

# The Seafish Guide to **Marine Protected Areas (MPAs)**

This is one of a series of guides in which Seafish explores topical issues affecting the UK seafood industry. This guide looks at Marine Protected Areas relevant to the North East Atlantic, including MPAs in international waters on the High Seas and within UK and European waters. The creation of a 'coherent network of MPAs' in the North East Atlantic under international agreement is described.

# The Seafish Guide To Marine Protected Areas

## Definitions

There is no single internationally accepted definition of a Marine Protected Area (MPA). The IUCN<sup>a,1</sup> generalise to all protected areas both terrestrial and marine;

*'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'.*

The above definition relates primarily to nature conservation, which is an important motivation for implementation of most MPAs in the UK and Europe. However, Europe also has a long history of spatial management of fisheries including spatial restriction of access to vessels of certain sizes and measures aimed at protection of juveniles and spawning stocks. The FAO<sup>b</sup> technical guidelines for Responsible Fisheries<sup>2</sup> define an MPA as;

*....any marine geographical area that is afforded greater protection than the surrounding waters for biodiversity, conservation, or fisheries management purposes will be considered an MPA.*

The extent of the synergy between nature conservation and fisheries management in relation to MPAs has been the subject of much discussion in the scientific and policy literature. FAO (2011)<sup>2</sup> discusses the use of MPAs in the context of a move towards an 'Ecosystem Approach to Fisheries' (EAF) where a broad range of stakeholders, objectives and sources of information are included. In a fisheries context MPAs are only one of a suite of management including such measures as gear, catch and effort controls, which are used for fisheries' management. Demonstrating fisheries' benefits can be difficult and a high proportion of the examples where benefits have been demonstrated are based in tropical

areas with temperate areas, where conditions are likely to be different have been less well studied<sup>3</sup>.

The primary objectives of marine nature conservation MPAs relate to the conservation and/or recovery of marine biodiversity. They are usually designated around permanent geographic features. The management measures range from highly restrictive so called Highly Protected Marine Reserves (HPMRs) where there is no extractive use or other damaging activities, to areas where multiple uses of the area are managed in relation to the area's conservation objectives. Under UK and European legislation, nature conservation MPA management has focused on managing multiple uses of the marine environment while achieving the specific conservation objectives of the MPA.

The purpose of this guide is to inform on the process by which MPAs, designed primarily for biodiversity conservation, are being introduced into North-East Atlantic, European and UK waters. This is defined as the area of Convention for the Protection of the Marine Environment of the North-East Atlantic (the 'OSPAR'<sup>c</sup> Convention'). This is an international agreement designed to protect the marine environment of this region; see Figure 1 (p 6).

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<sup>a</sup> IUCN: International Union for Conservation of Nature  
[www.iucn.org](http://www.iucn.org)

<sup>b</sup> FAO: FOOD and AGRICULTURE ORGANISATION OF THE UNITED NATIONS

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<sup>c</sup> [www.ospar.org](http://www.ospar.org)

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### North East Atlantic Marine Protected Area

The main international framework for marine management is the United Nations Convention on Law of the Sea (UNCLOS) signed in 1982. Although not all States have ratified this Convention, most have claimed the 200 mile Exclusive Economic Zones (EEZs) derived from it, enabling states to implement spatial management regimes inside these zones. Outside the EEZs on the 'High Seas', Regional Fisheries Management Organisations (RFMOs) are the legally competent organisations. In the North East Atlantic Fisheries Commission (NEAFC)<sup>4</sup> is the appropriate RFMO.

#### High Seas

The framework for the protection of High Seas areas (beyond the national EEZs) has resulted in designation of Vulnerable Marine Ecosystems (VMEs) under FAO guidelines (FAO, 2009<sup>5</sup>; see also FAO Database of VMEs<sup>6</sup>). VMEs are groups of species, communities or habitats that may be vulnerable to impacts from fishing activities. The concept of a VME sensitive to fishing is not exclusive to the High Seas areas but it is here that the term is used in management. Both physical impacts by gear and functional importance of the ecosystems are taken into consideration. Protection is afforded by;

1. MPAs in specific locations defined by geographical boundaries inside which certain fisheries activities likely to be damaging to these habitats are not allowed.
2. Outside these areas 'existing bottom fishing areas' are defined, that is areas which have been recently fished and where fisheries could continue relatively unrestricted. Bottom fishing outside these areas (i.e. in 'new bottom fishing areas'), which constitute the majority the High Seas areas of the North East Atlantic is allowed as exploratory fisheries which are subject to various restrictive conditions. These conditions include a pre-assessment of the proposed activities which includes scientific advice as to whether a VME is likely to be encountered, and may include a requirement for an observer to be present on the vessel.
3. Encounter rules are implemented in which vessels have to report bycatches of

certain indicator species as sponges or corals and move fishing activities a set distance away.

Full details of these regulations which apply to NEAFC contracting parties are given on the NEAFC website<sup>7</sup>. Norway has implemented similar regulations in fisheries within its jurisdiction and Russia is in the process of doing so<sup>7</sup>. The EU is working towards consistency with the NEAFC under the deep sea access regime of the EU Common Fisheries Policy.

#### European Marine Sites

European Marine Sites (EMS) is an umbrella term describing the marine areas of sites designated as Special Areas of Conservation (SACs) under the European Habitats Directive (92/43/EEC), which protects particular species or habitats of European importance and Special Protection Areas (SPAs) under the European Birds Directive (2009/147/EC), which emphasises protection of habitats for endangered and migratory species of birds. These two designations require that site selection is based on nature conservation grounds and do not permit economic or social impacts to influence the choice of their sites or boundaries. However, economic and social factors can be taken into account in the management of these sites. European Marine Sites can be designated in the inshore and offshore areas of European nations' EEZs.

These marine sites, together with terrestrial and freshwater sites, form a part of the European Natura 2000 network of protected areas. The Marine Strategy Framework Directive (2008/56/EC) requires Member States to include in their programmes of measures the establishment of MPAs, thus contributing to one of the key objectives of the Convention on Biological Diversity<sup>8</sup> as agreed at the Rio 'Earth' Summit in 1992: the creation of a global network of marine protected areas. This was reviewed by the European Commission in 2015<sup>9</sup> which found that MPAs covered 6% of European Seas by 2012, with the aim of reaching 10% by 2020. Economic and other benefits of the Natura 2000 network are also discussed.

## **Wetlands**

The Convention on Wetlands of International Importance<sup>10</sup>, agreed in Ramsar, Iran, in 1971 known as the Ramsar Convention is designed to protect wetlands defined as;

*“areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.”*

They may also incorporate coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands.

## **MPA Network in the UK**

The UK Marine and Coastal Access Act 2009 provides for the creation of Marine Conservation Zones (MCZs) to protect a range of nationally important marine wildlife, habitats, geology and geomorphology, which can be designated anywhere in English, Welsh, and UK offshore waters<sup>d</sup>. Nature conservation criteria will be the first consideration in the selection of MCZs but socio-economic factors can be taken into account. For Scotland, the Marine Scotland Act (2010) and for Northern Ireland the Marine Act (Northern Ireland) 2013 is relevant; see below.

These Acts impose a duty on UK government and devolved administrations to designate MCZs so as to contribute to a UK network of marine sites with MCZs complementing the Natura 2000 network of European Marine Sites, Sites of Special Scientific Interest (mostly terrestrial but with some intertidal and subtidal components) designated under the Wildlife and

Countryside Act 1981<sup>e</sup> and wetlands protected under the Ramsar Convention. This will help the government to fulfil the UK's commitment, under the OSPAR Convention (see below) to establish an ecologically coherent network of marine protected areas in the North-East Atlantic; see Figure 1 p 6.

Each Administration in the UK has responsibility for designating MCZs (known as Marine Protected Areas in Scotland) in their waters. There is also executive devolution of responsibility to the Scottish Government for offshore waters inside the EEZ adjacent to Scotland. Each Administration is taking a different approach to identifying and designating MCZs.

## **Assessment and management**

All activities, including fishing, affecting the Marine Sites will be subject to a risk assessment against the conservation objectives of the site with the advice of UK government advisors. These are; the Joint Nature Conservation Committee (JNCC) which advises the UK Government and devolved administrations; Scottish Natural Heritage; Natural Resources Wales; the Council for Nature Conservation and the Countryside in Northern Ireland, and Natural England.

Those activities which do not have a significant impact on the conservation objectives of the site will be unaffected. Some fishing activities might need to be restricted in certain areas, unless measures can be found to avoid adverse effects on the conservation objectives for the site.

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<sup>d</sup> It repeals the provision of Marine Nature Reserves (MNRs) under the Wildlife and Countryside Act 1981

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<sup>e</sup> Areas of Special Scientific Interest in Northern Ireland under the Nature Conservation and Amenity Lands Act (Northern Ireland) 1985

### **MCZs in English and Welsh waters**<sup>11</sup>

Under the provisions of the UK Marine Act stakeholders are to be involved in making the initial recommendations for MCZs. Four regional groups were established: Finding Sanctuary in the south west; Balanced Seas (south east), Irish Sea Conservation Zones (Irish Sea) and Net Gain (North Sea) to provide technical expertise in developing the MCZ recommendations. As of early 2016 54 of the 127 proposed English MCZs have been designated. However, the management measures in the majority of these sites are yet to be implemented.

The Marine Conservation Project Wales has identified a small number of highly protected MCZs for designation in Welsh inshore waters. However, following a public consultation these proposals were withdrawn by the Minister and any new MCZs will complement existing protected sites.

### **Scottish MPAs**<sup>12,13</sup>

In Scotland the term MPA is used instead of MCZ. Scottish MPAs can be designated for nature conservation, or demonstration and research purposes, or to protect historic areas. The Scottish MPA project is a joint project between Marine Scotland, Scottish Natural Heritage, JNCC, Historic Scotland and the Scottish Environment Protection Agency. It will identify and recommend Nature

Conservation MPAs to Scottish Government. Nature Conservation MPAs were identified using science-based selection guidelines, but the likely effects on socio-economic activities can be considered in the designation of sites.

In July 2014, 30 Nature Conservation MPAs were designated in the seas around Scotland, of which 13 are offshore, outside territorial waters (the 12 Nautical mile limit) but inside the EEZ. Subsequently, some of these sites have been contested and re-opened for consultation.

### **Northern Irish MCZs**<sup>14</sup>

Designation of MCZs the Northern Ireland inshore region may be carried out for conserving species of marine flora and fauna and geological or geomorphological features, taking fully into account any economic or social consequences of designation. The first MCZ to be designation is the former Strangford Lough Marine Nature Reserve (MNR) now designated as a MCZ. A further 4 sites have been proposed.

A few proposed MCZs in the Irish Sea outside the Northern Ireland inshore region would have an impact on Northern Irish fishermen, and alternative sites have been put forward by the Northern Ireland industry<sup>15</sup>

### The OSPAR network of MPAs

OSPAR<sup>16</sup> is the convention by which fifteen Governments of the western coasts and catchments of Europe, together with the European Community, co-operate to protect the marine environment of the North East Atlantic. Signatories to the OSPAR Convention have agreed to establish a network of marine protected areas. The overall aim is to have an ‘ecologically coherent’, well managed network of MPAs by 2016 (Figure 1). Many of the MPAs discussed in this document contribute to this network. By the end of 2014 the network comprises 413 MPAs with a total surface area of 788 377 km<sup>2</sup> or 5.82% of the OSPAR Maritime Area. Progress towards ecological coherence is discussed in OSPAR (2014)<sup>17</sup>

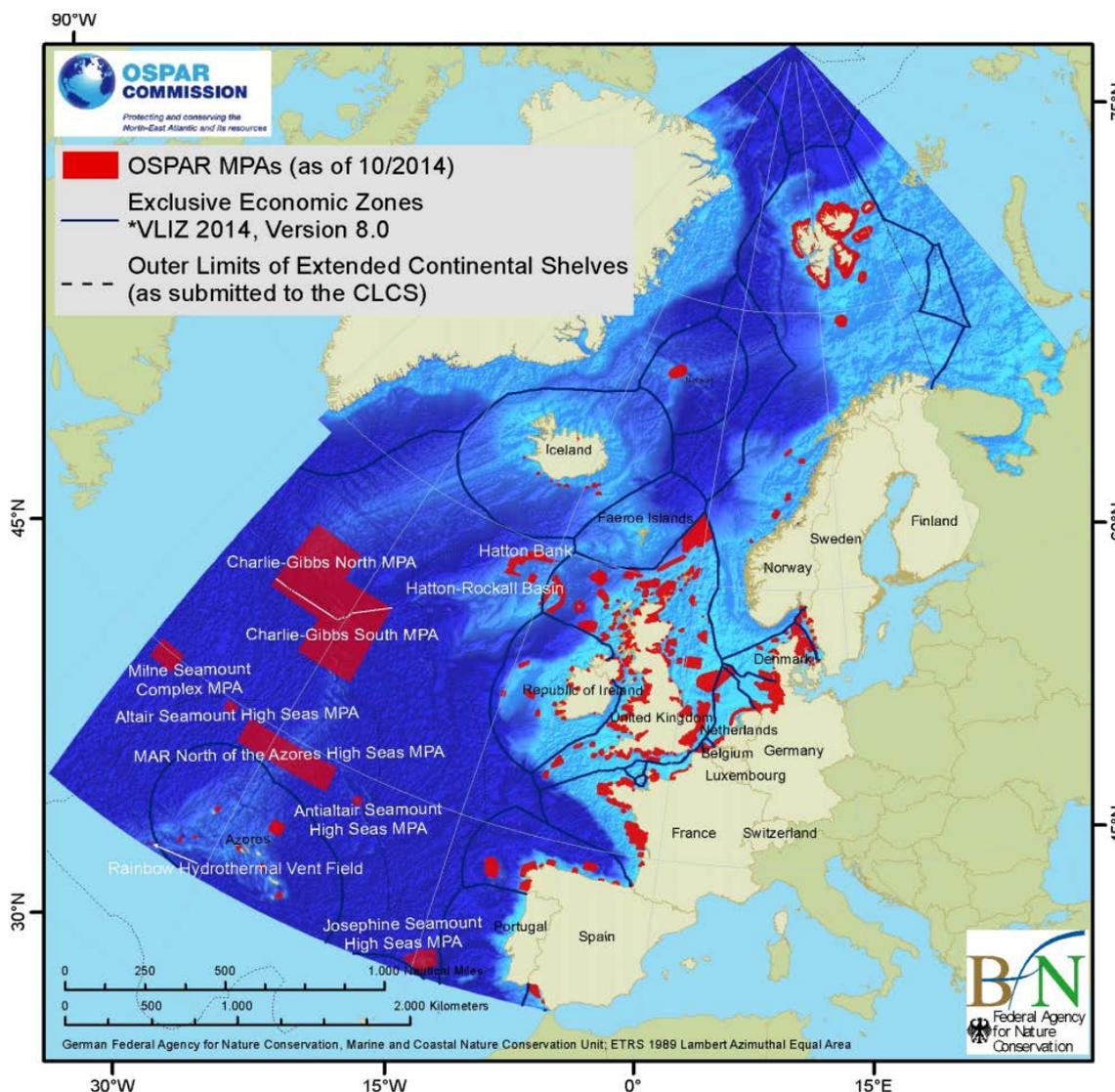


Figure 1 The OSPAR Area of the North East Atlantic with the Network of Marine Protected areas including those on the High Seas designated as Vulnerable Marine Ecosystems by the North East Atlantic Fisheries Commission (From OSPAR 2014<sup>17</sup>)

## Other Seafish guides

There are a number of other Seafish Guides in this series, covering different aspects of responsible fisheries and sustainability. For more details and the most up to date information consult our website at [www.seafish.org/responsible-sourcing](http://www.seafish.org/responsible-sourcing). Seafish also maintains the Risk Assessment for Sourcing Seafood (RASS) tool<sup>18</sup> which provides risk-based guides for around 300 fisheries. [www.seafish.org/rass/](http://www.seafish.org/rass/)

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## References

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- <sup>2</sup> FAO Technical Guidelines for Responsible Fisheries No. 4, Suppl. 4 Marine Protected Areas and Fisheries <http://www.fao.org/docrep/015/i2090e/i2090e.pdf>
- <sup>3</sup> Caveen, A J Sweeting C, Willis T.J and Polunin N (2012) Are the scientific foundations of temperate marine reserves too warm and hard? *Environmental Conservation* 39 (3): 199–203
- <sup>4</sup> NEAFC North East Atlantic Fisheries Commission [www.neafc.org](http://www.neafc.org)
- <sup>5</sup> FAO 2009. International Guidelines for the Management of Deep-sea Fisheries in the High Seas. Rome FAO. 2009. 73p. <http://www.fao.org/fishery/topic/166308/en>
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- <sup>7</sup> Hønneland, G, O'Boyle, R and Hambrey, J (2016) MSC SUSTAINABLE FISHERIES CERTIFICATION Barents Sea cod, haddock and saithe fishery; final report Ocean Trawlers Group Acoura Marine Ltd [www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/barents-sea-cod-haddock-and-saithe/re-assessment-downloads/20160405\\_FR\\_COD10.pdf](http://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/barents-sea-cod-haddock-and-saithe/re-assessment-downloads/20160405_FR_COD10.pdf)
- <sup>8</sup> Convention on Biodiversity CBD 2016 [www.cbd.int](http://www.cbd.int)
- <sup>9</sup> REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the progress in establishing marine protected areas (as required by Article 21 of the Marine Strategy Framework Directive 2008/56/EC) [http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/pdf/marine\\_protected\\_areas.pdf](http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/pdf/marine_protected_areas.pdf)
- <sup>10</sup> The Convention on Wetlands of International Importance, called the Ramsar Convention <https://www.informea.org/en/treaties/ramsar>
- <sup>11</sup> Natural England and JNCC The Marine Conservation Zone Project [http://jncc.defra.gov.uk/pdf/120718\\_MCZAP\\_MCZ%20Project%20Factsheet%20110712.pdf](http://jncc.defra.gov.uk/pdf/120718_MCZAP_MCZ%20Project%20Factsheet%20110712.pdf)
- <sup>12</sup> Report to the Scottish Parliament on Progress to Identify a Scottish Network of Marine Protected Areas <http://www.gov.scot/Resource/0041/00410766.pdf>
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- <sup>16</sup> The Convention for the Protection of the Marine Environment of the North-East Atlantic (the 'OSPAR Convention') was open for signature at the Ministerial Meeting of the Oslo and Paris Commissions in Paris on 22 September 1992. It was adopted together with a Final Declaration and an Action Plan. [www.ospar.org](http://www.ospar.org)
- <sup>17</sup> 2014 Status Report on the OSPAR Network of Marine Protected Areas [http://www.ospar.org/site/assets/files/7413/assessment\\_sheet\\_mpa\\_status\\_2015.pdf](http://www.ospar.org/site/assets/files/7413/assessment_sheet_mpa_status_2015.pdf)

## Other sources

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