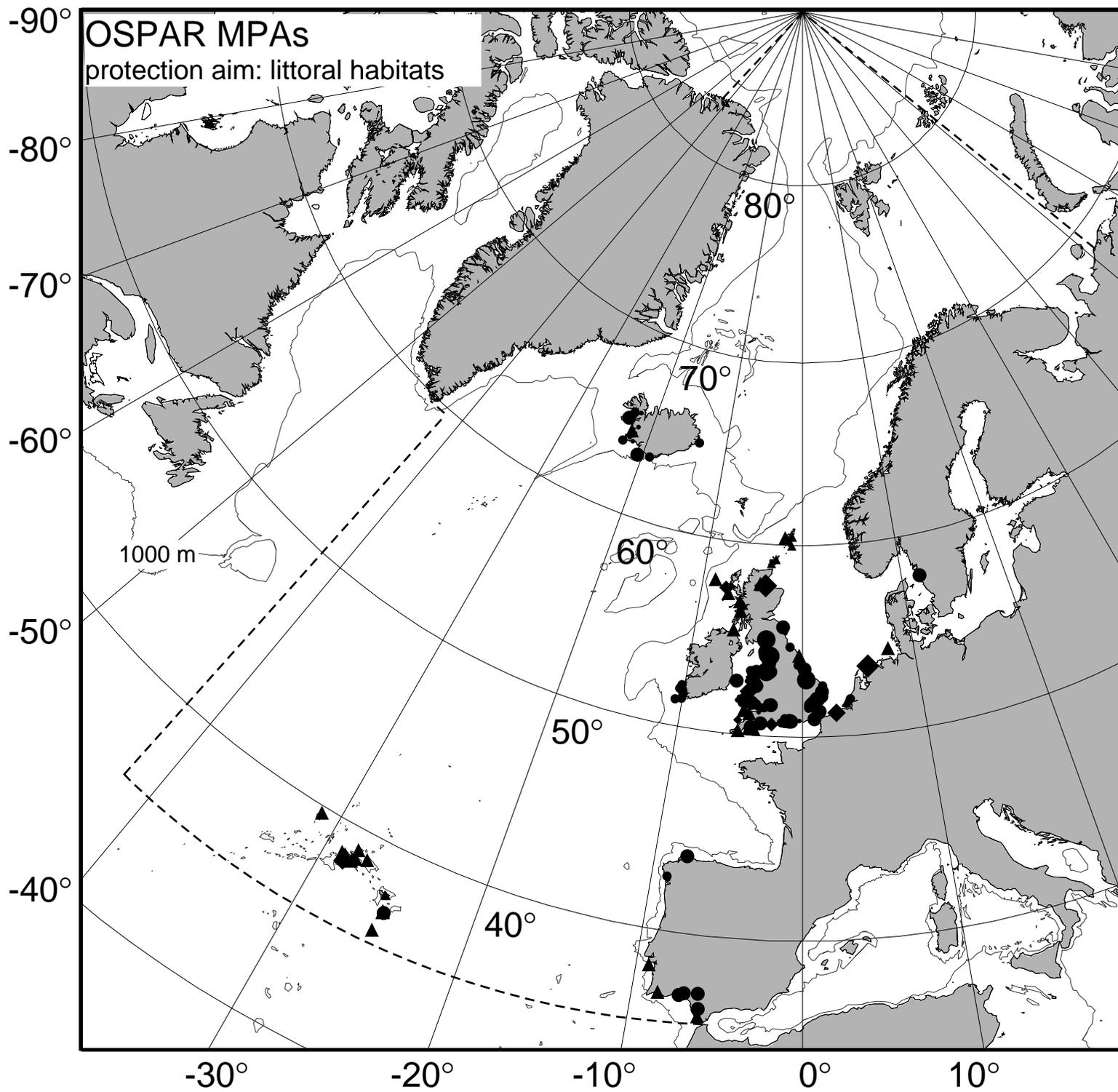


Legend

- >1000 km²
- 100-1000 km²
- 10-100 km²
- 1-10 km²
- < 1 km²

Scale

- =1000 km²!



Legend

Intertidal

- 100-1000 km²
- 10-100 km²
- 1-10 km²
- < 1 km²

Subtidal

- ◆ >1000 km²
- ◆ 100-1000 km²
- ◆ 10-100 km²
- ◆ 1-10 km²
- < 1 km²

Inter-and subtidal

- ▲ 10-100 km²
- ▲ 1-10 km²

Scale

- =1000 km²!

