Supporting **I**mplementation of **M**aritime Spatial Planning in the **Celt**ic Seas

Photo: Sylvain Dromzée - AFB

Component: 1.2.1 Spatial demands and scenarios for maritime sectors

Deliverable: D3A – Marine Protected Areas in the Celtic Seas - Analysis of National Frameworks

European Commission
Directorate-General for Maritime Affairs and Fisheries
Grant Agreement No. EASME/EMFF/2014/1.2.1.5/3/SI2.719473 MSP Lot 3

SIMCelt partners

Deliverable i.d.:	D3A
Deliverable Lead Partner:	French Biodiversity Agency
Due Date of Deliverable:	31/12/17
Completion Date of Deliverable:	00/00/17
Start Date of Project:	29/12/15
Duration:	24 Months
Version:	1.0
EU Grant Call:	Action on Maritime Spatial Planning in the Northern European Atlantic
EU Project Officer:	David San Miguel Esteban

Recommended Citation: De Magalhaes, A.V.T., Likhacheva K., Fartaoui, M., and Alloncle, N. 2018. Marine Protected Areas in the Celtic Seas – Analysis of National Frameworks (Deliverable 3A). 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. 60 pp.

Dissemination Level		
PU	Public	**X**
PP	Restricted to a group specified by the consortium (including the Commission services)	
RE	Restricted to other programme participants (including the Commission services)	
CO	Confidential, only for members of the consortium (Including the Commission services)	

Document Information

Deliverable Title	Marine Protected Areas in the Celtic Seas - Analysis of National Frameworks
Coordinator	Alloncle N.
Authors	De Magalhaes A.V.T., Likhacheva K., Fartaoui, M., Alloncle N.

Version History

Date	Document Version	Reviewer	Revision
14/11/2016	1.0	Kristina Likhacheva	Initial draft
15/11/2016	1.0	CAN	Amendments
02/12/2016	1.0	AMOH	Edits
05/12/2016	1.0	LR	Amendments
15/12/2016	1.0	DAERA (AR & CF)	Review
02/2017	1.0	NRW	Amendment
09/2017	1.1	-	-
30/02/2017	2.1	Michael Fartaoui	Structural and content revision
02/10/2017	3.0	Ana Vitoria Tereza de Magalhaes	Structural and content revision
15/12/2017	3.1	Neil Alloncle	Content revision
15/12/2017		Neil Alloncle	Content revision
16/01/2018	3.2	Neil Alloncle	Content revision
17/01/2018	3.2	Ana Vitoria	Content revision
15/03/2018	4	Neil Alloncle	Content Revision
15/03/2018	4	Ana Vitoria	Completion Date

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List of Acronyms

AAMP Agency for Marine Protected Areas (Agence des aires marines protégées)
AFB French Biodiversity Agency (Agence Française pour la Biodiversité)
AA Appropriate Assessment
CBD Convention on Biological Diversity
CEREMA French National Center for Studies and Expertise on Risks, Environment, Mobility and Urban and Country Planning
DDTM Departmental Directorate for the Territories and the Sea (Direction Départementale des Territoires et de la Mer)
DAERA Department of Agriculture, Environment and Rural Affairs (Northern Ireland)
Defra Department for Environment, Food and Rural Affairs (UK)
DIRM Inter-regional Directorate for the Sea (Direction Interrégionale de la Mer)
DML Delegation to the Sea and the Coastal Zone (Délégation à la Mer et au Littoral)
DREAL Regional Environmental, Planning and Housing Agency (Direction Régionale de l'Environnement, de l'Aménagement et du Logement)
EBA Ecosystem Based Approach
GES Good Environmental Status
IOM Isle of Man
IMP Integrated Maritime Policy
IFREMER French Research Institute for Exploitation of the Sea
JNCC Joint Nature Conservation Committee (UK)
MAB Man and Biosphere Programme
MASH Protected Areas, Species and Habitats
MCZs Marine Conservation Zones
MEEM Ministry of Environment, Energy and Sea (Ministère de l'Environnement, de l'Energie et de la Mer)
MMO Marine Management Organisation (UK)
MNHN The National Museum of Natural History (Museum national d'histoire naturel)
MPA Marine Protected Area
MSP Maritime Spatial Planning
MSFD Marine Strategy Framework Directive
NE Natural England
NIEA Northern Ireland Environment Agency
NIS Natura Impact Statement
NNR National Nature Reserve
NPWS National Parks and Wildlife Service (Ireland)
NRW Natural Resources Wales
OSPAR Convention Convention for the Protection of the Marine Environment of the North-East Atlantic
SACs Special Areas of Conservation
SCI Sites of Community Importance

SEPA Scottish Environment Protection Agency
SNH Scottish Natural Heritage
SPAs Special Protection Areas
SIMCelt Supporting Implementation of Maritime Spatial Planning in the Celtic Seas
SSSIs Sites of Special Scientific Interest
WNBR World Network of Biosphere Reserves
UK United Kingdom
WFD Water Framework Directive
WH World Heritage Programme

About SIMCelt

The SIMCelt Project SIMCelt - Supporting Implementation of Maritime Spatial Planning in the Celtic Seas is a two-year €1.8 million project co-financed by DG MARE and focused on promoting the development of transnational cooperation to support the implementation of Directive 2014/89/EU in the Celtic Seas. Led by University College Cork, the project consortium comprises both planners and researchers from seven partner institutes representing a mix of governmental authorities and academic institutes from Ireland, France and the UK. This consortium is particularly interested in developing meaningful cooperation between neighbouring Member States to support implementation of spatially coherent plans across transboundary zones of the Celtic Seas, building on previous work and leveraging new opportunities to identify and share best practice on technical, scientific and social aspects of transboundary MSP.

To explore how transboundary working for MSP is being undertaken in the Celtic Seas, SIMCelt project components focus on understanding spatial demands and scenarios, data requirements for MSP and stakeholder engagement. To complement the outputs of these components, four case studies were selected to illustrate how MSP implementation and transboundary working are approached within the Celtic Seas.

This report will identify the main categories of MPA deriving from international conventions, EU law and national legislation in the SIMCelt partner countries and describe how these differ. An analysis of the links between MPAs and MSP is also provided in the 'Discussion' section of this report. The report refers to a related SIMCelt Deliverable on Marine Protected Areas in the Celtic Sea - North-East Atlantic Database completion and analysis (D3B), which should be read in conjunction with this report for comprehensiveness.

Introduction

Due to the continuing increasing demands for sea space, as well as environmental degradation from overfishing, pollution, habitat destruction; new approaches to the management of human activities and marine resources, together with their impacts, have emerged Maritime Spatial Planning (MSP) and Marine Protected Areas (MPA). [1]

Maritime spatial planning, as defined by the MSP Directive, is "a tool that enables stakeholders to apply coordinated, integrated and transboundary approaches."[2] Marine Protected Areas are geographically defined areas, designated and managed to achieve specific conservation objectives and as such aim to protect and conserve the marine environment. MSP seeks to balance demands for development with the need to protect the environment, achieving social, environmental and economic objectives, in an open and planned approach.[3] As a number of MPAs already exist, and contribute to protecting the ecosystems on which resources and other services depend, these areas must be reflected within MSP.

The International Union for Conservation of Nature (IUCN) defines a protected area as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values" (IUCN, 2008).[4]

This definition was not used in the Convention on Biological Diversity (CBD), which uses the following:
"'Marine and Coastal Protected Area' means any confined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings" (CBD, COP 7, Decision VII/5 (note 11)).[5]

The term MPA, can therefore have different definitions, and those differences can cause debate and misunderstanding between stakeholders, industry and even regulatory authorities.[6] One common misunderstanding is the idea that MPAs are "no take zones", however when implemented MPAs are rarely "no take zones".[7] Marine protected areas usually allow the existence of activities linked to sustainable development and subsistence livelihoods, provided these do not affect upon the integrity of the environment concerned.

Moreover, Marine Protected Areas is a generic term that encompasses a broad range of categories. These various categories arise from international law and policy (e.g. UNESCO Biosphere Reserves and World Heritage, Ramsar Sites, OSPAR Convention, EU Directives) as well as national legislation. These various categories of MPA have different conservation objectives (from strict protection of the marine environment to the support of sustainable development of activities) and accordingly are managed in different ways to achieve those specific objectives. In practice, this means they will be regulated and governed in different ways. These variations can compound misunderstandings.

[1] Kenchington, R. A., Ward, T. J., & Hegerl, E. J. (2003). The benefits of marine protected areas. Department of the Environment and Heritage.
[2] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0089&from=EN
[3] Ehler, C., & Douvere, F. (2009). *Marine spatial planning: a step-by-step approach toward ecosystem based management*. UNESCO/IOC.
[4] https://www.iucn.org/theme/protected-areas/about
[5] https://www.cbd.int/decision/cop/?id=7742
[6] https://aran.library.nuigalway.ie/bitstream/handle/10379/314/Irish waters.pdf?sequence=1&isAllowed=y
[7] https://aran.library.nuigalway.ie/bitstream/handle/10379/314/Irish waters.pdf?sequence=1&isAllowed=y

In this report, we have used the term MPA is the most general sense, encompassing any form of designated site for conservation purposes. The aims of this report, therefore, are to provide a better understanding of MPAs and their varying legal basis and present a clear overview of the differences between each MPA category (international and national) occurring within the Celtic Seas. The latter impacts upon how management is conducted and implemented, also described in this report. The final section of this report is dedicated to exploring the potential links marine conservation, especially MPAs, have with MSP.

Literature Review

This study used information from the websites of official organisations (e.g. United Nations, European Commission and OSPAR), official publications (e.g. National Administrations Reports) and scientific literature as a basis.

Methodology

This study investigated the existent framework for marine conservation present in the Celtic Seas countries and the differences between France, Ireland and United Kingdom. The analysis took into account the:

1. Identification of international legal frameworks for marine conservation in the Celtic Seas and International Categories of MPAs (Figure 1),

2. Analysis of national legal frameworks and national categories of MPAs (France, Ireland and UK)

3. Synthesis on the links between MSP and MPAs

4. Conclusions

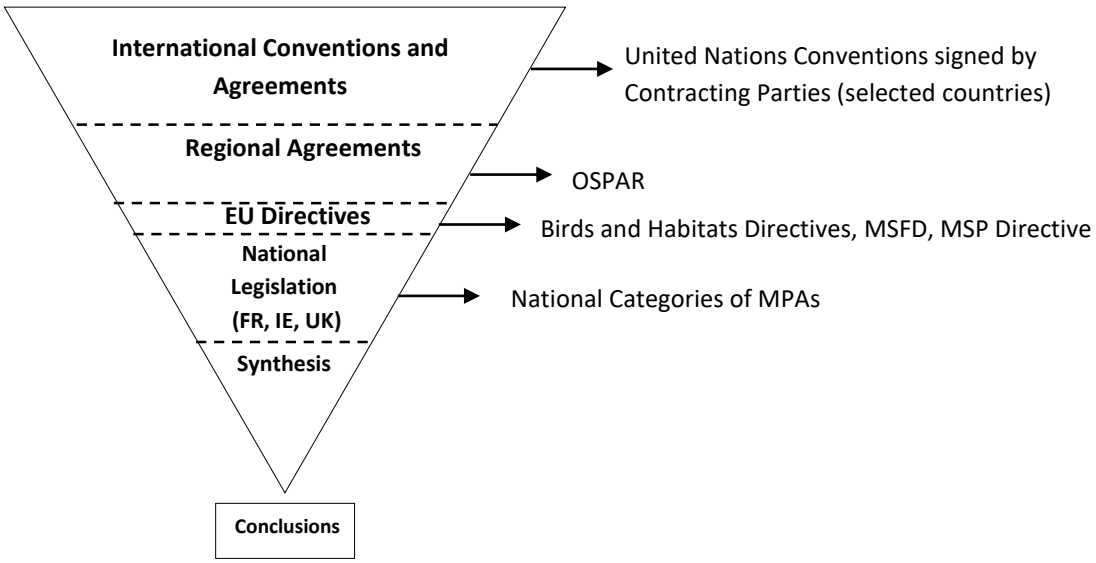

Figure 1: Structure of this study

1. Legal Basis for Marine Conservation

At the international level, marine conservation is addressed through several instruments.

All countries of the Celtic Seas region have ratified the 1982 UN Law of the Sea Convention (UNCLOS)[8]. UNCLOS requires Contracting Parties to "protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life" [9].

Other multilateral treaties relevant to the protection of the environment include the Convention on Biological Diversity[10] (CBD) that aims to conserve biological diversity and sustainable use components of biological diversity. Two Protocols have also been agreed under the CBD Convention:

- Nagoya Protocol[11] on access to genetic resources and the fair sharing of benefits arising from their utilisation, and
- Cartagena Protocol[12] on bio safety.

The CBD, established the 20 Aichi targets distributed across five Strategic Goals defined by the Strategic Plan 2011-2020 of the CBD Convention,[13] those targets will be further analysed in this report.

Other international Conventions also relate to environmental protection such as the Bonn Convention[14] on the conservation of migratory species of wild animals and the CITES Convention, relating to international trade of endangered species, wild fauna and flora.[15] Transboundary environmental impacts are addressed through the Espoo Convention.

The UNESCO World Heritage Convention (1972)[16] links nature and heritage conservation, recognising that people interact with nature, and the fundamental needs to preserve and balance both.[17]

The UNESCO Man and Biosphere (MaB) Programme[18], is another initiative that provides an international MPA category, the Biosphere Reserve, by the MaB Strategy[19]. The Biosphere Reserves can comprise terrestrial, marine and coastal ecosystems. Biosphere Reserves are places where interdisciplinary approaches to understanding and managing changes and interactions between social and ecological systems are trialled.[20]

The Convention on Wetlands, or Ramsar Convention[21], is dedicated to the protection of wetlands and their resources.[22]

The Oslo/Paris (OSPAR) Convention on the Protection of the Marine Environment of the North-East Atlantic was adopted in 1992. It has been signed by 15 European countries and the EU.[23]

[8] http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm
[9] UNCLOS http://www.un.org/depts/los/convention_agreements/texts/unclos/part12.htm
[10] CBD https://www.cbd.int/information/parties.shtml
[11] Nagoya Protocol https://www.cbd.int/abs/
[12] Cartagena Protocol https://bch.cbd.int/protocol
[13] https://www.cbd.int/convention/default.shtml
[14] Bonn Convention https://treaties.un.org/pages/showDetails.aspx?objid=08000002800bc2fb
[15] https://www.cites.org/eng/disc/parties/chronolo.php
[16] http://whc.unesco.org/archive/convention-en.pdf
[17] http://whc.unesco.org/en/convention/
[18] http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/
[19] http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Final_Draft_MAB_Strategy_4-5-15_en.pdf
[20] http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/
[21] www.ramsar.org/about-the-ramsar-convention
[22] https://www.ramsar.org/).
[23] https://www.ospar.org/about

At EU level, the Birds (1979, amended in 2009) and Habitats Directives (1992) aim to protect Europe's most valuable and threatened species and habitats.[24] The Marine Strategy Framework Directive was adopted in 2008 and aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend.[25]

Several of these international legal instruments provide for the protection of sites, included in this report as MPA categories, described in dedicated sections of this report:

- UNESCO World Heritage Sites
- Biosphere Reserves
- Ramsar MPAs
- OSPAR MPAs[26]
- Natura 2000 Sites: Special Protection Areas (SPA) and Special Areas of Conservation (SAC)

At national level, additional MPA categories in the Celtic Seas may be designated under national legislation namely:

- **France:** Environmental Code [27] and the Law of 14 April 2006 relating to national parks, marine nature parks and regional nature parks (amending the system of national parks, establishing marine nature parks and amending regional nature parks)

- **Ireland:** Wildlife Acts, 1976-2012[28], provides legal basis for protected area in Ireland, which may include marine sites.

- **United Kingdom:** Marine and Coastal Access Act, 2009.

Therefore, different national MPA categories exist in the Celtic Seas according to country:

- **France:** Nature Reserve, Nature Marine Park, Biotope Protection Order.

- **Ireland:** In addition to the international and EU categories, Irish law provides for the creation of National Parks, Natural Heritage Areas and Nature Reserves.

- **United Kingdom:** Sites of Special Scientific interest (England, Wales, Scotland), Areas of Special Scientific interest (Northern Ireland), Marine Conservation Zones (England, Wales, Northern Ireland, Offshore Waters), Nature Conservation MPA (Scotland).

[24] http://ec.europa.eu/environment/nature/natura2000/index_en.htm
[25] http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm
[26] https://www.ospar.org/work-areas/bdc/marine-protected-areas
[27] https://www.legifrance.gouv.fr/content/download/1963/13739/.../3/.../Code_40.pdf
[28] https://www.npws.ie/legislation/irish-law/wildlife-act-1976

Table 1: Synthesis table of International Conventions

Convention/Agreement		Year	Main Objective(s) of the MPAs designated by this Agreement
Espoo Convention		Adopted in 1991, entered into force 1997	Encourage the environmental impact assessment in a transboundary context
Convention on Biological Diversity		Signed 1992, entered into force 1993	Conservation of biodiversity, sustainable use of its components, fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.
Cartagena Protocol	Nagoya Protocol		
UNCLOS		1982, entered into force 1994	Promote peaceful use of the sea, facilitate communication, enable equitable and efficient use of the sea, protect marine environment and promote maritime safety
Bonn Convention		Signed 1979, entered into force 1985	Conservation of migratory species and wild animals
CITES Convention		Signed 1973, entered into force 1975	Prevent the international trade of endangered species of wild fauna and flora
Espoo Convention		Adopted in 1991, entered into force 1997	Encourage the environmental impact assessment in a transboundary context
UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage		1972	Conservation of nature properties linked with cultural heritage, recognizing the way people interact with nature. **Strategic Objectives**: Credibility, Conservation, Capacity-building, Communication and Communities
UNESCO Biosphere Reserves		1971	Achieve conservation, development and logistic support to the Biosphere Reserves. Improve conservation zones, foster sustainable development with innovative and participatory governance systems. Preserve nature taking into account traditional knowledge in ecosystem management[29].
Ramsar Convention		1971	Promote the wise use of wetlands, designate suitable wetlands for the "Ramsar List", and enhance the international cooperation on transboundary wetlands and species[30].
OSPAR Convention		1992	Protect, conserve and restore species, habitats and ecological processes affected by human activity. Prevent degradation and conserve areas that best represent the range of species of the OSPAR Regions.

[29] http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/main-characteristics/
[30] https://www.ramsar.org/about/the-ramsar-convention-and-its-mission

2. International MPA Categories

This section will analyse each international category of MPA and their respective objectives, management processes, governance, designation process and regulatory mechanisms.

UNESCO World Heritage (Marine Programme)

The Celtic Seas countries are all participants in the United Nations Network for protection of environment[31] such as World Heritage Sites. Those sites are nominated by the contracting parties and aim to preserve the world's natural and cultural treasures, historical cultural landscapes, including marine features.[32]

Objectives

This programme of UNESCO recognises the way people interact with nature and the fundamental need to preserve the balance between two. The specific objectives of the World Heritage Convention are based on the "5 Cs": Credibility, Conservation, Capacity-building, Communication and Communities.[33]

Management

The programme aims to protect heritage under a holistic strategy, rather than conserve a specific structure, providing identification, protection, conservation, presentation and transmission of values to future generations about heritage. This approach provides the promotion of cultural values linked with protection of environment, providing vitality to communities.[34]

Governance

The governance system in the WH Programme, aims to hold the balance between economic, social and individual and community goals, encouraging the efficient use of resources.

Regulation

Countries have an obligation to prepare regular periodic reports about the state of conservation and the various protection measures applicable to their sites. The State Party also has the option to inscribe one site in danger on the Official List of Heritage in Danger. [35] In relation to Planning, UNESCO published a Best Practice Guide for site managers, in 2015, explaining the MSP methodology and providing examples of its application in World Heritage Marine Sites.[36]

[31] http://www.unesco.org/mabdb/bios1-2.htm
[32] http://whc.unesco.org/en/globalstrategy/
[33] World Heritage Objectives http://whc.unesco.org/en/convention/
[34] http://whc.unesco.org/en/managing-cultural-world-heritage/
[35] http://whc.unesco.org/en/118/
[36] https://whc.unesco.org/en/marine-programme/

UNESCO Biosphere Reserves MPAs

Biosphere Reserves can be coastal, marine or terrestrial; the network aims to conserve nature, at the same time as promoting sustainable development. Biosphere Reserves have as action plan, the Lima Action Plan, a document that contains a succinct set of actions aimed at ensuring the effective implementation of the MAB Strategy 2015-2025[37].

The Biosphere Reserves in the Celtic Seas region, considered here as MPAs, are: the Iroise Biosphere Reserve in Brittany, France, Dublin Bay in Ireland, Brauton Burrows (England), Dyfi (Wales), Taynish (Scotland), Loch Druidibed (Scotland) in the UK and also the Isle of Man Biosphere Reserve, UK.[38]

Objectives

The objective of the programme is to ensure environmental, economic and social sustainability through development and coordination of a worldwide network of places acting as "live laboratories". This network also encompasses the human aspects of conservation (including cultural and spiritual heritage conservation). The aim is to understand interactions between people and the environment.[39]

Management

The programme aims to assure the participation of local civil society for effective management, and devise means of improving livelihoods through sustainable use, protecting representative ecosystems, on a long-term basis.[40]

Governance

The Governance system may vary from country to country, however, at international level; biosphere reserves follow the principle of biodiversity governance, supporting a holistic view of human and non-human needs, recognising the intrinsic value of the living world.[41]

Regulation

The regulation of these sites considers human-nature interactions, aiming at the creation of sustainable livelihoods. This may change according to the country context and scale of the Biosphere Reserve.

The Statutory Framework of the World Network of Biosphere Reserves was formulated with the objective of enhancing the effectiveness of individual Biosphere Reserves. It also advocates a common understanding on communication and cooperation at regional and international levels.

The Statutory Framework intends to contribute to the recognition of Biosphere Reserves and encourage and promote good working examples. It also provides for the designation, support and promotion of Biosphere Reserves, taking into account the diversity of national and local situations.

[37] http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Lima_Action_Plan_en_final_01.pdf
[38] http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/united-kingdom-of-great-britain-and-northern-ireland/isle-of-man/
[39] Biosphere Reserve objectives http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme/awards-and-prizes/mab-young-scientists-awards/criteria-and-objectives/
[40] http://www.moef.nic.in/sites/default/files/BR_Guidelines.pdf
[41] www.tesisenred.net/bitstream/handle/10803/117448/cj1de1.pdf?sequence=1

States are encouraged to elaborate and implement national criteria (e.g. consider ecological systems of biogeographic regions, consider biological conservation, opportunity to explore and demonstrate approaches to sustainable development, etc.)[42] for Biosphere Reserves that take into account the special conditions of the State concerned.

Designation

The designation process for Biosphere Reserves involves the International Coordinating Council of the MAB Programme, where an interested State sends a list of proposed sites for designation once a year to the Council based on supporting documentation including scientific analysis. If the documentation is approved by the Council, the site is designated, receiving the status of "UNESCO Biosphere Reserve."[43]

Ramsar Sites

The Ramsar Convention provides another category of MPA (mainly coastal), namely Wetlands of International Importance, aimed at promoting the conservation of wetlands and their resources. All countries with the Celtic Seas region have MPAs of this category.[44] The Convention uses a broad definition of wetlands, including diverse ecosystems relevant for coastal conservation. The Ramsar Convention provides countries with a Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance. It includes important inputs for national action and international cooperation.

Objectives

Initially, the main objective of the Ramsar Convention was to preserve wetlands and habitats of water birds.[45] However, over time, the network started to encompass the full range of wetland functions and values, including cultural values.[46] Long-term objectives of the Ramsar Convention include the establishment of specific mechanisms to enhance partnerships, in order to achieve the common nature conservation goals with other international networks. The Convention also aims to establish a framework for international cooperation on transboundary wetlands, for shared species and habitats.[47]

Management

The management of Ramsar sites is the responsibility of the respective Member States, and the Convention states that each State should formulate and implement the management plans. The Ramsar Convention Secretariat provides support for implementation, management and monitoring. The Convention states that States shall "formulate and implement their planning so as to promote the conservation of the wetlands included in the list".

[42] http://www.ddbra.ro/media/The%20Statutory%20Framework%20of%20the%20World%20Network%20of%20Biosphere%20Reserves(3).pdf

[43] http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/designation-process/

[44] https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/biodiversity-status/marine-protected-areas/

[45] https://www.ramsar.org/about/the-ramsar-convention-and-its-mission

[46] Guidelines for MPAs https://cmsdata.iucn.org/downloads/mpaguid.pdf

[47] https://www.ramsar.org/about/the-ramsar-convention-and-its-mission

Resolution 5.7[48] and Resolution VIII.14[49] are documents that contain detailed provisions on the management of Ramsar Sites. The former called on Contracting Parties to develop management plans for each wetland on the Ramsar List, to establish the appropriate legal and administrative structures for the application of such management plans, and to provide funds for the implementation of the plans and for training of the necessary staff. Resolution VIII.14 updated these requirements by introducing new guidelines for management planning of Ramsar sites. These recognise that Ramsar sites might also be subject to other planning and management actions (Figure 2) and, as such, form part of an integrated management planning process that should also take account integrated coastal management plans.[50]

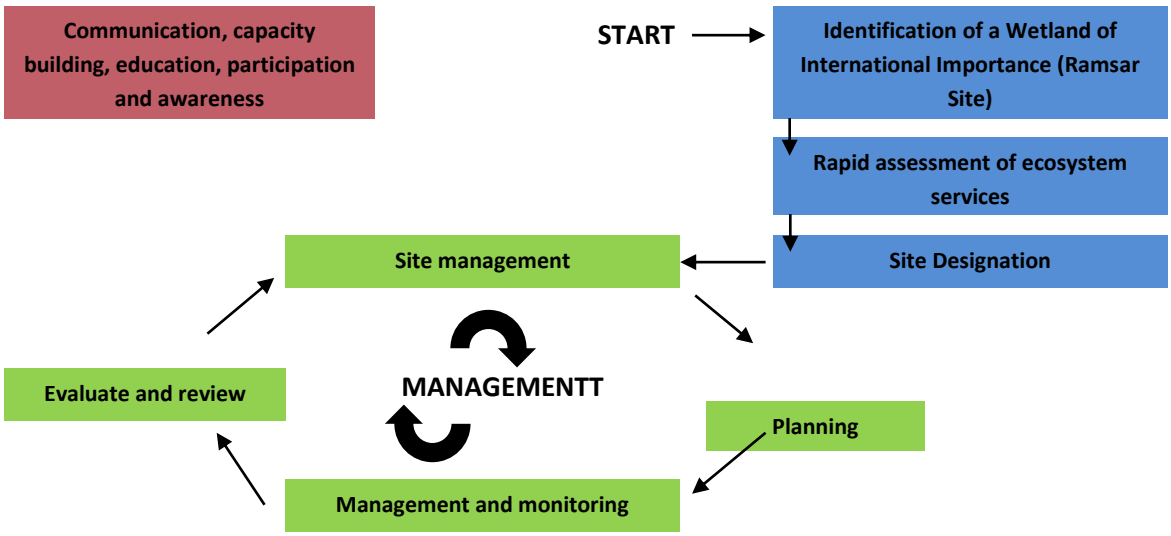

Figure 2: Steps in the designation and management of Ramsar Sites. Source: Ramsar 2017, adapted version for this study[51]

The management of a Ramsar site may be at different ranges and scale. In general, management activities should maintain the services that the site provides, avoiding introduction of invasive species, regulating natural resources, including in management and installing infrastructure such as facilities, for the increase of awareness through provision of access and mechanisms to view wildlife[52]. Integrated Coastal Zone Management and MSP allow decision makers to achieve multiple objectives and deal with trade-offs. Both approaches are encouraged by Ramsar Advisory Bodies.[53]

Designation

Parties to the Convention are responsible for identifying possible sites. The Ramsar Committee provides Guidelines,[54] however, to guide Member States through the process of designation. After signing the

[48] Resolution 5.7: Management planning for Ramsar sites and other wetlands. 5th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands, Kushiro, Japan, 9-16 June 1993.
[49] Resolution VIII.14: New Guidelines for management planning for Ramsar sites and other wetlands. 8th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands, Valencia, Spain, 18-26 November 2002.
[50] Resolution VIII.14, para. 17 and section III of the guidance.
[51] http://www.ramsar.org/sites/default/files/documents/library/designation_management_ramsar_sites_e.pdf
[52] http://www.ramsar.org/sites/default/files/documents/library/designation_management_ramsar_sites_e.pdf
[53] http://www.ramsar.org/sites/default/files/documents/library/teeb_waterwetlands_report_2013.pdf
[54] https://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-17.pdf

Convention, a Contracting Party has to designate at least one site, identified as a 'Wetland of International Importance'.

The criteria established by the Ramsar Convention specifies that sites have to be selected according to the international significance of their ecology, botany, zoology, limnology or hydrology.[55] In the UK, a site is proposed for selection by the UK nature conservation agencies and this process is coordinated by the Joint Nature Conservation Committee.

In the past, the initial step comprised of selecting sites of importance to water birds, designated under the EU Birds Directive, however more recently, other non-bird features can be taken into account for Ramsar Sites proposed in the UK.[56] Once a site is selected for designation, the relevant authorities in charge of the designation are guided by the Ramsar Committee composed of experts for future advice.

OSPAR

Regional environmental protection is fostered by the Regional Seas Programme.[57] The OSPAR Convention for the protection of the marine environment of the North-East Atlantic includes the Celtic Seas as a region, Region III.

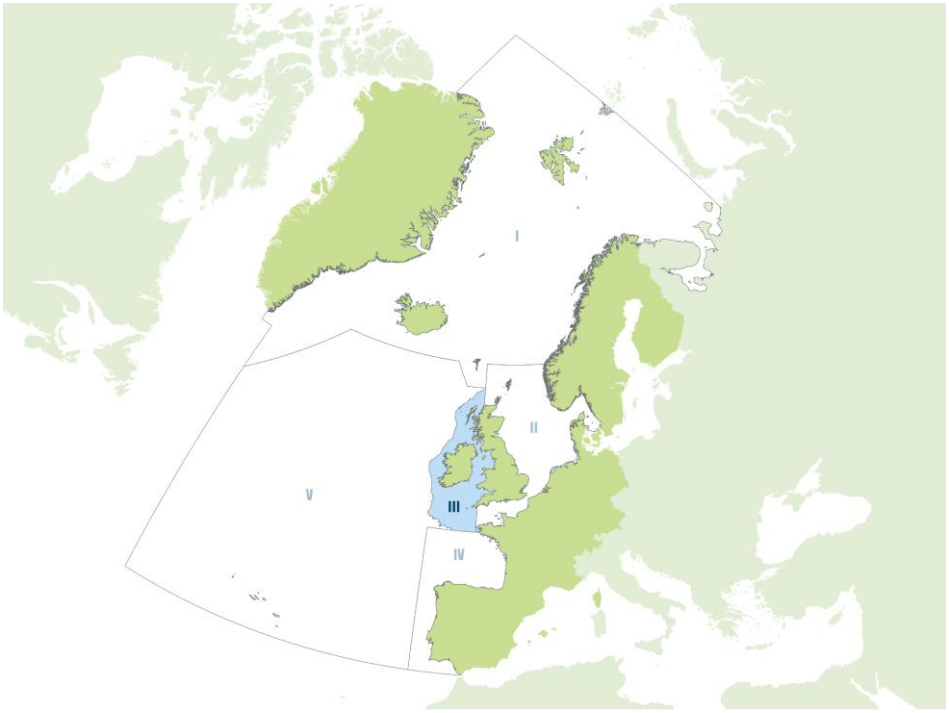

Figure 3: OSPAR Region III, representing map with no scale. Source: OSPAR Commission, 2017[58]

The OSPAR definition of a Marine Protected Area is[59]: "an area within the [OSPAR] maritime area for which protective, conservation, restorative or precautionary measures, consistent with international law have

[55] http://www.fao.org/docrep/005/W7545E/w7545e03.htm
[56] http://jncc.defra.gov.uk/page-161
[57] Regional Seas Programme http://www.unep.org/regionalseas/
[58] https://www.ospar.org/convention/the-north-east-atlantic
[59] http://jncc.defra.gov.uk/page-3370-theme=textonly

been instituted for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment" (OSPAR 2003, Annex 9 A-4.44a).

In this context, France has been tasked by the OSPAR Secretariat to develop the OSPAR MPA GIS database. This was taken forward through the MAIA cooperation project,[60] which also created a network of MPA managers and stakeholders in the Atlantic Arc.[61]

Objectives

OSPAR's strategic objective is to achieve an ecologically coherent network of well-managed marine protected areas across the OSPAR maritime area, consistent with the CBD.[62] The Contracting Parties have committed to implement appropriate measures to eliminate pollution, as well as to conduct scientific and technical research to evaluate the implementation of the Convention. OSPAR seeks to progress implementation of the ecosystem approach along with addressing identified key threats through five thematic strategies.

One of these strategies is the Biodiversity and Ecosystems Strategy.[63] OSPAR's strategic objective with regard to biodiversity and ecosystems is "to halt and prevent by 2020 further loss of biodiversity in the OSPAR maritime area, to protect and conserve ecosystems and to restore, where practicable, marine areas which have been adversely affected."[64]

In achieving its objectives, the Strategy stipulates that the OSPAR Commission will focus on "integrated management of human activities" through the further development and implementation of tools such as Marine Spatial Planning, impact assessment and socio-economic assessment so as to reduce pressures affecting the marine environment.[65]

Management

To assist the work of the Contracting Parties, OSPAR has developed guidance documents such as "Guidelines for the Management of Marine Protected Areas."[66] Management plans are also suggested by OSPAR in order to help achieve the goals of the network. Considering the EU context, where Natura 2000 sites are also reported as OSPAR MPAs, the contracting parties do not have to take any further action.[67] Where management plans for Natura 2000 sites exist, they are sufficient for OSPAR purposes.[68]

Regulation

OSPAR encourages the regulation of MPAs through implementation of their Guidelines on management. However, there is no formal regulation on behalf of OSPAR.[69]

[60] http://www.maia-network.org/
[61] MAIA European Project http://www.maia-network.org/upload/iedit/11/pj/1529_4487_4p_MAIA_EN_BD.pdf
[62] OSPAR MPAs https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/key-messages-and-highlights/network-ospar-marine-protected-areas-expanding/
[63] http://www.ospar.org/site/assets/files/1200/ospar_strategy.pdf#page=7
[64] http://jncc.defra.gov.uk/page-3370
[65] https://www.ospar.org/site/assets/files/1466/biodiversity_strategy.pdf
[66] https://www.ospar.org/work-areas/bdc/marine-protected-areas/guidance-for-the-development-and-management-of-the-ospar-network
[67] http://www.ospar.org/*documents?d=32690*
[68] www.ospar.org/documents?d=32690
[69] https://www.ospar.org/work-areas/bdc/marine-protected-areas/guidance-for-the-development-and-management-of-the-ospar-network

Designation

For a site to be designated as an MPA by OSPAR, it must meet certain criteria as specified in Appendix 1 of OSPAR Agreement: 2003-17 (as amended). Networks of OSPAR MPAs are designated to be resilient to changing conditions. The following points can be addressed and contribute to coherence:[70]

- Protect, conserve and restore species, habitats and ecological process that are affected as result of human activities
  - ✓ High priority is given to species and habitats that are declining

- Prevent degradation of species and damage to ecological processes, following the precautionary principle
  - ✓ Priority is given to habitats and species that have a high possibility to decline
  - ✓ Important habitats and species that are of local importance, global importance, rarity, sensitivity, ecological significance

- Protect and conserve areas that best represent the range of species, habitats and ecological processes in the maritime area
  - ✓ Considering the ecological significance
  - ✓ High natural biological diversity
  - ✓ Representatively including the biogeographical regions
  - ✓ Naturalness[71].

3. European MPA Categories

Other important instruments for the protection of rare habitats and threatened species in the EU, is the Natura 2000 Network. Created through the Birds Directive and Habitats Directive, the network encompasses 6% of European maritime territory.[72]

The Birds and Habitats Directives require designation of Special Conservation Areas (SPAs) and Special Areas of Conservation (SACs) respectively, which together form the Natura 2000 network. Information on the Natura 2000 network is via public online tools, which can be accessed by a broad range of public, such as the Natura 2000 Viewer, that promotes the sharing of data about marine habitats and species, crucial for maritime spatial planning.

Objective

In the case of the Natura 2000 network, it is important to distinguish between conservation objectives of individual sites and the overall objective of achieving favourable conservation status.[73] Site conservation objectives are specific objectives that need to be met in a site, and represent a way to achieve favourable conservation status at the appropriate level, taking into account the natural range of the respective species or habitats.

[70] *https://www.ospar.org/documents?d=32377*
[71] https://www.ospar.org/documents?d=32377
[72] http://ec.europa.eu/environment/nature/natura2000/marine/index_en.htm
[73] Natura 2000 http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note2_EN.pdf

Table 2: Objectives of Birds and Habitats Directives.

Birds Directive Objectives	Habitats Directive Objectives
Long-term conservation and management of natural resources as integral part of the heritage. Promote the preservation, maintenance or restoration of a sufficient diversity and area of habitats that is essential for all species of birds, considering ecological, scientific and cultural requirements, taking into account economic and recreational requirements[74].	Aim to contribute towards ensuring bio-diversity by the conservation of habitats and wild fauna and flora of European Habitats, taking measures that shall be designed to maintain and restore favourable conservation status of natural habitats (fauna and flora), considering economic, social, cultural and environmental aspects[75].

- France

French Natural Heritage (a unit of the French Museum of Natural History) designed a method to assess conservation status, based on three major parameters:

- Composition, structure and functions of the habitat;
- Deterioration;
- Evolution of its spatial area within the site

The method should allow the Natura 2000 Steering Committee, to determine and discuss the conservation objectives and assess the conservation status.

- Ireland

The country uses the definition present in the Habitats Directive, to access favourable conservation status.[76] When a Natura 2000 site is proposed, a statement of the conservation objectives to be reached is also proposed, including the interests or conservation features for which the site has been designated.[77] The conservation objectives for SACs are determined under the Habitats Directive and are intended to ensure that the relevant Annex I habitats and Annex II species present on a site are maintained in a favourable condition. The conservation objectives in Ireland derive from the qualifying interests, the Natura 2000 standard data form, and the management plan for the site[78].

- United Kingdom

In the UK, the Natura 2000 sites follow the principle that, unless there is evidence to the contrary, the sites are at Favourable Conservation Status when originally selected and therefore, the pattern of human use at the time was not causing significant damage.[79] As required by the Habitats Directive, there is a monitoring and reporting programme, for each site, that is reported to the European Commission on a six-year basis.[80]

[74] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147&from=EN
[75] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN
[76] https://www.npws.ie/sites/default/files/publications/pdf/Art17-Vol1-web.pdf
[77] https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf
[78] https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf
[79] English Nature et al., (2001) Indications of good practice for establishing management schemes on European marine sites. Learning from the UK Marine SACs Project 1996-2001.
[80] http://assets.wwf.org.uk/downloads/ma_overviewukmpa.pdf

Management

Member States are required to take appropriate conservation measures to maintain and restore the habitats and species for which the Natura 2000 site has been designated. Damaging activities that could significantly disturb species or deteriorate habitats of the protected species or habitats types must be avoided.[81]

Article 6 of the Habitats Directive requires Member States to establish the necessary conservation measures but gives Member States discretion as to whether or not they use management plans specifically designed for the site.[82] In some cases, Member States use such management plans (Table 3) as a tool to guide managers and other interested parties in dealing with conservation of Natura 2000 sites.[83]

The plan provides a framework for partnership working and is recognised as the most time and cost-effective method for managing large complex sites. The content of a management plan can vary from site to site, some plans focus on the conservation features for which the site has been proposed or designated, and other focus on the range of activities that may have implications for the maintenance of the important features of the site.

Table 3: Management plan requirement. Source: European Commission, Conservation Measures – Annex 2, 2011.

Member State	Obligatory	Not obligatory
France	**X**	
Ireland	**X**	
United Kingdom		**X** Management plans are not obligatory under transposing legislation in any part of the UK (reflecting the fact that they are not obligatory under Article 6 of the Directive)

- France

The management of Natura 2000 sites is defined by the Environmental Code that provides basic principles for the management of protected areas. Each site has a "Document of Objectives" (DOCOB) that is prepared with the active involvement of stakeholders through a Steering Committee that is specifically created for this purpose.[84] The DOCOB is similar to a Management Plan, and is used for several other MPA categories in France such as Marine Parks, Natural Reserves and National Parks.[85]

[81] http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm
[82] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043
[83] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043
[84] http://ec.europa.eu/environment/archives/greenweek2010/sites/default/files/speeches_presentations/rambaud_39.pdf
[85] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures.pdf

The DOCOB is evaluated and adapted every six years. The Environmental Code specifies different types of management measures that may be applied to conserve the habitats and species of community interest present at each site. The DOCOB is implemented involving local partners, one Steering Group and one administrative organisation, the choice of administration varies according to the specific issues at each site (e.g. a fishermen's' organisation if the site has important fishing activity)[86].

In France, stakeholders are involved in defining the conservation objectives and measures for the protection of species and habitats. This is to encourage the active participation and to give stakeholders a sense of ownership of nature conservation.[87] Ultimately, responsibility for the Natura 2000 plans is with the Head of the administrative authority (the Prefecture).[88]

- Ireland

Management of Natura 2000 sites in Ireland is the responsibility of the National Parks and Wildlife Service, the State agency responsible for the protection and conservation of Ireland's natural heritage and biodiversity at national government level. The NPWS designate and advise on the protection of habitats and species identified for nature conservation under Irish law,[89] their role also includes the implementation of management measures from EU legislation and policies relating to biodiversity and natural heritage.

Protected areas may use Conservation Management Plans that include identification and evaluation of features of interest on a site, setting clear objectives and describing the management. Management Plans include descriptive information and a management framework section that outlines objectives and strategies. The production of maps is also part of the management plan, and it includes indicative habitat locations. The final stage is a three-month period of public consultation.

Ireland uses Conservation Statements that are written as a precursor to the conservation plans; such plans include descriptive information and a management framework section that outlines objectives and strategies.[90]

- United Kingdom

In the UK, a large number of organisations are involved in the development, preparation, implementation and management of Natura 2000 sites[91] (Table 4). The structures for management change depending on the site, each site however depends on a local management group. The management scheme is a statement that clearly sets out, in sufficient detail, the measures necessary to conserve or restore a site's features. A large number of organisations are involved in the development, preparation, implementation and monitoring schemes for marine Natura 2000 sites.[92]

[86] https://www.ecologique-solidaire.gouv.fr/reseau-europeen-natura-2000-1
[87] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures.pdf
[88] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures-Annex%202.pdf
[89] http://www.npws.ie/protected-sites/nha
[90] https://www.npws.ie/protected-sites/conservation-management-planning
[91] An Overview of Marine Protected Areas in the UK, A Briefing Paper by WWF-UK, Summer 2005
[92] https://www.npws.ie/protected-sites/conservation-management-planning

Table 4: Responsibility for management plans. Source: European Commission, 2011.[93]

England	Secretary of State and the Statutory Nature Conservation Agency (Natural England)
Scotland	Scottish Natural Heritage (the statutory nature conservation agency)
Wales	Countryside Council for Wales (CCW), the Welsh Assembly Government's Statutory Nature conservation agency
Northern Ireland	Department of Agriculture, Environment & Rural Affairs (DAERA)

In general, there is no single best formula, the structure and detail of management schemes and of management scheme documents have to be site specific. They need to be tailored to the requirements of each site and depend on the opinion of the local management groups.

Hence, not all UK European Marine Sites (EMS) have a specific management scheme and some schemes may be grouped together due to some sites overlapping. The management scheme usually contains a brief description of the designated site and the reasons for the designation.[94]

The management scheme defines the actions needed to implement the strategy, the entity responsible for each action, and the implementation timeframe. The scheme also provides a detailed structure for monitoring, periodic assessment and review. The Conservation of Habitats and Species Regulations 2010 prescribes the requirements for review of a management scheme. Such schemes may be amended from time to time, and a review is conducted every six years.

In Scotland, management schemes have been developed for Natura 2000 marine sites in busy areas, such as estuaries. Some examples of this approach are on the border with England (Berwickshire and North Northumberland SAC) as well on the Solway Firth.[95] The authorities that have functions relevant to marine conservation along with key stakeholders are also involved in the process.

The management schemes cover the Scottish part of the site. In Wales and Northern Ireland, plans are significantly different to the English plans and the formats may also vary between sites.

Where multiple authorities are involved in site management, there is a need for coordination between those local or regional approaches.[96] Only one management scheme can apply to each European Marine Site; however, there is no requirement for every Natura 2000 site to have a management scheme.[97] The management scheme must define the actions needed to implement the strategy, the entity responsible and the implementation timeframe. It provides a detailed structure for monitoring, periodic assessment and review.

In the UK, a National Steering Group is established to address the need of national coordination and works to develop a national reporting structure for MPA management[98] in some regions. This is done to ensure the management of these activities and management of MPAs can be assessed in terms of effectiveness of

[93] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures-Annex%202.pdf
[94] http://www.panache.eu.com/upload/iedit/12/pj/2271_6146_WP3_MPA_management_in_a_few_english_french_keywords.pdf
[95] https://www.nature.scot/sites/default/files/2017-10/C248050%20-%20SNH%20Natura%20booklet.pdf
[96] Marine Protected Area Management REF
[97] WWF: An overview of the MPAs in the UK. Full REF
[98] http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/Stour--Orwell/030815revised-NSGRoles-and-responsibilities-for-management-of-MPAs.pdf

their management. The only exception to this case is Scotland, where the management schemes involve consultation with all relevant interests along with local stakeholders (including local users groups and interested bodies).

Regulation

The European Commission has produced guidance documents, specific to each sector, relevant for the implementation of the Birds and Habitats Directives[99]. Those documents provide guidance to the sectors on the development of activities in the Natura 2000 sites, such as Aquaculture, Wind Energy and Non-energy mineral extraction.

The Appropriate Assessment procedure, provided by the Habitats Directive, ensures that site integrity continues and is maintained, therefore contributing to Favourable Conservation Status. The AA involves a serious of steps and tests that need to be applied in sequential order. The conservation objectives for a particular Natura 2000 site must therefore be taken into account in all AA for plans and projects. Whenever an activity affects the status of marine habitats and species within a Natura 2000 site, Member States shall take all measures necessary to protect the site.

The evaluation of impacts of fisheries in Natura 2000 sites, are also an important part of marine site management and application of the Habitats Directive, specifically Article 6. Statutory Nature Conservation Advisers such as JNCC, SNH, or Natural England (NE) in the UK identify the type and severity of impacts that might arise from each fishing activity, relative to the sensitivity of the protected feature, and indicate to managers if those activities need mitigation.

- France

Professional maritime fishing activities within or on the perimeter of one or more Natura 2000 sites are subject to analyses of the risks of attaining the conservation objectives of the Natura 2000 sites, carried out at the scale of each site, when drawing up or revising the objective documents mentioned in Article L. 414-2 of the Environmental Code.[100]

Where a risk is identified, the administrative authority shall take the necessary regulatory measures to ensure that activities do not adversely affect the conservation objectives of the site, in compliance with the rules of the Common Fisheries Policy (CFP). These activities are then exempt from impact assessment on Natura 2000 sites.[101]

- Ireland

No specific thresholds are applied to the requirement for an Appropriate Assessment or preparation of Natura Impact Statement (NIS). The NIS is a scientific evaluation of the Natura site(s) and the proposed plan

[99] http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

[100] https://www.legifrance.gouv.fr/affichCode.do;jsessionid=8E3E281FF8679646B1109DEFA03A25D5.tplgfr40s_2?idSectionTA=LEGISCTA000006176524&cidTexte=LEGITEXT000006074220&dateTexte=20180313

[101] https://www.legifrance.gouv.fr/affichCode.do;jsessionid=8E3E281FF8679646B1109DEFA03A25D5.tplgfr40s_2?idSectionTA=LEGISCTA000006176524&cidTexte=LEGITEXT000006074220&dateTexte=20180313

or project. The NIS should identify any possible implications of the plan and project, individually or in combination with other plans or projects.

- United Kingdom

Plans and projects that are not related to the management of the Natura 2000 sites, but may have an impact due to proximity of Natura 2000 sites, need an Appropriate Assessment. A competent authority cannot agree to the plan or project, until it has ascertained that the plan or project will not adversely affect the integrity of the site concerned.

CONSERVATION MEASURES

The conservation measures need to be decided on a case-by-case basis depending of the sites ecological as well as socio-economic circumstances, and they can range from:

- 'doing nothing' if no additional measures are required other than to continue to manage the site in the way it has been managed;
- 'simple' measures, such as avoiding disturbance during the reproduction season
- 'major' restoration activities involving the extensive removal of non-native species or the hydrological restoration of a wetland for instance.[102]

In some cases, the non-intervention or the strict protection of a Natura 2000 site can be considered as a conservation measure, especially in the case of habitats and species that are very vulnerable to any kind of human intervention. Different types of measures may be necessary in Natura 2000 sites, including restoration activities that require works to be carried out at certain specified times (e.g. restore the hydrology of a wetland).[103]

Some recurring actions may also need to be implemented periodically, in order to maintain or improve the conservation status of a Natura 2000 site. This action can include for instance, the management of hydrological regimes for wetlands areas.[104]

The preparation of measures requires planning and the elaboration of detailed technical specifications to ensure their correct implementation.[105] Monitoring is also part of the conservation measures, once their follow up is important to evaluate the efficacy of the measures.

The implementation of conservation measures is often best achieved if it is accompanied by communication and awareness raising (with people living in the area and the main stakeholders concerned).[106]

[102] http://ec.europa.eu/environment/nature/natura2000/faq_en.htm
[103] http://ec.europa.eu/environment/nature/natura2000/faq_en.htm
[104] http://ec.europa.eu/environment/nature/natura2000/faq_en.htm
[105] http://ec.europa.eu/environment/nature/natura2000/faq_en.htm
[106] http://ec.europa.eu/environment/nature/natura2000/faq_en.htm

Measures can be divided into:

- **Statutory conservation measures**: specific legal requirements that allow or restrict activities on the site.[107]
- **Contractual Measures:** Involve establishing contracts or agreements usually among managing authorities and land owners or users in the site.[108]
- **Voluntary conservation measures:** The complexity of the conservation measures may require other kinds of agreements and other types of specific measures, such as voluntary measures[109]. In the Celtic Seas region, France is one example that applies the voluntary measures.

  The Environmental Code in France establishes the basic principles for the management of Natura 2000 sites through the DOCOB. The DOCOB includes a voluntary Natura 2000 Charter. This Charter comprises all the undertakings and recommendations that may apply to the Natura 2000 site, and to specific habitats and environments.[110]

  The signature of the Natura 2000 Charter ensures the right holders to carry out activities, by respecting the conservation objectives of the site. This is a voluntary system that indicates a strong commitment to the conservation objectives of the site. Any individual or corporate body, with rights on the site, can sign the Natura 2000 Charter for the duration of 5 years.[111]

  - France

In France, two types of voluntary measures may be used: contracts and charters. The "Natura 2000 contracts" are agreed between the State and various local organisations (often local authorities, stakeholder organisations and NGOs) and bring financial support to enforce measures or actions needed to achieve the objectives in the DOCOB.[112]

  - Ireland

The enforcement is dependent on the nature of the actions. Conservation Rangers in NPWS have a role in enforcement, as do officials in other government agencies (e.g. EPA, the Garda / police service, Inland Fisheries Ireland); hence, enforcement usually falls under one of these bodies.

It is common for Regulations covering designated sites to contain specific provisions on how they can be managed and how that management might be enforced. Under the European Union Habitats (Ardmore Head Special Area of Conservation 002123) Regulations 2017[113], for example, activities specified in Schedule 4 need the consent of the Minister if it is not already covered by another form of consent. Such activities include but are not limited to:

- Blasting, drilling, dredging or otherwise removing or disturbing fossils, rock, minerals, mud, sand, gravel or other sediment;
- Introduction, or re-introduction, of plants or animals not found in the area;

[107] Establishing conservation measures for Natura 2000 sites, European Commission 2014
[108] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures.pdf
[109] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures.pdf
[110] https://circabc.europa.eu/sd/a/a35db32f-37c1-4236-993e-d06000df6494/20130322-N2000%20conservation%20measures-final%20draft.pdf
[111] http://ec.europa.eu/environment/nature/natura2000/management/docs/conservation%20measures.pdf
[112] https://circabc.europa.eu/sd/a/a35db32f-37c1-4236-993e-d06000df6494/20130322-N2000%20conservation%20measures-final%20draft.pdf
[113] http://www.irishstatutebook.ie/eli/2017/si/228/made/en/print

- Works on, or alterations to, the banks, bed or flow of a drain, watercourse or waterbed;
- Drainage works including digging, deepening, widening or blocking a drain, watercourse or water body.

- United Kingdom

In the UK, management measures are included in the management plan, where one exists. In general, management schemes can be thought of as a timeshare rather than a freehold, meaning multiple parties hold rights to use the site rather than have exclusive rights and accordingly a management scheme will contain a list of tasks that should be carried out by each management authority.

For the management authority participating in the scheme, the benefits are that:
- it helps initiate the management process;
- it should lead to better informed decisions;
- it helps promote an "identity" for the site;
- it provides a mechanism for involving local communities and NGOs.

Governance

Styles of governance may determine or influence the way policy goals are reached and how to direct actors in society are involved in reaching those goals. In general, the main styles used are: hierarchical, network and communicative style.[114] Those styles can differentiate how to involve citizens in the process of policy making and implementation. In general, participatory approaches are a good way to prevent or deal with conflicts.[115]

- France

The approach used in France is considered participatory,[116] as a local working group of local stakeholders agree on the site goals and establish a management plan for a Natura 2000 site, including economic, social and cultural provisions for active management and preventive measures. Along with a manager, a Steering Committee is convened for each site by the administrative authority. This committee comprises representatives of concessionaries of public works, professional bodies, general sector stakeholders, protection of environment and cultural heritage. State representatives, have the responsibility for enforcing regulations proposed by the steering committee at sea.[117]

- Ireland

The National Parks and Wildlife Service (NPWS) develops conservation objectives for Natura 2000 sites and manages sites along with local stakeholders and competent authorities, producing a draft conservation plan for each SAC and SPA. The authorities in Ireland are represented at national; regional and local levels and may be tasked with consenting, authorising, adopting or deciding to proceed with a plan or project depending on their role.[118]

[114] http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3_Task%201-European_review.pdf
[115] Stoll- Kleemann & Welp, 2006
[116] http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3_Task%201-European_review.pdf
[117]http://ec.europa.eu/environment/archives/greenweek2010/sites/default/files/speeches_presentations/rambaud_39.pdf
[118] http://www.burrengeopark.ie/wp-content/uploads/2015/03/Sustainable-Tourism-and-Conservation-Management-Mapping-Policy.pdf

The NPWS is responsible for maintaining nature conservation of designated sites; the staff provide advice to authorities on the impacts of development applications and, in some cases, more than one competent authority may be responsible for different aspects of an individual project.[119]

- United Kingdom

In Scotland, Wales and Northern Ireland, the implementation of the Habitats Directive is a matter for each of the devolved administrations: Scottish Government, Welsh Assembly Government and Northern Ireland Executive; DEFRA is responsible for overall UK implementation of the Directives. Relations with the European Union, its institutions and obligations arising from the Treaties, concerning Natura 2000, remain the responsibility of the UK Government.[120]

Designation process of Natura 2000 sites

The Natura 2000 site is selected to ensure the long-term survival in Europe of the most valuable and threatened species and habitats. How a site is chosen depends on what it aims to protect.[121] Member States choose sites according to precise scientific criteria; however selection is driven by the lists of species and habitats listed in the Birds and Habitats Directives.

The implementation of Appropriate Assessment and specific conservation measures aim to ensure the Favourable Conservation Status of NATURA 2000 sites.

One essential part of the designation process in all EU countries is stakeholder involvement. Consultation is essential to provide management committees with input for the development of the management plans. There are also opportunities for stakeholders to comment on initiatives relating to MPAs, such as site selection or monitoring.[122]

HABITATS DIRECTIVE: The designation of sites, under the Habitats Directive, consists of three stages.

- **Step 1:** regarding the proposition of a site, under the Habitats Directive, this responsibility lies with the Member State who conducts the supporting scientific process, based on standard criteria specified in the Directive.[123]

- **Step 2:** This step is carried out by the European Commission, based on the proposed national lists; if accepted Sites of Community Importance are then adopted. Seminars are held by the EC, and are open to the Member States. This process is made in order to analyse the Member States proposals in a transparent way.

  Seminars also concern stakeholders, including sea users, environmental NGOs. The seminars aim to provide a list of SCIs, for each region determined by the Habitats Directive, applying a consistent approach across the Member States.

[119] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[120] McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ, & Way, SF (eds.) (2005) The Habitats Directive: selection of Special Areas of Conservation in the UK. 2nd edn. Joint Nature Conservation Committee, Peterborough. www.jncc.gov.uk/SACselection
[121] http://ec.europa.eu/environment/nature/natura2000/sites/index_en.htm
[122] http://eur-lex.europa.eu/legal-content/ga/TXT/?uri=CELEX:52003DC0845
[123] http://ec.europa.eu/environment/nature/natura2000/sites_hab/index_en.htm

- **Step 3:** The final process occurs once the list of SCIs is adopted and from then on, it is up to Member States to ensure favourable conservation status of each habitat and species type. Once the list of SCI is adopted, Member States designate those sites as Special Areas of Conservation, within six years. Member States shall also take the necessary management measures to ensure the FCS of those sites.[124]

BIRDS DIRECTIVE: Under the Birds Directive, Member States designate SPAs. The selection of sites is made using scientific criteria. Member States must ensure that all "most suitable territories", in number and surface area, are designated. Standard Data Forms are used by MS to submit specific data to the EC.

Based on the information provided by the MS, the EC determine if the sites designated constitute a coherent network of protection or if they are vulnerable. After this process, the sites become an integral part of the Natura 2000 network.[125]

Table 5: Summary details on designation and management of Natura 2000 sites.

Habitats Directive	Birds Directive
Article 3 and 4: Member States shall designate **Special Areas of Conservation SAC** to ensure favourable conservation status of each habitat type and species.	Article 4: The network must include **Special Protection Areas SPAs**, designated for 194 threatened species and all migratory birds.
Objective: Conservation objectives should establish priorities on a respective site for the maintenance of a site or restoration of a favourable conservation status of the habitat type. The term "conservation objectives", "conservation measures" and "conservation priorities" can be interconnected but are distinct concepts[126].	
Designation: The choice of sites is based on scientific criteria. Member States are responsible for carrying out assessments of the habitats, then submitting lists of the proposed SCIs. After this process, scientific seminars are held by Member States for each biogeographical region. Once the list of SCI is adopted, MS can designate the sites as SACs.[127]	**Designation:** The SPAs have site level conservation objectives; set of measures to be met in a site, in order to make sure that the site will contribute to protect bird species of community importance at the appropriate level.
Management: The Commission encourages the use of management plans as tool to assist the pro-active management of Natura 2000 sites.	**Management:** The Commission recommends that management plans are adopted.[128]

[124] http://ec.europa.eu/environment/nature/natura2000/sites_hab/index_en.htm
[125]http://ec.europa.eu/environment/nature/natura2000/sites_hab/index_en.htm
[126] http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note2_EN.pdf
[127] http://ec.europa.eu/environment/nature/natura2000/sites/index_en.htm
[128] http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note2_EN.pdf

4. National MPA categories

In addition to the international categories of marine protected areas, there are also national categories, determined by each country. These categories may be different in conservation objectives, as shown in Table 6.

Table 6: Main objectives on the national MPAs objectives:

MPA Category	Main Objective
France	
National Parks	Purpose to protect large ecosystems, as well cultural heritage and landscapes.
Nature Reserves	Protect natural environment from potential harmful human activities and provide protection for sites of national interest.
Marine Nature Park	Contribute to knowledge on the marine environment, protect the marine environment and sustainable develop the area.
Biotope Protection Order	Conserve habitats of protected species including include feeding, resting or breeding sites, as well as sites critical for the survival of key protected species.
Ireland	See also OSPAR MPAs (page 17), Special Areas of Conservation (SAC) and Special Protected Areas (SPA) objectives (page 19)
National Park	Large natural areas set aside to protect large-scale ecological processes, along with species and habitats characteristic of the area, which also provide a foundation for visitor opportunities.
Natural Heritage Area	Areas considered important for the habitats present or which hold species of plants and animals whose habitat needs protection.
Nature Reserve	Areas of importance to wildlife, which are protected under Ministerial Order. Most are owned by the State, however, some are owned by organisations or private landowners.
UK	
Sites of Special Scientific Interest (SSSI) / Areas of Special Scientific Interest (ASSI)	The objective of these areas is to protect species, habitats and geological features of national importance.
Marine Conservation Zones	Aim to protect a range of nationally important marine wildlife, habitats, geology and geomorphology.
Marine Protected Areas (Scotland)	Aim to contribute to the development of ecological coherent and well-managed MPAs network, developed under OSPAR guiding principles, fulfilling international and European commitments.

France

Categories

Each national category of MPA in France meets specific objectives (Table 6). Those categories provide a range of tools, and improve the knowledge about marine environment, fostering the sustainable use of French waters.

The French National categories of MPAs were recognised by the French Law of 14 April 2006,[129] this Law, establishes national strategies for the creation and management of Marine Protected Areas.[130] Those categories are:[131]

- National Parks
- Nature Reserve
- Marine National Park
- Natura 2000 (recognised by the French Law as a national category)
- Maritime public domain entrusted to the Conservatory of littoral
- Biotope or Geotope Protection Order

Each one of those categories has different objectives for conservation, designation, management and governance.[132]

Table 7: Regulatory objectives of the different MPA categories, defined by the law of 14 April 2006

Legally-binding objectives	Categories of Marine Protected Areas					
	Natural Reserve	Marine Natura 2000 site	National Park	Marine Nature Park	MPD (Conservatory of the Coast)	Biotope Protection Area
GES of listed and heritage species or those that deserve to be thus classified	✓	✓	✓	✓	✓	✓
GES of unlisted species and habitats that are targeted by MPA management	✓		✓	✓	✓	
Rendering of key ecological functions	✓		✓	✓	✓	
GES of marine waters			✓	✓		
Sustainable exploitation of resources			✓	✓		
Sustainable development of uses			✓	✓	✓	
Preservation of maritime cultural heritage			✓	✓	✓	
Added social, economic, scientific or academic value	✓		✓	✓	✓	

NATIONAL PARKS (PARC NATIONAL)

Objective

The purpose of a national park is to protect large ecosystems, as well cultural heritage and landscapes, the sites are divided into two components, “core zone” and “partnership area”.

Core Zone: Area of strict protection, and of scientific reference, of national and international importance. It enables the monitoring of ecological succession, particularly as part of biological diversity and climate change monitoring.[133]

[129] http://www.aires-marines.com/Marine-Protected-Areas/Different-marine-protected-area-categories
[130] MPA Categories http://www.aires-marines.fr/Les-aires-marines-protegees/Categories-d-aires-marines-protegees
[131] http://www.maia-network.org/upload/iedit/11/pj/956_7801_MAIA_rapport_2013_anglais_BD4.pdf
[132] http://uicn.fr/wp-content/uploads/2016/08/Espaces_naturels_proteges-EN-ok.pdf
[133] Article 3, Order of 23 February 2007 on the fundamental principles applicable to natural parks

Partnership Area: Area that aims to promote economic, social and cultural sustainable development, to prevent any impact to the core zone. This area can provide geographical continuity to the Core Zone, in order to maintain the ecological links between both areas.

The National Parks in France seek to find a balance between biodiversity protection and use of natural resources, combined with an increasing role of local authorities.

Designation

National Parks are designated by a Decree after obligatory advisory consultation with the State Board (the highest administrative court).[134]

Management

The main management document is the National Park Charter, and it maintains the partnership between State and local stakeholders for a minimum of 15 years. For the core area, this document establishes the conservation objectives for the natural and cultural heritage of the area, and for the partnership area, it sets out guidelines for conservation, enhancement and sustainable development.

Governance

Administrative public entities have regulatory powers; local stakeholders play a major role and are included in the majority of park management boards. Decisions concerning National Parks are made by the management board; this board makes decisions concerning the management of national parks and specific regulations concerning human activities. The Park Director can make decisions related to the management of the Park, also regarding the Coastal Zones (forming part of the Park).

Regulation

Management guidelines for National Parks are contained in each management plan. Each marine park has a management plan that defines actions to be taken for its protection, research, enhancement and sustainable development.[135] Regulations may differ between the core and partnership areas, for example, if the core area requires strict protection. Specific regulations can be directly stipulated in the legal text for designation, especially for the core area.

NATURE RESERVES (RESERVE NATURELLE NATIONALE)

Nature Reserves have the aim of protecting the natural environment from potential harmful human activities. The main goal of Nature Reserves is to provide protection for sites of national interest.

Objective

Provide long-term protection for unique, functional and ecological representative habitats, as well species of exceptional heritage value. Preservation of animal or plant species that are endangered in all parts of the national territory, protect outstanding biotopes and geological formations.

[134] Idem
[135] Environmental Code, Art. L. 334-5

Designation

Those sites are designated by Decree, simple Decree or a Decree issued after consultation with the State Board, and may include the establishment of a buffer zone on the reserve.

Management

The reserve management plan defines the required environmental conservation, maintenance or restoration measures. Activities that may affect the environmental integrity are prohibited. The plan is the principal document that contains provisions for management of a specific nature reserve. Management plans are mandatory for each nature reserve in France. The plan should be approved by the relevant Prefectures, taking into consideration the recommendations of the advisory committee and scientific advice for the particular area.

Governance

Those sites are managed by a local agency in consultation with local stakeholders. Management is carried out by the Prefecture, while the local agency develops and implements the plan, and civil society also has an active role in the management of the protected areas. The Maritime Prefecture, appoints managers for the national reserves for a period of three years, who then act on behalf of the State to provide support to the management team. The first obligation of the designated manager is to develop a nature reserve management plan for a five-year period. The manager is also responsible for submitting reports to the advisory committee and for funding the management of the Nature Reserve.

The advisory committee controls the functioning of the Nature Reserve. The committee is composed of representatives of civil society, local authorities and representatives of registered organisations.[136] The main responsibility of the committee is to advise on the implementation of the management plan for the nature reserves.

The nature reserve must have a scientific council that is appointed by the Prefecture. This Scientific Council's function is to conduct scientific studies in order to ensure conservation and protection of natural habitats.

Regulation

This category of MPA is defined by the "Code d'Environnment", the "Circulaire n.95-47 du 28 mars 1995" the "Circulaire n.97-93 du octobre 1997", and the "Circulaire n.2006-3 du 13 mars 2006". These documents make provision for the development of a management plan. Other specific regulations for this category of protected area are defined in the designation document. [137]

[136] Environmental Code, Art. R. 332 – 15.
[137] http://www.maia-network.org/upload/iedit/11/pj/956_7801_MAIA_rapport_2013_anglais_BD4.pdf

MARINE NATURE PARK (PARC NATURAL MARIN)

France has nine marine parks. The first was created 10 years ago (2007) and is located in the Celtic Seas: the Iroise Marine Nature Park. This category of Park is relatively new and was created by the Act of 14 April 2006, specifically to protect the marine environment. The uniqueness of the environment is taken into account by the creation of an adaptive tool designed to ensure consistency of activities carried out in marine areas.[138]

Objective

Marine parks have three main goals: contribute to knowledge on the marine environment, protect the marine environment and sustainable development of the area. Another characteristic of a Marine Nature Park is to involve local authorities, fishermen and users in the decision-making process for the park.

Designation

Parks are designated and their boundaries set by decree after a public inquiry with concerned local communities.

Management

The management of a site is based on the principles of the ecosystem approach, general guidelines are set, and include the promotion of human activities that are compatible with the conservation of biodiversity and integrity of natural habitats.

Management guidelines for Marine Parks are contained in the management plan. Each Park has a management plan that defines the actions to be taken for protection, research and sustainable development. Management has a long-term view, with duration of 15 years.

The management plan is developed under the authority of the management board, within 3 years of the Marine Park's creation. Of the measures that the management plan aims to implement, the most relevant are protective measures; enhance knowledge and sustainable development in the protected area.

Marine Nature Parks have a management board that develops a management plan for the park. This board consists of local representatives of the State, government, users and NGOs, as well qualified individuals. This board makes decisions on all matters relating to the park. The responsibilities of the management board include the development of an action plan for the implementation, monitoring and evaluation of the management plan.

Governance

The French Biodiversity Agency is in charge of management, in consultation with all users of the sea. Each marine park has a management board, governance and consultation body comprising representatives of the central government. It rules on any matter concerning the park and develops its management plan.

[138] Armelle Guignier, Michel Prieur. Legal Framework for Protected Areas: France, p 26.

Regulation

The legal text governing the creation of a Marine Natural Park does not contain any specific provision limiting or banning activities within that sea. The management board has responsibility to propose new regulations in a collaborative process with stakeholders. The State, public authorities and organisations involved in the management of the marine nature park ensure that actions and resources are coherent with the objectives and measures of the management plan.

In some cases, the management board restricts some activities. It has the authority to grant permission for development of projects and licences that may have an impact on the environmental conservation objectives of the park. The management board also has the power to regulate some activities, preventing impacts from human activities on the marine environment.

BIOTOPE PROTECTION ORDER (ARRETE DE PROTECTION DE BIOTOPE)

Objective

A biotope protection order is a regulatory tool that aims to conserve habitats of protected species. This may include feeding, resting or breeding sites, as well as sites critical for the survival of key protected species. A biotope protection order can also be used to prohibit any action that might harm the environment, such as use of chemicals or destruction of plants.[139]

Designation

The initiative of the designation belongs to the State, under the responsibility of the Prefect of the concerned region[140]. Nature protection associations often provide support to DREAL and DDEA in the definition of projects. The texts do not require the advice of the municipal council, but in practice, the advice is used. In practice, a monitoring committee placed with the prefect sometimes provides management and monitoring rankings and sometimes involve the DREAL, associations or municipalities[141].

Management

A biotope protection order sets up regulation of activities that may have a negative impact on biotope conservation. It can also provide for ecological restoration measures. This category of MPA is usually not supported by a management plan, as the purpose of this category is to ensure strict environmental conservation.

Governance

Biotope protection orders do not necessitate a designated manager, as they are administrative measures. In practice, the Prefects set up monitoring committees that comprise regional representatives of the Ministry for Environment, NGOs and local authorities.

[139] http://www.maia-network.org/upload/iedit/11/pj/956_7801_MAIA_rapport_2013_anglais_BD4.pdf
[140] http://ct78.espaces-naturels.fr/arrete-de-protection-de-biotope
[141] http://ct78.espaces-naturels.fr/arrete-de-protection-de-biotope

Regulation

This category is governed by the Environmental Code and the Ministerial Circular of July 1990 on the protection of biotopes needed for living species in aquatic environments. Neither document specifies the requirements for drafting a management plan, how the areas should be governed or funded.[142]

NATIONAL OVERVIEW OF FRANCE

In France, some categories of MPAs such as Marine Parks have a strong link with MSP. The spatial planning methods, integrated with the involvement of stakeholders at all levels, are also utilised when implementing MSP.

Objectives

Marine protected areas in France also aim to protect unspoilt areas that are highly attractive to tourists, restore damaged environments, introduce compensatory ecological measures for destructive activities or facilities, create education centres for marine protection.

Marine Protected Areas, also have the function to maintain or achieve GES of marine waters[143], in particular, protect biodiversity, rare or endangered species or habitats, protect fisheries resources, maintain ecosystem capacities and sustainable manage the environment subjected to multiple uses.

Designation

In the French maritime domain, the state is predominant in decision making; the state is responsible for putting in place the different categories of MPAs. For management purposes, and to ensure the successful integration of maritime bodies, governing bodies such as an Executive board and/or Steering Committees are put in place[144], however, this varies between the different categories of MPA.

Management

In France, a dedicated manager is designated for every marine site. Managers can be from NGOs, or directly from the responsible State Agency, (e.g. French Biodiversity Agency). The French Biodiversity Agency and the National Museum of Natural History, have a duty to support the local manager in the administration and management of the site.

The State plays a major role through Maritime Prefects, State representative at sea, who have ultimate authority. Regional and Department prefects also have regulatory powers relating to several activities such as fishing and activities affecting the seabed. Decentralised services (such as DIRM and DREAL), in combination with scientific services and public bodies (Ifremer, Cerema, AFB) support the prefect in marine management.

[142] http://www.maia-network.org/upload/iedit/11/pj/956_7801_MAIA_rapport_2013_anglais_BD4.pdf
[143] http://www.aires-marines.com/Marine-Protected-Areas/Different-marine-protected-area-categories
[144] Idem

Strategy

The governance will depend on the local context of the project of MPA, on the particular choice of parties involved in the decision making process[145] and on the MPA type. The French system for MPA management has as its basis, the French National Strategy for MPAs. It specifies how France intends to expand its actions to develop and manage MPAs through objectives, geographical priorities and principles. Launched in 2006 and adopted in 2012, this framework established the first six categories of MPAs, including the category of Marine Natural Parks. It not only aims to fulfil international commitments under the CBD, but also achieve specific targets, being part of the French National Strategy for Biodiversity (2011-2020) and the National Strategy for the Sea and the Coast. In Metropolitan France, those policies contribute to the achievement of the Marine Strategy Framework Directive and Natura 2000 network implementation.[146]

Other Laws, Action Plans and Decrees also provide a basis for MPAs in France, such as the Grenelle Law II, published in 2010, presenting concrete actions to reach defined 2020 targets; the Environmental Code, the Decree on Action Plan for Marine Environment, the Environmental Charter, the Law on Water and aquatic environments and the Biodiversity cross-sectoral intervention framework.[147]

French, Strategy for the creation of MPAs

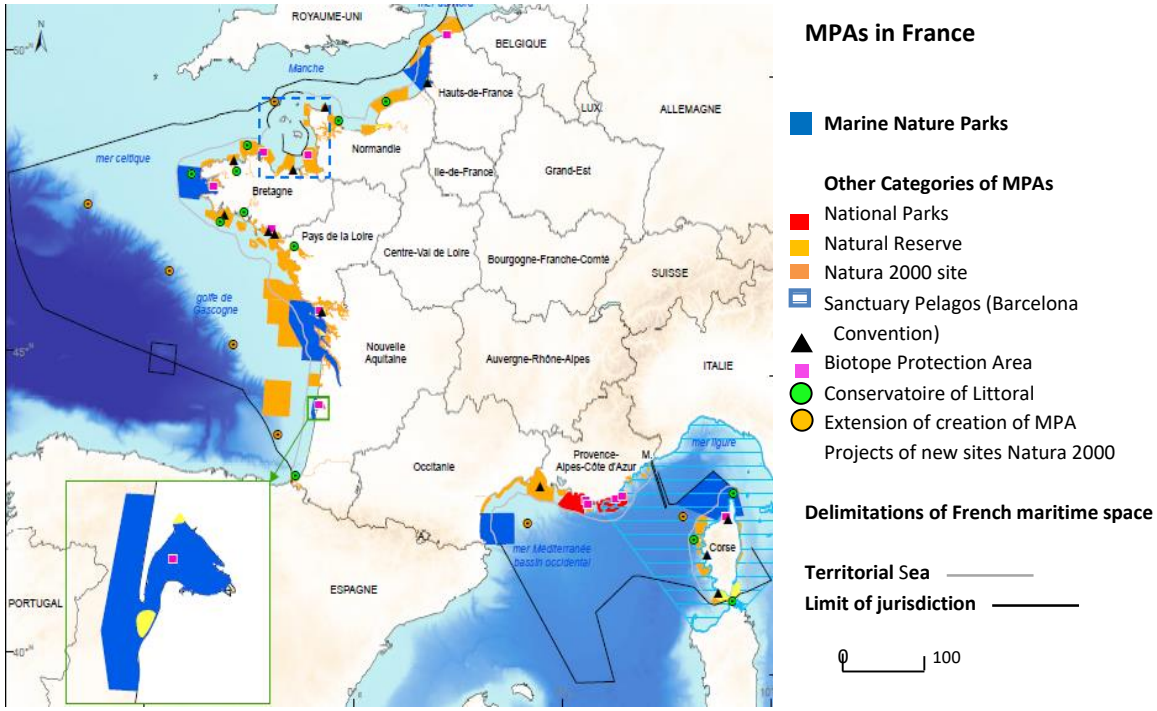

Figure 4: Marine Protected Areas of France, in October 2015.
Source:http://cartographie.aires-marines.fr/sites/all/modules/carto/pdf/_met_ges_amp_et_strategie_20170301_a4pa.pdf

[145] Idem
[146] https://www.iucn.org/downloads/france_en.pdf
[147] http://www2.developpement-durable.gouv.fr/IMG/pdf/National_strategy_for_the_creation_and_management_GB_Web.pdf

Ireland

Categories

The major part of the Irish MPA network is composed of SACs and SPAs, two MPA categories deriving from EU law (Birds and Habitats Directives). These two categories are described in the "European categories" section of this report. Along with these two EU categories, Ireland also has MPAs deriving from international law such as Ramsar sites, Biosphere Reserve and OSPAR MPAs. National legislation also provides for the designation of sites including National Parks, Natural Heritage Areas, Nature Reserves. Many of these have both marine and coastal qualifying interests though they are generally not termed MPAs.

NATURAL HERITAGE AREA

Objectives

A Natural Heritage Area (NHA) is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.[148]

A NHA means the area is worthy of conservation due to the presence of one or more species, communities, habitats, landforms or geological or geomorphological features, or for its diversity of natural attributes.[149] A "natural heritage order' refers to an order made under section 18 of the Wildlife (Amendment) Act, 2000.[150]

Management

The NPWS produces a draft conservation plan for each NHA.[151] Those plans list the wildlife resources of the area, the current human uses, any conflicts between the two, and strategies for retaining the conservation value. [152] This draft document is made available online and to interested parties for a consultation period, following and intended parties can review it every 5 years. [153]

It is expected that these plans will be consulted/referenced during the preparation of local authority development plans.[154]

Designation

NHAs are fully provided for in the Wildlife (Amendment) Act, 2000.[155] The designation process, is divided into steps in Ireland (those steps may also apply to other categories of MPAs).[156] NHA designation is made:

- Using the previous knowledge such as the list of Areas of Scientific Interest compiled in the 1970s
- Using the NHA survey, carried out from 1991-94
- Using inputs from NGOs

The selection criteria for individual NHA habitats types are specified.[157] Such requirements encompass the:

[148] https://www.npws.ie/protected-sites/nha
[149] http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print.html
[150] http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print.html
[151] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[152] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[153] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[154] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[155] http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print#sec20
[156] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[157] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf

- Protection of the site, with contribution to the species that are considered vulnerable, rare or endangered in Ireland
- Contribution of the protected site to the conservation of one or more species and habitats considered vulnerable
- The site has to take into account geological aspects, and contribute to the preservation of the geological, geomorphologic or fossil features.

Regulation

The regulations for NHAs, imply, that where there is a subsisting natural heritage area order, no person shall carry out, or cause or permit to be carried out, any works specified in the order or any works which are liable to destroy or to significantly alter, damage or interfere with the features by reason of which the designation order was made, unless[158]:

- The owner or occupier of that place has to give to the Minister notice in writing the intention to carry out works specifying the nature of the works.[159]

No person shall carry out or allow works to be undertaken that are liable to destroy or to significantly alter, damage, or interfere with the features of a NHA. In cases where work is required next to such an area, prior notice has to be sent to the Minister, not less than 3 months in advance of the date that the works will commence.[160]

NATURE RESERVES

A 'Nature Reserve' means an area managed primarily for conservation of one or more species, communities, habitats or for any feature of geological, geomorphological or other natural interest which is provided for by the Minister in accordance with the Wildlife Acts, 1976 and 2000. [161]

Most are owned by the State, however, some are owned by organisations or private landowners, and persons interested in acquiring statutory protection for their lands can seek advice on this matter from the Department.[162]

[158] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[159] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[160] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[161] http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print.html
[162] https://www.npws.ie/nature-reserves

Objectives

Nature Reserves include the habitat or forms one or more communities and species that represent a community of scientific interest. Those reserves can include an ecosystem or part of an ecosystem that has scientific value or contains features of geological, geomorphologic or other natural interest. [163]

The ecosystem, or geological, geomorphological or other natural interest linked to the Nature Reserve is likely to benefit if measures are taken for its protection.[164]

Management

The NPWS has regional structures[165] comprised of four divisions: Eastern, Northern, Southern and Western, each of which is made up of two regions. Regional management offices are responsible for the management of State-owned Nature Reserves. These offices are also responsible for planning advice and advising other consent authorities on the impacts of development applications and plans on biodiversity.[166]

National Overview of Ireland

Objectives

The National Parks and Wildlife Service is the body responsible for developing conservation objectives for Natura 2000 sites and managing those sites with local stakeholders and competent authorities.

Management

The management of MPAs is carried out by the National Parks and Wildlife Service. The NPWS produces a draft conservation plan for each Natural Heritage Area (NHA), SAC and SPA.[167] Each plan lists the wildlife resources of the area, the current human users and the conflicts between both. [168]

This draft document is made available online to the interested parties for a specified time enabling consultation.[169] Plans are reviewed every five years.[170]

The Regional Management offices, covering the Eastern, Northern, Southern and Western divisions, are also in charge of:

- Advice to planning and other consent authorities on the impacts of development applications and plans on biodiversity
- Participation in research and survey projects by collecting data within their areas, and
- Provision of an education and advisory service to the public. [171]

[163] http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print#sec24
[164] http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print#sec24
[165] https://www.npws.ie/about-npws/npws-regional-management
[166] https://www.npws.ie/about-npws/npws-regional-management
[167] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[168] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[169] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[170] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf
[171] https://www.npws.ie/sites/default/files/general/Site%20Designation%20Process%2016%20Feb%202012.pdf

Designation

At a national level, the designation process for Natura 2000 sites is done in consultation with stakeholders,[172] including interested parties (e.g. conservation groups) and other government departments. The process also allows public consultation meetings to assist in developing conservation plans for the sites. The National Parks and Wildlife Service advertises locally in press and on radio to maximize the awareness of the statutory proposals.[173]

Governance

The NPWS is part of the Heritage Division of the Department of Culture, Heritage and the Gaeltacht. It is responsible for nature conservation, protection of habitats and species through site designation and implementing national and EU legislation on this.

The Integrated Marine Plan for Ireland outlines the broad policy agenda for Ireland and consequently contains actions of relevance to marine biodiversity and marine ecosystems.

The organisational responsibilities to ensure effective MSP in Ireland, are proposed by

- The Department of Housing, Planning and Local Government as Competent Authority for MSP has a MSP section (with scientific and technical support from the Marine Institute).[174]
- A High level cross-departmental steering group (with representatives from other relevant Government departments and statutory agencies)
- An advisory group (with representatives from stakeholder groups, different marine sectors and academia.

Regulation

The Wildlife Acts, 1976-2012[175] provide the legal basis for nature conservation in the Republic of Ireland. The 2000 Act provides significant provisions relating to habitat and site protection measures. It provides for the designation of Natural Heritage Areas, which are areas considered important for the habitats present or which host species whose habitat needs protection. A number of NHAs are coastal or have marine features, particularly those designated for bird species or their habitat.

Under the Wildlife Amendment Act, 2000 NHAs are legally protected from damage from the date they are formally proposed for designation. The Sea-Fisheries and Maritime Jurisdiction Act, 2006 contains provisions relating to management of sea fisheries and conservation of fish resources in specific areas of the sea, with controls and restrictions on fishing activities within the territorial waters of the country, in line with the EU's Common Fisheries Policy.

Ireland also has the National Biodiversity Action Plan covering the period from 2017 to 2021. This plan, sets actions for government, civil and private sectors. The strategic objectives of the plan, include:

- Mainstreaming biodiversity across the decision making process in the State;
- Strengthening the knowledge base underpinning work on biodiversity issues;

[172] https://www.npws.ie/protected-sites/designation-process
[173] https://www.npws.ie/protected-sites/designation-process
[174] http://www.housing.gov.ie/sites/default/files/publications/files/towards_a_marine_spatial_plan_for_ireland.pdf
[175] https://www.npws.ie/legislation/irish-law/wildlife-act-1976

- Increasing public awareness and participation;
- Ensuring conservation of biodiversity in the wider countryside;
- Ensuring conservation of biodiversity in the marine environment;
- Expanding and improving on the management of protected areas and protected species;
- Enhancing the contribution to international biodiversity issues.[176]

Ireland currently has 19 OSPAR MPAs, these are underpinned in legislation by their designation as SACs and form part of the Natura 2000 network.[177]

United Kingdom

Actors and Network of MPAs

The JNCC mainly work in collaboration with the other statutory nature conservation bodies and the UK devolved administrations, providing advice on territorial and offshore waters.[178] The network of MPAs in the UK, help to meet the commitments under the CBD and contribute to the measures needed to achieve GES in marine waters by 2020 under the EU MSFD.

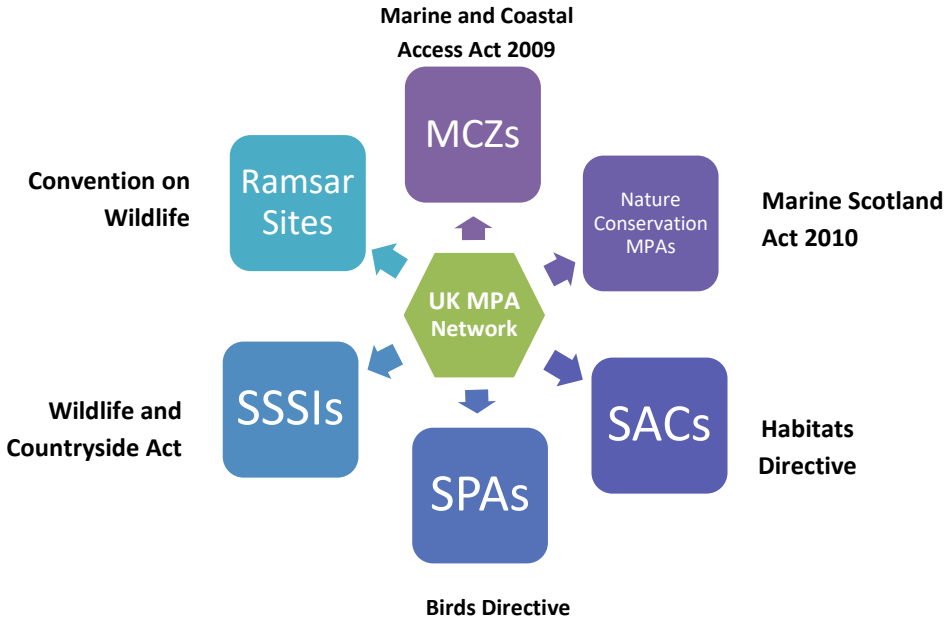

Figure 5: Scheme of designation and categories of MPAs in the UK.

Categories

The MPA categories in UK waters have national and international character, some of the international categories are:

- Ramsar Sites with "marine components"

[176] https://www.npws.ie/legislation/national-biodiversity-plan
[177] https://www.npws.ie/protected-sites/ospar-sites
[178] http://jncc.defra.gov.uk/page-6906

- Special Areas of Conservation (SAC): designated under the Habitats Directive, for habitats and species listed in Annex I and II of the Directive. There are currently 105 SACs that cover about 14% of the UK marine area.
- Marine Special Protection Areas (SPAs): designated under the Birds Directive. Currently, there are 102 SPAs in the UK that have marine components.

Beyond the common international framework, the UK MPA categories are established as well through national legislation,[179] those categories differ depending on specifications of local levels. At national level, the categories of MPAs are:

- Areas of Sites of Specific Interest (SSSI – England, Scotland and Wales) and Areas of Special Scientific Interest (ASSI – Northern Ireland)
- Marine Conservation Zones (MCZ – England, Northern Ireland and Wales)
- MPAs (Scotland)

Each one of those categories has different objectives for conservation, designation, management and governance.

- Offshore waters: The categories are SACs, SPAs, Nature Conservation MPAs and Marine Conservation Zones. The JNCC sets conservation objectives for MPAs in UK offshore waters.[180]

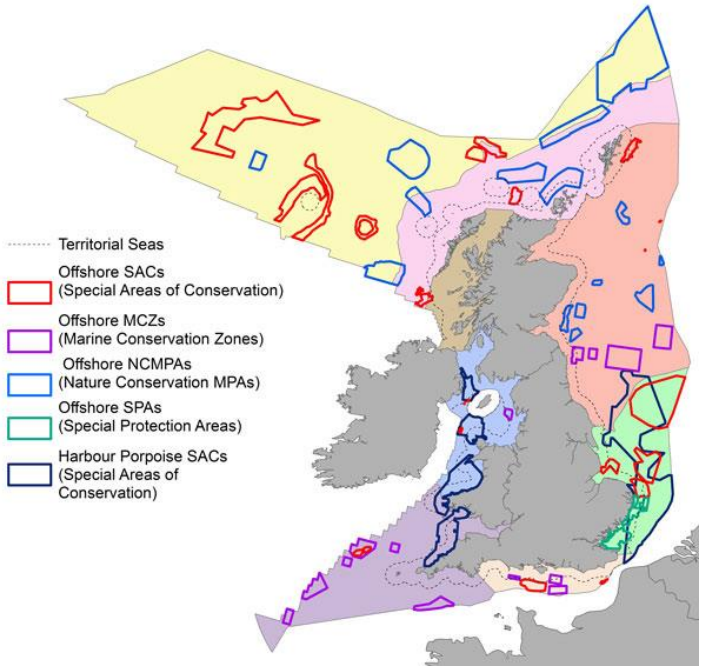

Figure 6: Marine Protected Areas of UK. Source: Defra, 2017.

[179] MPAs categories http://jncc.defra.gov.uk/pdf/MPAsInfoDoc_v2_2.pdf
[180] http://jncc.defra.gov.uk/page-6895

Sites of Special Scientific Interest (SSSI) / Areas or Special Scientific Interest (ASSI)

This category is known as SSSI in England, Wales and Scotland and ASSI in Northern Ireland.

Objectives

The main purpose of this category is to preserve essential areas threatened by development, pollution, and/or climate change. In the case of marine ecosystems, those areas can be coastal habitats, salt marshes and sand dunes. The objective of these areas is to protect species, habitats and geological features of national importance. This category is considered as a MPA where it protects intertidal or sub tidal habitats and species but, as they do not normally offer protection below the low water mark, this means they offer protection to a limited range of marine wildlife.[181]

Designation

Sites of Special Scientific Interest (SSSI) are designated and managed under the Wildlife and Countryside Act 1981. The Countryside and Rights of Way Act 2000 (England and Wales) and the Nature Conservation (Scotland) Act 2004 improved provisions for the protection and management of SSSIs in Britain. Sites in Northern Ireland, designated under The Environment (Northern Ireland) Order 2002, are known as Areas of Special Scientific Interest (ASSIs).[182]

In England, Natural England must identify an area as a new SSSI when it believes the land's wildlife or geology is of special interest.[183] This is known as a 'notification' or 'designation'. The designation includes a notification and confirmation process.[184]

In Wales, the responsible body for the selection and notification is Natural Resources Wales. Natural Resources Wales choose sites carefully after a detailed survey and evaluation against criteria put forward by the JNCC.[185] The criteria consider sites of importance for fauna, flora and geology. When notifying a new SSSI, the proposal is discussed with the occupiers of the area. This is followed by a formal consultation process.[186]

In Scotland, the SSSIs are a statutory designation made by Scottish Natural Heritage. Sites are chosen carefully after a detailed survey and evaluation against the JNCC criteria using the Guidelines for the selection of biological SSSIs.[187]

In Northern Ireland, ASSIs are protected areas for their species, habitat and/or geological features. Many of these are in coastal areas and have marine features. Some ASSIs are also subject to other designations, for example, they can also be part of the Natura 2000 network.[188]

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[181] http://jncc.defra.gov.uk/pdf/MPAsInfoDoc_v2_2.pdf
[182] http://www.rya.org.uk/knowledge-advice/planning-environment/Pages/sites-of-special-scientific-interest.aspx
[183] https://www.gov.uk/guidance/protected-areas-sites-of-special-scientific-interest
[184] http://webarchive.nationalarchives.gov.uk/20140605100500/http://www.naturalengland.org.uk/ourwork/conservation/designations/sssi/default.aspx
[185] http://jncc.defra.gov.uk/page-2303
[186] https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/find-protected-areas-of-land-and-seas/sites-of-special-scientific-interest-sssis/?lang=en
[187] https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/national-designations/sites-special-scientific-interest
[188] https://www.daera-ni.gov.uk/articles/coastal-areas-special-scientific-interest

Management

Normally, these areas are notified and managed under the Wildlife and Countryside Act of 1981 and the Nature Conservation and Amenity Lands (Northern Ireland) Act 1985[189]. On land, most SSSIs are privately owned or managed; others are owned or managed by public bodies or non-governmental organisations.

In England, in the case of activities or uses, close to or inside a SSSI, Natural England can advise on the management of proposed activities.[190] The SSSI advisor can recommend management measures based on information that is provided for the designated site. The management schemes are not mandatory. A management scheme is a statement of measures necessary to conserve and restore features in a region. However if a user of a SSSI applies a management scheme to conserve or restore the area, it can receive payments for that.[191]

In Wales, the SSSIs are protected through working partnerships and agreements with occupiers that manage the sites.

Many organisations have roles in protected areas in Scotland.[192] Scottish Natural Heritage (SNH) directly manages some, advises on the management of others and monitors the condition of SSSIs and Natura 2000 sites. Scottish Ministers or the Courts may use various orders to compel conservation efforts.[193]

In Northern Ireland, if a user wishes to carry on an activity within an ASSI, they must apply to DAERA's Natural Environment Division who may grant consent if the activity is unlikely to cause adverse damage to the designated site. If there is a chance that the proposed activity may affect marine features of the coastal ASSIs then DAERA Marine & Fisheries Division will be consulted.[194]

Governance

The main conservation agencies in the UK, responsible for the SSSIs/ASSIs are Natural England, Scottish Natural Heritage, Natural Resources Wales, and the Department of Agriculture, Environment & Rural Affairs in Northern Ireland.[195]

These sites are also used to underpin other national and international nature conservation designations. Most SSSIs are privately owned or managed; others are owned or managed by public bodies or non-governmental organisations.[196]

MARINE CONSERVATION ZONES

[189] http://jncc.defra.gov.uk/pdf/MPAsInfoDoc_v2_2.pdf
[190] https://www.gov.uk/guidance/sites-of-special-scientific-interest-public-body-responsibilities
[191] https://www.gov.uk/guidance/protected-areas-sites-of-special-scientific-interest#management-agreements-schemes-and-notices
[192] https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas
[193] https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas
[194] https://www.daera-ni.gov.uk/topics/land-and-landscapes/areas-special-scientific-interest
[195] http://jncc.defra.gov.uk/page-1527
[196] http://jncc.defra.gov.uk/page-1527

MCZs are designated under the Marine and Coastal Access Act 2009[197] (and the Marine Act (Northern Ireland) 2013, which makes provision for MCZs in the territorial seas around Northern Ireland).

Objectives

Generally, each MCZ has one conservation objective.[198] The objective applies to all of the features being protected. The main objective is also related to the idea that each of the features being protected needs to be in favourable condition.[199] To achieve this objective, the general management approach required for a feature in a MCZ will be either to maintain it in favourable condition (if currently in this state), or for it to be recovered to a favourable condition (if it is currently in a damaged state) and then to be maintained in favourable condition.[200]

Designation

The MCZs in English inshore waters have been identified by the Marine Conservation Zone Project. In Welsh and Northern Ireland inshore waters, MCZs are identified through the MCZ Project Wales and MCZ Project Northern Ireland processes respectively. The sites are selected and protect, not only, threatened habitats and species; but also a wide range of marine wildlife found in the UK. [201]

Unlike other MPA designations, social and economic factors may be taken into account in the identification of those sites. The selected sites may protect not just the rare and threatened species and habitats, but a range of marine wildlife.[202] Table 8 explains the effect a conservation objective may have on the designation process for an MCZ.

Table 8: Condition scale and conservation objectives for the MCZ designation. Source: DAERA, 2015[203]

Condition Scale and Objectives for features within the MCZ (low to high)					
Condition	Destroyed/ Partially destroyed	Unfavourable declining	Unfavourable maintained	Unfavourable recovering	Favourable
Objectives	**RECOVER**				**MAINTAIN**

The designation of a MCZ is a process that begins with recommendations provided by stakeholders, through a bottom-up approach, then their consequent designation and implementation follows a top-down approach.[204]

[197] http://webarchive.nationalarchives.gov.uk/20140605093714/http://www.naturalengland.org.uk/ourwork/conservation/designations/default.aspx
[198] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/259972/pb14078-mcz-explanatory-note.pdf
[199] Ibdem
[200] Ibdem
[201] http://jncc.defra.gov.uk/page-4525
[202] http://jncc.defra.gov.uk/pdf/MPAsInfoDoc_v2_2.pdf
[203] https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/mcz-guidelines-for-conservation-objectives-information-on-activities-and-management.PDF
[204] http://discovery.ucl.ac.uk/1362686/1/1362686.pdf

Once an area is designated as a MCZ, any authority with functions likely to impact on the conservation of a MCZ has to exercise those functions in a way that manages risks relating to environmental damage and activities.

Management

Authorities that have responsibility for the management of MCZ are Ministers of the Crown, public bodies and local planning authorities, or persons holding public office. The management of a MCZ will depend on the "options"; the development of "management options" reflects the information gathered about the site to be managed; and will reflect the interaction between activities carried out and MCZ features.[205] The process of identification of management options aims to identify the main human activities that can cause pressures on the marine environment and MCZ features.

Governance

A range of authorities have responsibilities relating to the management of human activities at the coast, including the Marine Management Organisation, the Inshore Fisheries and Conservation Authorities, Environmental Agencies, Local Authorities, the Harbour Authorities, DAERA (Northern Ireland) and the Department for Business, Energy and Industrial Strategy (UK). Natural England and the JNCC advise the regulators on the vulnerability of the features and the activities that are currently occurring within the site and that may impact upon the protected features.[206]

MARINE PROTECTED AREAS (SCOTLAND)

Objectives

These MPAs aim to contribute to the development of an ecologically coherent and well managed MPA network, developed under OSPAR guiding principles, fulfilling international and EU commitments.[207]

Designation

The designation of Nature Conservation MPAs is made by Scottish Ministers. The sites are identified by Marine Scotland in partnership with Scottish Natural Heritage, the Joint Nature Conservation Committee, Historic Environment Scotland, and the Scotland Environmental Protection Agency.

Management

The need for management will be determined on the basis of the features present, the risk that each activity may have for the MPA and the achievement of conservation objectives. Only activities considered to have

[205] https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/mcz-guidelines-for-conservation-objectives-information-on-activities-and-management.PDF
[206] https://www.gov.uk/guidance/marine-conservation-byelaws
[207] http://jncc.defra.gov.uk/pdf/Offshore_NCMPA_Designation_FAQs_July2014.pdf

a negative impact will require management. Stakeholders can be engaged in the development of management options.[208]

The management handbook is a document that sets out the approach to identify and implement the management measures required for MPAs. The potential impacts of the licensed activities will be assessed by the Environmental Impact Assessment process, on a case-by-case basis.[209]

Governance

The selection of a Nature Conservation MPA is underpinned by scientific advice from the JNCC and SNH. This process involves stakeholders in order to discuss and improve data on the marine features and marine activities. National workshops and regular meetings are organised and held with stakeholder groups, with discussion focused around site identification and management.[210]

OFFSHORE WATERS

The offshore MPAs of UK (beyond 12nm), include Marine Conservation Zones, Nature Conservation MPAs, Special Areas of Conservation and Special Protection Areas.[211] These MPAs also include offshore sites designated as SACs. [212]

- Special Areas of Conservation

Offshore SACs are notified to the EC as SCIs, under section 7 of the Conservation of Offshore Marine Habitats and Species Regulations 2017, in order to protect habitats and species of European importance.

- Special Protected Areas

A small proportion of SPAs in the UK extend into offshore waters.

- Nature Conservation MPAs

MPAs located in offshore waters around Scotland are designated under the Marine (Scotland) Act 2009.

- Marine Conservation Zones

MCZs are national designations introduced under the MCAA 2009 and have been designated in offshore waters around England, Wales and Northern Ireland for nationally important marine wildlife, habitats, geology and geomorphology.[213]

[208] http://jncc.defra.gov.uk/pdf/Developing_Management_Options_Web_ready.pdf
[209] http://jncc.defra.gov.uk/PDF/Project%20brief%20on%20Improving%20offshore%20MPA%20Cons%20Advice_WEB.pdf
[210] http://jncc.defra.gov.uk/pdf/Offshore_NCMPA_Designation_FAQs_July2014.pdf
[211] https://data.gov.uk/dataset/uk-offshore-marine-protected-areas1
[212] Ibdem
[213] http://jncc.defra.gov.uk/offshoreMPAs

UK NETWORK OF COHERENCE:

Management

In the UK, roles and responsibilities regarding the management of MPAs vary across jurisdictions and an overview of this structure is explained in Table 9.

The National Steering Group (NSG) is one of the coordinators that support the assessment of a well-managed MPA network at national level. The MMO is identified as the principal organisation to provide national co-ordination.[214] The NSG provides leadership on MPA management in order to champion and steer improvements.[215] The group also raise the profile of MPAs within their authorities increasing buy in to management responsibilities and also with wider stakeholders.[216]

Table 9: MPAs Management: National Steering Group. Source: adapted from Solent European Marine Sites, 2015[217]

Organisation / Country	***Roles and Responsibilities***
UK	
Department for Environment, Food and Rural Affairs (DEFRA)	- Provide overall MPA management on UK policy framework - Designation of UK MPAs
Joint Nature Conservation Committee (JNCC)	- Statutory conservation advisor to the Government and devolved administrations for Offshore areas (12-200 nm) - Statutory advisor to the UK Scottish Government on UK wide and international nature conservation[218]
Department of Business, Energy & Industrial Strategy	- Regulator of offshore oil and gas, including activities that require a marine licence.
England	
Marine Management Organisation (MMO)	- Management of activities that require a marine license, power to control activities and protect MPAs. - Management of fishing activities between 6 and 12 nm of the coast. - Development of maritime spatial plans
Inshore Fisheries Conservation Authorities (IFCAs)	- Fisheries 0-6 nm, including commercial fisheries and recreational fishing activities
Local Government	- Management of recreational activities

[214] http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/Stour--Orwell/030815revised-NSGRoles-and-responsibilities-for-management-of-MPAs.pdf
[215] http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/Stour--Orwell/030815revised-NSGRoles-and-responsibilities-for-management-of-MPAs.pdf
[216] http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/Stour--Orwell/030815revised-NSGRoles-and-responsibilities-for-management-of-MPAs.pdf
[217] http://www.solentems.org.uk/about/National_Steering_Group/Duties_on_authorities_in%20relation_to_MPA_management_NSG_April_2015.pdf
[218] http://jncc.defra.gov.uk/PDF/Nature%20Conservation%20MPAs%20in%20Scotlands%20seas%20-%20FAQs%20-%20v1%20-%20July%202011.pdf

	- Planning authority (interface marine-terrestrial) - Provision of coastal defence and strategic planning - Beach management and maintenance - Waste management
Environment Agency (EA)	- Management of migratory fisheries (out to 6nm) - Competent authority for WFD estuarine and coastal waters to 1nm for ecological status and 12nm for chemical status - Environmental Permitting Regulation activities - Respond to pollution incidents up to 3nm - Management of flood risk
Natural England	- Public access (coastal paths) - Designation and management of SSSIs - Conservation advisor to the Government for inshore areas (0-12nm) - Development of an advice on conservation objectives and on advice on operations/activities (EMS and MCZs)
Wales	
Natural Resources Wales	- Advisor role, as principal Advisor to the Welsh Government - Regulator and designator authority for MPAs - Monitor and management of environment - Key collaborator with the public, private and voluntary sectors
Scotland	
Historic Environment Scotland	- Statutory archaeological heritage advisor to the Scottish Government for inshore areas (0-12 nm) on Historic MPAs
Scottish Environment Protection Agency	- Scotland's principal environmental regulator, providing advice and guidance on implementation of conservation measures and support in monitoring.
Marine Scotland	- Provide overall MPA management on Scottish policy framework - Responsible for Scottish legislative targets - Designation and management of Scottish MPAs
Northern Ireland	
DAERA	- Management of site based conservation designations in cooperation with other UK administrations[219] - Responsibility for the designation of SPAs, ASSI, Ramsar sites and SACs with non-marine features
Loughs Agency	- Cross-border body (Northern Ireland and Republic of Ireland) - Responsible for fisheries and marine resources - Management, conservation, protection, improvement and development of fisheries[220]
Offshore Waters (England, Wales, Scotland and Northern Ireland)	
JNCC	- Advisor to the UK Government and devolved administrations regarding offshore MPAs - Sets conservation objectives for offshore UK MPAs

Designation

The designation process is a competence of the devolved administrations of Scotland, Wales and Northern Ireland inshore waters (0-12nm). In general for all MPAs in offshore waters the designation process is conducted in collaboration with the devolved administrations when MPAs fall into territorial and offshore

[219] https://www.daera-ni.gov.uk/articles/marine-protected-areas#toc-2
[220] http://www.loughs-agency.org/responsibilities/

waters[221], this process then is supported by bodies such as Marine Scotland, Natural Resources Wales and Natural England.

Conservation advice is also provided for each site, with surveys, monitoring and assessment. The JNCC also provides advice to public authorities and sea users of the marine environment. Considering transboundary cooperation, the JNCC is the body responsible for assisting the UK Government in liaising with the EU Member States, ensuring management of sites whose boundaries are next to protected sites in their waters. [222]

5. Marine Conservation Authorities and MSP Authorities

National authorities in charge of marine conservation are defined in all countries. France has as unique characteristic, with the existence of Maritime Prefectures. The Maritime Prefecture is also the authority in charge of implementing environmental policy and MSP, in combination with technical bodies such as French Agency for Biodiversity, IFREMER and the National Museum of Natural History.

In Ireland, the National Parks and Wildlife Service is responsible for nature conservation with representation at national, regional and local levels. The NPWS can authorise, adopt and decide plans and projects regarding marine conservation but liaise with other responsible authorities in relation to specific activities and/or development proposals. The competent authority for MSP is the Department of Housing, Planning and Local Government (DHPLG)[223], with the Marine Institute, providing scientific and technical advice.[224]

In the UK, authorities responsible for marine conservation are various (see Table 9), and include the JNCC, MMO, IFCAs, DEFRA, Statutory Nature Conservation Bodies and local government.

Those institutions have different roles regarding MPAs, generally providing the management of activities in MPAs and the UK policy framework, but also dealing with MPA designation. Some institutions, such as Natural England and Natural Resources Wales, act as advisors to Government on this topic.[225]

Regarding MSP, the institutions in charge of Maritime Spatial Planning, are: [226]

- **England:** The Marine Management Organisation (MMO) is responsible for preparing marine plans in England
- **Scotland**: Scottish Ministers for the Scottish inshore and offshore regions and Marine Scotland is the lead planning agency
- **Wales**: The Welsh Assembly Government, the Marine Team, part of the Department of Environment and Sustainability within the Welsh Assembly Government, will lead preparation of the Welsh marine plan[227]

[221] http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/Stour--Orwell/030815revised-NSGRoles-and-responsibilities-for-management-of-MPAs.pdf
[222] http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/Stour--Orwell/030815revised-NSGRoles-and-responsibilities-for-management-of-MPAs.pdf
[223] Ireland MSP Platform http://www.msp-platform.eu/countries/ireland
[224] http://www.housing.gov.ie/sites/default/files/publications/files/towards_a_marine_spatial_plan_for_ireland.pdf
[225] http://jncc.defra.gov.uk/PDF/Nature%20Conservation%20MPAs%20in%20Scotlands%20seas%20-%20FAQs%20-%20v1%20-%20July%202011.pdf
[226] http://msp.ioc-unesco.org/world-applications/europe/uk/
[227] http://msp.ioc-unesco.org/world-applications/europe/uk/wales/

- **Northern Ireland:** Department for Agriculture, Environment and Rural Affairs (DAERA) Northern Ireland for both the inshore and offshore regions[228]

[228] http://msp-platform.eu/countries/united-kingdom

6. The Celtic Seas MPA Network

The Celtic Seas Region, covers an area of 387,550 km², with a total of 683 MPAs.[229] Those MPAs equate to an area of 35,399 km², or 9.1% of OSPAR Region III. At CBD COP 10 in Nagoya, Japan; it was agreed that by 2020, at least 10% of coastal and marine areas are conserved,[230] as explained below:

> **Target 11:** By 2020, at least 17 per cent of terrestrial and inland water areas and 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.

Disclaimer: For technical reasons, several Irish MPAs are not included in the North East Atlantic MPA database.[231] Specifically Natural Heritage Areas and Nature Reserves (national categories), Ramsar sites and Biosphere Reserves (international categories) are not included. Maps displayed in this report, therefore, do not take these categories into account. It was not possible to include figures for the number of sites in each category or for their spatial extents. Many NHAs and Nature Reserves are small coastal sites. The figures or spatial coverage are not significantly affected by these exclusions. The list of sites included in these calculations for each country is available in Annex 1 of the MPA database report.[232]

Table 10: MPA by category, number of sites as a percentage of the total area covered. Source: AFB, 2017.

Category of MPA	France		Ireland		United Kingdom	
	Number of sites	Total covered area (km²)	Number of sites	Total covered area (km²)	Number of sites	Total covered area (km²)
International						
UNESCO BR	1	1642 km²	*Not assessed*	*Not assessed*	-	-
Ramsar	1	360 km²	*Not assessed*	*Not assessed*	22	1506 km²
Regional						
OSPAR MPA	9	*7175 km²*	15	1587 km²	120	38711 km²
N2000 - SPA (Birds Directive)	14	*4455 km²*	93	2306 km²	43	5696 km²
N2000 - SAC (Hab. Directive)	20	*5289 km²*	76	4833 km²	57	11911 km²
National						
Marine Nature Park	1	*3431 km²*	-	-	-	-

[229] Fauveau, G., and Alloncle, N. 2017. Marine Protected Areas in the Celtic Sea - North-East Atlantic Database completion and analysis (D3B). 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, 52pp.
[230] https://www.cbd.int/sp/targets/rationale/target-11/
[231] http://www.maia-network.org
[232] Fauveau, G. and Alloncle, N. 2017. Marine Protected Areas in the Celtic Sea - North-East Atlantic Database completion and analysis (D3B). 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, 52pp.

Nature Reserve (National and Regional)	5	*13 km²*	-	-	-	-
Biotope Protection by Law	2	*< 1 km²*	-	-	-	-
Marine State Property managed by Conservatoire du Littoral	1	*1 km²*	-	-	-	-
Natural Heritage Areas	-	-	*Not assessed*	*Not assessed*	-	-
Nature Reserves	-	-	*Not assessed*	*Not assessed*	-	-
SSSI	-	-	-	-	149	1689 km²
ASSI	-	-	-	-	17	83 km²
Marine Nature Reserve	-	-	-		2	177 km²
Nature Conservation MPA	-	-	-	-	14	14102 km²
Marine Conservation Zone	-	-		-	21	8447 km²
Whole MPA Total network	54	*6506 km²*	184	4744 km²	445	24148 km²

Within the Celtic Seas, countries have reached various levels of achievement of their MPA network. According to the analysis methodology used in this work, in terms of coverage, if these figures are examined at a national scale, the United Kingdom and France (12.2% and 14.9% respectively) meet the target whereas the Irish network is underrepresented (3.2%) but it should be stressed that not all MPA categories in Irish waters were included.[233] Considering the whole of OSPAR Region III, falling within the SIMCelt project area, the percentage covered reaches 9.1%, close to the Aichi requirement.[234]

The level of protection for offshore waters is different between countries. With 8.2% of offshore waters covered by a MPA category, the UK has the highest percentage area covered beyond 12nm in OSPAR Region III. The MPA network of France and Ireland is currently only coastal with no MPAs designated beyond 12nm and within the boundaries of OSPAR Region III, which extends between 60° N and 48° N and between 5° W and the west coast of Great Britain to the 200m depth contour to the west of 6°W.[235] This definition means that a number of Irish offshore OSPAR MPAs cannot therefore be included.

Figure 7 represents all categories of MPAs present at the Celtic Seas utilised in this analysis.

[233] Ibid.
[234] Ibid.
[235] Ibid.

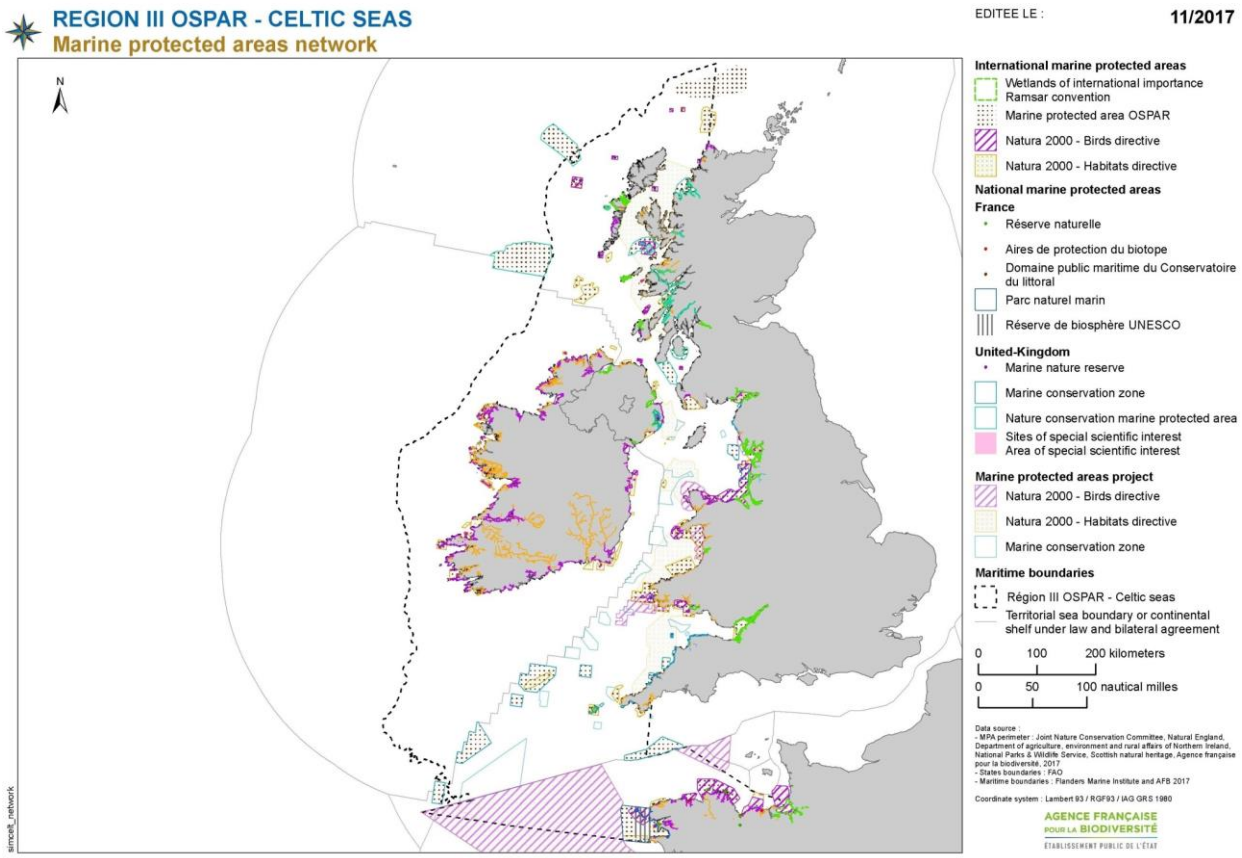

Figure 7: Marine protected areas, Region III OSPAR. Source: AFB, 2017.

Taking into account known projects of designation the situation changes substantially for MPAs in the Celtic Seas. If the proposed designations for the UK and France are considered, areas covered by at least one designation would lead to 32.6% and 67% of protected waters respectively, which means that 25.4% of the Celtic Seas would be covered by an MPA designation.[236]

In order to achieve these numbers, both countries will have to implement different strategies. The intention in France is to designate vast areas in its offshore waters (5 MPAs that cover 71.4% of the zone). The UK plans to designate large offshore zones and also expand its network in its inshore waters (from 16.8% to 41.1%).[237]

[236] Ibid.
[237] Ibid.

Table 11: Representativeness of the MPA Network in Region III OSPAR – Celtic Seas. The estimated surface area world cylindrical, equal area according to the boundaries drawn by the Flanders Marine Institute (MarineRegions.org). Source: AFB, 2017.

Country	Area in the OSPAR Region III (km ²)	Designated MPAs	Surface area covered by the current MPA network (km²)	Achievement of 10%	Projects designation of MPAs	Surface of water, covered by future network of MPAs (km²)	Achievement of 10%
France	**43726**	**54**	**6506 (14.9%)**	✓	**5**	**29368 (67%)**	✓
12 nm	11735	54	6306 (55.4%)	✓	0	6506 (55.4%)	✓
200 nm	31991	0	0 (0%)	−	5	22862 (71.4%)	✓
Ireland	**145975**	**219**	**4744 (3.2%)**	−	**0**	**4744 (3.2%)**	−
12 nm	37522	219	4744 (12.6%)	✓	0	4744 (12.6%)	✓
200 nm	108453	0	0 (0%)	−	0	0 (0%)	−
United Kingdom	**197839**	**445**	**24148 (12.2%)**	✓	**34**	**64576 (32.6%)**	✓
12 nm	92186	411	15458 (16.8%)	✓	28	37877 (41.1%)	✓
200 nm	105653	30	8690 (8.2%)	−	21	26699 (25.3%)	✓
Total	387550	683	35399 (9.1%)	−	39	98615 (25.4%)	✓

Legend:

✓ Reached Aichi Status − Has not reached Aichi Targets

It is important to bear in mind that statistics calculated through this SIMCelt action relate only to OSPAR Region III, which does not cover all marine waters under the jurisdiction of France, the UK and Ireland. Therefore, figures presented in this report cannot be compared with national statistics available for each of the countries concerned.[238]

[238] Ibid.

7. Discussion: Connections between MSP and marine conservation

Maritime Spatial Planning is a process whereby authorities analyse and organise human activities in marine areas, to achieve ecological, social and economic goals.[239] It may also be considered as a practical way to create rational organisation of the use of maritime space and the interaction between its uses, balancing demands for development whilst taking into account the protection of marine ecosystems.[240]

This section focuses on how the MSP process is connected with MPAs and how this relationship can be used to enhance ecological coherence and hence ecosystem-based management.

a. Achieving MPA objectives through the MSP process

With the MSP process, Member States endeavour to reduce conflicts, increase cross-border cooperation and protect the environment. This is a good opportunity for addressing the MPAs effectiveness. To do so, the national MPA network targets and objectives must be taken into account in the MSP process.

MSP could support the creation of new MPAs addressing network gaps in species or habitat protection. In addition, MSP could support the enforcement of regulations on uses within existing MPAs and therefore facilitate spatial management.

In France, for example, a National Strategy for the creation and management of MPAs is already integrated with the National Strategy for the Seas and Coasts. This is one example of how better coherence between conservation policies and MSP can be advanced.

Another approach, known in the UK as "network oriented" MPAs categories (e.g. MCZs and Natura 2000), is used extensively to reach ecological coherence (representativeness of environmental features). This operates at the network scale instead of by isolated MPAs. This approach needs to be considered more thoroughly during the MSP process so that EU-wide coherence could be achieved.

b. Taking advantage of MSFD implementation

The MSP process, if linked to implementation of the MSFD, is a way to foster the achievement of conservation goals within and beyond MPA perimeters.

The French approach to implement the MSFD and the MSP Directive simultaneously is to have a joint approach to implementation, contained in an overarching document[241] (National Strategy for the Sea and the Coast), which encompasses the measures need to implement both Directives at the same time. The National Strategy could deliver positive results in terms of coherence between maritime policies.

Brennan et al. (2014) writing about the contributions of MSFD and MSP Directives (before the launch of the MSP Directive) to UK marine policy, conclude that MSP is the obvious mechanism to implement the MSFD in the UK.[242] The authors also found that implementation of the MCAA 2009, the Marine Scotland Act 2010, the development of Marine Plans and the decision framework for licensing marine activities, is contributing significantly to the achievement of GES in the UK.[243]

[239] Directive 2014/89/EU
[240] UNESCO, 2009.
[241] https://www.ecologique-solidaire.gouv.fr/strategie-nationale-mer-et-littoral
[242] Brennan, J., Fitzsimmons, C., Gray, T. and Raggatt, L. (2017). EU marine strategy framework directive (MSFD) and marine spatial planning (MSP): Which is the more dominant and practicable contributor to maritime policy in the UK? Marine Policy, vol. 43, pp. 359-366. https://doi.org/10.1016/j.marpol.2013.07.011
[243] Ibid.

The MSFD requires Member States to adopt a Programme of Measures (PoMs) in order to achieve Good Environmental Status of marine waters by 2020. According to Article 13(4) of the MSFD, POMs "shall include spatial protection measures, contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems" such as SACs, SPAs and OSPAR MPAs.

Therefore, MSFD enforcement (through the PoMs) is expected to support MPA network objectives, both by encouraging MPA designation and their management for MSFD objectives, which include maintenance of biodiversity.

c. MPAs as spatial measures for regulation of uses

Marine protected areas encompass various conservation methods that can sustain the coexistence of activities and multiple uses of the seas.[244] In this sense, MPA management measures can be considered as spatial measures that set out rules for maritime sectors.

Moreover, sustainable development of maritime uses is emerging as an important objective for MPA networks. The example of Marine Parks in France reflects the need for environment protection, economic resource use and leisure of a common area. The management guidelines of these parks reflect the will to protect and sustainably develop compatible activities.[245]

In the UK, MCZs or MPAs are designated with regard to socio-economic factors and are intended to allow sustainable development of maritime uses.[246]

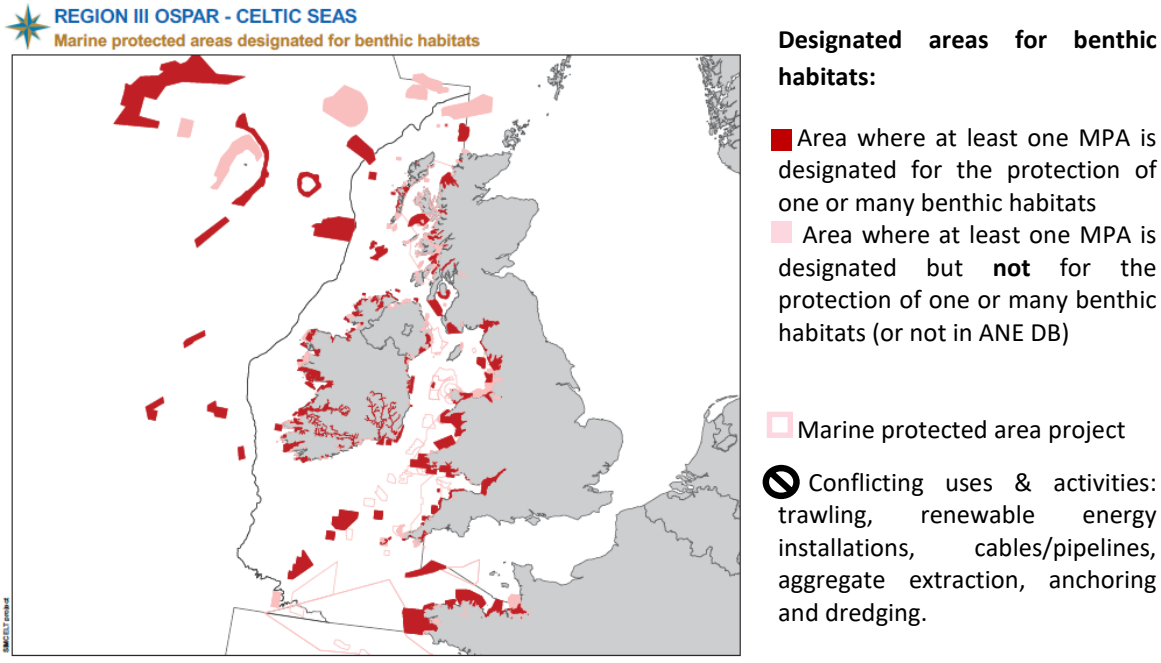

Figure 8: MPAs designated for protection of benthic habitats. Source: AFB, 2017.

[244] http://www.protectplanetocean.org/collections/introduction/introbox/mpas/introduction-item.html
[245] http://www.aires-marines.com/Ressources/Marine-nature-parks/Marine-Nature-Parks.
[246] Defra. 2010. Guidance on selection and designation of Marine Conservation Zones (Note 1). Guidance on the proposed approach to the selection and designation of Marine Conservation Zones under Part 5 of the Marine and Coastal Access Act. Defra, London. 22pp.

Figure 8 shows MPAs designated for the protection of at least one type of benthic habitat in the Celtic Seas. Measures that aim to protect benthic habitats can be enforced within these areas. The planning of activities that intensively use the bottom of the sea must take into account those particular MPAs and their conservation objectives. Such activities could include bottom trawling, renewable energy installations, cables and pipelines, aggregate extraction, anchoring and dredging. Therefore in MPAs where used can be explicitly regulated can be used as a tool with maritime spatial planning.

d. MPAs as a local governance tool

Marine Protected Areas may facilitate participatory governance structures by supporting a process that entails collaborative planning and decision-making.[247] Stakeholder engagement is a crucial element for the successful implementation of the MSP process and is a requirement of the MSP Directive. Where they exist, management boards or councils of MPAs generate participatory management. They can be considered instruments for local governance and could support MSP implementation by fostering participation in the decision-making process.

In France, for example, a good example is the French Nature Marine Park, specifically the Iroise Marine Park, located in the Celtic Seas. This Marine Park, at the tip of Finistère, aims to balance protection of natural resources with the development of activities that depend on it.[248] The local governance of the Park is conducted by a management board composed of State representatives, as well economic stakeholders, local government and NGOs. The council is responsible for developing a management plan for the Park and proposes measures or actions to achieve the objectives contained in the management plan. This governance process, however, is very similar to stakeholder engagement for MSP at a local scale.

In Ireland, the NPWS works with the landowners (in the case of terrestrial or coastal designated sites), as well as with national and local authorities, in order to achieve the best balance possible between existing uses and conservation requirements in these areas.[249]

In the UK, boards of MPAs involve sectors. In MCZs, for example, their governance connects industry, fishing groups and people with marine interests. These groups provide information, collected by the information groups, and develop recommendations for the MPA management. Therefore, MPAs can facilitate the communication among stakeholder groups that could benefit the MSP process

e. MSP within MPA boundaries

Some types of large MPAs include sub-zones within their boundaries to address different issues in different parts of the designated area. Then, measures and regulations on uses could be adapted within each of the sub-zones depending on their specificity. This process, which could be viewed as a spatial planning exercise, takes into consideration a wide range of features (e.g. bathymetry, sediment type, habitats, wind direction, conservation importance) as well as socio-economic factors.

[247] http://www.mpag.info/governing-mpas-final-technical-report-web-res.pdf
[248] http://www.parc-marin-iroise.fr/Media/Parcs/Iroise/Fichiers/Fichiers-PDF/The-summary-of-the-management-plan-of-the-Iroise-Marine-Natural-Park.
[249] https://www.npws.ie/protected-sites

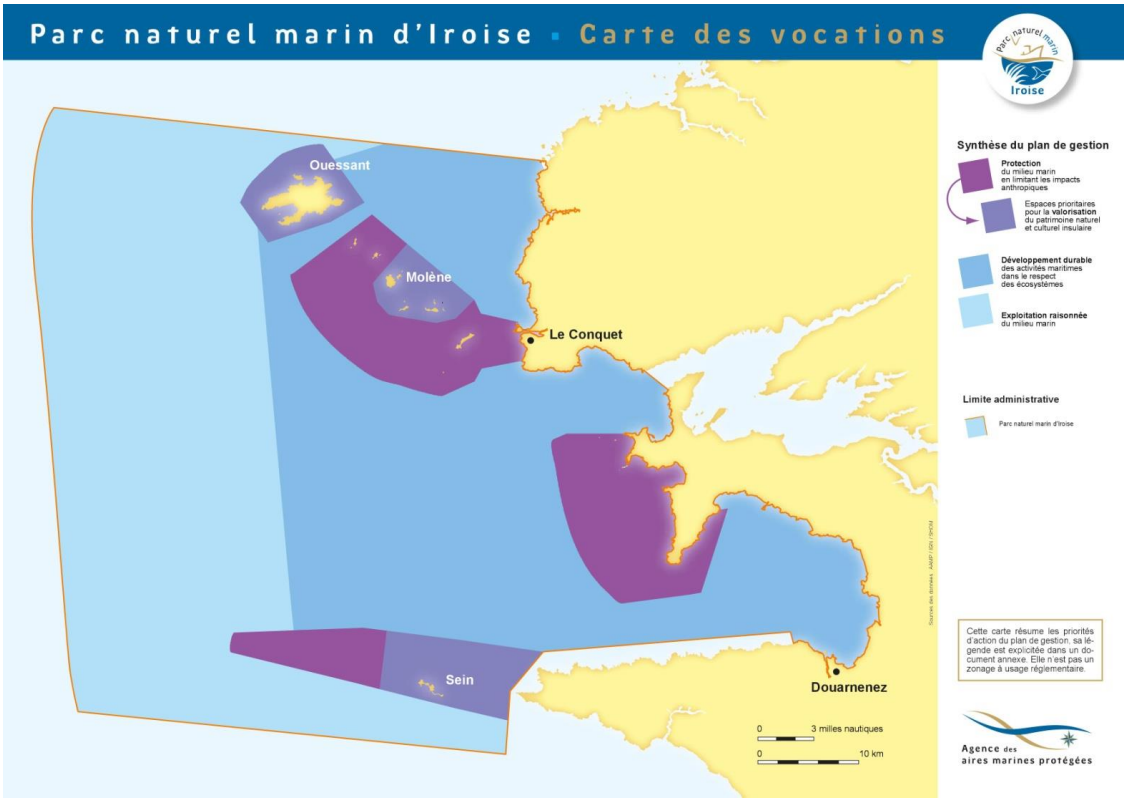

Figure 9: Marine Park of Iroise, representing MSP within an MPA. Source: AFB, 2017.

The management plan of the Iroise Nature Marine Park in France contains a sub-zoning map shown in Figure 9. This map, called a "carte des vocations", or map of priority focus in English, contains the main types of management areas ("vocation") within the Park.[250] This type of mapping process represents the trade-offs between environmental and socio-economic stakes that occur in the Park. The management board (involving a broad range of stakeholders) decides on the management priorities for sub-zones of the Park, resulting in a participative mapping process very similar to MSP at a local scale.

8. Conclusions

This study concluded that different international Conventions relating to the protection of the environment provide for different categories of marine protected areas. Those categories differ mainly according to the objectives of that protection. Differences also exist with respect to national management, designation and regulations of the MPAs created.

According to the European Environment Agency, in a study published in 2015, some gaps exist in terms of representativeness, coherence, adequacy and management effectiveness in EU MPAs (including national and international categories).[251] A better solution for this gap, according to the EEA would be to harmonise the information sources, agree on science criteria and develop clear objectives.[252]

[250]https://www.legifrance.gouv.fr/affichCodeArticle.do?idArticle=LEGIARTI000006833650&cidTexte=LEGITEXT000006074220
[251] EEA. 2015. Marine protected areas in Europe's seas: An overview and perspectives for the future. EEA Report No. 3/2015. EAA, Copenhagen. ISSN 1977-8449.
http://espas.eu/orbis/sites/default/files/generated/document/en/Marine%20protected%20areas%20in%20Europes%20seas.pdf
[252] Ibid.

National categories of MPAs in France, Ireland and UK have different objectives, and this aspect can be very significant when considering cross-border cooperation aspects required for implementation of MSP and the MSP Directive. Cooperation among neighbouring countries (on MPA management and governance) is necessary to achieve coherent marine conservation, though ecosystems across the globe are divided by political and administrative boundaries.[253]

The main differences between the objectives of national MPAs relate to what they aim to protect. Some categories accept sustainable exploration of resources within their perimeters (e.g. French Marine Nature Park), while others have areas of strict protection (e.g. French National Parks, Core Area). Some categories include the protection of other features, such as geological heritage (e.g. Marine Conservation Zones in the UK) in their objectives, and others focus solely on the protection of habitats and species.

Regarding this context, in order to have a holistic approach to the management of MPAs, the conservation objectives could be reflected in the MSP process, as explained in the Discussion part of this report. Steps in MSP are already used and developed in many parts of the world for the management of MPAs.[254] One example of this approach is described in the Best Practice Guide, published by UNESCO,[255] where MSP is used as a management approach for UNESCO Marine World Heritage Sites.

Maritime spatial planning also presents an opportunity to communities to get involved in effective management of the ecosystems around them,[256] acting as a local governance tool. The process of establishing and managing MPAs requires careful planning and sensitive management,[257] it should also allow for the inclusive representation of stakeholders in the planning process.[258] Marine protected areas often involve distinctive governance structures that facilitate the participation of other maritime sectors and civil society, serving as a process that could be harnessed to foster public engagement in MSP.

[253] https://www.iucn.org/theme/protected-areas/wcpa/what-we-do/transboundary-conservation
[254] http://www.imr.no/filarkiv/2011/02/agardy_et_al-2011.pdf/en
[255] https://whc.unesco.org/document/137595
[256] Ibid.
[257] http://assets.wwf.org.uk/downloads/mpas_marinespacialplanning.pdf
[258] http://assets.wwf.org.uk/downloads/mpas_marinespacialplanning.pdf