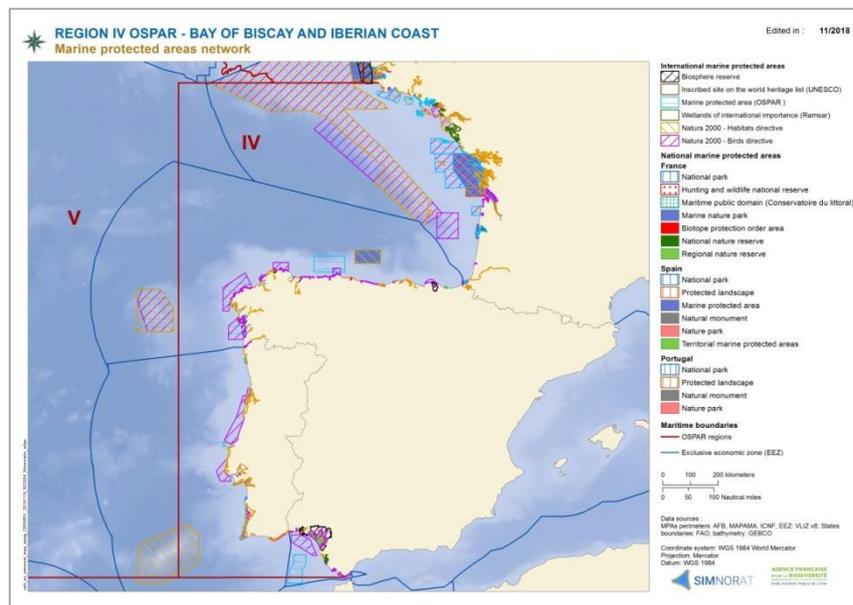


# MARINE PROTECTED AREAS IN THE BAY OF BISCAY AND IBERIAN COASTS DATABASE COMPLETION AND ANALYSIS

January 2019

Version 2



Supporting Implementation of Maritime Spatial Planning in the  
Northern European Atlantic



European Commission

Directorate-General for Maritime Affairs and Fisheries

Grant Agreement No. EASME/EMFF/2015/1.2.1.3/03/SI2.742089-SIMNORAT

## Component 1.3.2 – Spatial demands and future trends for maritime sectors and marine conservation

<b>Deliverable Lead Partner:</b>	Agence Française pour la Biodiversité
<b>Start date of the project:</b>	01/01/2017
<b>Duration:</b>	25 months
<b>Version:</b>	1.1
<b>Contributors (in alphabetical order):</b>	Alloncle Neil, AFB; Bliard Fanny, AFB; Campillos-Llanos Mónica, IEO; Cervera-Núñez Cristina, IEO; De Magalhães Ana Vitoria, AFB; Fauveau Guillaume, AFB; Gimard Antonin, AFB; Giret Olivier, CEREMA; Gómez-Ballesteros María, IEO; Lloret Ana, CEDEX; Lopes Alves Fátima, UAVR; Mahier Marie, AFB; Marques Márcia, UAVR; Murciano Carla, CEDEX; Odion Mélanie, AFB; Piel Steven, AFB; Quintela Adriano, UAVR; Sousa Lisa, UAVR.

Dissemination level	
<b>PU</b>	Public
<b>PP</b>	Restricted to a group specified by the consortium (including the Commission services)
<b>RE</b>	Restricted to other programme participants (including the Commission services)
<b>CO</b>	Confidential, only for members of the consortium (Including the Commission services)

Disclaimer:

This report was produced as part of the SIMNORAT Project (Grant Agreement NO. EASME/EMFF/2015/1.2.1.3/03/SI2.742089).

The contents and conclusions of this report, including the maps and figures were developed by the participating partners with the best available knowledge at the time. They do not necessarily reflect the national governments' positions and are not official documents, nor data. The European Commission or Executive Agency for Small and Medium sized Enterprises is not responsible for any use that may be made of the information it contains.

## Document information

Deliverable Title	Marine protected areas in OSPAR region IV: Bay of Biscay and Iberian coast - Database completion and analysis
Coordinator	Alloncle N., Gimard A.
Authors	Bliard Fanny, Alloncle Neil
Recommended Citation	Alloncle, N., Bliard, F., Campillos-Llanos, M., Cervera-Núñez, C., De Magalhães, A. V., Fauveau, G., Gimard, A., Giret, O., Gómez-Ballesteros, M., Lloret, A., Lopes Alves, F., Mahier, M., Marques, M., Murciano, C., Odion, M., Piel, S., Quintela, A., Sousa, L. (2019). Marine protected areas in OSPAR region IV: Bay of Biscay and Iberian coast - Database completion and analysis. EU Project Grant No.: EASME/EMFF/2015/1.2.1.3/03/SI2.742089. Supporting Implementation of Maritime Spatial Planning in the Northern European Atlantic (SIMNORAT). French Agency for Biodiversity. 31 pp. DOI: 10.5281/zenodo.2597299

## Version history

Date	Document version	Reviewer	Revision
26/11/2018	1.0	Bliard Fanny	Initial draft
14/01/2019	2.0	Bliard Fanny, Alloncle Neil	Structural and content revision

## TABLE OF CONTENTS

<b>1. PRESENTATION OF THE MARINE PROTECTED AREAS DATABASE .....</b>	<b>5</b>
1.1 HISTORY .....	5
1.2 DATABASE CONTENTS.....	5
<b>2. TAKING MARINE CONSERVATION IN CONSIDERATION IN MARITIME SPATIAL PLANNING.....</b>	<b>8</b>
<b>3. COMPLETION OF THE DATABASE .....</b>	<b>9</b>
3.1 ADDITION OF MISSING MPAS .....	9
3.1.1 <i>Spain</i> .....	9
3.1.2 <i>Portugal</i> .....	10
3.2 ATTRIBUTE COMPLETION.....	10
3.2.1 <i>Marine species and benthic habitats</i> .....	10
3.2.2 <i>Activities and regulations</i> .....	11
3.2.3 <i>Management plan</i> .....	11
<b>4. ANALYSIS .....</b>	<b>12</b>
4.1 MPA NETWORK IN OSPAR REGION IV AND GEOGRAPHIC COMPREHENSIVENESS .....	12
4.2 COMPREHENSIVENESS ASSESSMENT BASED ON DESIGNATION OBJECTIVES .....	15
4.3 ACTIVITIES OCCURRING WITHIN MPAS .....	17
<b>5. CONCLUSION .....</b>	<b>19</b>
<b>6. ANNEXES .....</b>	<b>20</b>
ANNEXE 1: REFERENCE LIST OF SPECIES IN THE MPA DATABASE.....	20
ANNEXE 2: REFERENCE LIST OF BENTHIC HABITATS IN THE MPA DATABASE.....	23
ANNEXE 3: DETAILED MAPS OF THE MPA NETWORK .....	25
<b>7. BIBLIOGRAPHY .....</b>	<b>30</b>

## LIST OF FIGURES

Figure 1: Example of a MPA datasheet displayed on the portal and the different tabs to complete.....	7
Figure 2: Map of the network of marine protected areas in the Bay of Biscay and Iberian coast (OSPAR region IV).....	13
Figure 3: Marine protected areas designated for benthic habitats' protection .....	15
Figure 4: Marine protected areas designated for marine mammals' protection .....	16
Figure 5: Marine protected areas designated for seabirds' protection .....	17

## LIST OF TABLES

Table 1: Official international and national MPA designations in the MPA database .....	6
Table 2: Standard WDPA attributes field .....	6
Table 3: Number of marine protected areas of OSPAR region IV already in the MPA database and number of MPAs added in the database under the SIMNORAT project. ....	9
Table 4: Number of MPAs and total marine area covered by each designation of MPAs per country in the OSPAR region IV .....	12
Table 5: Representativeness of the MPAs network within OSPAR IV region .....	14

## ACRONYMS

AFB	Agence Française pour la Biodiversité
ICNF	Instituto da Conservação da Natureza e das Florestas
IUCN	International Union for Conservation of Nature
MAIA	Marine protected Areas In the Atlantic arc
MPA	Marine Protected Area
MSP	Marine Spatial Planning
PANACHE	Protected Area Network Across the Chanel Ecosystem
SIMCelt	Supporting the Implementation of Marine Spatial Planning in the Celtic sea
SIMNORAT	Supporting the Implementation of Marine Spatial Planning in the Northern European Atlantic
SIMWESTMED	Supporting the Implementation of Marine Spatial Planning in the Western Mediterranean sea
WDPA	World Database on Protected Areas

## 1. PRESENTATION OF THE MARINE PROTECTED AREAS DATABASE

### 1.1 History

The MPA database that was enriched through the project was created during the MAIA (Marine protected areas in the Atlantic arc) INTERREG project<sup>1</sup>, which ran from 2010 to 2012, and involved four countries: United Kingdom, France, Spain and Portugal. The aim of this database is to share official and updated information of international and national MPAs but also support the ecological coherence assessment of the existing network. The MPA database is based on the WDPA (World Database on Protected Areas<sup>2</sup>) standard and contains geographic boundaries of MPAs, standard attributes and attributes fields on species, habitats, activities, management method, protection measures, etc.

From 2013 to 2015, the database was completed to include the Channel during the PANACHE (Protected area network across the Channel ecosystem) INTERREG project<sup>3</sup>. As the geographic scope of the database was extended, several fields and values in the attribute data were added.

Furthermore, the MPA database was made the reference for compiling information on the network of marine protected areas designated by the OSPAR Commission<sup>4</sup> (Convention for the Protection of the Marine Environment of the North-East Atlantic) in Europe. Fields and values specific to OSPAR were therefore added to the database.

In 2016 and 2017 this MPA database was completed in the Celtic Sea region (France, United Kingdom, and Ireland) through the SIMCelt<sup>5</sup> project. During these projects, the MPA database was updated to integrate the missing boundaries of MPAs in these regions but also to complete attributes of species, habitats and activities.

All information contained in the MPA database is displayed online via four geography portals: MAIA<sup>1</sup>, PANACHE<sup>3</sup>, OSPAR<sup>4</sup> and FRANCE<sup>6</sup>. MPAs of the OSPAR IV region are displayed through the MAIA portal (and through the OSPAR portal only for OSPAR MPAs). It is also possible to use WMS and WFS flows or download the MPAs geographic layers containing their standard attributes. Moreover, data from the MPA database are provided to the SIMNORAT<sup>7</sup> data portals through the WMS flow.

### 1.2 Database contents

The MPA database encompasses various designation categories which are considered as official MPA by countries. MPA categories occurring in the 3 countries of the OSPAR IV region are listed in the table below (Table 1).

---

<sup>1</sup> <http://www.maia-network.org/accueil>

<sup>2</sup> <https://www.protectedplanet.net/c/world-database-on-protected-areas>

<sup>3</sup> <http://www.panache.eu.com/>

<sup>4</sup> [http://mpa.ospar.org/accueil\\_ospar](http://mpa.ospar.org/accueil_ospar)

<sup>5</sup> <http://www.simcelt.eu/>

<sup>6</sup> [http://www.amp.afbiodiversite.fr/accueil\\_fr](http://www.amp.afbiodiversite.fr/accueil_fr)

**Table 1: Official international and national MPA designations in the MPA database**

FRANCE	SPAIN	PORTUGAL
<b>International / UE MPA designations</b>		
Marine protected area (OSPAR) Special protection area (EU Birds Directive) Site of community importance (EU Habitats Directive) Special area of conservation (EU Habitats Directive) Wetlands of international importance (RAMSAR) Biosphere reserve (UNESCO) Inscribed site on the world heritage list (UNESCO)		
<b>National designations</b>		
Marine nature park National nature reserve Biotope protection order area Hunting and wildlife national reserve Maritime public domain (Conservatoire du littoral)	Nature park National park Nature reserve Marine protected area Natural monument Protected landscape Marine reserve Site of national interest	Nature park Nature reserve National park Natural monument Protected landscape
<b>Regional designations (considered as national in the database)</b>		
Regional nature reserve	Area of community importance – Andalusia Nature park – Andalusia, Cantabria, Galicia Fishing reserve – Andalusia Natural landscape – Andalusia Partial nature reserve – Asturias Special protection zone of natural values – Galicia Protected biotope – Basque country	

A MPA can have sub-perimeters which have specific regulations. The sub-perimeters correspond often to zones where the protection is reinforced.

As mentioned before, when a MPA is added in the database, it must be informed with standard attributes (Table 2) which correspond to the minimum and mandatory information to be provided.

**Table 2: Standard WDPA attributes field**

<b>WDPA ID</b>	Unique WDPA identification number of the area. It can be obtained on the Protected Planet website.
<b>WDPA PID</b>	Parent WDPA identification number (in case of a sub-perimeter).
<b>NAME</b>	Official name of the MPA in the original language (without accents).
<b>ORIGINAL NAME</b>	Official name of the MPA in the original language (with accents).
<b>COUNTRY</b>	Country in which the MPA is based.
<b>DESIGNATION</b>	Category of protected area as legally established or recognized by the country (with accents).
<b>DESIGNATION IN ENGLISH</b>	Category of protected area as legally established or recognized by the country translated in English.

<b>DESIGNATION TYPE</b>	Type of the designation (national or international).
<b>IUCN CATEGORY</b>	IUCN category corresponding to the designation.
<b>MARINE SITE</b>	Type of protected area (1: terrestrial and marine, 2: marine).
<b>REPORTED MARINE AREA</b>	Marine area of the MPA (in km <sup>2</sup> ) as reported in the designation decree/order (or calculated).
<b>REPORTED TOTAL AREA</b>	Total area of the MPA (in km <sup>2</sup> ) as reported in the designation decree/order (or calculated).
<b>STATUS</b>	Status of the site: proposed (project in progress) or designated (officially designated site).
<b>STATUS YEAR</b>	The year when the current status was officially decreed.

Once a MPA is added in the database by the administrator, the MPA manager can fill in information in the different tabs (Figure 1). These data include fields related to general characteristics of the MPA (management authority name, web site, official purposes of site management), marine species and benthic habitats (species and habitats present and those that justified the designation of the MPA) and uses and activities currently known to be occurring within the site. There also tabs on governance (governing body, authority responsible of implementing management measures and plan), resources (staff, equipment and financing), management plan, regulation of activities (type, temporal and spatial application) and monitoring programs (ecosystem functionality, socio-economic activities).

## BASSIN D'ARCACHON - Parc naturel marin

Country:  
**France**

Name of MPA:  
**BASSIN D'ARCACHON**

Designation in national language:  
**Parc naturel marin**

Status:  
**Designated**

Status year:  
**2014**

WDPA ID :  
**555561999**

WDPA PID :  
**555561999**

**Main perimeter**

- [General information](#)
- [Marine species and habitats](#)
- [Uses and activities](#)
- [Governance](#)
- [Resources \(staff, equipment and financial\)](#)
- [Management plan](#)
- [Regulation](#)
- [Monitoring](#)

**Link other MPAs**

Consult the identity sheets of these MPAs

- BANC D'ARGUIN - Réserve naturelle nationale
- PRES SALES D'ARES ET DE LEGE CAP FERRET - Réserve naturelle nationale
- BANC D'ARGUIN - Zone marine protégée de la convention OSPAR
- BASSIN D'ARCACHON ET BANC D'ARGUIN - Zone de protection spéciale (N2000, DO)
- BASSIN D'ARCACHON ET CAP FERRET - Zone spéciale de conservation (N2000, DHFF)

Figure 1: Example of a MPA datasheet displayed on the portal and the different tabs to complete

## 2. TAKING MARINE CONSERVATION IN CONSIDERATION IN MARITIME SPATIAL PLANNING

In order to avoid competition for maritime space, a coherent management of waters is essential. Maritime spatial planning works across borders and sectors to ensure human activities at sea take place in an efficient, safe and sustainable way<sup>7</sup>. To reduce conflicts between maritime sectors and marine conservation, it's necessary to analyze the existing conservation strategies of countries as well as the network of marine protected areas. The MPA database provides a first indication of the ecological coherence of the network existing.

Regularly updated information on MPAs is needed because MPA network change quickly (creation of new MPAs, new regulations in existing MPAs, etc.). For example, thanks to work performed during the SIMNORAT project, several missing Spanish and Portuguese MPAs were integrated into the database.

Beyond the geographic distribution of MPAs, some information of each MPA needs to be made available to the relevant planning authorities so that they can identify the conservation issues and regulating methods on each site. When it comes to marine spatial planning, it is important to know:

- The designation category of MPA. There are many different MPA categories in each country, from national or international regulations, with different goals (species or ecosystem protection, sustainable development of activities, education and awareness, etc.) and their own conservation methods. The designation of MPA gives an initial indication of its objectives and management, and therefore its influence on maritime uses;
- The conservation objectives of the MPAs. These are generally targeting threatened or endangered marine species or benthic habitats facing challenges, for which MPAs have been created. This information allows to anticipate potential incompatibilities with certain uses of the marine environment;
- The activities occurring in the MPAs and regulations in force. Regulations differ from one category to another and sometimes within the MPA if it has sub-perimeters. This information allows to figure out the impact of MPA regulations on maritime sectors;
- The governance of each MPA. The governance methods for MPAs vary depending on the category and can involve stakeholders in the management of protected areas to varying degrees;
- The management plans if they exist. These plans define the management orientations and actions as well as the indicators used to evaluate the effectiveness of the management.

As part of a cross-border approach, although MPA categories and related management methods cannot be directly compared between countries, summarizing the objectives and management methods based on common attributes provides a better understanding of the MPA network and its involvement in marine spatial planning in the Northern European Atlantic.

---

<sup>7</sup> [https://ec.europa.eu/maritimeaffairs/policy/maritime\\_spatial\\_planning\\_en](https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en)

### 3. COMPLETION OF THE DATABASE

Under the SIMNORAT project, completion efforts were mainly focused on updating the MPAs network in the database (addition of new MPAs: boundaries and standard attributes), the inventory of benthic habitats and species for which the MPAs were designated, and whenever possible, inventory of human activities practiced in the sites and related regulations.

As the network of French MPAs was up to date, the goal was to complete the MPA database for the two other States of the OSPAR region IV: Spain and Portugal, where the network, except OSPAR sites, had not been updated since the end of the MAIA project (2012).

**Table 3: Number of marine protected areas of OSPAR region IV already in the MPA database and number of MPAs added in the database under the SIMNORAT project.**

Country	Number of MPAs already in the database	Number of MPAs added in the database under the SIMNORAT project
France	134	0
Spain	79	102
Portugal	23	22

Besides the boundaries, sub-perimeters and standard attributes of the missing MPAs, other attributes were also updated: marine species and benthic habitats present in the MPAs and those that justified the designation, activities practiced in the area, public authorities responsible for implementing management measures and when the information is available: governing bodies, management plans, regulations and monitoring programs.

#### 3.1 Addition of missing MPAs

##### 3.1.1 Spain

The boundaries of the Spanish MPAs were obtained via the World Database on Protected Areas (WDPA) downloadable on the website Protected Planet<sup>8</sup> and the geographic layers of the different categories available on the website of the Ministry for ecological transition<sup>9</sup>, also known as MITECO, of the Spanish Government.

The standard attributes, necessary to add a new MPA in the database, were found on the MITECO website, on autonomous community websites, in the designation orders or in the management plans. Sometimes the reported marine area had to be calculated with a Geographic Information System (QGIS 3.2) in the official projection of the country.

At the scale of the OSPAR IV region, the project allowed to add a total of 91 MPAs: 6 sites of community importance (UE habitats Directive), 15 special areas of conservation (UE Habitats Directive), 21 special protection areas (UE Birds Directive), 1 marine protected area, 8 wetlands of international importance (RAMSAR), 3 biosphere reserves (UNESCO), 3 natural monuments, 3 protected landscapes, 1 site of national interest, 4 nature parks for which 1 is related to Cantabria autonomous community, 2 protected biotopes (Basque country), 6 areas of community importance (Andalusia) and 29 special protection zones of natural values (Galicia).

<sup>8</sup> <https://www.protectedplanet.net/>

<sup>9</sup> <https://www.miteco.gob.es/en/>

### 3.1.2 Portugal

The boundaries of the Portuguese MPAs were obtained via the World Database on Protected Areas (WDPA) downloadable on the website Protected Planet<sup>10</sup> and the geographic layers of the different categories available on the website of the Institute for Nature Conservation and Forests (ICNF<sup>10</sup>) which is the responsible governmental body for the nature and forest policies, including the management of Protected Areas and State managed national, municipal and communal forests of mainland Portugal.

The standard attributes were found on the ICNF website, in the creation decrees or in the management plans. Sometimes the reported marine area had to be calculated with a Geographic Information System (QGIS 3.2) in the official projection of the country.

At the scale of the OSPAR IV region, the project added a total of 22 MPAs: 9 sites of community importance (UE habitats Directive), 7 special protection areas (UE Birds Directive), 1 natural monument, 1 nature park and 4 nature reserves.

## 3.2 Attribute completion

### 3.2.1 Marine species and benthic habitats

The marine species and benthic habitats attributes were completed for each MPA thanks to predefined lists (Annexes 1 and 2). Species and habitats for which the MPA was designated must be indicated, along with the existence of monitoring.

To find out which marine species or/and benthic habitats were the reasons behind the designation of the MPA, various sources were used:

- The Standard Data Forms for Natura 2000 network sites, which are available on the following websites:
  - o For Spain:  
<https://www.miteco.gob.es/es/biodiversidad/temas/espacios-protegidos/red-natura-2000/lic.aspx> (SCI/SAC)  
<https://www.miteco.gob.es/es/biodiversidad/temas/espacios-protegidos/red-natura-2000/zepa.aspx> (SPA)
  - o For Portugal:  
<http://www2.icnf.pt/portal/pn/biodiversidade/rn2000/rn-pt/rn-contin/sic-pt> (SCI/SAC)  
<http://www2.icnf.pt/portal/pn/biodiversidade/rn2000/rn-pt/rn-contin/zpe-pt> (SPA)
- The Ramsar Information Sheets for sites created under the Ramsar Convention:
  - o For Spain:  
<https://www.miteco.gob.es/es/biodiversidad/temas/ecosistemas-y-conectividad/conservacion-de-humedales/buscadorhumedales.aspx>  
<https://www.ramsar.org/wetland/spain>
  - o For Portugal:  
<https://www.ramsar.org/wetland/portugal>

Concerning the national categories, most of the time the marine species and benthic habitats for which MPAs were designated were not clearly highlighted compared to other species and habitats. In these cases, the

---

<sup>10</sup> <http://www.icnf.pt/>

attribute “species justifying the designation” are not completed. Marine species and benthic habitats present in the area are found in creation decrees, management plan, on official websites (MITECO, ICNF) or on the autonomous communities’ websites:

- For Spain :
  - <https://www.miteco.gob.es/es/red-parques-nacionales/nuestros-parques/default.aspx> (National park)
  - <https://www.miteco.gob.es/es/costas/temas/proteccion-medio-marino/biodiversidad-marina/espacios-marinos-prottegidos/areas-marinas-prottegidas/areas-marinas-prottegidas.aspx> (Marine protected area)
  - <http://www.juntadeandalucia.es/medioambiente/> (Andalusia)
  - <https://www.asturias.es/portal/site/medioambiente/> (Asturias)
  - <http://www.medioambientecantabria.es/> (Cantabria)
  - [https://www.xunta.gal/medio-ambiente-e-ordenacion-do-territorio?langId=es\\_ES](https://www.xunta.gal/medio-ambiente-e-ordenacion-do-territorio?langId=es_ES) (Galicia)
  - <http://www.euskadi.eus/gobierno-vasco/departamento-medio-ambiente-planificacion-territorial-vivienda/> (Basque country)
- For Portugal :
  - <http://www2.icnf.pt/portal/ap/p-nat> (Nature park)
  - <http://www2.icnf.pt/portal/ap/r-nat> (Nature reserve)
  - <http://www2.icnf.pt/portal/ap/nac/mon-natur> (Natural monument)

Furthermore, for some intertidal MPAs, species which justified the designation were not found in the available list on the web portal. This is particularly the case for shorebirds/waders, for which a number of species were not included in the database. Consequently, in theory, some sites that are mainly terrestrial may not have any species indicated in the database as the reason of their designation.

### 3.2.2 Activities and regulations

Human activities that occur within the MPA were selected from a pre-defined list. There are two levels of precision to define the type of activity and the specific activity (optional). For example, it is possible to select “sports and water sports (at sea)” and to precise that is “kitesurfing”.

Regulations applying in the MPA can also be added with its extent, frequency, an URL link, a comment and the species of habitat on which the regulation is related. When this information was available, it was collected in decrees/orders, management plans or also in some presentation sheets/reports of the MPAs (ex: RAMSAR). In France, the Control Support Center for the Marine Environment (CACEM) gathers decrees available on its regulatory website LEGICEM<sup>11</sup>. This was the way used to find the legal orders related to French MPAs.

When none of this information was available, the presence of certain activities in the MPAs could be determined by visualizing satellite images. For example, shellfish farms or ports were visible on these images.

### 3.2.3 Management plan

Management plans were collected on the official websites (MITECO, ICNF) or on the autonomous communities’ websites cited previously.

---

<sup>11</sup> <http://legicem.metier.e2.rie.gouv.fr/>

## 4. ANALYSIS

### 4.1 MPA network in OSPAR region IV and geographic comprehensiveness

Queries enables users to select all MPAs in the Bay of Biscay and Iberian coast (OSPAR region IV), and generate statistics (Table 4 and Table 5) and a comprehensive map of the network (Figure 2).

**Table 4: Number of MPAs and total marine area covered by each designation of MPAs per country in the OSPAR region IV**

	France		Spain		Portugal	
	Number of sites	Total marine area covered (km <sup>2</sup> )	Number of sites	Total marine area covered (km <sup>2</sup> )	Number of sites	Total marine area covered (km <sup>2</sup> )
Wetlands of international importance (RAMSAR)	5	334	10	115		
Biosphere reserve (UNSECO)	1	27	3	134		
N2000 (Birds Directive)	37	68 356	35	9 523	14	5 145
N2000 (Habitats Directive)	48	49 575	55	3 032	14	7 697
Marine protected area (OSPAR)	20	20 213	14	17 338	5	502
National park			1	68		
Nature reserve	11	142			7	251
Nature park			2	<1	4	408
Marine nature park	3	6 886				
Biotope protection order area	4	4				
Maritime public domain (Conservatoire du littoral)	4	8				
Hunting and wildlife national reserve	1	64				
Marine protected area			1	2 350		
Natural monument			9	1	1	<1
Protected landscape			1	<1		
Marine reserve						
Site of national interest			1	1		
Regional designations			49	681		
<b>Whole MPAs network in OSPAR region IV</b>	<b>134</b>	<b>69 797</b>	<b>181</b>	<b>17 818</b>	<b>45</b>	<b>12 435</b>

The total marine areas covered by each MPA category are calculated with the appropriate projection for each country. It is important to point at that each total area is calculated independently from other MPA categories. Since there can be overlaps between marine protected areas, the total marine area covered by the whole national MPA networks in OSPAR region IV (last row of the table 4) is calculated taking into account overlaps. Consequently, this total is different than the sum of total marine areas covered by each category.

This table also includes proposed MPAs which are not yet officially designated. For example the French site “Mers celtiques - talus du golfe de Gascogne” is currently proposed by France as a site of community importance.

**REGION IV OSPAR - BAY OF BISCAY AND IBERIAN COAST**  
**Marine protected areas network**

Edited in : 11/2018

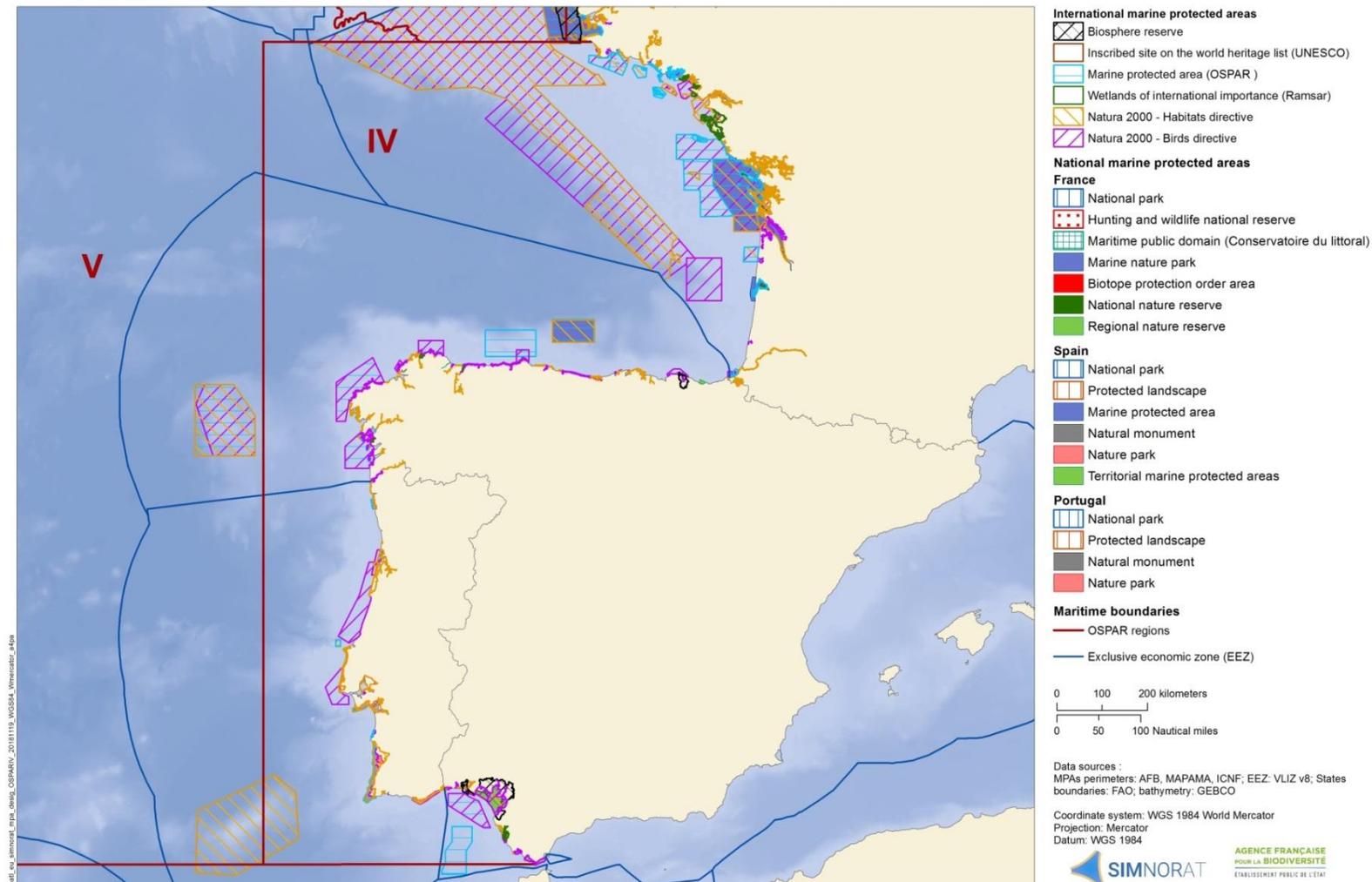


Figure 2: Map of the network of marine protected areas in the Bay of Biscay and Iberian coast (OSPAR region IV)

The map of the MPA network in the Bay of Biscay and Iberian coast shows the geographic distribution of MPAs and allows making out the main MPA categories. The network is quite good developed in OSPAR region IV even though the Spanish and Portuguese MPAs are mostly coastal. Natura 2000 designations are the most represented, especially in offshore waters.

A way to illustrate the comprehensiveness of the MPAs network is to refer to Aichi Target 11<sup>12</sup> : “By 2020, [...] at least 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape”.

In order to calculate the MPAs network comprehensiveness, area of national waters within the OSPAR region IV and area covered by the current MPAs network within this region were calculated. MPA polygons were merged to avoid multiple countings due to MPA overlaps. Areas were calculated using appropriate projection for each country in order to minimize calculation errors. The column “number of MPAs” evaluates the amount of MPAs included in the inshore or offshore waters. Hence, an MPA can be counted both in the inshore and offshore waters.

**Table 5: Representativeness of the MPAs network within OSPAR IV region**

Country		Area of national waters within OSPAR region IV (km <sup>2</sup> )	Number of MPAs	Area covered by the current MPA network within OSPAR region IV (km <sup>2</sup> )	Covering percentage in the view of the Aichi target achievement (10%)	Number of MPAs proposed	Area covered by the planned MPA network within OSPAR region IV (km <sup>2</sup> )	Expected covering percentage in the view of the Aichi target achievement (10%)
France	Inshore waters (0-12nm)	22 586	131	11 079	49,1	0	11 079	49,1
	Offshore waters (12-200nm)	164 767	21	58 718	35,6	0	58 718	35,6
Spain	Inshore waters (0-12nm)	27 004	165	7 975	29,5	5	9 023	33,4
	Offshore waters (12-200nm)	175 579	9	4 293	2,4	2	8 795	5,0
Portugal	Inshore waters (0-12nm)	23 708	44	5 338	22,5	0	5 338	22,5
	Offshore waters (12-200nm)	108 855	2	7 097	6,5	0	7 097	6,5
Total		522 499	-	94 500	18,1	-	100 050	19,1

OSPAR region IV covers around 530 000 km<sup>2</sup> (ETRS89 / LAEA Europe projected coordinate system) and contains a network of 349 MPAs covering 94 500 km<sup>2</sup>, making 18,1 % of the region Bay of Biscay and Iberian coast. This is comfortably above the 10% target set in 2010 in the Strategic Plan for Biodiversity 2010-2020. In the future, if the proposed sites of Spain are considered, the total area covered by MPAs will represent 19,1% of the OSPAR region IV.

<sup>12</sup> Strategic Plan for Biodiversity 2010-2020 (20 Aichi Biodiversity Targets), adopted in 2010 by the Parties to the Convention on Biological Diversity (CBD).

At the national scale, France, Spain and Portugal (49,1%, 29,5% and 22,5% respectively) achieve Aichi target in their inshore waters (under 12 nautical miles) which include internal waters and territorial seas even if the distribution of sites is very coastal for Spain and Portugal. However, only France (35,6%) reaches the 10% target for their offshore waters (between 12 to 200 nautical miles). Spain and Portugal network of MPAs is primarily constituted of coastal sites. In the short-term, only the Spanish marine waters covered by MPAs will increase thanks to proposed sites in inshore and offshore waters. Despite of this consideration, the 10% target will not be reached yet. It has to be taken into account that some Spanish and Portuguese offshore MPAs are above the OSPAR IV region limits and are therefore not counted in this assessment.

## 4.2 Comprehensiveness assessment based on designation objectives

Number of MPAs and marine waters coverage presented above are an initial indication for assessing the comprehensiveness of the MPA network. The representativeness of the MPAs network can also be appreciated with the analysis of the attribute fields. SQL queries were used to show MPAs of the network depending on their conservation objectives, particularly for those which are aiming to protect benthic habitats (Figure 3), marine mammals (Figure 4) or seabirds (Figure 5).

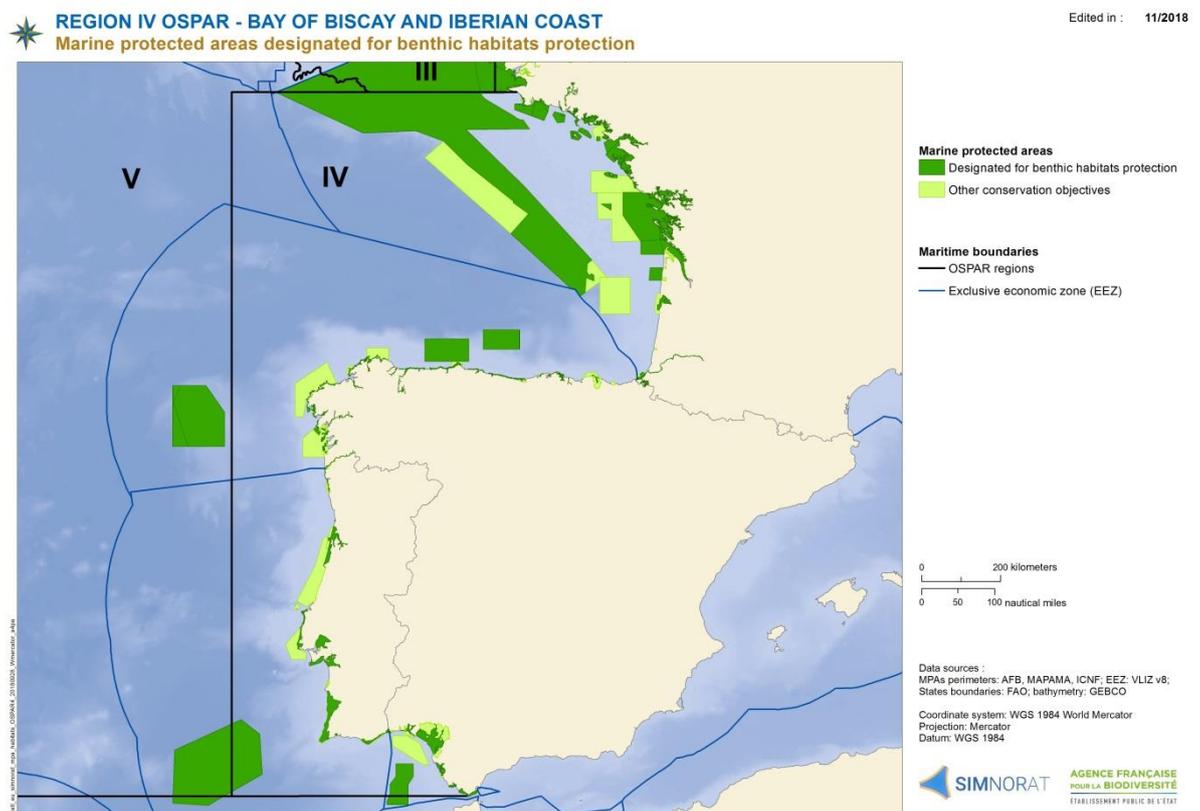
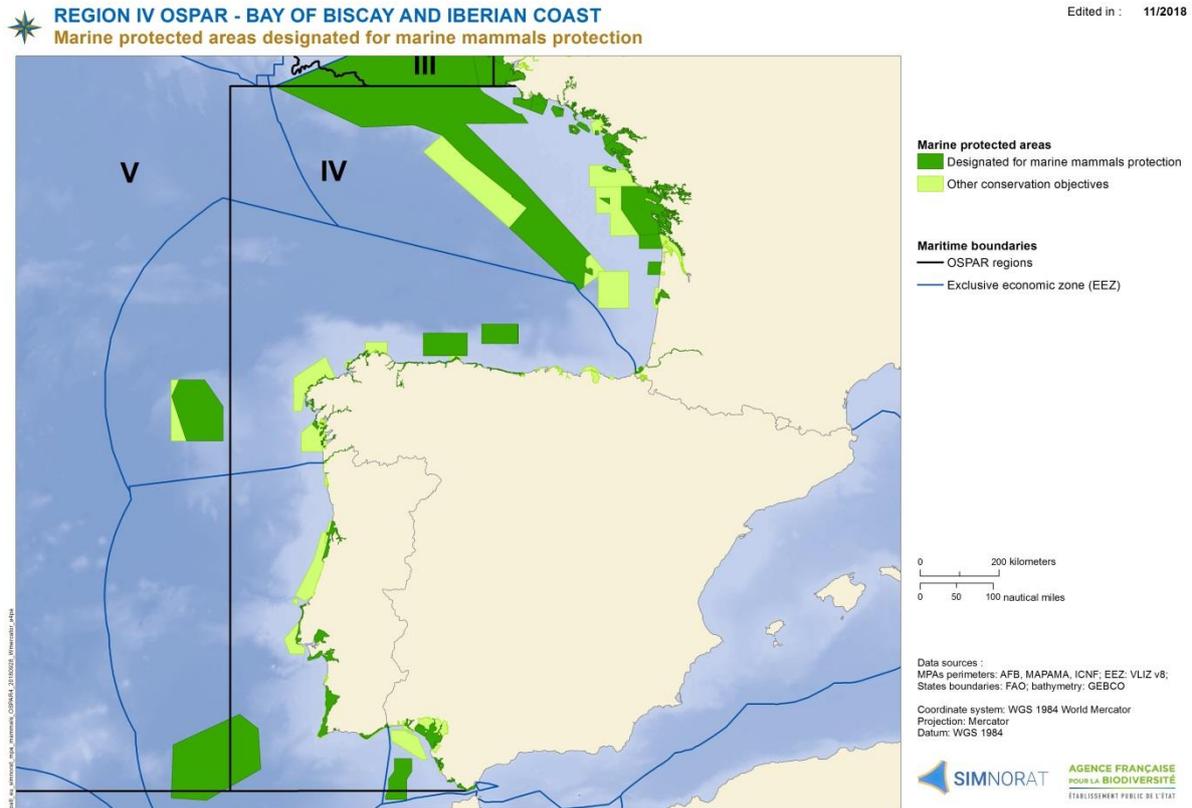


Figure 3: Marine protected areas designated for benthic habitats' protection

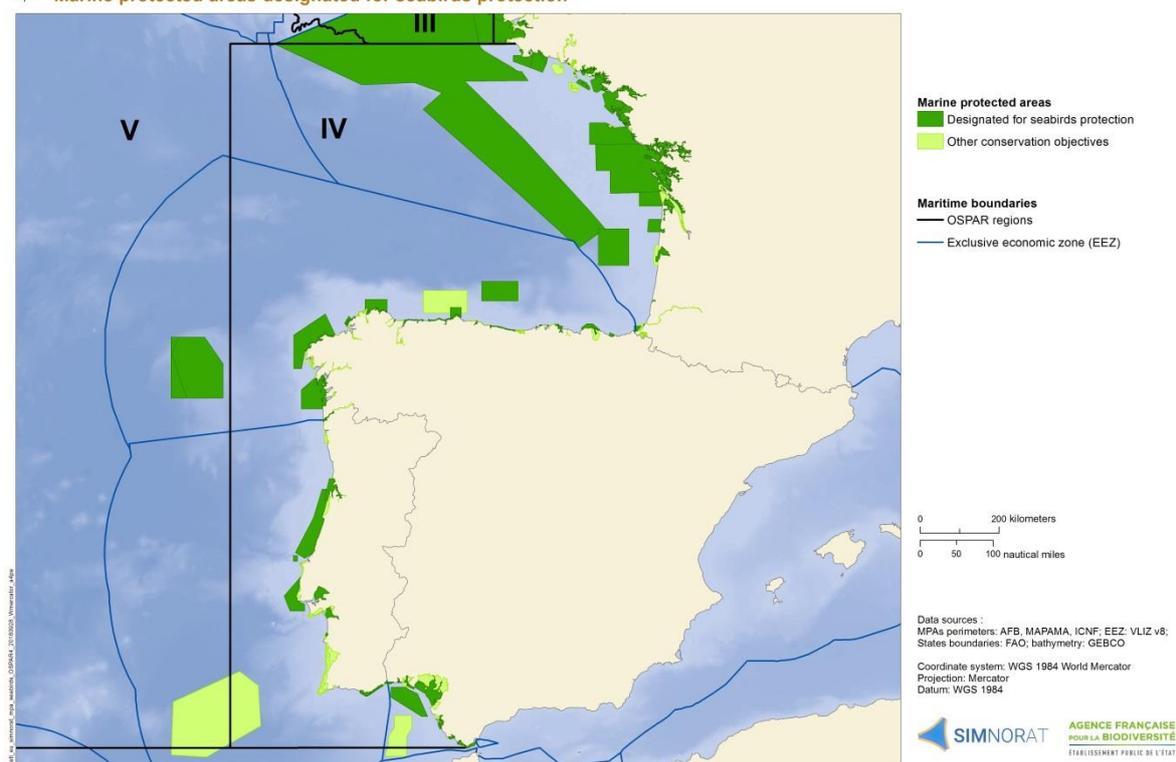
Nearly half of the marine protected areas are designated for protection of at least one benthic habitat. It's particularly the case for "Sites of Community Importance" or "Special Areas of Conservation" which are included in the Natura 2000 ecological network and related to the Habitats Directive<sup>13</sup>. In the OSPAR IV region, 67 084 km<sup>2</sup> of waters are covered by at least one MPA protecting benthic habitats which represents approximately 67% of the MPA network. Sites protecting benthic habitats are relatively evenly distributed throughout the network. Despite the lack of MPAs in offshore waters, the majority is designated for the protection of at least one benthic habitat.



**Figure 4: Marine protected areas designated for marine mammals' protection**

Protection of at least one marine mammal species is also often a reason for MPA designation. In the OSPAR IV region, 66 411 km<sup>2</sup> of waters are covered by at least one MPA protecting marine mammals which represents approximately 66% of the MPA network. As for benthic habitats protection, distribution of MPAs which protect at least one marine mammal species is also homogeneous and majority of offshore MPAs is designated for marine mammals' protection.

<sup>13</sup> Adopted in 1992 by the Council Directive, the Habitats Directive ensures the conservation of a wide range of rare, threatened or endemic animal and plant species. Some 200 rare and characteristic habitat types are also targeted for conservation in their own right.



**Figure 5: Marine protected areas designated for seabirds' protection**

Finally, the network of marine protected areas designated for the protection of seabirds differs slightly since it constituted by vast areas and offshore sites, and less exclusively coastal MPAs. In Bay of Biscay and Iberian coast, 85 705 km<sup>2</sup> of waters are covered by at least one MPA protecting seabirds which represents approximately 85% of the MPA network. Seabirds' protection is especially the objective of the "Special Protection Areas" which is included in the Natura 2000 ecological network and related to the Birds Directive<sup>14</sup>.

This gives other views of the MPA network, with more accuracy on its objectives of conservation. It appears that the MPA network is not a homogenous layer of protection. In some ways, the shape of the MPA network varies depending the considered conservation objective. Therefore, expected regulations (aimed at achieving conservation objectives by regulating maritime uses having an impact on concerned environmental features) will not be enforced throughout the whole network. This new way of addressing the MPA network could be an important contribution for a more efficient tool into account in MSP processes.

### 4.3 Activities occurring within MPAs

Contrary to data on species or habitats for which MPAs were designated, data on activities present and/or regulated within sites are at least, not standardized, or in the worst case, unavailable. For this reason, it was impossible to collect and fill in this information consistently for all sites. Analyzing the network based on these criteria across the OSPAR region IV seems difficult yet.

The human activities that occur within the MPA were selected from a predefined list and concern professional and recreational fishing practices, aquaculture, energy production, maritime traffic, recreational activities on the coast, nautical sports, scientific research, military activities, overflight, extraction/deposit, etc.

<sup>14</sup> Adopted in 1979 by the Council Directive and amended in 2009, the Birds Directive aims to protect all of the 500 wild bird species naturally occurring in the European Union.

Concerning the regulation, for France, after the update, 60% of the MPAs have their regulation part completed with at least one activity regulated/prohibited thanks mostly to decrees gathered on the regulatory website LEGICEM of the Control Support Center for the Marine Environment (CACEM).

## 5. CONCLUSION

A major update of the MPAs database of the Atlantic arc was carried out under the SIMNORAT project. Spanish and Portuguese MPAs of OSPAR region IV had not been updated since the end of the MAIA INTERREG project in 2012. It was relatively easy to find data on marine protected areas boundaries as they are gathered in the World Database on Protected Areas (WDPA). General information, marine species and benthic habitats lists and management plans were collected for all the sites but required a time-consuming investigative work. In some case, the difference between species/habitats at the origin of the MPA designation and other species/habitats just present in the area was not made. Finally, the real difficulty came with the gathering of data on human activities and specific regulations as there is little or no standardized information available.

This work reveals the importance of collecting information of marine protected areas from a single official national website and completing as comprehensive as possible the management documents in order to collect validated and standardized data needed to complete the database. Moreover, the setting up of alerts when a new site is created or new information is available would be useful.

The MPAs database could be a good decision-making tool for maritime spatial planning. In terms of environmental protection, queries can be made to measure the completeness of the network on an international scale and know the species and habitats present. For decision-makers, it also serves to centralize information on the types and categories of MPAs and which provides indication of whether the site's objectives are compatible with a given activity. Although the information on activities in the database is incomplete, it provides an idea of the interactions they have with ecological components.

## 6. ANNEXES

### ANNEXE 1: REFERENCE LIST OF SPECIES IN THE MPA DATABASE

Règne	Classe	Nom scientifique	Classement IUCN	N2000 oiseau	OSPAR
Animalia	Actinopterygii	Acipenser sturio	CR	1	1
Animalia	Actinopterygii	Alburnoides bipunctatus	NE	0	0
Animalia	Actinopterygii	Alosa alosa	LC	1	1
Animalia	Actinopterygii	Alosa fallax	LC	1	0
Animalia	Actinopterygii	Anguilla anguilla	CR	0	1
Animalia	Actinopterygii	Coregonus lavaretus oxyrinchus	VU	1	1
Animalia	Actinopterygii	Cottus gobio	NE	1	0
Animalia	Actinopterygii	Esox lucius	NE	0	0
Animalia	Actinopterygii	Gadus morhua	VU	0	1
Animalia	Actinopterygii	Hippocampus guttulatus	DD	0	1
Animalia	Actinopterygii	Hippocampus hippocampus	DD	0	1
Animalia	Actinopterygii	Hoplostethus atlanticus	NE	0	1
Animalia	Actinopterygii	Leucaspius delineatus	NE	0	0
Animalia	Actinopterygii	Leuciscus idus	NE	0	0
Animalia	Actinopterygii	Leuciscus leuciscus	NE	0	0
Animalia	Actinopterygii	Pomatoschistus microps	LC	0	0
Animalia	Actinopterygii	Pomatoschistus minutus	NE	0	0
Animalia	Actinopterygii	Salmo salar	LC	1	1
Animalia	Actinopterygii	Salmo trutta	LC	1	0
Animalia	Actinopterygii	Salmo trutta fario	NE	1	0
Animalia	Actinopterygii	Salmo trutta trutta	NE	0	0
Animalia	Actinopterygii	Silurus glanis	NE	0	0
Animalia	Actinopterygii	Syngnathus abaster	LC	0	0
Animalia	Actinopterygii	Thunnus thynnus	EN	0	1
Animalia	Actinopterygii	Thymallus thymallus	NE	0	0
Animalia	Anthozoa	Dendrophyllia cornigera	NE	0	0
Animalia	Anthozoa	Lophelia pertusa	NE	0	0
Animalia	Anthozoa	Madrepora oculata	NE	0	0
Animalia	Aves	Alca torda	LC	1	0
Animalia	Aves	Alle alle	LC	0	0
Animalia	Aves	Calonectris diomedea	LC	1	0
Animalia	Aves	Catharacta skua	LC	0	0
Animalia	Aves	Cepphus grylle	LC	0	0
Animalia	Aves	Clangula hyemalis	LC	1	0
Animalia	Aves	Fratercula arctica	LC	1	0
Animalia	Aves	Fulmarus glacialis	LC	1	0
Animalia	Aves	Gavia arctica	LC	1	0
Animalia	Aves	Gavia immer	LC	1	0
Animalia	Aves	Gavia stellata	LC	1	0
Animalia	Aves	Haematopus ostralegus	LC	1	0
Animalia	Aves	Hydrobates pelagicus	LC	1	0
Animalia	Aves	Larus argentatus	LC	1	0
Animalia	Aves	Larus audouinii	NT	1	0
Animalia	Aves	Larus cachinnans	LC	1	0
Animalia	Aves	Larus canus	LC	1	0
Animalia	Aves	Larus delawarensis	LC	0	0
Animalia	Aves	Larus fuscus	LC	1	1
Animalia	Aves	Larus glaucoides	LC	0	0
Animalia	Aves	Larus hyperboreus	LC	0	0
Animalia	Aves	Larus marinus	LC	1	0
Animalia	Aves	Larus melanocephalus	LC	1	0
Animalia	Aves	Larus michahellis	NE	1	0
Animalia	Aves	Larus minutus	LC	1	0
Animalia	Aves	Larus ridibundus	NE	1	0
Animalia	Aves	Larus sabini	LC	1	0
Animalia	Aves	Melanitta fusca	LC	1	0
Animalia	Aves	Melanitta nigra	LC	1	0
Animalia	Aves	Melanitta perspicillata	LC	0	0
Animalia	Aves	Morus bassanus	LC	1	0
Animalia	Aves	Oceanodroma leucorhoa	LC	1	0

Animalia	Aves	Pagophila eburnea	NT	0	1
Animalia	Aves	Phalacrocorax aristotelis	LC	1	0
Animalia	Aves	Phalacrocorax carbo	LC	1	0
Animalia	Aves	Pinguinus impennis	EX	0	0
Animalia	Aves	Podiceps auritus	LC	1	0
Animalia	Aves	Podiceps cristatus	LC	1	0
Animalia	Aves	Podiceps grisegena	LC	1	0
Animalia	Aves	Podiceps nigricollis	LC	1	0
Animalia	Aves	Polysticta stelleri	VU	1	1
Animalia	Aves	Puffinus assimilis baroli	LC	1	1
Animalia	Aves	Puffinus gravis	LC	1	0
Animalia	Aves	Puffinus griseus	NT	1	0
Animalia	Aves	Puffinus mauretanicus	CR	1	1
Animalia	Aves	Puffinus puffinus	LC	1	0
Animalia	Aves	Recurvirostra avosetta	LC	1	0
Animalia	Aves	Rissa tridactyla	LC	1	1
Animalia	Aves	Somateria mollissima	LC	1	0
Animalia	Aves	Stercorarius longicaudus	LC	1	0
Animalia	Aves	Stercorarius parasiticus	LC	1	0
Animalia	Aves	Stercorarius pomarinus	LC	1	0
Animalia	Aves	Sterna albifrons	LC	1	0
Animalia	Aves	Sterna bengalensis	LC	0	0
Animalia	Aves	Sterna caspia	LC	1	0
Animalia	Aves	Sterna dougallii	LC	1	1
Animalia	Aves	Sterna hirundo	LC	1	0
Animalia	Aves	Sterna paradisaea	LC	1	0
Animalia	Aves	Sterna sandvicensis	LC	1	0
Animalia	Aves	Tachybaptus ruficollis	LC	1	0
Animalia	Aves	Uria aalge	LC	1	1
Animalia	Aves	Uria lomvia	LC	0	1
Animalia	Bivalvia	Arctica islandica	NE	0	1
Animalia	Bivalvia	Ostrea edulis	NE	0	1
Animalia	Bivalvia	Pholas dactylus	NE	0	0
Animalia	Bivalvia	Pinna rudis	NE	0	0
Animalia	Cephalaspidomorphi	Lampetra fluviatilis	LC	1	0
Animalia	Cephalaspidomorphi	Petromyzon marinus	LC	1	1
Animalia	Echinoidea	Paracentrotus lividus	NE	0	0
Animalia	Elasmobranchii	Carcharodon carcharias	VU	0	0
Animalia	Elasmobranchii	Centrophorus granulosus	VU	0	1
Animalia	Elasmobranchii	Centrophorus squamosus	VU	0	1
Animalia	Elasmobranchii	Centroscymnus coelolepis	NT	0	1
Animalia	Elasmobranchii	Cetorhinus maximus	VU	0	1
Animalia	Elasmobranchii	Dipturus batis	CR	0	1
Animalia	Elasmobranchii	Lamna nasus	VU	0	1
Animalia	Elasmobranchii	Raja clavata	NT	0	1
Animalia	Elasmobranchii	Raja montagui	LC	0	1
Animalia	Elasmobranchii	Rostroraja alba	EN	0	1
Animalia	Elasmobranchii	Squalus acanthias	VU	0	1
Animalia	Elasmobranchii	Squatina squatina	CR	0	1
Animalia	Gastropoda	Nucella lapillus	NE	0	1
Animalia	Gastropoda	Patella ulyssiponensis aspera	0	0	1
Animalia	Malacostraca	Maja squinado	NE	0	0
Animalia	Mammalia	Balaena mysticetus	LC	0	1
Animalia	Mammalia	Balaenoptera acutorostrata	LC	0	0
Animalia	Mammalia	Balaenoptera borealis	EN	0	0
Animalia	Mammalia	Balaenoptera musculus	EN	0	1
Animalia	Mammalia	Balaenoptera physalus	EN	0	0
Animalia	Mammalia	Delphinapterus leucas	NT	0	0
Animalia	Mammalia	Delphinus delphis	LC	0	0
Animalia	Mammalia	Eubalaena glacialis	EN	1	1
Animalia	Mammalia	Globicephala macrorhynchus	DD	0	0
Animalia	Mammalia	Globicephala melas	DD	0	0
Animalia	Mammalia	Grampus griseus	LC	0	0
Animalia	Mammalia	Halichoerus grypus	LC	1	0
Animalia	Mammalia	Hyperoodon ampullatus	DD	0	0
Animalia	Mammalia	Kogia breviceps	DD	0	0
Animalia	Mammalia	Kogia sima	DD	0	0

Animalia	Mammalia	Lagenorhynchus acutus	LC	0	0
Animalia	Mammalia	Lutra lutra	NT	1	0
Animalia	Mammalia	Megaptera novaeangliae	LC	0	0
Animalia	Mammalia	Mesoplodon bidens	DD	0	0
Animalia	Mammalia	Monachus monachus	CR	0	0
Animalia	Mammalia	Orcinus orca	DD	0	0
Animalia	Mammalia	Pagophilus groenlandicus	LC	0	0
Animalia	Mammalia	Phoca vitulina	LC	1	0
Animalia	Mammalia	Phocoena phocoena	LC	1	1
Animalia	Mammalia	Physeter macrocephalus	VU	0	0
Animalia	Mammalia	Stenella coeruleoalba	LC	0	0
Animalia	Mammalia	Tursiops truncatus	LC	1	0
Animalia	Mammalia	Ziphius cavirostris	LC	0	0
Animalia	Maxillopoda	Megabalanus azoricus	0	0	1
Animalia	Reptilia	Caretta caretta	EN	1	1
Animalia	Reptilia	Dermochelys coriacea	CR	0	1
Plantae	Liliopsida	Zostera marina	NE	0	0

## ANNEXE 2: REFERENCE LIST OF BENTHIC HABITATS IN THE MPA DATABASE

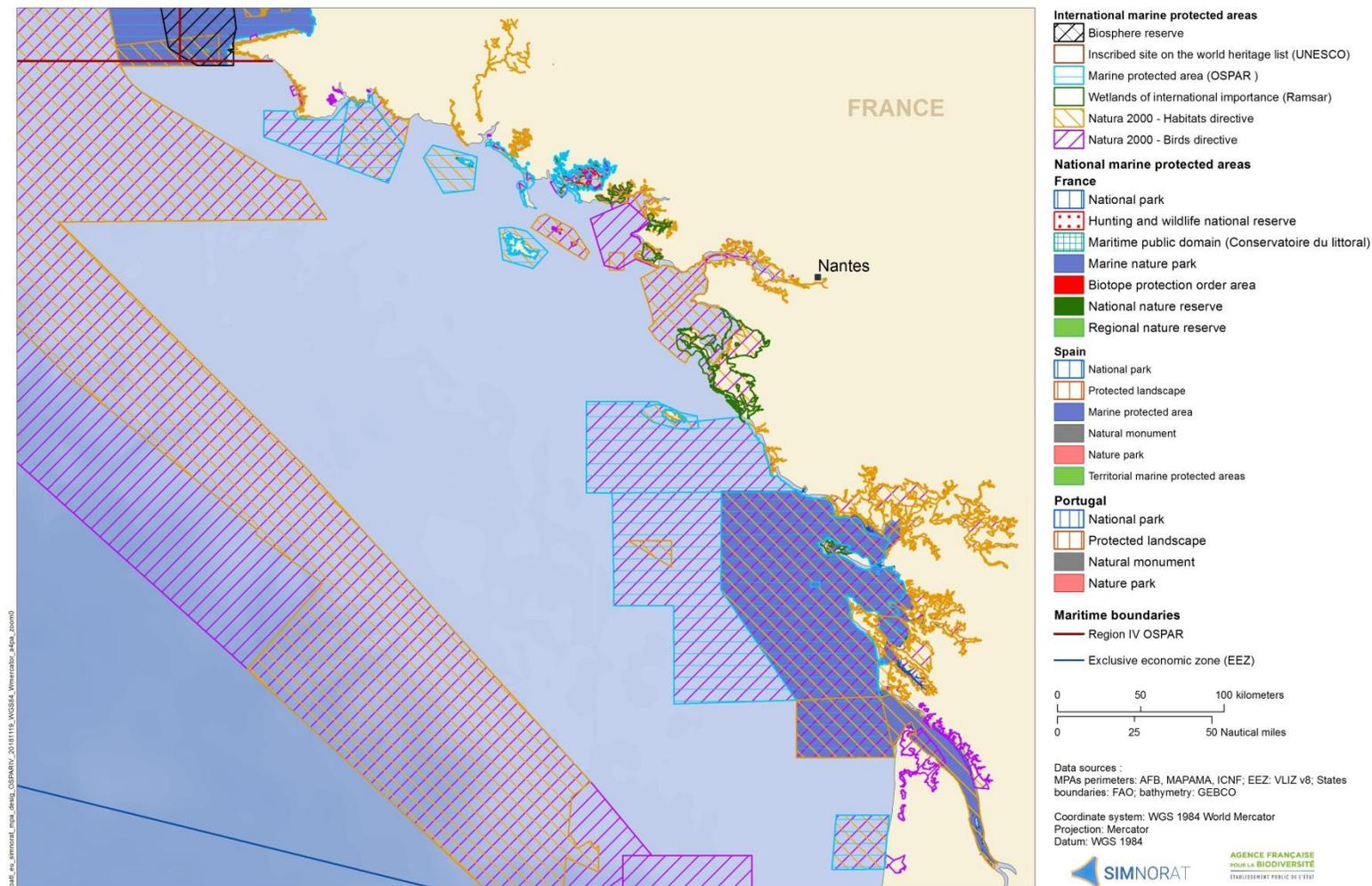
Code	French name	English name
1110	Bancs de sable à faible couverture permanente d'eau marine	Sandbanks which are slightly covered by sea water all the time
1130	Estuaires	Estuaries
1140	Replats boueux ou sableux exondés à marée basse	Mudflats and sandflats not covered by seawater at low tide
1150	Lagunes côtières	Coastal lagoons
1160	Grandes criques et baies peu profondes	Large shallow inlets and bays
1170	Récifs	Reefs
1180	Structures sous-marines causées par des émissions de gaz	Submarine structures made by leaking gases
1210	Végétation annuelle des laissés de mer	Annual vegetation of drift lines
1220	Végétation vivace des rivages de galets	Perennial vegetation of stony banks
1230	Falaises avec végétation des côtes atlantiques et baltiques	Vegetated sea cliffs of the Atlantic and Baltic Coasts
1240	Falaises avec végétation des côtes méditerranéennes avec <i>Limonium</i> spp. endémiques	Vegetated sea cliffs of the Mediterranean coasts with endemic <i>Limonium</i> spp.
1250	Falaises avec flore endémique des côtes macaronésiennes	Vegetated sea cliffs with endemic flora of the Macaronesian coasts
1310	Végétations pionnières à <i>Salicornia</i> et autres espèces annuelles des zones boueuses et sableuses	<i>Salicornia</i> and other annuals colonizing mud and sand
1320	Prés à <i>Spartina</i> ( <i>Spartinion maritimae</i> )	<i>Spartina</i> swards ( <i>Spartinion maritimae</i> )
1330	Prés salés atlantiques ( <i>Glauco-Puccinellietalia maritimae</i> )	Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> )
1340	Prés salés intérieurs	Inland salt meadows
1410	Prés-salés méditerranéens ( <i>Juncetalia maritimi</i> )	Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )
1420	Fourrés halophiles méditerranéens et thermo-atlantiques ( <i>Sarcocornetea fruticosi</i> )	Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )
1430	Fourrés halo-nitrophiles ( <i>Pegano-Salsolatea</i> )	Halo-nitrophilous scrubs ( <i>Pegano-Salsolatea</i> )
1510	Steppes salées méditerranéennes ( <i>Limonieta</i> )	Mediterranean salt steppes ( <i>Limonieta</i> )
8330	Grottes marines submergées ou semi-submergées	Submerged or partially submerged sea caves
EUNIS	A6.9 Structures émettrices de gaz ou de liquide, habitats hypoxiques et anoxiques profonds	A6.9 Vents, seeps, hypoxic and anoxic habitats of the deep sea
EUNIS	A4.7 Habitats particuliers rocheux infralittoraux	A4.7 Features of circalittoral rock
EUNIS	A5.1 Sédiment grossier subtidal	A5.1 Sublittoral coarse sediment
EUNIS	A5.2 Sable subtidal	A5.2 Sublittoral sand
EUNIS	A5.3 Vase subtidale	A5.3 Sublittoral mud
EUNIS	A5.4 Sédiments hétérogènes subtidaux	A5.4 Sublittoral mixed sediments
EUNIS	A5.5 Sédiment subtidal dominé par des macrophytes	A5.5 Sublittoral macrophyte-dominated sediment
EUNIS	A5.6 Récifs biogènes subtidaux	A5.6 Sublittoral biogenic reefs
EUNIS	A5.7 Habitats sédimentaires particuliers subtidaux	A5.7 Features of sublittoral sediments
EUNIS	A6.1 Roche et substrats durs artificiels profonds	A6.1 Deep-sea rock and artificial hard substrata
EUNIS	A6.2 Substrats hétérogènes profonds	A6.2 Deep-sea mixed substrata
EUNIS	A6.3 Sable profond	A6.3 Deep-sea sand
EUNIS	A6.4 Sable vaseux profond	A6.4 Deep-sea muddy sand
EUNIS	A6.5 Vase profonde	A6.5 Deep-sea mud
EUNIS	A6.6 Biohermes profonds	A6.6 Deep-sea bioherms
EUNIS	A6.7 Reliefs proéminents profonds	A6.7 Raised features of the deep-sea bed
EUNIS	A6.8 Fosses océaniques, canyons, chenaux, ruptures de pente et éboulements sur la pente continentale	A6.8 Deep-sea trenches and canyons, channels, slope failures and slumps on the continental slope
EUNIS	A1.1 Roche intertidale sous fort hydrodynamisme	A1.1 High energy littoral rock
EUNIS	A2.3 Vase intertidale	A2.3 Littoral mud
EUNIS	A7.1 Neuston	A7.1 Neuston
EUNIS	A4.6 Roche circalittorale de la Baltique en mode abrité	A4.6 Baltic sheltered circalittoral rock
EUNIS	A7.2 Completely mixed water column with reduced salinity	A7.2 Completely mixed water column with reduced salinity
EUNIS	A7.3 Completely mixed water column with full salinity	A7.3 Completely mixed water column with full salinity
EUNIS	A7.4 Partially mixed water column with reduced salinity and medium or long residence time	A7.4 Partially mixed water column with reduced salinity and medium or long residence time
EUNIS	A7.5 Unstratified water column with reduced salinity	A7.5 Unstratified water column with reduced salinity
EUNIS	A7.6 Vertically stratified water column with reduced salinity	A7.6 Vertically stratified water column with reduced salinity
EUNIS	A7.7 Fronts in reduced salinity water column	A7.7 Fronts in reduced salinity water column
EUNIS	A7.8 Unstratified water column with full salinity	A7.8 Unstratified water column with full salinity

EUNIS	A7.9 Vertically stratified water column with full salinity	A7.9 Vertically stratified water column with full salinity
EUNIS	A7.A Fronts in full salinity water column	A7.A Fronts in full salinity water column
EUNIS	A8.1 Sea ice	A8.1 Sea ice
EUNIS	A8.2 Freshwater ice	A8.2 Freshwater ice
EUNIS	A8.3 Brine channels	A8.3 Brine channels
EUNIS	A8.4 Under-ice habitat	A8.4 Under-ice habitat
EUNIS	A1.2 Roche intertidale sous hydrodynamisme modéré	A1.2 Moderate energy littoral rock
EUNIS	A1.3 Roche intertidale sous faible hydrodynamisme	A1.3 Low energy littoral rock
EUNIS	A1.4 Habitats rocheux intertidaux particuliers	A1.4 Features of littoral rock
EUNIS	A2.1 Sédiments grossiers intertidaux	A2.1 Littoral coarse sediment
EUNIS	A2.2 Sable et sable vaseux intertidaux	A2.2 Littoral sand and muddy sand
EUNIS	A2.4 Sédiments hétérogènes intertidaux	A2.4 Littoral mixed sediments
EUNIS	A2.5 Marais salés côtiers et roselières salines	A2.5 Coastal saltmarshes and saline reedbeds
EUNIS	A2.6 Sédiments intertidaux dominés par des Angiospermes aquatiques	A2.6 Littoral sediments dominated by aquatic angiosperms
EUNIS	A2.7 Récifs biogènes intertidaux	A2.7 Littoral biogenic reefs
EUNIS	A2.8 Habitats sédimentaires particuliers intertidaux	A2.8 Features of littoral sediment
EUNIS	A3.1 Roche infralittorale de l'Atlantique et de la Méditerranée sous fort hydrodynamisme	A3.1 Atlantic and Mediterranean high energy infralittoral rock
EUNIS	A3.2 Laminaires et algues rouges sur roche infralittorale sous hydrodynamisme modéré	A3.2 Atlantic and Mediterranean moderate energy infralittoral rock
EUNIS	A3.3 Roche infralittorale de l'Atlantique et de la Méditerranée sous faible hydrodynamisme	A3.3 Atlantic and Mediterranean low energy infralittoral rock
EUNIS	A3.4 Roche infralittorale de la Baltique en mode battu	A3.4 Baltic exposed infralittoral rock
EUNIS	A3.5 Roche infralittorale de la Baltique en mode semibattu	A3.5 Baltic moderately exposed infralittoral rock
EUNIS	A3.6 Roche infralittorale de la Baltique en mode abrité	A3.6 Baltic sheltered infralittoral rock
EUNIS	A3.7 Habitats particuliers rocheux infralittoraux	A3.7 Features of infralittoral rock
EUNIS	A4.1 Roche circalittorale de l'Atlantique et de la Méditerranée sous fort hydrodynamisme	A4.1 Atlantic and Mediterranean high energy circalittoral rock
EUNIS	A4.2 Roche circalittorale de l'Atlantique et de la Méditerranée sous hydrodynamisme modéré	A4.2 Atlantic and Mediterranean moderate energy circalittoral rock
EUNIS	A4.4 Roche circalittorale de la Baltique en mode battu	A4.4 Baltic exposed circalittoral rock
EUNIS	A4.3 Roche circalittorale de l'Atlantique et de la Méditerranée sous faible hydrodynamisme	A4.3 Atlantic and Mediterranean low energy circalittoral rock
EUNIS	A4.5 Roche circalittorale de la Baltique en mode semibattu	A4.5 Baltic moderately exposed circalittoral rock
OSPAR	Communautés des calcaires du littoral	Littoral chalk communities
OSPAR	Bancs de <i>Modiolus modiolus</i>	<i>Modiolus modiolus</i> beds
OSPAR	Herbiers de <i>Zostera</i> ( <i>Zostera marina</i> , <i>Zostera noltii</i> )	<i>Zostera</i> beds
OSPAR	Vasières intertidales	Intertidal mudflats
OSPAR	Colonies de pennatules et mégafaune fouisseuse	Sea-pen and burrowing megafauna communities
OSPAR	Jardins de coraux mous	Coral Gardens
OSPAR	Herbiers de cymodocés	Cymodocea meadows
OSPAR	Monts carbonatés	Carbonate mounds
OSPAR	Dorsales océaniques comportant des sources hydrothermales	Oceanic ridges with hydrothermal vents/fields
OSPAR	Bancs de maërl	Maerl beds
OSPAR	Monts sous-marins	Seamounts
OSPAR	Agregation d'éponge de grands fonds	Deep-sea sponge aggregations
OSPAR	Banc intertidaux à <i>Mytilus edulis</i> sur substrats mixtes et sableux	Intertidal <i>Mytilus edulis</i> beds on mixed and sandy sediments
OSPAR	Récifs à <i>Sabellaria spinulosa</i>	<i>Sabellaria spinulosa</i> reefs
OSPAR	Bancs d' <i>Ostrea edulis</i>	<i>Ostrea edulis</i> beds
OSPAR	Récifs à <i>Lophelia pertusa</i>	<i>Lophelia pertusa</i> reefs

## ANNEXE 3: DETAILED MAPS OF THE MPA NETWORK

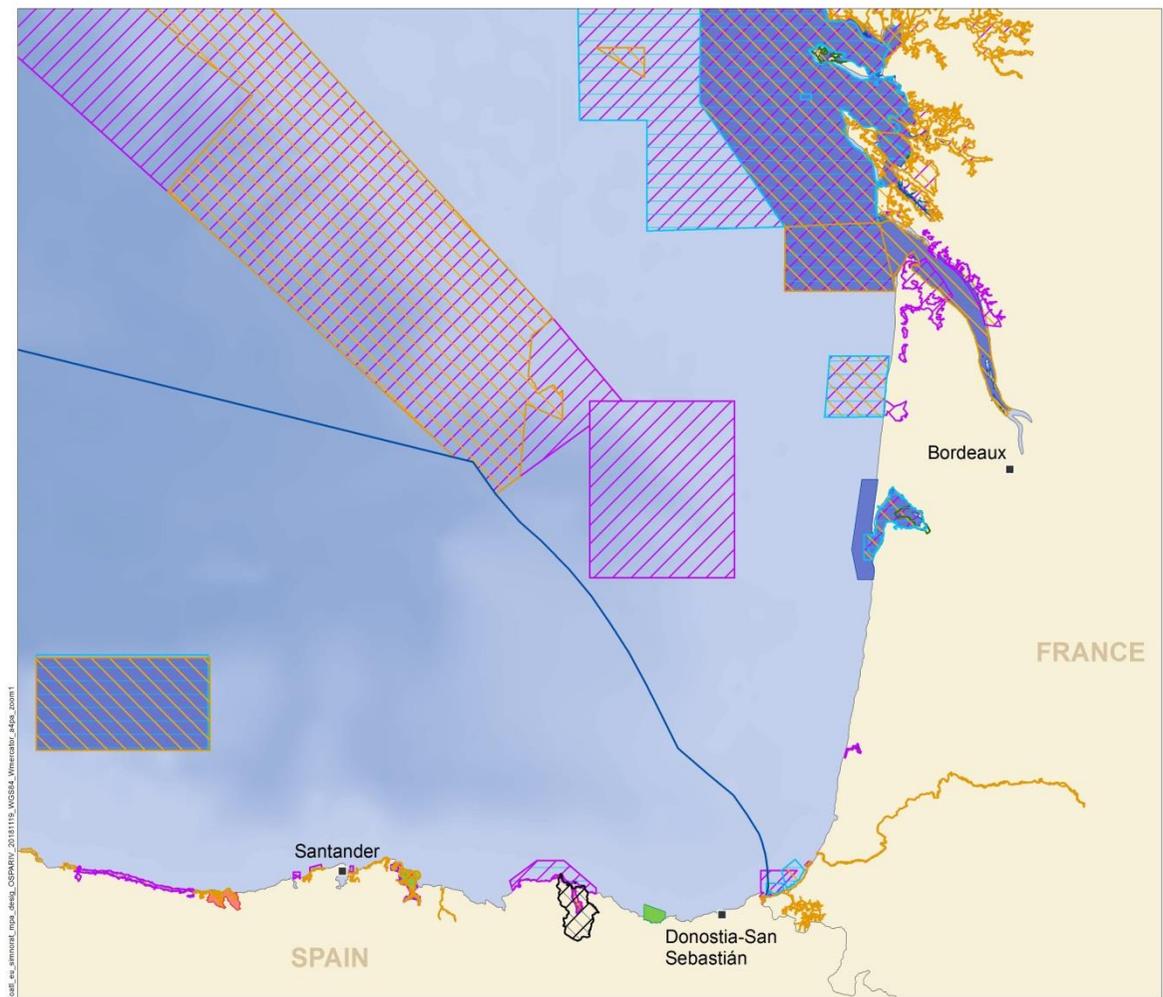
### REGION IV OSPAR - BAY OF BISCAY AND IBERIAN COAST Marine protected areas network

Edited in : 11/2018



**REGION IV OSPAR - BAY OF BISCAY AND IBERIAN COAST**  
**Marine protected areas network**

Edited in : 11/2018



**International marine protected areas**

- Biosphere reserve
- Inscribed site on the world heritage list (UNESCO)
- Marine protected area (OSPAR)
- Wetlands of international importance (Ramsar)
- Natura 2000 - Habitats directive
- Natura 2000 - Birds directive

**National marine protected areas**

**France**

- National park
- Hunting and wildlife national reserve
- Maritime public domain (Conservatoire du littoral)
- Marine nature park
- Biotope protection order area
- National nature reserve
- Regional nature reserve

**Spain**

- National park
- Protected landscape
- Marine protected area
- Natural monument
- Nature park
- Territorial marine protected areas

**Portugal**

- National park
- Protected landscape
- Natural monument
- Nature park

**Maritime boundaries**

- Region IV OSPAR
- Exclusive economic zone (EEZ)

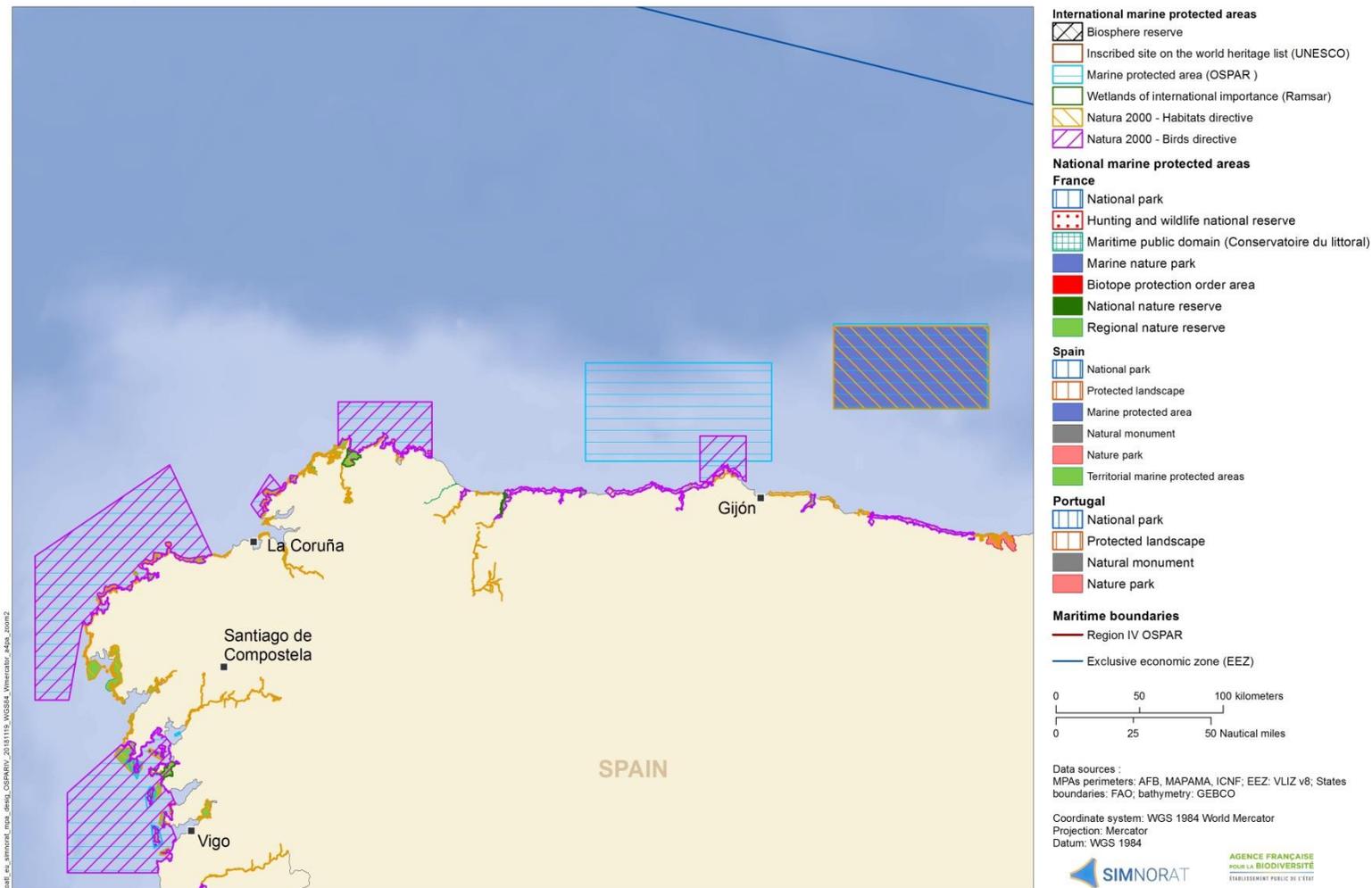
0 50 100 kilometers  
 0 25 50 Nautical miles

Data sources :  
 MPAs perimeters: AFB, MAPAMA, ICNF, EEZ: VLIZ v8; States boundaries: FAO; bathymetry: GEBCO

Coordinate system: WGS 1984 World Mercator  
 Projection: Mercator  
 Datum: WGS 1984

**REGION IV OSPAR - BAY OF BISCAY AND IBERIAN COAST**  
**Marine protected areas network**

Edited in : 11/2018

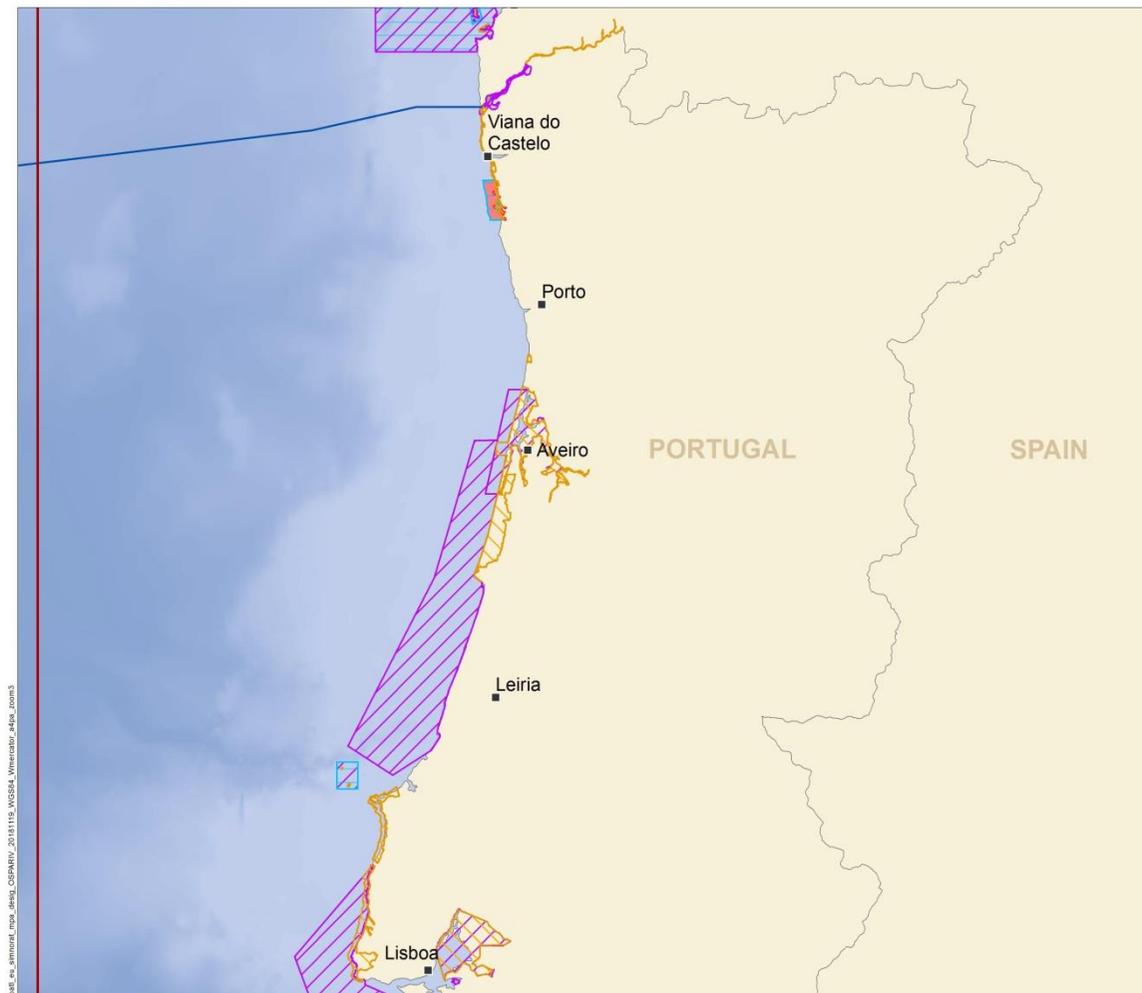




# REGION IV OSPAR - BAY OF BISCAY AND IBERIAN COAST

## Marine protected areas network

Edited in : 11/2018



**International marine protected areas**

- Biosphere reserve
- Inscribed site on the world heritage list (UNESCO)
- Marine protected area (OSPAR)
- Wetlands of international importance (Ramsar)
- Natura 2000 - Habitats directive
- Natura 2000 - Birds directive

**National marine protected areas**

**France**

- National park
- Hunting and wildlife national reserve
- Maritime public domain (Conservatoire du littoral)
- Marine nature park
- Biotope protection order area
- National nature reserve
- Regional nature reserve

**Spain**

- National park
- Protected landscape
- Marine protected area
- Natural monument
- Nature park
- Territorial marine protected areas

**Portugal**

- National park
- Protected landscape
- Natural monument
- Nature park

**Maritime boundaries**

- Region IV OSPAR
- Exclusive economic zone (EEZ)

0 50 100 kilometers  
0 25 50 Nautical miles

Data sources :  
MPAs perimeters: AFB, MAPAMA, ICNF, EEZ: VLIZ v8; States boundaries: FAO; bathymetry: GEBCO

Coordinate system: WGS 1984 World Mercator  
Projection: Mercator  
Datum: WGS 1984

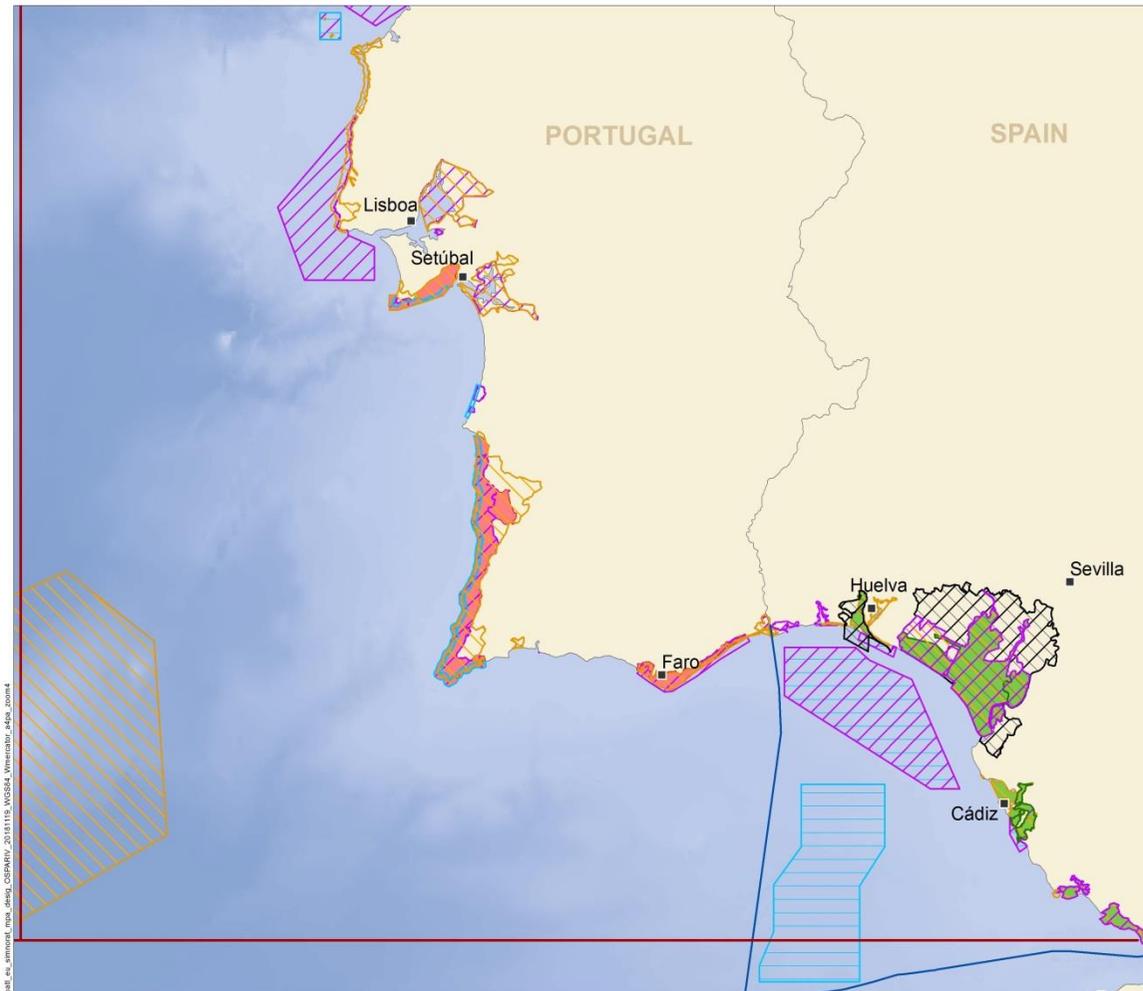
SIMNORAT

AGENCE FRANÇAISE  
POUR LA BIODIVERSITÉ  
ÉTABLISSEMENT PUBLIC DE L'ÉTAT



**REGION IV OSPAR - BAY OF BISCAY AND IBERIAN COAST**  
**Marine protected areas network**

Edited in : 11/2018



- International marine protected areas**
- Biosphere reserve
  - Inscribed site on the world heritage list (UNESCO)
  - Marine protected area (OSPAR)
  - Wetlands of international importance (Ramsar)
  - Natura 2000 - Habitats directive
  - Natura 2000 - Birds directive
- National marine protected areas**
- France**
- National park
  - Hunting and wildlife national reserve
  - Maritime public domain (Conservatoire du littoral)
  - Marine nature park
  - Biotope protection order area
  - National nature reserve
  - Regional nature reserve
- Spain**
- National park
  - Protected landscape
  - Marine protected area
  - Natural monument
  - Nature park
  - Territorial marine protected areas
- Portugal**
- National park
  - Protected landscape
  - Natural monument
  - Nature park
- Maritime boundaries**
- Region IV OSPAR
  - Exclusive economic zone (EEZ)

Data sources :  
 MPAs perimeters: AFB, MAPAMA, ICNF, EEZ: VLIZ v8; States boundaries: FAO; bathymetry: GEBCO

Coordinate system: WGS 1984 World Mercator  
 Projection: Mercator  
 Datum: WGS 1984



## 7. BIBLIOGRAPHY

Fauveau G., Alloncle, N. (2017) Marine Protected Areas in the Celtic Sea - North-East Atlantic Database completion and analysis. EU Project Grant No.: EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3. Supporting Implementation of Maritime Spatial Planning in the Celtic Seas (SIMCelt). French Agency for Biodiversity. 25 pp.

Odion M. (2018) Guide d'utilisation de l'espace collaboratif pour les contributeurs aux géo-portails FRANCE / MAIA / PANACHE et OSPAR. Agence française pour la biodiversité. Version 3.