Offshore marine conservation policies in the North East Atlantic: Emerging tensions and opportunities

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Abstract

An inherent tension exists between legal approaches to nature conservation and fisheries management in the European Union, as the former remains the remit of Member States while the latter is under the exclusive legislative jurisdiction of the European Community (EC). This tension is of particular importance when addressing the conservation of habitats or species that are under threat from fishing activities. This article examines recent developments in offshore marine conservation in the North-East Atlantic in light of the legislative developments and political frameworks that are currently evolving. By analysing the emergency closure of the Darwin Mounds area of cold-water corals and the UK pair-trawl ban, it becomes evident that the precautionary principle is a key factor in the tension between fisheries management and marine nature conservation, and is not always taken into account.

1. Introduction

In its 25th report to Parliament in December 2004, the Royal Commission on Environmental Pollution described the impact of fishing on the marine environment as 'the greatest individual threat to the environment in the seas around the UK' [**1**]. In recent years, there has been growing impetus at the international level for the establishment of networks of Marine Protected Areas (MPAs) in order to address this threat (**Table 1**). The Plan of Implementation put forward by the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg called for a representative network of MPAs to be established by 2012 [**2**], a goal reiterated in 2003 at the IUCN World Parks Congress with a further commitment to strictly protect at least 20-30% of each habitat type, *i.e*. closed to all forms of extractive use [**3**]. Also in 2003, a joint Ministerial meeting of the Helsinki and OSPAR Commissions held in Bremen resulted in a work programme aimed at designating a network of inshore and offshore MPAs by 2010 [**4**]. In 2004, the WSSD commitment was reinforced at the seventh Conference of Parties to the Convention on Biological Diversity (CBD) in Kuala Lumpur, with a target to establish by 2012 (in the marine realm, and by 2010 terrestrially) a global network of 'comprehensive, representative and effectively managed national and regional protected areas' [**5**].

Table 1. Recent international initiatives for networks of Marine Protected Areas applicable in the North East Atlantic

CONFERENCE	GOAL	SCOPE	YEAR
World Summit on Sustainable Development (Rio +10), Johannesburg	Network by 2012	Global	2002
IUCN World Parks Congress, Durban	Network by 2012, 20-30% strictly protected	Global	2003
OSPAR/HELCOM Bremen Statement	Network by 2010	Regional	2003
CBD 7th Conference of Parties, Kuala Lumpur	Network by 2012	Global	2004

Although it has yet to pass a moratorium on deep-sea trawling, the United Nations General Assembly (UNGA) issued Oceans and the Law of the Sea Resolutions [**6**] in 2003 and 2004 urging the international community to take immediate action towards the conservation and sustainable use of marine resources in areas beyond national

jurisdiction. In the European Community (EC)[1], following three years of consultation, a draft Marine Strategy Directive [**7**] was released in 2005, aimed at achieving a 'good environmental status' for European marine waters by 2021. The EC also recently adopted a Green Paper on Maritime Policy in June 2006, which is open to consultation for one year and aims to launch a debate about a future maritime policy for the European Union. However, a coalition of non-governmental organizations (NGOs) has already pointed out that the proposed Marine Strategy Directive falls short of the ambitious targets set out in earlier drafts and the definition of 'good environmental status' remains unclear. If the proposed Directive is to serve as a pillar for the developing maritime policy, this definition needs to be uniform across Member States to prevent duplication and promote synergy between the two European initiatives [**8**].

The primary legal instruments available to the EC to address fisheries management and marine nature conservation are, respectively, the Common Fisheries Policy (CFP) and the Habitats Directive [**9**]. While the CFP is managed under the Directorate General for Fisheries and Maritime Affairs (DG Fish), the Habitats Directive is under the responsibility of the Directorate General for the Environment (DG Environment). This bifurcation has its roots in the Treaty on European Union, where fisheries management is addressed under the Agriculture Title (Articles 32-38, formerly 38-46), and environmental management lies within the Environment Title (Articles 174-5). Both the CFP and the Habitats Directive impose binding obligations on Member States, the CFP in the form of Regulations and Decisions, and the Habitats Directive via its requirement of Member States to transpose the Directive into their national legislation. From a legal standpoint, a key issue arises from this situation: given the jurisdictional separation between fisheries management issues controlled by DG Fish on the one hand and nature conservation under the auspices of DG Environment on the other, how can a Member State of the EC address overlapping nature conservation issues that occur as a result of the activities of EC fishing vessels? As will become evident later in the discussions on the Darwin Mounds protected area and the attempted ban on pair-trawling for sea bass, the role of precaution and degree of threat is at the interface of this tension.

1.1 Greenpeace Judgment

In 1999, a High Court ruling commonly referred to as the 'Greenpeace Judgment' [**10**] extended the territory to which the Habitats Directive applies in the UK from the 12 nautical mile (nm) boundary of its territorial sea out to the limit of its 200nm Exclusive Fisheries Zone (EFZ)[2]. Consequently the UK is now required to protect species and habitats in this area, and is currently revising its national implementation legislation, the Conservation (Natural Habitats etc.) Regulations (1994), to include not only its EFZ but the entire continental shelf over which the UK exercises sovereign rights, which represents a 2.74 fold increase in area subject to protection under the Habitats Directive.[3] The extension of these regulations has, however, been delayed and the European Commission recently took the UK to court for, *inter alia,* not having properly implemented its Regulations in the offshore zone [**11**]. This is an important development

[1] This article refers to the European Community (EC) rather than European Union (EU), as fisheries are exclusively within the jurisdiction of the EC while the EU comprises the three 'pillars' of (i) the EC, (ii) justice and home affairs and (iii) a common Foreign and Security policy.

[2] The UK has a 200nm Exclusive Fishing Zone (EFZ) rather than Exclusive Economic Zone (EEZ), pursuant to article 1(1) of the Fishery Limits Act 1976.

[3] Given the total land area of the UK is 244,101 km^2 and that of its territorial sea is approximately 161,200 km^2, this extension would add an additional 706,200km^2, resulting in a total extent of UK area (territorial and offshore waters, and land area) subject to protection of 1,111,501 km^2.

as it implies that other Member States have the same obligation to ensure the Directive is implemented throughout their Exclusive Economic Zones, even though the Greenpeace Judgment, being of a national rather than European court, is not binding on other Member States. However, the European Commission '*...contends that within their exclusive economic zones the Member States have an obligation to comply with Community law in the fields where they exercise sovereign powers and that the directive therefore applies beyond territorial waters*' (Case C6-04, para. 115 [**11**]). Other Member States have started to designate protected sites in their offshore waters, *e.g.* Germany recently proposed areas comprising nearly 30% of its 200nm EEZ [**12**] as potential Special Areas of Conservation (SACs) under the Habitats Directive.

Recent legal developments involving the Wadden Sea in the Netherlands, the Darwin Mounds area of cold-water coral off the coast of Scotland, and the UK sea bass pair-trawl industry reveal different political contexts and outcomes, and exemplify the tensions inherent in the overlap between fisheries management and nature conservation in the EC, with implications for future approaches to such issues. In order to fully appreciate the complexities of these case studies, it is necessary to first briefly summarize the development and repercussions of relevant aspects of the Common Fisheries Policy and Habitats Directive for EC Member States' approaches towards nature conservation in the marine realm.

2. Common Fisheries Policy

2.1 Evolution of legislative jurisdiction

It is worth noting that unlike the Common Agricultural Policy, there is no specific mention of a Common Fisheries Policy (CFP) in the Treaty on European Union.[4] This is not to say that the EU Treaty lacks provision for fisheries legislation however [**13**]. Instead, fisheries were, and still are, grouped with agricultural products in the Agriculture Title, Articles 32-48 (formerly Articles 38-46), which establishes guidelines for the establishment of a common market in agricultural products, including fisheries. A common policy towards fisheries in the EC began in 1970 with the establishment of the Structural Regulation 2141/70 [**14**] defining rules on access to fishing grounds, markets and structures. At this time it was apparently envisaged that fishing would continue to be regulated primarily by international fisheries commissions and Member States' national authorities [**13**] but this did not remain the case.

The EC gained exclusive legislative jurisdiction[5] to regulate fishing under Article 102 of the 1972 Act of Accession of Denmark, Ireland, Norway and the UK [**15**] as follows: '*From the sixth year after accession at the latest, the Council, acting on a proposal from the Commission, shall determine conditions for fishing with a view to ensuring protection of the fishing grounds and conservation of the biological resources of the sea.*'

However the EC's full powers over fisheries management only took effect at the start of 1979; prior to this, Member States had some powers over fisheries in their waters.[6] This

[4] European Community environmental law is set out in the EU Treaty as amended in 1986 (Single European Act), 1992 (Maastricht Treaty on European Union), 1997 (Amsterdam Treaty) and 2001 (Treaty of Nice).

[5] The term 'legislative jurisdiction' is used in this context as the competence to enact legal rules, as opposed to enforcing them.

[6] A full history of the development of the CFP and the evolution of European fisheries management is beyond the scope of this article. For a definitive analysis, see Churchill R, EEC Fisheries Law [13].

shift can be viewed as occurring over three phases: (i) the time prior to the extension[7] of Member States' fishing limits to 200nm at the beginning of 1977, (ii) a transitional period from the start of 1977 to the end of 1978 laid out in Article 102 of the Act of Accession, and (iii) the period since the EC gained full legislative jurisdiction at the start of 1979. In the first phase, Member States were permitted to adopt national measures, a right that was confirmed by the European Court of Justice (ECJ) with respect to the Netherlands in the 1976 *Kramer* cases [**16**]. During the second, transitional, phase, certain exceptions to the EC's exclusivity were allowed in what can be viewed as a 'grace period' during which Member States were entitled to take unilateral conservation measures in cases where the Council had yet to adopt necessary conservation measures. This occurred in Ireland [**17**], France [**18**] and twice in the UK [**19**]. In addition, the *van Dam* cases [**20**] clarified that Member States had not only the right to enact independent conservation measures in this interim period, but also the 'duty' to do so. The second case involving the UK [**19**] occurred at the start of the third phase and demonstrated the now complete shift of power over fishery conservation measures to the EC (albeit with some qualifications as the Council had not yet adopted the measures required of it under the 1972 Act of Accession). This was soon followed by a Commission Declaration to the same end [**21**], which required that Member States adopt conservation measures based on Commission proposals. Comprehensive fishery management measures for most EC waters were adopted by the Council at the beginning of 1983 [**22**].

A related issue is the equal access principle introduced with the 1972 Act of Accession which came into effect on 31 December 1982. This contentious principle allowed Member States equal access to fisheries resources within the 200nm zones established in 1977 by the Hague Resolution (although in practice all Member States claim six or twelve mile restricted zones off their coasts for vessels that traditionally fished in those waters, through a derogation allowed under the Act of Accession). The equal access principle followed from the traditional view among Member States that fish do not belong to anyone until caught. Consequently this principle has had the effect, along with EC fisheries legislation, of making marine fisheries resources a common property resource among Member States, a situation which has not occurred with other natural resources in the EC [**13**].

2.2 Reform of the CFP

The principal instrument governing the use of fisheries resources from 1983 to 1993 was Council Regulation 170/83 [**22**] establishing a Community system for the conservation and management of fisheries resources, which included Total Allowable Catches and quotas, conservation measures and regulations on access to coastal waters. The first review of the CFP took place in 1992, when it was evident that technical measures alone would not be sufficient to prevent over-fishing, as there were simply too many vessels for the available resources. Between 1970 and 1985, the total number of European vessels had increased by 75% and decommissioning efforts from 1985 onwards had only reduced the fleet by 7% [**23**]. Reforms to the CFP were undertaken and the 1983 Regulation was replaced in 1992 by Council Regulation 3760/92 [**24**] establishing a Community system for fisheries and aquaculture, designed to extend and consolidate the preceding legal regime. Following the latest CFP reform process that began in 1998, this Regulation has now been replaced by Council Regulation 2371/2002 [**25**] on the conservation and sustainable exploitation of fisheries resources under the CFP.

[7] On 3 November 1976 the Council adopted the Hague Resolution extending Member States' fishing limits to 200 nautical miles.

2.3 Emergency measures

The EC has been operating under the revised CFP (Regulation 2371/2002 herein referred to as the Basic Regulation) as of January 2003. The Basic Regulation emphasizes that: '*the Community shall apply the precautionary approach in taking measures designed to protect and conserve living aquatic resources, to provide for their sustainable exploitation and to minimize the impact of fishing activities on marine ecosystems. It shall aim at a progressive implementation of an ecosystem-based approach to fisheries management*' (Article 2 para. 1).

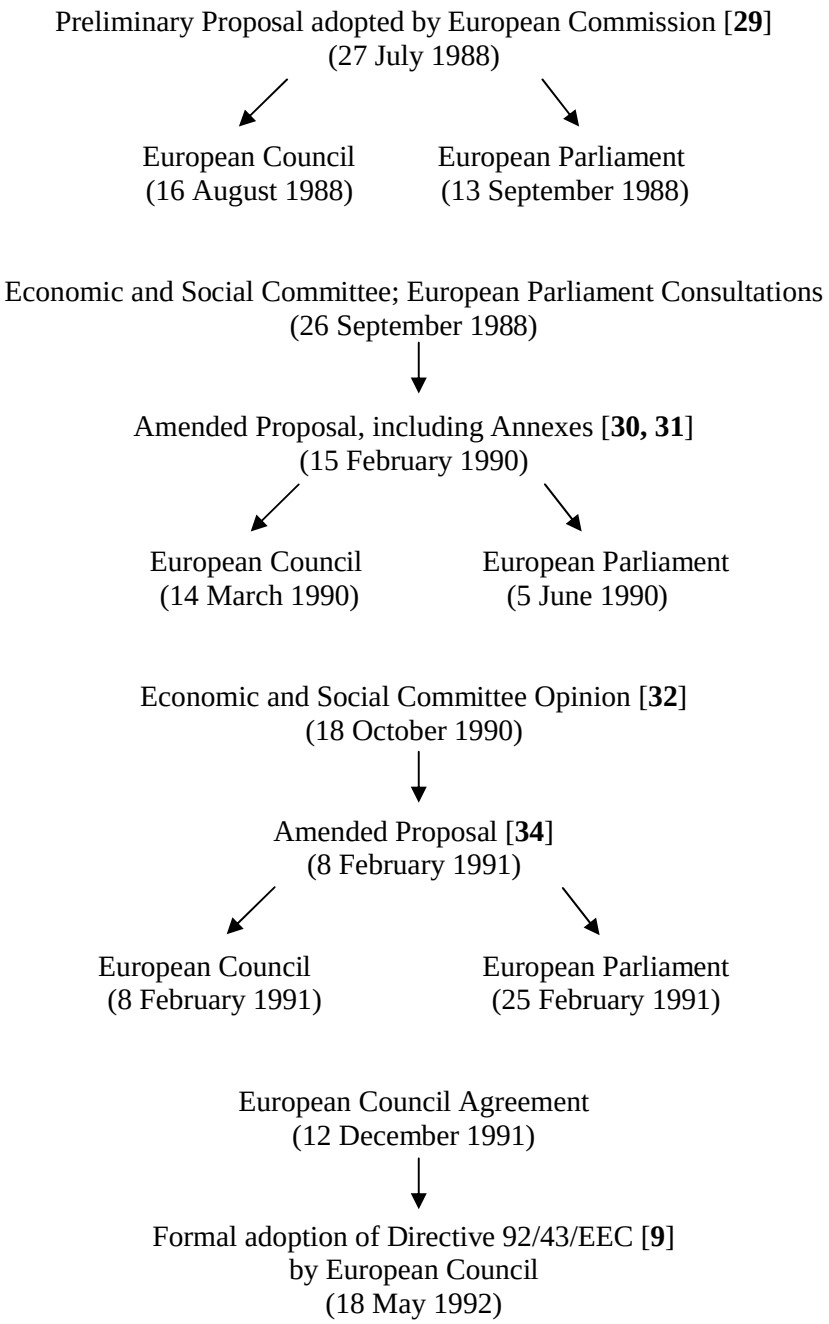
In order to implement these approaches, Chapter II of the Basic Regulation entitled 'Conservation and Sustainability' outlines specific technical measures including recovery and management plans and the establishment of emergency closures. In particular, Article 7 allows for the Commission to apply emergency measures '*if there is evidence of a serious threat to the conservation of living aquatic resources, or to the marine ecosystem resulting from fishing activities and requiring immediate action*'.

Under the three subsequent Articles (8-10), some powers of legislative jurisdiction concerning fisheries conservation and management have been returned to Member States, namely in Articles 8 on Member State emergency measures, Article 9 on Member State measures within the 12nm zone and Article 10 on Member State measures applicable solely to fishing vessels flying their flag. However these powers are limited, in that all measures under Article 8 and some under Article 9 are subject to a complicated EC consultation process [**26**]. It is also worth noting that unlike Articles 8 and 9, Article 10 fails to refer to a power to adopt measures to minimize the effect of fishing on the conservation of marine ecosystems [**26**]. Nevertheless, the emergency measures mechanism for closing an area for nature, rather than fish stock, conservation objectives represents an important shift in the legislative approach to European marine environmental protection and this is the first time that marine nature conservation has been provided for in the CFP.

3. Habitats Directive

The origins of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (1992 EC Habitats Directive [**9**]) lie in the EC's Third and Fourth Environmental Action Programmes as well as in the preceding 1979 EC Wild Birds Directive [**27**], which required the establishment of a network of Special Protected Areas (SPAs) throughout the EC. The Habitats Directive follows this model, requiring Member States to prepare and propose national lists of Sites of Community Importance (SCIs) for submission to and evaluation by the EC. Approved SCIs are to be designated by Member States as Special Areas of Conservation (SACs) and combined with SPAs to form the *Natura 2000* network. The Habitats Directive is the first international instrument to address the protection of all habitats, with regard to both geographical location and type [**28**]. It is worth mentioning that although the drafting of the Habitats Directive began several years before the United Nations Conference on Environment and Development (UNCED, Rio de Janeiro 1992), it was negotiated in the same time frame as the 1992 CBD and can be viewed as a means of implementing it in the EC, along with the 1979 Bern Convention on the Conservation of European Wildlife and their Natural Habitats.

Figure 1: Development of EC Directive 92/43/EEC



3.1 Development and limitations

The development of the 1992 Habitats Directive began in July 1988 with the adoption of a preliminary 'Proposal for a Council Directive on the protection of natural and semi-natural habitats and of wild fauna and flora' [**29**] by the European Commission, which was subsequently transmitted to the European Council and European Parliament (**Figure 1**). Following consultations of the Economic and Social Committee and the European Parliament, an amended proposal including annexes [**30**] was adopted on 15 February 1990. This version of the proposal [**31**] was transmitted to the European Council and European Parliament and underwent another round of Economic and Social Committee opinion [**32**]. The amended proposal [**33**] was adopted on 8 February 1991, transmitted to the European Council on the same day, and soon afterwards to the European Parliament. Following a European Council agreement at the end of 1991, it was formally adopted on 18 May 1992.

The evolution of the Habitats Directive has not been previously described in detail in the literature, but is worth noting here in relation to offshore marine conservation. In particular, Article 1 of the working documents mentioned above stated it would apply to the territory of Member States '*including maritime areas under the sovereignty or jurisdiction of the Member States*', *i.e.*, throughout their Exclusive Economic Zones (EEZs) or Exclusive Fishery Zones (EFZs), 200nm from shore. This clause was subsequently dropped before the final version of the Directive was agreed, perhaps in order to maintain consistency with the earlier Birds Directive. Information on the negotiations is not readily available; however there appears to have been significant debate regarding the Commission's powers of intervention, the number of Annexes and draft funding regulations [**34**]. The early development of the Habitats Directive has been described as an indication of not only the way that the relationships between the Commission, the Parliament and the Council have developed, but also the opportunities that exist for Parliament and lobby groups to influence the process [**34**]. Presumably, it was during the negotiation process that the maritime areas provision was removed. Following the outcome of the 1999 Greenpeace Judgment described above, the Directive does now finally apply to the UK's EFZ and other Member States are also preparing SCI proposals for their offshore waters.

Prior to the conclusion of the Greenpeace Judgment, in July 1999 the Commission released a Communication to the Council and European Parliament on 'Fisheries Management and Nature Conservation in the Marine Environment' [**35**]. In its discussion of the application of the Habitats Directive, the Commission clearly outlined the direct applicability of the Directive to the 200nm EEZ boundary of European Member States as follows:

'*The provisions of the Habitats Directive automatically apply to the marine habitats and marine species located in territorial waters (maximum 12 miles). However, if a Member State exerts its sovereign rights in an exclusive economic zone of 200 nautical miles […] it thereby considers itself competent to enforce national laws in that area, and consequently the Commission considers in this case that the Habitats Directive also applies, in that Community legislation is an integral part of national legislation*' (paragraph 5.2.2).

It can be argued that the Habitats Directive was drafted from a terrestrial perspective and is ill-suited to application in the offshore marine environment as only three habitats and seven species listed in its Annexes I and II are found in UK offshore waters.[8] It is not

[8] **Habitats**: Sandbanks which are slightly covered by sea water all the time; Reefs; Submarine structures made by leaking gas. **Species**: Harbour Porpoise (*Phocoena phocoena*); Grey Seal

unlikely that the Annexes will eventually be updated to include more species and habitats now that not only the UK but other Member States are applying the Habitats Directive to their offshore waters. However, such revisions are likely to occur in the long rather than short term, given the severe delays that have already occurred with the Directive.[9]

In addition to gaps in the species and habitats covered and delays in its implementation, another weakness of the Habitats Directive lies in its emphasis on habitats and species *per se*, which leaves little room for areas of functional importance such as spawning sites or other ecological processes that are difficult to define spatially. This approach also overlooks areas that might be important as migratory routes and/or sanctuaries for marine species.

Although the Habitats Directive does not call explicitly for an 'ecosystem approach' to conservation, which evolved as the primary framework for action under the CBD, it does provide for protection in parts. The ecosystem approach, defined by the CBD as '*a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way*', is an aim of not only the revised CFP and the UK's emerging marine management framework, as evidenced in its 2004 Review of Marine Nature Conservation and currently developing Marine Bill, but also the aforementioned developing EC Marine Strategy Directive and the OSPAR network of MPAs, which aim to implement the approach in the North East Atlantic.

3.2 Article 6

Despite what can be perceived as flaws in its drafting and limitations in its coverage, the Habitats Directive does provide an important mechanism for the protection of species and habitats. Article 6 contains three main sets of provisions. Article 6(1) provides for the establishment of 'necessary conservation measures' and is focused on positive and proactive methods. Article 6(2) has a more preventative emphasis, providing for the avoidance of habitat deterioration and significant species disturbance. Articles 6(3) and 6(4) set out a series of procedural and substantive safeguards governing plans and projects likely to have a significant effect on *Natura 2000* sites and are the means by which Article 6(2) is achieved [**36**].

The interpretation of Article 6 has led to significant debate and some interesting cases in the ECJ, especially in relation to paragraph 4, whereby '*imperative reasons of overriding public interest, including those of a social or economic nature*' can be cited to allow Member States to authorize plans or projects with a deleterious effect on a SAC.[10] This is in contrast to what had been previously decided in the well-known *Leybucht* case, under the Birds Directive in 1991, where the Commission had stated that the destruction of a protected habitat was only acceptable '*in the case of a threat to human life*' [**37**]. This overturn has been described as a slap in the face for the European Court [**38**]. In 1995, the Commission adopted two Opinions [**39**] that to some extent clarify Article 6(4), *i.e.* the 'exemption clause'. These Opinions have also been referred to as being

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(*Halichoerus grypus*); Common Seal (*Phoca vitulina*); Sturgeon (*Acipenser sturio*); Shad (*Alosa* spp.); Lamprey (*Petromyzon marinus*); Loggerhead turtle (*Caretta caretta*).

[9] Member States were required to implement the Directive into their national legislation by 1995, though some still have not completely, and the final lists of SCIs for the *Natura 2000* network were to have been selected by Member States by 1998, but this process is still ongoing in 2006.

[10] On overriding public interest, see: Holder J. Overriding Public Interest in Planning and Conservation Law. Journal of Environmental Law 2004;16:377-407.

among the few authoritative decisions of EC institutions that elucidate how Community law aims to unite the objectives of habitat protection and infrastructure expansion [**40**]. They addressed a German A20 motorway project which intersected two *Natura 2000* sites, the Trebel and Recknitz Valley and the Peene River Valley. Despite these areas' having been protected under both the Birds and Habitats Directives, the Court concluded that a less damaging crossing of these valleys did not exist, and considering the high unemployment in the region, '*imperative reasons of overriding public interest*' justified the project's going ahead.

Subsequent cases on this subject include two that focused on the site selection process under the Birds and Habitats Directives, the *Lappel Bank* case of 1996 [**41**] and the *Severn Estuary* case of 2000 [**42**]. A year later, in 2001 Airbus Industrie gained permission to expand its A380 production factory in the Mühlenberger Loch area near Hamburg, the largest freshwater/tidal flat in the EC at the time and a critical habitat for migratory birds which had been designated a protected area under the Ramsar Convention as well as a priority site for the *Natura 2000* network. The German Federal Constitutional Court declined to grant an injunction to stop the filling of 20% of the Loch. A complete overview of the issue of overriding public interest is beyond the scope of this article; however the recent Wadden Sea judgment has some interesting implications that are relevant to implementation of the Habitats Directive in the marine realm.

3.3 Wadden Sea judgment

Two issues relevant to the interpretation of the Habitats Directive were recently highlighted in a 2004 ECJ case involving mechanical fishing for cockles in the Wadden Sea SPA, Netherlands [**43**]. In this judgment, the Court went into detail explaining the meaning of Article 6, in particular what kinds of activities amount to 'plans or projects' under paragraph 3, concluding that fisheries activities undertaken under an annual license can be considered as falling in this category. Consequently, if such activities are likely to have an effect on a *Natura 2000* site, they can only proceed after an 'appropriate assessment' of their impacts in keeping with Article 6 [**44**]. This decision can be seen as a positive development in terms of linking the CFP and the Habitats Directive. While it does not mean that a detrimental activity will be prevented for certain, given the overriding public interest 'exemption clause' mentioned earlier, it is debatable whether fishing would be considered of 'overriding' regional economic and strategic development importance.

A second outcome of the Wadden Sea judgment of relevance to the implementation of the Habitats Directive in offshore waters involves the principle of 'direct effect', *i.e.* whether an individual can rely on a Directive to claim rights in a national court when the Directive has not been transposed (or has been improperly transposed) into national law. For European Directives, such transposition is subject to an implementation deadline, and for the Habitats Directive this deadline expired in 1995. In the Wadden Sea judgment, the Court focused its consideration of this principle on Article 6(3) on 'plans or projects', which the Netherlands had not transposed into national legislation, but it did not refer to the principle of direct effect by name. It is debatable whether the Court was explicit enough [**44**] or not [**45**]. At the minimum, however, it can be agreed that the judgment clarified that Article 6(3) was indeed held to be directly effective, despite the Netherlands not having transposed it into national legislation [**46**]. Given that the UK is still in the process of revising its Conservation (Natural Habitats etc.) Regulations (1994) over its continental shelf, it can be inferred that Article 6(3) is applicable in the offshore, and 'plans or projects', including licensed fishing activities, should be subject to an 'appropriate assessment' by national authorities to assess whether they may affect the integrity of any potential *Natura 2000* sites.

Another recent (2004) ECJ case involving fishing [**47**] is worth noting in the context of 'direct effect' with regard to the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources (Barcelona Convention). It can be inferred from this ruling that Member States are obliged to treat Conventions to which the EC is a Party as Community law. Also, a recent (May 2006) ECJ ruling on the dispute between Ireland and the UK regarding a nuclear (MOX) plant in Sellafield clarified that the whole of the UN Convention on the Law of the Sea (UNCLOS) is EC law and forms an integral part of the EC's legal order [**48**]. These rulings may have interesting implications in the future when the OSPAR network of marine protected areas comes into effect in 2010.

4. OSPAR

The geographic coverage of the 1992 OSPAR Convention for the Protection of the North East Atlantic extends westwards to the east coast of Greenland, eastwards to the continental North Sea coast, south to the Straits of Gibraltar and northwards to the North Pole. Originally designed to replace the 1972 Oslo Dumping and 1974 Paris Conventions, OSPAR moved beyond its pollution-focused approach with the adoption in 1998 of Annex V on the Protection and Conservation of the Ecosystems and Biological Diversity of the North East Atlantic.

4.1 Bremen Statement

In June 2003, the first joint Ministerial meeting of the Helsinki[11] and OSPAR Commissions was held in Bremen, Germany, resulting in the establishment of a joint HELCOM/OSPAR work programme on MPAs aimed at the establishment of a network of well-managed MPAs for the maritime areas of both HELCOM and OSPAR by 2010. In addition to specifically addressing MPAs and an ecosystem approach in the Annexes to the resulting Bremen Statement, the Commissions also declared an intention to take forward and broaden the approach of the EC Birds and Habitats Directives '*in order to ensure the conservation of the full range of habitats and species in the marine environment within the jurisdiction of the EU Member States in accordance with the objectives of those directives, and suggest to the EC initiatives for these purposes*'[**4**].

OSPAR MPAs are to be designated throughout the North East Atlantic, including the high seas, with the first set of MPAs scheduled to be identified in 2006 and likely to consist primarily of *Natura 2000* sites. However this initial MPA nomination phase, whereby OSPAR parties were to have submitted sites by the end of 2005, does not appear to be running on schedule, as the majority of parties had not finalized their nominations on time. While the OSPAR network will include offshore marine habitats and species not found in the Annexes of the Habitats Directive, whether it will fall into the same pattern of delay as the Directive remains to be seen. Nevertheless, the OSPAR network provides an opportunity to reinforce the Habitats Directive by including species and habitats throughout Member States' inshore and offshore waters, as well as on areas of the high seas included in the Convention's coverage. Furthermore, as discussed above, the recent Barcelona Convention and UNCLOS cases indicate that the OSPAR Convention could be interpreted as being legally binding on Member States, as the EC is a signatory to it. This could significantly increase the influence of the OSPAR MPA provisions.

[11] The 1992 Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area. Its governing body, the Helsinki Commission, is commonly referred to as HELCOM.

5. The Darwin Mounds and the Sea Bass Pair-Trawl Ban

5.1 Darwin Mounds Closure

The Darwin Mounds area of cold-water coral (*Lophelia pertusa*) was discovered in 1998, approximately 185 kilometres to the northwest of Scotland at a depth of around 1000 meters, covering an area of approximately 1500 km^2 [**49**] and supporting significant biological density and diversity. In particular, a unique feature of the mounds is the growth of *Lophelia pertusa* on a sand base, rather than hard substrate, and this area is considered to be an exceptional example of the coral. Damage to the area caused by deep-sea trawling was evident when it was revisited in 2000, and in August 2003, at the UK's request, the Commission imposed a six-month emergency restriction [**50**] on bottom trawling in the area to prevent further damage, though pelagic fishing was still permitted.[12] This move represented the first instance of a closure implemented for nature (rather than fish stock) conservation through the CFP. The ban was extended for a further six months [**51**] during which the Commission developed permanent measures to protect the area from bottom trawling, which came into force in March 2004 [**52**] (**Figure 2**).

Figure 2: Timeline of Darwin Mounds Designation

1998		Discovery during AFEN survey (revisited 2000, damage observed)
1999		Greenpeace Judgment
2001		Secretary of State Margaret Beckett announced discovery
2001		JNCC Report #325 on implementing *Natura 2000* offshore
2002		Initial letter from UK to Commission concerning Darwin Mounds
2003	JAN	Revised CFP Regulation 2371/2002 came into effect
2003	MAR	Informal discussions with Commission and other Member States
2003	JUN	Formal approach to Commission for action under Regulation 2371/2002
2003	JUL	Formal request for closure
2003	AUG	Emergency closure Regulation (for 6 months)
2003	SEPT	Proposal for permanent Regulation
2004	FEB	Emergency closure extended a further 6 months
2004	MAR	Closure made permanent

The closure of the Darwin Mounds area to bottom-trawling was possible through the emergency powers given to the Commission in the revised CFP Basic Regulation discussed earlier (Section 2.3). While the closure was being made permanent, in the late summer/autumn of 2003, DEFRA also released a consultation document [**49**] proposing the Darwin Mounds as a candidate SAC under the Habitats Directive. However, as the implementation of the UK's national legislation implementing the Directive in its offshore waters has still not occurred,[13] the designation of offshore habitats will not be finalised for some time. Nonetheless, the only mechanism available to the UK government to protect this area from bottom-trawling fishing activities was to act through the Basic Regulation.

[12] For a more detailed analysis of the events and circumstances leading to the protection of the Darwin Mounds, see: De Santo, E.M. and P.J.S Jones. The Darwin Mounds: From Undiscovered Coral to the Development of an Offshore Marine Protected Area. Bulletin of Marine Science, 2007 (*in press*).

[13] At the time of writing, the necessary revisions to the existing Conservation (Natural Habitats etc.) Regulations (1994) to extend its coverage offshore have not come into force. Consultation on a revised version closed in June 2006 and the Regulations are now due to come into effect in 2007.

As the first such use of the Commission's emergency powers under the Basic Regulation, the Darwin Mounds closure represented an opportunity to show that the revised CFP was taking its promise to incorporate the ecosystem-approach and precautionary principle seriously. In addition, as mentioned earlier, there were several international initiatives for offshore MPAs developing at the same time which provided additional external impetus for the EC to show its commitment to marine conservation.

The designation of a closed area around the Darwin Mounds did not occur until 2003, five years after they were discovered and during which more damage from deep-water trawlers is likely to have taken place. Nevertheless, the designation process took a relatively short amount of time when one considers that the revised CFP did not come into force until the beginning of 2003. The actual mechanism of the closure occurred quite rapidly once the Basic Regulation was in effect. During the process, the UK approached the Commission in a stepwise manner, receiving feedback at each stage. The UK also undertook informal consultations with other Member States, including France, which resulted in a compromise whereby the north-east and north-west corners of the proposed closed area, into which the Darwin Mounds did not extend, were excluded from the Regulation to reduce the area of fishing grounds closed. Once the temporary ban on bottom-trawling came into effect in August 2003, it only took seven months for the permanent measure to be established. Enforcement of the closure is under the remit of the Scottish Fisheries Protection Agency (SFPA) which relies on the use of satellite Vessel Monitoring System (VMS) technology, aerial surveys and SFPA patrol vessels.

5.2 Sea Bass Pair-Trawl Ban

In contrast to the situation for the Darwin Mounds, the UK's attempt to ban pair-trawling for sea bass in the English Channel under the revised CFP did not succeed (**Figure 3**). Pair-trawling involves the use of a pelagic net towed between two vessels, which can result in the bycatch of cetaceans. The UK pursued a ban on pair-trawling in order to fulfil its obligation under the Habitats Directive to protect cetaceans, 'all species' of which are listed under Annex IV. Article 12 requires that such species are strictly protected throughout their natural range (paragraph 1), including ensuring that the incidental killing does not have a negative impact on such species (paragraph 4). To this end, in July 2004 the UK requested that the Commission close the English Channel pair trawl fishery throughout ICES Area VIIe under Article 7 of the Basic Regulation, on emergency measures, as common dolphin bycatches had been reported. This request was rejected, as the Commission did not find that the legal requirements justifying an emergency procedure were fulfilled, *i.e.* a need for immediate action was not apparent as the request was made in the summer when the sea bass fishery is most active in winter months. It was also not apparent, in the Commission's view, that the background information on bycatch accompanying the UK's request provided radically new evidence on the level of threat to the conservation of cetaceans by the fishery. Rather, the Commission suggested that a ban in ICES Area VIIe might result in a redistribution of fishing effort, either into other fisheries in the same area or into adjacent areas, without necessarily reducing the bycatch of cetaceans.

Figure 3: Timeline of UK Ban on Pair-trawling for Sea-bass

2004	JUL	UK approached Commission requesting emergency measures under Article 7 of Regulation 2371/2002 to close fishery in the Western Channel (ICES area VIIe)
2004	AUG	Commission decision to reject request
2004	SEPT	Fisheries Minister Ben Bradshaw announced intention to ban fishery
2004	DEC	UK Order closing the fishery within 12nm of English Coast for UK fishermen (whether in UK or EC waters)
2005	JAN	UK approached Commission requesting extension of domestic ban to vessels of other Member states, under Article 9 of Regulation 2371/2002
2005	FEB	Commission decision to reject request
2005		Greenpeace-initiated judicial review
2005	OCT	Rejection of judicial review by the High Court

The UK subsequently established a unilateral Order [**53**] under domestic legislation, prohibiting British fishing vessels from pair-trawling both within UK territorial waters and anywhere else they may be, *i.e.* in EC waters. In January 2005, the UK approached the Commission again, requesting an emergency closure under Article 9 of the Basic Regulation on measures within 12nm, to prohibit other Member States from pair-trawling within UK territorial waters, but this request was also rejected. The Commission's decision built on its previous rejection, adding that no new scientific information had been made available that could justify a change in their analysis. As a result, while UK fishermen are prohibited from using pair trawling methods in UK and EC waters, this ban has no effect on other Member States, including those that participate in pair-trawling within UK territorial waters. Soon after the UK Order came into effect in 2005, it was challenged by a judicial review whereby Greenpeace sought to overturn the closure claiming it would cause a displacement of fishing effort outside 12nm from shore and increase cetacean bycatch. However Greenpeace's efforts were unsuccessful and their claim was dismissed by the High Court.

There are several reasons why the pair-trawl ban did not meet the same positive response afforded the Darwin Mounds closure by the Commission. Closing a fishery over a wide area such as the western approaches to the English Channel versus partially closing a very specific geographic area is politically very challenging. For the Darwin Mounds, while bottom trawling was prohibited, pelagic fishing was permitted to continue and the area closed was reduced as a result of lobbying efforts from the fishing industry. With the sea-bass fishery in the English Channel, not only is it very much dominated by French fishermen, (while the UK has two pairs of trawlers involved in the fishery, France has more than twenty) who maintain a powerful lobby, but also the scientific advice available argued that the ban would be an arbitrary measure, and unlikely to achieve the desired goal of reducing cetacean bycatch. The ICES advice relied upon by the Commission indicated that other fisheries in the area also resulted in bycatch and that there was a need for comprehensive monitoring of the numerous trawl fisheries active in the region before ICES could be precise about mitigation requirements [**54**].

In addition, the second attempt at a ban was targeted at fishing occurring within the UK's territorial waters, *i.e.* 12nm from shore, but it can be argued that with this fishery occurring outside this boundary as well, cetaceans would still be at risk of being caught and drowned in pair-trawl nets. At the same time however, the UK government pursued a ban within 12nm presumably because it knew it would not be politically feasible to extend a ban throughout the English Channel, given the failure of its first attempt under Article 7 of the Basic Regulation. As a result, when faced with the second Commission

rejection, the UK was left with maintaining its unilateral stance, prohibiting pair-trawling only for its own fishermen.

It goes without saying that this development is in contrast to the 'level playing field' sought by UK fishermen in the context of European fisheries management. However, at the same time it can be argued that the Commission's decision hinged on the definition of 'irreversible damage' as outlined in the emergency measures Articles of the Basic Regulation and defining this state for a stationary coral reef is easier than defining it for mobile populations such as cetaceans.

5.3 Precaution

A brief discussion of the precautionary principle is relevant in the context of fisheries management and nature conservation in the European offshore environment. The precautionary principle is worded in a variety of subtly different ways in the different conventions and agreements in which it is integrated. The simplest interpretation, however, is that where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. For the purpose of this article, given its focus on marine conservation in the North East Atlantic, an appropriate definition is the one given by the 1992 OSPAR Convention, which links prevention and precaution [**28**] as preventative measures should be taken when there are '*reasonable grounds for concern […] even when there is no conclusive evidence of a causal relationship between the inputs and the effects*' (Article 2(2)(a)) .

The 1991 Maastricht Treaty on European Union incorporated the precautionary principle as a legal obligation and required objective for environmental policy (Article 130r(2)) and this was further amended by the 1997 Amsterdam Treaty and subsequent 2001 Treaty of Nice as follows: '*Community policy […] shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay. Environmental protection requirements must be integrated into the definition and implementation of other Community policies*' (Article 174(2)).

It is not entirely clear whether the precautionary principle should be considered a general principle of international law, with sufficient state practice to support the argument that it has emerged as a principle of customary international law. On the one hand this may seem logical given its incorporation into several international environmental treaties and policy documents [**55**], though there is still no clear consensus on the principle's exact meaning in the international arena [**28**]. In the 1998 WTO *Beef Hormones* case [**57**] the EC invoked the principle to justify prohibiting the import of beef with artificial hormones from the United States and Canada. Although the EC argued that the principle was already 'a general customary rule of international law or at least a general principle of law', the legal status of the precautionary principle was found to be uncertain [**56**] and while it has been accepted by Canada as an emerging principle of international law, the United States has denied that it has any legal status at all [**28, 56**]. The European Commission released a Communication on the precautionary principle in 2000, which stated that it had been progressively consolidated in international environmental law and consequently has become a 'full-fledged and general principle of international law' [**58**]. However this raises an interesting question; while the principle can be seen as part of customary international law, why has it not been accepted as part of customary international environmental law?

The situations described earlier highlight some interesting interpretations of 'precaution', given it is one of the stated goals of the CFP Basic Regulation. If a

precautionary approach can be deemed as implying that nature conservation should be pursued in the face of scientific uncertainty, a flaw can be seen in the emergency measures provisions of the Basic Regulation, which require a degree of certainty, *i.e.* that 'evidence of a serious threat' must already exist. The difficulty of determining what degree of damage or threat is required to have occurred before action can be taken remains an issue. In the sea bass pair-trawl ban example, the Commission's rejection of the UK's proposal for a closure under Article 7 of the Basic Regulation was justified on the basis of lack of evidence as required under this Article, but this requirement is arguably not consistent with the interpretations of the precautionary principle discussed above and now incorporated into the EU Treaty.

This case aside, there have been a few instances in recent years where closures and bans have been implemented in European waters, integrating environmental concerns with fisheries management (**Table 2**). Prior to the Darwin Mounds closure described above, an area extending 20,000 km^2 from North East Scotland to Northumberland was closed in 2000 to sandeel fishing under the auspices of the Birds Directive, as a decline in sandeel populations appeared to be affecting puffin and kittiwake populations, which depend on sandeels for food during their breeding season. This area includes the 'Wee Bankie' off the Firth of Forth and hence is popularly referred to under this name. Though it began as a seasonal closure, the timeline has been extended over the past five years and it is expected that a complete ban on sandeel fishing may occur in the North Sea in the very near future as sandeel stocks have plummeted. An analysis of ecosystem-based fisheries management in the North East Atlantic [**59**] refers to the management of this fishery as having an ecosystem objective (seabird population health), being precautionary (as the link is not yet proven) and using kittiwake breeding success as a biological indicator of the ecosystem effects of the fishery.

Table 2. Recent examples of closures/bans where environmental concerns have been integrated into fisheries management.

CLOSURE/BAN (SPECIES)	AREA AFFECTED	YEAR
'Wee Bankie' from NE Scotland to Northumberland (Sandeel fishing)	20,000 km^2 of North Sea	2000
EC Drift-net ban (protection of cetaceans)	EC waters (as of 2002), including Baltic Sea (to begin 2007)	2002
ICCAT Driftnet ban	Mediterranean Sea	2003
Darwin Mounds (*Lophelia pertusa*)	1,380 km^2 of NE Atlantic	2003
FAO GFCM ban on Driftnets and demersal trawling below 1000m	Mediterranean Sea	2005
UK Sea Bass Pair Trawl Ban	UK territorial waters and European waters (UK fishermen only)	2005

Another precautionary set of measures was taken recently in European waters to address driftnet fishing. An EC drift net ban (Regulation 1239/98 [**60**]) came into effect in 2002, ten years after the United Nations moratorium [**61**] on large scale driftnets and covering all European waters except the Baltic Sea. A subsequent Regulation (No. 812/2004 [**62**]) extended the ban into the Baltic and is to take effect in 2007. However compliance has been problematic in the Mediterranean, and in 2003 the International Commission for the Conservation of Atlantic Tuna (ICCAT) prohibited the use of driftnets for fisheries of large pelagics [**63**]. This was followed in 2005 by a recommendation [**64**] from the FAO General Fisheries Commission for the Mediterranean (GFCM) that reiterated the

ICCAT prohibition and went a step further, banning benthic trawling fishing methods at depths below 1000m.

Despite these efforts, illegal driftnet fishing is still occurring in the area, according to NGOs who have been pressuring EC Fisheries Ministers to address loopholes in the Regulation that allow fishermen to modify driftnets (*e.g.* affixing anchors to the nets) and continue to use them. The driftnet ban is an interesting example, as it is an issue that garnered a lot of media attention in the 1980s and 1990s, involves charismatic species such as cetaceans, and yet the EC Regulation alone has not been enough to control illegal fishing in the Mediterranean and regional fisheries organizations have stepped in to add further prohibitions. Traditionally, the 'burden of proof' has lain with those opposing an activity to prove that it does not cause environmental damage [**28**]. A fuller incorporation of the precautionary principle into European fishing activities would shift the burden of evidence to those carrying out the activities to prove that such activities will not cause harm, in which case the UK's proposal for a pair-trawl ban might be considered more positively.

6. Conclusion

Against a background of growing concern about the impacts of fishing on marine biodiversity, the provisions of the Habitats Directive have been judged to apply to all EC marine areas, including those beyond 12nm. A key means of implementing these provisions is the revised CFP, under which all EC fisheries beyond 12nm are managed. The recent Wadden Sea judgement requires that licensed fishing activities are subject to an assessment of their impacts on listed habitats and species as a basis for appropriate conservation measures under Article 6 of the Habitats Directive. The Darwin Mounds have been proposed as the UK's first offshore SAC and their permanent closure to bottom trawling represents the first case where the provisions of the revised CFP have been used solely for biodiversity conservation objectives. Less encouraging, however, is the Commission's rejection of the UK's proposal to close the English Channel pair trawl fishery to protect dolphin populations from bycatch impacts, such protection being an obligation under the Habitats Directive and ASCOBANS.[14] This rejection is in contrast to both the precautionary principle, which has been incorporated into the EU Treaty, and the recent ECJ ruling that the UK is failing to properly implement the Habitats Directive beyond its territorial waters.

Considering this contrast, the integration of policies and, more importantly, decisions for biodiversity conservation and fisheries management in European waters beyond 12nm clearly poses a significant challenge. At an administrative level, one step would be an improvement in communication and cooperation between DG Fish and DG Environment on issues of overlapping interest, coupled with mechanisms to ensure that their policies and decisions are integrated rather than contrary. This is critically important if the Habitats Directive and other statutory marine conservation initiatives that are currently emerging, such as the OSPAR MPA network and the Marine Strategy Directive, are to be successful in protecting marine biodiversity.

There is an interesting parallel between the Darwin Mounds closure and the pair-trawl ban, given both processes followed the same legal path in Brussels and both were launched with declarations of their necessity by UK public officials, Secretary of State for the Environment in the case of the Darwin Mounds and the Minister for Nature Conservation and Fisheries in the case of pair-trawling. However, differences in the

[14] The UK is a Party to the 1991 Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS), an instrument under the Bonn Convention on Migratory Species (CMS).

political acceptability and related science of the two cases from the point of view of the Commission resulted in different outcomes. While the Darwin Mounds are closed to bottom trawling, the ban on pair-trawling for sea bass only applies to UK vessels, which has the twofold effect of failing to achieve cetacean conservation obligations and discriminating against and thereby alienating UK fishermen.

The appropriateness of the CFP Basic Regulation emergency powers mechanism as a precautionary approach can be questioned given the Commission's rejection of the UK proposal for a ban on pair-trawling in the English Channel. This is not to say that the revised CFP is not potentially an effective means for preventing damage to habitats and species that result from fishing activities, but this rejection demonstrates that it is rather inflexible in the face of scientific uncertainty and does not require the shift in the burden of proof to the fishing industry necessary to fully implement the precautionary principle and the Habitats Directive. The current development of a UK Marine Bill coupled with further pressures to implement the Habitats Directive beyond 12nm and the development of the European Marine Strategy Directive will doubtlessly further complicate this issue. These initiatives, however, also provide political catalysts to clarify the questions raised by the cases discussed here, particularly the integration of the regulatory activities of DG Fish and DG Environment, and provision for EC policies and decisions that are consistent with the precautionary principle. The catalytic role of these initiatives might, with future hindsight, be considered to be amongst their greatest achievements.

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