FIELD
Foundation for International
Environmental Law and Development

Marine protected areas on the high seas?

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An introductory guide to the legal issues surrounding the establishment of marine protected areas on the high seas

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The oceans

The oceans cover more than 70 per cent of the Earth's surface and hold approximately 90 per cent of the planet's living biomass. Ocean ecosystems support all life on this planet. They provide oxygen and food, manage vast amounts of human pollutants, buffer the weather and regulate global temperature. Most parts of the oceans are unexplored and deep seabed environments are considered the largest reservoir of biodiversity on the planet. Despite the oceans' great natural capacity for self-purification, the health, productivity and biodiversity of the marine environment is severely threatened by human activities.

Marine environment protection

Until recently environmental protection in the seas has focused primarily on particular species. Unlike on land, safeguarding ecosystems has been rather unusual. At present less than one per cent of the world's oceans is subject to a particular conservation regime compared to twelve per cent of the earth's land surface. The vast majority of marine protected areas (MPAs) is located along the coasts, whilst the more distant offshore areas remain virtually unprotected.

Marine protected areas

The designation of areas where human activities are restricted is a vital tool for protecting and conserving the ocean's biodiversity. MPAs can enhance the protection of vulnerable habitats and have the potential to allow damaged ecosystems to recover and restore their functioning. They are a particularly important conservation tool for areas on the high seas and in deep water beyond national jurisdiction.

So little is known about the specific features and functions of high seas ecosystems; therefore, a precautionary approach toward conserving them must be taken to safeguard against irreversible biodiversity loss. The high seas represent nearly 65 per cent of our oceans' surface. Marine protected areas can provide an effective mechanism for protecting not only what we now know but what we have yet to discover.

Existing law

The need for the protection and conservation of biodiversity on the high seas has been recognised by the international community and is expressed in many international legal and policy instruments. This guide provides an overview of the relevant provisions in international and regional treaties and corresponding 'soft' law. It demonstrates that on paper there is significant support for the concept of high seas MPAs. However, at present there is no global legal framework which defines international responsibilities and mechanisms in the identification, creation and protection of MPAs beyond national jurisdiction.

State obligations

This opens up a wide space for interpreting the existing rights and obligations of States under international law. It raises questions with regard to authority, the scope of permissible regimes, compliance and enforcement issues. The guide addresses these questions with a view to developing arguments in favour of better environmental protection.

High seas freedom *versus* environmental protection

It shows how the juxtaposition of international treaty obligations on environmental protection and the variety of rules on other ocean uses results in uncertainties. Under present treaty law the establishment of MPAs beyond national jurisdiction needs to take into account legitimate high seas uses. Depending on the geographical location and the activities regulated this could result in a complex network of legal relationships.

There is scope for elaborating environmental protection vis-à-vis traditional high seas freedoms through contractual arrangements, but this serves to highlight a fundamental challenge. Any contractual or treaty based regime can only confer rights and obligations to States which are willing Parties to the regime. The rights and obligations of non-Parties remain unaffected. Even where all States with a particular interest in the high seas area were to agree on a regulatory regime, they would not create binding obligations for external Parties. In these circumstances enforcement and compliance remain a significant dilemma.

International law

Under customary international law the different lawful uses of the high seas such as navigation, fishing and the conservation of natural resources must be balanced not only against one another, but also against the interests of the international community. In practice, stronger States are often able to insist upon the acceptance of their own uses of the high seas, notwithstanding that such uses may not strike the right balance in the views of States with less influence. There appears to be sufficient evidence in international legal and policy instruments to conclude that the balance is shifting towards environmental protection. The scope and permanency of this shift will be determined by the practice of States in the years to come.

The legal issues being considered in this guide are complex, often politicised and subject to more than one interpretation. They have been addressed in various international fora including the UN General Assembly and the Conference of the Parties to the Convention on Biological Diversity. Although the international community in general agrees that urgent steps are needed to protect the marine environment on the high seas, the creation of MPAs in locations beyond national jurisdiction is proving uniquely challenging - due in part to unresolved legal questions.

Why this guide?

Government negotiators, non-governmental organisation (NGO) representatives and other policymakers involved in environmental protection efforts at the international level, come from a diverse set of backgrounds with different skills and experiences. However, to be able to argue convincingly for an equitable and sustainable approach to natural resource management, a good understanding of the associated legal context and processes is important.

The aim of this guide is to facilitate a better understanding of the legal context, relevant international processes, existing approaches and possible solutions to establishing MPAs beyond national jurisdiction. It is not meant to provide authoritative legal advice, but instead to provide an overview of a wide range of issues. Bearing in mind the potentially diverse readership, this guide focuses on the fundamental connexions between legal instruments and institutions, leaving to one side the more complex exceptions and special cases. Every attempt has been made to present issues in objective, accessible and non legalistic prose.

I. Introduction

Creating marine protected areas

The establishment of designated areas in the ocean that restrict human activities is one of the most viable solutions to successful protection of the marine environment. To end destructive practices on the seas and reverse the loss of biodiversity, the World Summit on Sustainable Development in 2002 called for the creation of a global network of marine protected areas. This guide aims to assist international policymakers and other stakeholders in accomplishing this task. It focuses specifically on the legal issues surrounding the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction.

Legal uncertainty

The legal issues being considered in this guide are complex, often politicised and subject to more than one interpretation. They have been addressed in various international fora including the UN General Assembly and the Conference of the Parties to the Convention on Biological Diversity.

Making the argument

Government negotiators, non-governmental organisation (NGO) representatives and other policymakers involved in environmental protection efforts at the international level come from a diverse set of backgrounds with different skills and experiences. However, to be able to argue convincingly for an equitable and sustainable approach to natural resource management, a good understanding of the associated legal context and processes is important.

FIELD

This introductory guide has been written by the Foundation for International Environmental Law and Development (FIELD). FIELD aims to contribute to a fair, effective and accessible system of international law that protects the global environment and promotes sustainable development. FIELD is a UK based charity staffed by international environmental lawyers from around the world with professional experience in government, international organisations, environmental campaigning, corporate legal practice and academia. FIELD broadens access to environmental justice through research, capacity building, advice and assistance. The organisation builds partnerships with communities and governments in the developing countries that are most susceptible to the impacts of environmental degradation, but are often the least equipped to participate in shaping solutions through international law and policy.

II. Background

The importance of the oceans

The oceans cover more than 70 per cent of the Earth's surface. With an average depth of almost 4,000 meters, it is estimated that more than 90 per cent of the planet's living biomass is found there. Ocean ecosystems support all life on this planet. In addition they manage vast amounts of human pollutants, buffer the weather and regulate global temperature. A vast portion of the world's oceans is unexplored, including the biology of the deep seafloor. Deep seabed environments are considered the largest reservoir of biodiversity on the planet and scientists believe that they may hold the knowledge to tackle incurable disease and develop new foods for future generations.

The state of the oceans

Despite the oceans' great natural capacity for self-purification, the health, productivity and biodiversity of the marine environment is severely threatened by human activities. The level of harmful substances entering the seas has multiplied over the last decades. Plastic and synthetic materials are the most common types of marine debris and many animals have been injured or have died after being entangled in or ingesting these materials. Marine creatures increasingly show signs of contamination and damage from pollution. Fishing, shipping and other uses of the sea have caused further damage and it is feared that many species will be lost before they have even been discovered.

Fishing

Fishing activities are the most pressing threat to open ocean and deep seabed biodiversity. Harvesting the living resources of the sea has been transformed into a highly industrialized business reaching even the remotest areas. Overfishing and the unfettered use of destructive fishing practices have reduced many fish stocks well below sustainable levels. Pelagic longlines, widely used to catch tuna and billfish, also kill hundreds of thousands of seabirds, turtles and cetaceans. In a quest to catch sparser and more far flung fish stocks, many fishing fleets have resorted to 'bottom trawling', a fishing method where heavily weighted nets are towed along the seafloor catching everything in their path and scraping off the coral cover of seamounts and other deep sea structures.

Other threats to the marine environment

Shipping also has negative impacts on marine wildlife and habitats through noise, accidental spills of oil or the deliberate, operational discharge of wastes, chemical residues and ballast water as well as the use of anti-fouling paints. The use of powerful sonar systems in military operations and scientific research, airguns for seismic surveys and drilling for mineral, gas and oil exploration are thought to cause hearing loss and disrupt feeding, communication, mating and migration patterns in whales, dolphins and other ocean-going species.

The laying of cables and pipelines and large-scale scientific research can also result in significant disturbances of sensitive ecosystems. Oil and gas development can already take place below a depth of 3,000m and new technologies which may facilitate seabed mining, the exploitation of hydrocarbons or the storage of greenhouse gases in the ocean floor may soon be available. Finally, scientists are only just beginning to understand the impact that climate change will have on ocean ecosystems, including warming and acidification which will affect the growth of marine phytoplankton and lead to coral bleaching, among other things.

A recent study found that unless some of these trends are reversed and large sea

conservation areas unimpaired by human activities are soon established, the world's fish stocks will be totally eradicated in forty years. The former Executive Director of the United Nations Environment Programme, Klaus Töpfer, predicted that

". . . our grandchildren will have to learn about turtles, dugongs and coral reefs at the knees of a history teacher, and we will have the tough job of explaining what a fish is."

III. Marine Protected Areas

Marine protected areas

The term 'Marine Protected Area' (MPA) is used to describe a wide range of marine areas where the environment enjoys a higher degree of protection than in the surrounding waters. The types and scope of restrictions associated with an MPA differ widely. They can range from limiting a particular activity or the protection of an individual species to a conservation regime which essentially bans all human activity. The term includes zones which may otherwise be referred to as Specially Protected Areas, Marine Reserves, Marine Parks or No Take Zones.

The International Union for Conservation and Nature (IUCN) defines an MPA as

"Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical or cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment."

A conservation tool

The establishment of MPAs is a vital tool for protecting and conserving the oceans' biodiversity. MPAs can enhance the protection of rare or vulnerable habitats and species, and historical and cultural sites. Designated areas where extractive uses and other significant human pressures are removed have also shown the ability to recover from damage. Ecologically coherent networks of MPAs are crucial for sustaining mobile seabirds, sea turtles and fish stocks. Typical restrictions in MPAs relate to fishing and the use of certain kinds of fishing equipment, oil and gas extraction, development and construction, the use of sonar and even tourist access.

Species conservation

Until recently marine environmental protection has focused primarily on the conservation of particular species. The notion of protecting entire ecosystems has taken longer to take hold than it has on dry land. At present approximately 4,600 MPAs cover approximately 2.2 million square kilometres or less than one per cent of the world's oceans. In comparison nearly 12 per cent of the earth's land surface is subject to different nature conservation regimes. The vast majority of MPAs are located along the coasts whilst the more distant offshore areas remain virtually unprotected.[1]

Ecosystem approach

Because individual maritime species depend on complex relationships with the habitats in which they live and the other species living in them, the protection of marine ecosystems is crucial for the functioning of the oceans. Marine protection efforts have increasingly focused on this ecosystem approach. This universal approach is particularly relevant for high seas and in deep water areas beyond national jurisdiction, because very little is known about the specific features and functioning of these ecosystems. In the face of this uncertainty, it would seem sensible to use precaution to safeguard against potentially irreversible biodiversity loss. Networks of MPAs provide a mechanism for protecting not just what is known at present to be important, but what may turn out to be important in the future.

Nevertheless, the sea cannot be boxed in and even a comprehensive network of MPAs will still be affected by activities in adjacent areas. The success of an area-based approach to conservation will also depend on the implementation of wider measures to control the uses of the sea.

1 A database on protected areas is available on http://www.unep-wcmc.org/wdpa

Case study – Oculina Bank Reserve

The Oculina Bank Reserve off the east coast of Florida is characterized by the delicate branch-like Oculina coral which provides ideal spawning sites for numerous species. By the early 1990s much of the habitat was destroyed and fish stocks were severely depleted as a result of hook-and-line fishing and bottom trawling. In 1994 the Oculina Experimental Closed Area was established prohibiting all bottom fishing. The regime was gradually expanded through anchoring restrictions, a ban on fishing for certain species and the inclusion of surrounding waters.

Despite these restrictions, illegal shrimp trawling continued to cause major destruction and monitoring activities in this isolated area remains a constant challenge for the authorities. A self regulation program, implemented in 2003 in collaboration with the rock shrimp industry, requires any vessel fishing near the MPA to use an approved vessel monitoring system. This has greatly improved enforcement. Since 1995 scientists have also been trying to re-establish the Oculina corals by deploying different types of concrete reef balls throughout the reserve. Several fish species have begun to colonise the area and there is increasing hope that the Oculina Bank Reserve may recover, at least partially.

IV. Public International Law

Public international law

Public international law is traditionally described as a system of rules and principles that govern the relations between States and other subjects of international law such as the United Nations or the European Communities. It is primarily created through States and covers almost all areas of inter-state activities such as trade, diplomacy, postal services, transboundary emissions, the use of outer space and, of course, war. Public international law governs issues relating to the global environment, control and jurisdiction over territory, human rights and international crime. Although international law is often concerned with the interests of groups and individuals it usually confers rights and obligations to States. Only rarely can people directly claim rights under international law.

Treaties and customary law

The primary sources of international law are treaties and customary law. Treaties are agreements between States (and other entities under international law) and only bind the participating Parties. These treaties are often known as conventions, pacts, protocols or covenants. The Charter of the United Nations is the most important international treaty and is often referred to as the constitution of the international community. Otherwise, there is no hierarchy between different international treaties. Conflicts amongst different treaty regimes may be addressed in the treaties themselves but can be subject to often contentious questions of application and interpretation.

Regulatory regimes

A number of international treaties have established entire regulatory regimes amongst their State Parties. Often institutions set up under treaty regimes monitor implementation, take further action, and facilitate the development of new legal instruments where, for example, priorities change or scientific knowledge evolves. Some treaties contain compliance and enforcement mechanisms as well as dispute settlement procedures and an increasing number of treaties allow a variety of stakeholders to put forth political, economic, and legal issues for consideration in decision making processes.

Customary law

Customary international law is derived from the consistent practice of States accompanied by *opinio juris* - the conviction of States that the consistent practice is required by a legal obligation. In addition to direct evidence of State behaviour, judgments of international courts as well as the results of academic investigation have traditionally been looked to as persuasive sources of international custom.

Customary and treaty law are complementary. Treaties regularly contain codifications of customary law while subsequent State practice can develop the provision of a treaty further. Treaties and the practice of States may also lead to the creation of new rules of customary law. What constitutes currently applicable international law is however often a question of interpretation dependant on political factors operating within the sphere of international relations.

Secondary sources

There are other (secondary) sources of binding international law, for example, court judgments or decisions of treaty bodies whose authority has been accepted by a State through an international treaty process. Also important for the determination and development of international law are international policy documents such as the 1992 Declaration of the UN Conference on Environment and Development drafted at the world summit in Rio de Janeiro (Rio Declaration). They may be described as quasi-legal instruments (or soft law) because they do not have binding force but can accelerate the formation of customary law as well as provide evidence of *opinio juris*.

Compliance and enforcement

International law has not established a general compliance and enforcement mechanism. Instead, a State's inclination to uphold norms rather comes from the pressure that States put upon one another to behave consistently and to honour their obligations. Although there are various means of dispute settlement and enforcement within existing treaty regimes, it is usually through diplomacy driven by the desire of States to preserve their international reputations that violations of international law are addressed.

V. High Seas

History of the high seas

The legal concept of the high seas began to be developed in the 17th century. In 1608 the Dutch jurist, philosopher, poet and playwright Hugo Grotius published his book Mare Liberum (Freedom of the Seas). The book justified the Netherlands' trading activities in the Indian Ocean and formulated the principle that beyond a limited area under national jurisdiction the use of the seas was free for all nations. Fish were considered a common property resource with free and open access.

By the first half of the 19th century the notion of the high seas as an area exempt from claims to national sovereignty by any State had, with some exceptions, become generally accepted. From that principle it followed that no State had the right to prevent ships belonging to other States from using the high seas for any lawful purpose. What constitutes a lawful purpose is nowadays essentially determined by the United Nations Convention on the Law of the Sea (UNCLOS).

United Nations Convention on the Law of the Sea

UNCLOS is often described as the constitution for the world's oceans. It lays down a comprehensive set of rules governing all aspects of the use of the sea and its resources. This includes rights of navigation, environmental controls, marine scientific research, economic and commercial activities, transfer of technology and the settlement of disputes. The Convention also sets out the international consensus on the scope and regime for different jurisdictional maritime zones.

Maritime zones

Under UNCLOS, Coastal States exercise sovereignty over a belt of water adjacent to their territory not exceeding 12 nautical miles. Foreign vessels are allowed 'innocent passage' through those waters. Coastal States have sovereign rights with respect to natural resources, certain economic activities, marine scientific research and environmental protection on their continental shelf and within a 200 nautical mile exclusive economic zone (EEZ). All other States enjoy the freedom of navigation and overflight and remain entitled to lay submarine cables and pipelines in the Coastal State's EEZ. In a zone within the EEZ and contiguous to the territorial sea the Coastal State has additional rights to enforce its customs, fiscal, immigration, and sanitary laws and regulations.

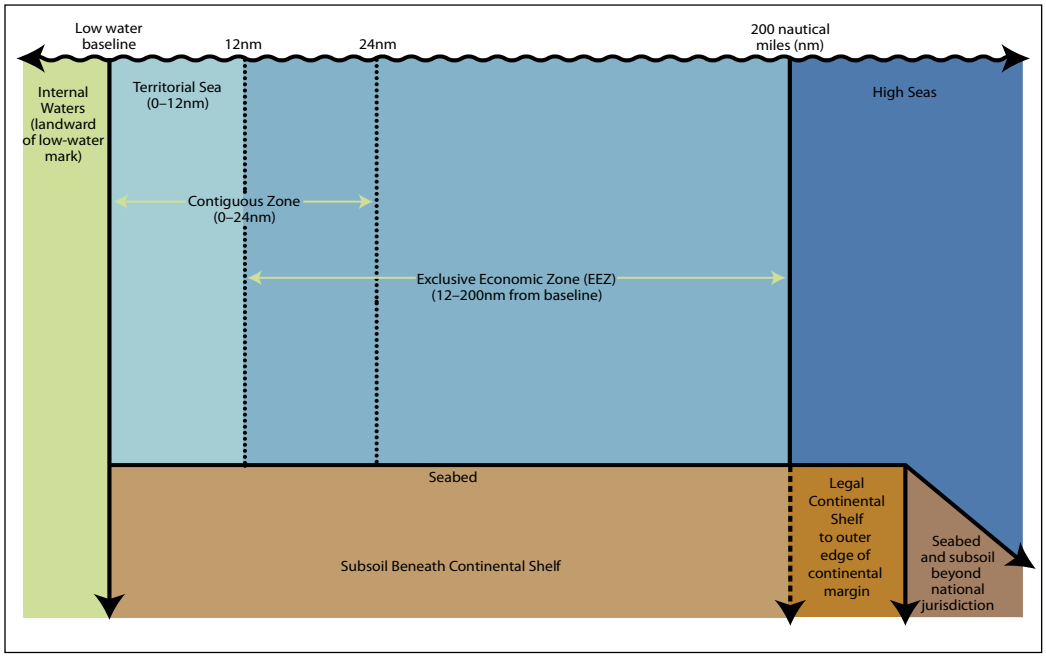

Figure 1 Maritime Zones under United Nations Convention on the Law of the Sea (UNCLOS) of 1982 (based on Gorina-Ysern 2004).

The water column beyond an EEZ (or the territorial sea where no State claims an EEZ), including the superjacent airspace, is the high sea - representing approximately 64 per cent of the ocean's surface. On the high seas all States, under conditions laid down by the Convention and other rules of international law, enjoy the principal freedoms of navigation, overflight, the laying of submarine cables and pipelines, the construction of artificial islands and other installations, fishing and scientific research.

Vessels on the high seas

Ships sailing the high seas are generally under the jurisdiction of the State whose flag they fly. They are required to comply with the laws and safety standards which the Flag State enforces. Many fishing nations require fishing vessels to obtain an authorization, license or permit before engaging in high seas fishing. Some States impose gear restrictions, prohibit fishing techniques or do not allow vessels flying their flags to fish in vulnerable high seas areas. To sell fish on their domestic markets some States require high seas vessels to have on-board observers, be equipped with monitoring devices and submit catch reports.

The principle of Flag State jurisdiction is subject to some exceptions. In the case of piracy, any State, by ship or plane in government service, may take action against a vessel and its crew. Under UNCLOS States may also enjoy additional rights with regard to preventing and punishing the transport of slaves, supressing unauthorized broadcasting, pursuing a foreign vessel for violations of domestic law, boarding ships without nationality and addressing major pollution incidents. Warships however have complete immunity from the jurisdiction of any State other than the Flag State.

In addition, States can allow other States to stop, board, search or arrest its vessels through international agreements or on an ad hoc basis. States have, for example, entered into international treaty arrangements to facilitate the interception of drug trafficking, terrorism, illegal fishing and other unlawful acts on the high seas. In addition, measures against foreign ships on the high seas have also been justified on the grounds of self defence or necessity.

Case Study – Barents Sea

Since 1975 Norway and Russia have jointly managed the main fish stocks of the Barents Sea, part of the Arctic Ocean north of Russia and Norway. In order to determine catch quotas and other management measures they established the Joint Norwegian Russian Fisheries Commission. The management regime includes two areas commonly referred to as the 'Barents Sea Loophole' and the 'Grey Zone'. Both countries claim large parts of the sea located in the 'Grey Zone' as part of their EEZ. For conservation and management purposes however they have agreed on a system of parallel jurisdiction that covers most of the disputed waters. Under the Grey Zone Agreement enforcement measures such as the inspection or arrest of vessels are to be exercised by the State that has issued the license to operate in the area.

The Loophole is a piece of water beyond the limits of national jurisdiction but entirely surrounded by the EEZs of Norway and Russia. In 1999 the two countries agreed with Iceland, the other main fishing nation in that region, on a management regime for the area. This included the allocation of catch quotas for cod and mutual access to national waters. Other provisions oblige the Parties to discourage their nationals from operating fishing vessels under foreign flags and to prohibit landing of catches taken without a quota. However fishing by vessels flying the flags of other States continues. In 2005 Greenpeace prevented a French-owned vessel, at that time flagged in Togo, from unregulated bottom trawling. In 2006 Norwegian patrol boats arrested two Spanish vessels for illegal fishing. The Spanish authorities however claimed that the vessels were fishing in international waters where Norway has no jurisdiction.

VI. Global International Treaties

There are no international agreements of potentially worldwide application on the identification, designation and establishment of marine protected areas on the high seas. Nor is there an agreed international framework addressing threats posed by different activities on the seas to a designated area. There are however a considerable number of global treaties which directly or indirectly deal with the protection of the ocean environment. This part of the guide provides an overview of the existing treaties with significant - though never universal – global membership. Updated lists of Parties to individual treaties are generally available on treaty websites (links to many are provided in this guide) or through the United Nations treaty series.[2]

1. United Nations Convention on the Law of the Sea

The United Nations Convention on the Law of the Sea (UNCLOS)[3] provides a comprehensive legal regime for the world's oceans. It divides marine space into different zones and sets out the rights and responsibilities of States within these zones (see above). UNCLOS further contains a general obligation for States to protect and preserve the marine environment within and beyond national jurisdiction. Individually or jointly States must take the necessary measures to prevent, reduce and control pollution from any source, including vessels, dumping, deep sea exploitation or land-based activities.

Marine living resources

States are also required to cooperate with each other in the conservation and management of the living resources of the high seas. States whose nationals fish for the same living resources or in the same area are required to negotiate adequate conservation measures. To this end they must cooperate to establish sub-regional or regional fisheries organisations. Conservation measures must be designed on the basis of the best scientific evidence available to maintain populations at levels which can produce the maximum sustainable yield and avoid threats to the species associated with or dependent upon harvested species. UNCLOS contemplates that further global and regional rules will be developed both for marine environmental protection and high seas living resources.

Common heritage of mankind

UNCLOS declares the seabed, ocean floor and its subsoil beyond the limits of national jurisdiction as the common heritage of mankind. All resource exploration and exploitation activities in this 'area' are to be carried out for the benefit of mankind as a whole taking into particular consideration the interests of developing states. The International Seabed Authority was established (ISA) to organize and control such activities and share the resulting benefits.

2. Fish Stocks Agreement

The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (Fish Stocks Agreement)[4] is an implementing agreement of UNCLOS. It is to be interpreted and applied in a manner consistent with UNCLOS.

Fisheries management measures

In areas beyond national jurisdiction fisheries management is to be based on the precautionary approach, i.e. the absence of adequate scientific information must not be used as a reason for postponing or failing to take conservation measures. Measures

2 UN treaty series: http://untreaty.un.org/English/treaty.asp
3 http://www.un.org/Depts/los/convention_agreements/convention_overview_convention.htm
4 http://www.un.org/Depts/los/convention_agreements/convention_overview_fish_stocks.htm

referred to, include selective fishing gear and techniques, closed areas and seasons as well as management measures for species belonging to the same ecosystem. The Fish Stocks Agreement also requires States which are not Parties to a fisheries management agreement to cooperate in the conservation of the relevant stock. Otherwise, they may not authorize vessels flying their flags to fish in this area. A State whose vessels fish on the high seas, must also take the necessary measures to ensure that these vessels respect regional conservation regimes. The State may only authorize the use of vessels for fishing where it is able to exercise its responsibilities. In high seas areas covered by a fisheries management organisation, a Member State of the organisation can inspect the vessels of any other Party to the Fish Stocks Agreement.

3. Convention on Biological Diversity

The Convention on Biological Diversity (CBD)[5] is designed to ensure the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of its utilization. The CBD covers all ecosystems, species and genetic resources. It provides that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.

In-situ conservation

The CBD distinguishes between in-situ conservation, namely the conservation and sustainable use of biodiversity in its natural environment, and ex-situ conservation. It expressly mandates the establishment of protected areas and recognizes that the conservation of biological diversity is a common concern of humankind and an integral part of the development process.

Application beyond national jurisdiction

Although the CBD's provisions do not apply to areas beyond national jurisdiction, per se, they do apply to countries individually in regard to national activities that may adversely impact biodiversity wherever it is located. In areas beyond national jurisdiction the CBD applies to processes and activities carried out under a Party's jurisdiction or control. Thus CBD Parties are, for example, responsible for monitoring activities under their control where those activities have significant adverse impacts on high seas ecosystems. The CBD also underlines the need for Parties to cooperate for the conservation and sustainable use of biodiversity in areas beyond national jurisdiction. With respect to the marine environment the CBD is to be implemented consistently with the rights and obligations of States under the law of the sea.

Global network of protected areas

To take further steps deemed necessary for its implementation, the CBD established a Conference of the Parties (COP). The second COP in Jakarta, Indonesia identified the conservation and sustainable use of marine biodiversity as an early priority for action and in 1995 adopted the 'Jakarta Mandate on Marine and Coastal Biological Diversity'. The seventh COP adopted the target to develop a global network of marine and coastal protected areas by the year 2012 and established an Ad Hoc Open-ended Working Group on Protected Areas whose mandate includes the exploration of options for co-operation for the establishment of MPAs beyond the limits of national jurisdiction.

4. International Convention for the Regulation of Whaling

Whaling

The International Convention for the Regulation of Whaling[6] was agreed in 1946 to ensure the proper and effective conservation of whale stocks. It applies to factory ships, land stations and whale catches under the jurisdiction of the Parties to the Convention

5 http://www.biodiv.org/default.shtml
6 http://www.iwcoffice.org/commission/convention.htm

and to all waters in which whaling is carried out. It established an International Whaling Commission, composed of member States to organise scientific studies and investigations and to collect, analyse and disseminate data. The Commission's main task is to review and revise as necessary the measures laid down in the Convention. It can fix the limits of open and closed waters, designate sanctuary areas, prescribe seasons, catch and size limits for each species of whale as well as prohibit types and methods of fishing.

5. Convention on International Trade in Endangered Species of Wild Fauna and Flora

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[7] is an international treaty which aims to ensure that the international trade in specimens of wild animals and plants does not threaten their survival. The import and export of species covered by CITES has to be approved by the national authorities of the Member States in accordance with the rules and regulations laid down by the Convention.

Species taken on the high seas

Species are listed in three Appendices resulting in different levels and types of protection. Among the marine listings are many species of cetaceans, marine turtles, seahorses, corals and commercial marine fishing species such as basking sharks. The 'introduction from the sea' of any species included in Appendix I or II requires the prior grant of a certificate from the Management Authority of the State of Introduction. Introduction from the sea is defined as the transportation of a species into a State taken in the marine environment outside national jurisdiction. This restriction does not apply to species included in Appendix II when they are taken by ships registered in a State, which is also Party to another treaty affording protection to that species and preceding CITES, such as the International Convention for the Regulation of Whaling.

6. The Convention on the Conservation of Migratory Species of Wild Animals

Protection through their range

The Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention)[8] aims to protect terrestrial, marine and avian migratory species throughout their range. Range is defined as all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route. For species in danger of extinction, listed in Appendix I, the Range States must work toward taking a variety of conservation and restoration measures. With regard to migratory species in unfavourable conditions, included in Appendix II, Range States are encouraged to enter into international agreements. The CMS provides guidelines for such agreements and serves as an umbrella mechanism for their review. Several agreements on marine species have been concluded, some of them addressing the establishment of protected areas as a conservation measure.[9]

Range States

Range States include States whose vessels are engaged in fishing for protected species on the high seas. The CMS requires these States to prohibit the taking of Appendix I species. To the extent that activities undertaken within national jurisdiction may endanger the species beyond national jurisdiction, the Range State should also control these effects. Range States should conserve and restore important habitats and prevent and remove obstacles to migration. At its fifth meeting the Conference of the Parties also decided that Parties should designate protected areas, in close co-operation with other

7 http://www.cites.org/eng/disc/text.shtml
8 http://www.cms.int/documents/index.htm
9 See Section VII.5, below.

Range States so that a network of critical sites is established throughout the migration route of Appendix I species.

7. Food and Agriculture Organisation Compliance Agreement

Control of fishing vessels

The 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993 (FAO Compliance Agreement)[10] applies to all fishing vessels that are used or intended for fishing on the high seas. It sets out Flag State responsibilities to ensure that a fishing vessel flying its flag and engaged in high seas fishing complies with international conservation and management measures. The Flag State may only authorise its vessels to fish on the high seas if it can effectively exercise its responsibilities under the Agreement. Restrictions are placed on issuing an authorization for high-seas fishing to any vessel that has undermined international conservation and management measures. The Agreement also provides for arrangements whereby Port States may take investigatory measures to establish whether a fishing vessel sitting voluntarily in one of its ports has violated the Agreement's provisions.

Flag state obligations

Each Flag State must maintain a record of vessels entitled to fly its flag and authorized by it to fish on the high seas. This information must be made available to the Food and Agricultural Organisation (FAO) which then circulates it to all Parties. The Agreement also requires State Parties to cooperate in exchanging information on fishing vessel activities in order to assist Flag States to identify any of their vessels engaged in activities that undermine international conservation and management measures. The FAO has established a High Seas Vessel Authorization Record in order to develop a comprehensive, centralized database on vessels authorized to fish on the high seas.

8. UNESCO Conventions

World heritage sites

The 1972 UNESCO Convention on the World Cultural Heritage and Natural Heritage (WH Convention)[11] encourages States to identify outstanding sites for the protection, preservation and transmission to future generations of cultural and natural heritage around the world. On the basis of a proposal submitted by Parties to the WH Convention, the World Heritage Committee designates world heritage sites with outstanding universal value for humanity. This includes maritime habitats such as the Great Barrier Reef (Australia) or the Tubbataha Reef Marine Park (Philippines). The application of the WH Convention is limited to sites within the territories of Parties to the Convention.

Underwater cultural heritage

In comparison to the WH Convention, the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage (UCH Convention)[12] covers underwater cultural heritage both within and beyond national jurisdiction. It has not yet entered into force. The UCH Convention defines underwater cultural heritage as all traces of human existence having a cultural, historical or archaeological character which has been partially or totally under water for at least 100 years. Shipwrecks and other historical or cultural objects can attract the settlement of species and protective measures taken under the UCH Convention may have the added benefit of protecting the associated biodiversity.

10 http://www.fao.org/DOCREP/MEETING/003/X3130m/X3130E00.HTM
11 http://whc.unesco.org/en/conventiontext
12 http://www.unesco.org/culture/laws/underwater/html_eng/convention.shtml

Under the UCH Convention underwater cultural heritage objects are to be preserved for the benefit of humanity as a whole. The preservation *in situ* of underwater cultural heritage is considered the first option. When such objects are found on the seabed or ocean floor beyond areas of national jurisdiction, notifications must go to the Director-General of UNESCO and the Secretary-General of the International Seabed Authority. The Director-General notifies Parties to the UNESCO Conventions. States with a verifiable link to the heritage are to be consulted on how to ensure its protection.

9. Instruments of the International Maritime Organisation

IMO

International rules and regulations concerning maritime safety, the efficiency of navigation and the prevention and control of marine pollution from ships have been developed under the auspices of the International Maritime Organisation (IMO). The IMO provides machinery for cooperation among governments. Its rules and standards are widely recognized as minimum standards applicable to all vessels both within and beyond national jurisdiction. The IMO is considered the competent international body to establish special protective measures in defined areas where shipping presents a risk. To date it has negotiated more than forty conventions, as well as adopted non-binding codes, recommendations and guidelines.[13]

Special Areas

This includes the International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL 1973/78).[14] MARPOL 73/78 regulates vessel design, equipment, and operational discharges from all ships both within and beyond national jurisdiction. It also provides for the designation of Special Areas where more stringent discharge rules apply in respect of oil, noxious liquid substances, and marine debris. Special Areas are defined as areas where, for technical reasons relating to their oceanographical and ecological condition and to their sea traffic, the adoption of special mandatory methods for the prevention of sea pollution is required.

Dumping at sea

The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention)[15] aims to control and prevent marine pollution caused by the deliberate disposal of wastes or other matter at sea. It differentiates between matter whose dumping is prohibited (listed in Annex 1) and others which require a permit. Issuance of a permit requires consideration of various factors including the characteristics of the proposed dumping site. Under the London Convention, States with common interests in protecting the marine environment in a given geographical area are to enter into regional agreements. Parties must also co-operate in the development of procedures for the effective application of the Convention on the high seas, including procedures for reporting dumping by vessels or aircraft.

The London Convention was replaced by the 1996 Protocol, which entered into force on 24 March 2006.[16] The Protocol provides a more restrictive approach and prohibits all waste dumping except for materials listed in Annex 1, such as dredged materials, sewage sludge, fish processing wastes, oil and gas installations and organic materials of natural origin. In implementing the Protocol Parties must also apply a precautionary approach and take appropriate preventative measures when there is reason to believe that matter introduced into the marine environment is likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects.

13 For all instruments see: http://www.imo.org
14 http://www.imo.org/Conventions/mainframe.asp?topic_id=258&doc_id=678
15 http://www.londonconvention.org
16 http://www.imo.org/home.asp?topic_id=1488

Ballast water

The IMO's 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments[17] is not yet in force. Its objective is to prevent, minimize and ultimately eliminate the transfer of harmful aquatic organisms and pathogens resulting from ballast water exchange. It requires ships to conduct exchanges at least 200 nautical miles from the nearest land and in waters deeper than 200 metres, wherever possible. If a Party or Parties determine that additional measures are necessary in certain areas, they may require ships to meet a specified standard or requirement consistent with international law. If such Party/ies intend the measure to apply to ships other than their own in areas beyond national jurisdiction, IMO approval would be necessary.

10. Regulations of the International Seabed Authority

The Area

The International Seabed Authority (ISA) was established under UNCLOS to organise and control all activities on the seabed and the ocean floor beyond areas of national jurisdiction (the Area). ISA has the responsibility of ensuring that effective measures are taken in connection with mining and exploration activities, including effective protection of the marine environment. To this end ISA must adopt appropriate rules and regulations on the prevention, reduction and control of pollution and the protection of natural resources, flora and fauna. These rules and regulations are binding on all Parties to UNCLOS.

Exploration in the Area

One set of regulations established by ISA are the Regulations for Prospecting and Exploration for Polymetallic Nodules in the Area.[18] Polymetallic nodules are non-living porous, concretionary objects of various sizes and shapes containing valuable metals such as nickel, manganese, copper and cobalt. They are found in thin discontinuous superficial layers on the floor of the ocean, occurring at depths of 5,000 meters. Under the Regulations any exploration and exploitation activities need to be approved by ISA. Applicants must carry out an environmental impact assessment, monitor the effects of their work and comply with all terms and decisions of ISA.

Preservation reference zones

With the application for exploitation rights a Contractor is required to propose areas to be set aside and used exclusively as impact reference zones and preservation reference zones. The regulations define impact reference zones as areas which are representative of the environmental characteristics of the Area to be used for assessing the effect of each contractor's activities in the Area on the marine environment. Preservation reference zones are areas in which no mining may occur to ensure representative and stable biota of the seabed in order to assess any changes in the flora and fauna of the marine environment.

The ISA is also in the process of drafting regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts in the Area.[19] Of the draft's 43 regulations, nine are concerned with the protection and preservation of the marine environment. This includes the application of the precautionary approach as well as the establishment of environmental baselines for monitoring and reporting.

17 http://www.imo.org/Conventions/mainframe.asp?topic_id=867
18 isa.org.jm/files/documents/EN/13sess/cnel/ISBA-13-C-wpl.pdf
19 isa.org.jm/files/documents/EN/13sess/LTC/ISBA-13LTC-wpl.pdf

VII. Regional Treaties

There is a multitude of bilateral and multilateral treaties dealing with environmental protection issues in different parts of the world. Examples include the Convention on the Conservation of European Wildlife and Natural Habitats (Berne Convention)[20] and the African Convention on the Conservations of Nature and Natural Resources.[21] In general the content of these regional treaties is also covered by one or more of the global treaties described above.

Because the review of all existing regional agreements with potential relevance to marine environment protection is impractical, the following section focuses on those regional agreements with a specific emphasis on area or ecosystem based approaches. Regional seas conventions, fisheries or - more generally - marine living resources management agreements and treaties for the protection of individual species are the types of treaties we will be exploring in this section.

Managing common waters

Most regions of the world now have binding framework conventions between countries sharing a common body of water. These framework conventions generally include the coordination and implementation of environmental management of the designated body of water. A list of these framework conventions has been included in Annex 1. Many of these agreements have been established under the auspices of the United Nations. The conventions usually reflect the particular environmental challenges encountered by a region and are often supplemented by protocols and annexes. They cover issues ranging from chemical wastes and coastal development to the conservation of marine life and ecosystems. Only a few of the legal instruments explicitly covers areas beyond national jurisdiction. The most significant ones are presented in sections 1 to 3 below. Section 4 deals with management agreements for marine living resources and section 5 with treaties designed to protect individual species.

1. Convention for the Protection of the Marine Environment of the North-East Atlantic

The 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic replacing the Oslo and Paris Convention (OSPAR Convention)[22] requires Parties to take all possible steps to protect the maritime area of the North-East Atlantic from pollution. The maritime area extends from the shores of its contracting Parties to a substantial adjacent high seas area including the seabed. It stretches from the east coast of Greenland to the continental North Sea coast, south to the Straits of Gibraltar and northwards to the North Pole but does not include the Baltic or Mediterranean seas.

Commission and protection measures

Annex V to the Convention calls on Parties to take the necessary measures to protect the maritime area against the adverse effects of human activities and to restore marine areas which have been adversely affected. The Commission established under the OSPAR Convention has the duty to develop means, consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites or related to specific species or habitats. It also clarifies that no programme or measure concerning a question relating to the management of fisheries is to be adopted under this Annex. Where the Commission considers that such action would be desirable, it is to draw that question to the attention of the competent fisheries organisation or other relevant authority.

20 http://conventions.coe.int/Treaty/en/Treaties/Word/104.doc
21 http://tinyurl.com/ywfgqn - as revised in 2003.
22 http://www.ospar.org/eng/html/convention/welcome.html

Marine protected areas

In 2003 the Parties to the OSPAR Convention recommended the development of a network of MPAs by 2010. They also agreed on a strategy and guidelines for the selection and management of sites. It is envisaged that Parties will identify potential MPAs both within and outside their national jurisdiction. They are required to develop a management plan for the areas and adopt the necessary measures to achieve them. Where competence to adopt such measures lies with another authority or international organisation (e.g. regional fisheries management organisations or the European Union) Parties should seek to adopt those measures. A Party can request the Commission's assistance with this. The Commission may consider, in accordance with UNCLOS and in consultation with the competent international organisations, how environmental protection might be achieved in areas outside national jurisdiction and how appropriate measures might be included in the OSPAR MPA network.

2. Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean

The 1976 Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean amended in 1995 (Barcelona Convention) applies throughout the Mediterranean Sea.[23] Parties to the Convention are to take all appropriate measures to prevent, abate, combat and eliminate pollution of the Mediterranean Sea and to protect and enhance the marine environment in this area. The revised text as amended in 1995 has not yet entered into force.

Protected areas of Mediterranean interest

Included within the Convention's framework is the 1995 Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean.[24] The Protocol provides for the establishment of a list of specially protected areas of Mediterranean interest (SPAMI list). This may include sites which are of importance for conserving the components of biological diversity, sites which contain ecosystems specific to the Mediterranean or the habitats of endangered species. The Protocol further specifies the procedures for the listing of SPAMIs. As regards areas located partly or wholly on the high seas, the proposal must be made by two or more neighbouring Parties. The decision to include an area is taken by consensus among the Parties.

If an area is included in the list, all Parties must comply with the measures applicable to the SPAMI and neither authorise nor undertake any activity that might be contrary to the objectives for which the SPAMI was established. Parties to the Protocol must adopt measures consistent with international law, ensure that no one engages in any activity contrary to its principles and purposes, and invite non-Member States to cooperate in its implementation.

3. Antarctic Treaty

The 1959 Antarctic Treaty[25] was initially signed by the twelve nations that had been active in Antarctica, nine of which had made territorial claims or reserved the right to do so. The Treaty, which applies to the area south of 60° South latitude provides that Antarctica should be used exclusively for peaceful purposes. It prohibits nuclear explosions and the disposal of radioactive waste, promotes international scientific cooperation and protection of living resources and effectively freezes all territorial claims. The Treaty now has 44 signatories. Twenty-seven of these are Consultative Parties on the basis that they were original signatories or had conducted substantial

23 http://www.unep.ch/regionalseas/legal/conlist.htm
24 http://www.oceanlaw.net/texts/unepmap2.htm
25 http://www.antarctica.ac.uk/About_Antarctica/Treaty/treaty.html

research in Antarctica.

Antarctic specially protected areas

The 1991 Protocol on Environmental Protection to the Antarctic Treaty[26] has five annexes. Annex V provides for the designation of Antarctic Specially Protected Areas to protect outstanding environmental, scientific, historic, aesthetic or wilderness values and Antarctic Specially Managed Areas to assist in the planning and co-ordination of activities, improve co-operation between Parties or minimise environmental impacts. Marine areas can be included in either category but their establishment requires the prior approval of the Commission on the Conservation of Antarctic Living Resources (CCAMLR).

Any Party wishing to propose an area for designation as a special area must draw up a management plan. Proposed management plans are to include a description of the aims and objectives of the plan, the value for which special protection is required, the envisaged management activities, a period of designation, and a description of the area and its features. Zones must be identified within the area where activities are to be prohibited, restricted or managed, and the proximity to other protected areas must be identified.

4. Regional Marine Living Resources Management Agreements

Traditionally regional management agreements have been drawn up by States engaged in fishing for the same species so that they may coordinate their activities in a specific geographical area. In many cases a commission or other institutional framework has been set up in order to decide on joint management measures such as the determination and allocation of catch quotas. A list of the regional fisheries/resources management agreements analysed for the purpose of this study has been included in Annex 1.

Use and conservation

Regional fisheries management agreements may deal with the management of one or several species or cover all living marine resources within a region. Many of them cover areas of the high seas. The agreements generally contain a clause to the effect that nothing in the agreements should be construed to affect a Party's rights under the law of the sea. More recently these agreements tend to emphasise the need for sustainable use and conservation whereas earlier agreements focused on management and best utilisation.

Regional fisheries management agreements generally state that conservation measures for areas under national jurisdiction and for the high seas should be compatible. Conservation measures, for example, include closed areas and seasons as well as restrictions on gear and fishing techniques. Member States have to ensure that nationals and vessels flying their flags comply with these measures. Few agreements however provide for the protection and conservation of aquatic resources through a stringent application of the ecosystem approach. In this respect, the 1980 Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR)[27] arguably may provide for the most advanced regime.

Convention for the Conservation of Antarctic Marine Living Resources

CCAMLR applies to the marine living resources of the Antarctic marine ecosystem. Its objective is defined as the conservation of Antarctic marine living resources and its Parties are obliged to refrain from any activities in the Antarctic Treaty area contrary to this purpose. The Commission for CCAMLR was established by the Convention with the mandate to identify and implement conservation measures. Conservation measures

26 http://www.antarctica.ac.uk/About_Antarctica/Treaty/protocol.html
27 http://www.oceanlaw.net/texts/ccamlr.htm

may include the designation of protected species, quantities of allowed catch and the size, age or sex of species which may be harvested. The Commission may stipulate fishing methods and gear as well as the closing or opening of seasons and areas, including special areas for environmental protection and scientific study. In addition it can take other conservation measures as necessary for the fulfilment of the Convention's objectives including measures related to components of the marine ecosystem other than the harvested populations.

Conservation measures adopted by CCAMLR enter into force within 180 days following notification of its members. Members can prevent measures from becoming binding upon them and initiate a review. The enforcement of management measures is generally the responsibility of individual Member States. The Commission aims to encourage compliance with such measures through reporting requirements, publications and the Standing Committee on Implementation and Compliance.

5. Regional CMS Agreements

Under the Convention on the Conservation of Migratory Species of Wild Animals (CMS)[28] several agreements on the protection of migrating marine species have been concluded. These are the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS), the Agreement on the Conservation of Albatrosses and Petrels (ACAP), the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), the Agreement on the Conservation of the African-Eurasian Migratory Waterbirds (AEWA) and the Agreement on the Conservation of Seals in the Wadden Sea. In addition, less formal instruments (Memoranda of Understanding) have been agreed with the aim of conserving the Marine Turtles of the Atlantic Coast of Africa, Marine Turtles of the Indian Ocean and South-East Asia, the Aquatic Warbler and Cetaceans of Pacific Island States.

In accordance with the objectives of the CMS the agreements generally require Parties to coordinate their efforts to ensure that a network of suitable habitats is maintained or re-established throughout the entire range of the migratory species concerned. The ACAP Action Plan (Annex 2 to ACAP) provides that Parties should take special measures individually and collectively to conserve marine areas considered critical to the survival and restoration of albatrosses and petrels. The ASCOBANS covers some areas beyond national jurisdiction in the North Sea but states that conservation and management measures prescribed in the Annex shall only be applied within the limits of each Party's jurisdictions.

28 See section VI.6, above.

VIII. Soft Law

There are various quasi legal or policy instruments on environmental matters which do not create binding obligations amongst supporting States (see above). However, they may provide evidence of *opinio juris* as well as guidance on the interpretation or application of treaties and customary law. Such instruments often reflect developing approaches and principles within the international community. They may result in voluntary compliance by some States creating pressure and expectations on others. Thus soft law instruments often enjoy a certain degree of authority. The most important ones for the establishment of MPAs in areas beyond national jurisdiction are introduced in this section.

1. Declaration of the UN Conference on Environment and Development

The Declaration on the UN Conference on Environment and Development (Rio Declaration) was the final document to come out of the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992.[29] It was adopted by 172 governments to guide future sustainable development and comprises a series of principles defining the rights and responsibilities of States.

Rio Principles

The Rio Declaration provides that States enjoy sovereignty over their natural resources but have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond national jurisdiction. The Rio Declaration recognises the common but differentiated responsibilities of States to protect the environment in view of their different contributions to global environmental degradation. Measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus. Where there are threats of serious or irreversible damage, lack of full scientific certainty is not to be used as a reason for postponing cost-effective measures to prevent environmental degradation.

2. Agenda 21

At the summit in Rio de Janeiro governments also adopted a global plan of action to promote sustainable development entitled Agenda 21.[30] Under Agenda 21 States commit themselves to prevent, reduce and control degradation of the marine environment in accordance with the provisions of UNCLOS on the protection and preservation of the marine environment. To this end the necessity of a precautionary and anticipatory rather than a reactive approach was recognised.

For the conservation and sustainable use of marine living resources on the high seas States agree to maintain or restore populations of marine species at levels that can produce the maximum sustainable yield as qualified by relevant environmental and economic factors, taking into consideration relationships among species. States have pledged to ensure effective monitoring and enforcement with respect to fishing activities, protect and restore endangered marine species and preserve habitats and other ecologically sensitive areas.

29 http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163
30 http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=52&ArticleID

3. Plan of Implementation of the World Summit on Sustainable Development

Ten years after Rio the World Summit on Sustainable Development (WSSD or Earth Summit) took place in Johannesburg. The WSSD confirmed previous commitments on sustainable development and drew up a plan of implementation (Johannesburg PoI)[31] to expedite their realisation.

Reducing the loss of biodiversity

The Johannesburg PoI aims to achieve by 2010 a significant reduction in the current rate of loss of biological diversity. It provides that action should be taken to maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction. International programmes for halting the loss of marine biodiversity should be developed.

It also encourages the application of the ecosystem approach and provides for the establishment of marine protected areas consistent with international law, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods. To achieve sustainable fisheries, stocks must be maintained or restored to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015.

4. Earth Charter

The Earth Charter[32] is a civil society declaration of fundamental values and principles for building a just, sustainable, and peaceful global society in the 21st century. It was developed and endorsed through an international consultations process involving NGOs, community groups, professional societies, experts and institutions such as UNESCO and IUCN. The Charter is used as a reference document and has influenced other policy processes. The Earth Charter promotes the protection and restoration of the integrity of Earth's ecological systems, with special concern for biological diversity through the establishment of nature and biosphere reserves, including marine areas.

5. IMO's Particularly Sensitive Sea Areas

The IMO instruments providing for the designation of Special Areas have been supplemented by the soft law concept of 'Particularly sensitive sea areas' (PSSAs).[33] Under the Guidelines for the Identification and Designation of PSSAs, a PSSA is an area that needs special protection through action by the IMO because of its recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities. The guidelines provide guidance to the IMO and its Member States in the formulation and submission of applications for the designation of PSSAs. They apply within and beyond the limits of the territorial sea.

Designation of areas

The designation of PSSAs does not result in protective measures beyond those approved under the IMO Conventions. To designate a PSSA an associated protective measure to prevent or reduce a threat or vulnerability must have been approved by the IMO. Associated protective measures, under MARPOL or the International Convention for the Safety of Life at Sea (SOLAS) respectively, could include the imposition of

31 http://www.iisd.ca/2002/wssd/PlanFinal.pdf
32 http://www.earthcharter.org
33 http://www.imo.org/includes/blastDataOnly.asp/data_id%3D14373/982.pdf

traffic separation schemes, areas to be avoided, compulsory pilotage, vessel discharge restrictions, the designation of a Special Area for SOx emission control as well as the adoption of ships' routing and reporting systems.

An application to the IMO for the designation of a PSSA and the adoption of associated protective measures may be submitted only by a Member Government. Where two or more Governments have a common interest in a particular area, they should formulate a co-ordinated proposal.

6. Code of Conduct for Responsible Fisheries

The Code of Conduct for Responsible Fisheries is a voluntary set of principles and standards applicable to cover the conservation, management and development of all fisheries.[34] Sections of the Code of Conduct are based on rules of international law and contain provisions that have been given binding effect by other legal instruments such as the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (see above).

Ecosystem conservation

According to the general principles of the Code, States and users of living aquatic resources should conserve aquatic ecosystems. The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of living aquatic resources. Fisheries management measures should promote the maintenance of the quality, diversity and availability of fishery resources and not only ensure the conservation of target species but also of species belonging to the same ecosystem or associated with or dependent upon the target species. States, subregional and regional fisheries management organizations are encouraged to apply a precautionary approach.

7. UN General Assembly Resolutions on Fishing

The UN General Assembly adopts an annual Resolution on Oceans and Law of the Sea accompanied by a resolution on sustainable fisheries towards the end of each calendar year.[35] These resolutions address a broad range of maritime issues and include recommendations as well as calls and invitations to international institutions and States on actions to be taken.

Confirming objectives

The 2006 Resolution on Oceans and the Law of the Sea adopted by a vote of 157 State representatives to 1 (with 3 abstentions) reaffirms the need for States to continue their efforts to develop a representative network of marine protected areas by 2012. The 2006 Resolution on Sustainable Fisheries further encourages States to apply by 2010 the ecosystem approach and measures that incorporate and strengthen the precautionary approach and consideration of ecosystem approaches to fisheries. It also encourages accelerated progress to establish criteria on the objectives and management of marine protected areas for fisheries purposes. It also urges regional fisheries management organizations to strengthen and modernize their mandates to include an ecosystem approach to fisheries management and biodiversity considerations, where those aspects are lacking.

34 http://www.fao.org/fi/website/FIRetrieveAction.do?dom=org&xml=CCRF_prog.xml
35 http://www.un.org/Depts/los/general_assembly/general_assembly_resolutions.htm

IX. Establishment of Marine Protected Areas

The need for protection and conservation of biodiversity on the high seas is emphasised in many international legal and policy instruments. The protected area or ecosystem approach is now perceived as a key device in the battle for effective environmental protection and conservation of the ocean environment and there is significant support for the general concept of MPAs in international treaties and soft law principles. The establishment of MPAs in areas beyond national jurisdiction is contemplated in some of these international instruments, including Agenda 21 and the IMO regulations, and may be justified under others such as the Biodiversity Convention or the Straddling Fish Stocks Agreement. There is, however, no global legal framework which defines international responsibilities and mechanisms in the identification, creation and protection of MPAs.

This opens up a wide space for interpreting the existing rights and obligations of States under international law. It raises questions with regard to authority, the scope of permissible regimes, compliance and enforcement issues. The juxtaposition of international obligations on environmental protection with a variety of rules on other ocean uses such as navigation, fisheries or mining can result in uncertainties. To contextualise some of the legal issues, elements from disparate sources of international law pertaining to marine environment protection need to be drawn together.

Case study – OSPAR MPA

The following table provides an overview of the legal regulations and instruments that may be applicable to high seas MPAs in the OSPAR area. It only lists international and regional treaties and does not include EU legislation or national laws.

Human activities	Regulations
1. Exploration and exploitation of oil, gas other mineral resources	UNCLOS[36], ISA regulations[37], CMS[38], CBD[39], Berne Convention[40], ASCOBANS[41], AEWA[42], OSPAR Convention[43]
2. Dumping of solid waste and dredged spoils	UNCLOS, LDC[44], OSPAR
3. Construction	UNCLOS, MARPOL 73/78[45], CBD, Berne Convention, ASCOBANS, AEWA, OSPAR
4. Shipping and navigation	UNCLOS, IMO instruments[46]
5. Placement and operation of submarine cables	UNCLOS, CBD, Berne Convention, ASCOBANS, OSPAR
6. Placement and operation of pipelines	UNCLOS, CBD, Berne Convention, ASCOBANS, OSPAR
7. Fishing, hunting and harvesting	UNCLOS, ICRW[47], CITES, CMS, CBD, Berne Convention, ASCOBANS, NAMMCO Agreement[48], AEWA, OSPAR, regional fisheries management agreements[49], Fish Stocks Agreement[50], FAO Compliance Agreement[51]
8. Tourism and recreational activities	UNCLOS, CBD, Berne Convention, ASCOBANS, AEWA, OSPAR
9. Research and bio-prospecting	UNCLOS, ICRW, CMS, CBD, Berne Convention, ASCOBANS, AEWA, OSPAR
10. Noise	UNCLOS, CBD, Berne Convention, ASCOBANS, AEWA, OSPAR Convention
11. Introduction of species	UNCLOS, CBD, Berne Convention ASCOBANS, AEWA, OSPAR Convention

Table OSPAR-MPA based on OSPAR Commission Summary Record MPA 2002/8/1-E, Annex 6

36 United Nations Convention on the Law of the Sea, see Section VI.1, above.
37 See Section VI.10.
38 Convention on the Conservation of Migratory Species of Wild Animals, see Section VI.6.
39 Convention on Biological Diversity, see Section VI.3.
40 Convention on the Conservation of European Wildlife and Natural Habitats, see Section VII.
41 Agreement on the Conservation of Small Cetaceans of the Baltic and North Sea, see Section VII.5.
42 Agreement on the Conservation of African-Eurasian Migratory Waterbirds, see Section VII.5.
43 Convention for the Protection of the Marine Environment of the North-East Atlantic, see Section VII.1.
44 Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter (London Convention), see Section VI.9.
45 International Convention for the Prevention of Pollution from Ships, see Section VI.9.
46 See section VI.9.
47 International Convention for the Regulating of Whaling, see Section VI.4.
48 Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic.
49 See Section VII.4.
50 See Section VI.2.
51 See Section VI.7.

The following section provides an overview of the current legal discourse. It aims to identify possible approaches for further development, by disentangling and structuring some of the main issues under discussion. The section first analyses the emerging framework for the establishment of MPAs under international treaty law (section 1) then examines existing customary law (section 2) and offers some conclusions on next steps (section 3).

1. International Treaty Law

Recognised need for MPAs

Several regional and international instruments refer to the establishment of MPAs in particular and other international agreements encourage the creation of zones as a means of environmental protection in general. There is overwhelming scientific evidence indicating that the restoration and conservation of vulnerable marine habitats and species will only be possible through a global network of MPAs including large areas of the high seas. An integrated management approach which spans zones and jurisdictions is also increasingly seen as the only way to successfully protect the ocean. The timelines formulated by the international community also recognise the urgency of the situation.

In view of this emerging understanding it is difficult to imagine how States might comply with their treaty obligations to maintain biodiversity, conserve the marine environment and protect endangered species without establishing global networks of MPAs. However, there does not appear to be any direct obligation under international law to establish MPAs on the high seas.

Environmental agreements and UNCLOS

In relation to marine issues, provisions in international environmental agreements often overlap with those of UNCLOS. Consequently, in areas beyond national jurisdiction environmental protection efforts may be severely restricted by a State's right under UNCLOS to exercise high seas freedoms. Most environmental agreements and soft law documents contain a clause addressing their relationship with UNCLOS. Such clauses state, for example, that the agreement should be *implemented consistently with rights and obligations of States under the law of the sea* or *interpreted and applied in the context of and in a manner consistent with international law, including the United Nations Convention on the Law of the Sea.* UNCLOS itself provides that *specific obligations assumed by States with respect to the protection and preservation of the marine environment should be carried out in a manner consistent with the general principles and objectives of this Convention.*

It has been argued, therefore, that environmental agreements do not create a basis for further action but rather that they need to be implemented within the wider framework created by UNCLOS. On the basis of this interpretation, Parties to environmental agreements would be under no obligation to reduce their uses of the world's seas and oceans, provided they took account of the environmental protection measures in UNCLOS. A variety of other approaches to clarify the relationship between UNCLOS and environmental agreements have also been suggested. They range from the parallel application of both treaties to their being mutually complementary. Regardless of the approach taken, the determinations made by UNCLOS itself with regard to ocean uses and the obligation to protect and preserve the marine environment are important and ultimately will play a part in resolving any perceived conflicts between obligations under UNCLOS and obligations under international environmental agreements.

Environmental protection as part of UNCLOS

When UNCLOS was first drawn up by the Third United Nations Conference on the Law of Sea (1973-1982), the emphasis was often more on allocating the available resources of the sea rather than on securing their survival. Protection of the marine environment was not the primary concern. A historical interpretation is therefore more

likely to see the balance between use and protection tip towards the former.

UNCLOS is a living instrument, however, that must be interpreted in light of present-day conditions and requirements. The need to take into account the interests of the international community as a whole is an underlying principle of the Convention. In fact, it could be said that UNCLOS limits the freedom of the high seas in favour of the interests of humanity – lending credence to the argument that UNCLOS would support the creation of MPAs on the high seas where the benefit to mankind is deemed greater than competing uses.

Using existing tools

Emphasising the environmental dimension of UNCLOS, many States hold that the current international regime is sufficient to provide for effective marine environment protection of the high seas. In other words, by using and expanding existing mechanisms, such as the provisions in regional agreements or the IMO's regulations on designating special and particularly sensitive areas, the tools for establishing MPAs are available to the international community. Where a State fails in its duty to cooperate in the protection and preservation of the marine environment from overfishing, for example, it may eventually forfeit the right for its nationals to participate in this high seas freedom.

Limits of effective protection

Nevertheless, the establishment of marine protected areas beyond national jurisdiction would still need to take into account legitimate uses of the high seas prescribed by law. Depending on geographic location and the activities being regulated, this could result in a complex network of legal relationships with various gaps or uncertainties. For example, while there is substantial guidance in existing instruments to limit fishing activities, other potential environmental threats such as the laying of undersea cables have yet to be addressed. There is limited basis for preventing vessels from navigating through particular waters and, even so, compliance and enforcement depend entirely on the will of States under the regime. Under current institutional arrangements, there is no one authority with a global mandate to regulate the high seas. Deep seabed issues come under the authority of the ISA while the control of vessels on the high seas is the purview of the IMO. Regional management agreements have also carved out varying degrees of jurisdiction over the high seas.

Contractual obligations

There is scope for elaborating environmental protection vis-à-vis traditional high seas freedoms through contractual arrangements, but this serves to highlight a fundamental challenge. Any contractual or treaty based regime can only confer rights and obligations to States which are willing Parties to the regime. The rights and obligations of non-Parties remain unaffected. Even where all States with a particular interest in the high seas area were to agree on a regulatory regime, they would not create binding obligations for external Parties. In these circumstances enforcement and compliance remain a significant dilemma.

2. Customary Law

Erga omnes obligaton

Many believe that the obligation to protect the environment in areas beyond national jurisdiction has acquired the status of a legal obligation owed to the international community (*erga omnes*) regardless of specific contractual arrangements. It is generally recognised under customary international law that where States exploit common natural resources, they must consider the interests of other States and should aim for equitable utilisation. They are required to make reasonable use of all common space and control and prevent pollution. It has been argued, therefore, that the establishment of MPAs on the high seas can be based on customary international law.

Precautionary principle

In addition, the precautionary principle may require States to take protective measures for the marine environment. Against a backdrop of scientific uncertainty, the precautionary principle (or approach) can be described as a tool for preventing further environmental degradation. As defined in the Rio Declaration and subsequent international environmental agreements, the precautionary principle provides guidance to States in the face of scientific uncertainty. States may not rely on scientific uncertainty to justify undertaking activities that could have an adverse impact on the environment or regulatory inaction.

MPAs under national jurisdiction

To date, the vast majority of marine protected areas have been established by Coastal States within their territorial seas. As part of their sovereign rights over these seas, they are entitled to take the measures they deem necessary to protect the marine environment. This includes the establishment and effective management of MPAs under domestic law. Under UNCLOS a State's rights in its territorial waters are limited only by the right of other State vessels to pass through peacefully ('right of innocent passage'). It should be noted, however, that ships navigating through a Coast State's territorial waters are required to comply with the Coastal State's environmental laws and regulations.

The rights of a Coastal State in its EEZ are more restricted, and consequently, fewer MPAs have been established in EEZs. Measures implemented by a Coastal State in its EEZ must relate to its exclusive rights in the zone, particularly in respect of the economic use and management of natural resources. Nevertheless, the Coastal State remains responsible for the protection and conservation of the marine environment in its EEZ, which includes taking action to combat pollution and dumping. The Coastal State is entitled to take a variety of measures, which may comprise the creation of no take areas, closed seasons or complete bans on fishing, tourism and other economic activities such as off shore drilling installations or wind farms.

MPAs in international waters

Only a very few protected areas have been declared in areas beyond national jurisdiction. They are limited to whaling and marine mammal sanctuaries, special areas under MARPOL, areas under the Antarctic Treaty and additional seasonal closings and area-based conservation measures under the auspices of regional fisheries management organisations (RFMOs). The establishment of areas with a wider scope of protective regime addressing multiple human activities has been discussed by a number of RFMOs. Organisations such as WWF and IUCN are actively campaigning for networks of MPAs in different highs seas areas.

State practice

So far, however, State practice is ambiguous. For example, the Pelagos Sanctuary for Mediterranean Marine Mammals, recognised as a SPAMI under the Barcelona Convention (see Section VII.2), covers high seas waters, but this is only the case because most Mediterranean States have not (or have only partly) declared a 200 nautical mile EEZ. Although the Southern Ocean was declared a whale sanctuary in 1994, some countries, Japan in particular, have continued fishing there for alleged scientific purposes. A Special Area under MARPOL has been established and various Antarctic Specially Protected Areas have been established in the Southern Ocean below 60 degrees. However, since some States have territorial claims to the Antarctic views differ as to whether the area actually lies beyond the limits of national jurisdiction.

Changing customary law?

There is limited evidence to suggest that customary international law would allow for the establishment of MPAs on the high seas. To date, conservation measures related to the high seas have been undertaken in connection with existing treaty regimes. Thus, State practice only appears to confirm the principle that the conservation of the marine environment on the high seas should be the collaborative effort of all States concerned.

Under customary international law the different lawful uses of the high seas such as navigation, fishing and the conservation of natural resources must be balanced not only against one another other but also against the interests of the international community. In practice, stronger States are often able to insist upon the acceptance of their own uses of the high seas notwithstanding that such uses may not strike the right balance in the views of States with less influence. There appears to be sufficient evidence in international legal and policy instruments to conclude that the balance is shifting towards environmental protection. The scope and permanency of this shift will be determined by the practice of States in the years to come.

3. Next steps

Approaches for improved protection of the high seas

Arguments supporting the creation of MPAs on the high seas can be developed on different bases. Through international treaty and customary law the traditional high seas freedoms have gradually been restricted to encompass the notion of common international interests. There are no agreed means for establishing MPAs in areas beyond national juristiction because different activities are addressed by different legal frameworks and new or emerging activities are not yet subject to detailed regulation. High seas MPAs would need to incorporate a wide range of legitimate ocean uses and take account of varying rights and obligations. Therefore, even should a means for establishing high seas MPAs be agreed, there would continue to be problems of general application and compliance jeopardising their effectiveness and potential success.

In order to develop a more coherent framework that addresses some of these concerns, a number of approaches and ideas are currently being reviewed at the international level. These approaches may be broadly summarised into three different trends: 1) nationalising conservation efforts; 2) strengthening current structures; and 3) expanding international frameworks. A brief overview of each of these three trends follows.

"Nationalising" conservation efforts

The first priority for Coastal States to date has been the protection of living resources and biodiversity within their own national jurisdiction. The lack of similar efforts on the high seas has been attributed to a lack of competencies and interpreted as evidence that the concept of a global commons is incapable of ensuring adequate environmental protection. This trend advocates the extension of Coastal State responsibilities beyond the current limits of jurisdiction into the high seas.

Strengthening current structures

Pending the development of international frameworks for environmental protection on the high seas, existing regional or activity focused protection regimes could be strengthened through global participation. By joining and implementing existing initiatives States could ensure that their vessels and nationals comply with the rules related to MPAs wherever these are located. The robustness of area-based measures could be further improved through linkages amongst different treaty regimes. The importation of species taken in an MPA established by an RFMO, for example, could be prohibited under CITES.

Expanding international frameworks

The establishment of a globally recognised system of MPAs is crucial for effective marine environmental protection of the oceans. However, the current range of permissible regimes, coupled with issues around compliance, enforcement, and ultimately, State sovereignty issues, render such a system unworkable. Instead, a new global agreement could be developed that specifically deals with environmental protection on the high seas. Such an agreement could bridge the gap between UNCLOS, regional fisheries agreements and environmental treaties. To allow for the establishment of a

comprehensive protection regime reflecting the ecosystem approach such an agreement should be able to cover all existing and potential human activities on or affecting the high seas.

An expansion or strengthening of the international legal framework could be further supported through the collaboration of international organisations with competencies or particular interests in ocean areas beyond national jurisdiction. For example, institutional linkages could be forged between RFMOs, the IMO and the ISA. The current multitude of existing programmes and initiatives risks fragmenting efforts to protect the marine environment. Despite the existence of a sophisticated network of consultations and instruments at different levels, the marine environment is deteriorating, and whilst the international community has acknowledged that greater coherence is required, not much action has yet been taken.

X. Ongoing Policy Processes

Several international organisations have given rise to processes that are currently playing a role in developing adequate ocean management strategies. These processes provide fora for discussion, allow for the review of existing mechanisms, help to identify gaps and oversee the launch of new initiatives. This section provides a brief overview of the main global processes involved in shaping developments related to the establishment of marine protected areas on the highs.

1. Convention on Biological Diversity - Conference of the Parties

Following a change in the rules of procedure in 2000, the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) is now held every two years, with the possibility of summoning extraordinary meetings. The COP's mandate is to review the implementation of the CBD and undertake any additional action that may be required for the achievement of its objectives. The COP can review new scientific data, consider and adopt further legal instruments, establish subsidiary bodies and cooperate with the executive bodies of other international treaties dealing with matters covered by the CBD.

In 1995, the second meeting of the COP identified the conservation and sustainable use of marine biodiversity as an early priority for action and adopted a programme of work on protected areas (see above Jakarta Mandate). The seventh meeting of the COP, held in Kuala Lumpur in February 2004, adopted the target to develop a global network of marine and coastal protected areas by the year 2012 and established an Ad Hoc Open-ended Working Group on protected areas. The first meeting of the Working Group took place in June 2005 and the second meeting will be held in Rome, Italy, from 11 to 15 February 2008.

At the eighth meeting of the CBD COP, held in Curtiba, Brazil in March 2006, a number of decisions were made and initiatives taken around MPAs and deep seabed resources. The COP recognised the CBD's key role in supporting the work of the UN General Assembly with regard to MPAs beyond national jurisdiction, by providing scientific and technical information and advice relating to marine biological diversity, the application of the ecosystem approach and the precautionary approach, and by delivering the 2010 target. The COP listed MPAs as one of a range of options for protecting deep seabed genetic resources beyond national jurisdiction.

At the high-level Ministerial meeting connected with COP-8, the President of Palau issued the Micronesian Challenge. Signatories to the Challenge have agreed to protect at least 30 per cent of their marine territory by 2020.

2. Meeting of States Parties to UNCLOS

The meetings of States Parties to UNCLOS are generally limited to budgetary and administrative matters. States Parties to UNCLOS do not have the express mandate to review UNCLOS, its implementation or new uses of the sea. The UN Secretary-General is required to convene meetings as necessary, for example, for the election of the members of the International Tribunal for the Law of the Sea. At present States Parties to UNCLOS meet annually at the seat of the United Nations in New York. Non-governmental organizations may participate as observers. The United Nations Secretariat through their Division for Ocean Affairs and the Law of the Sea operates as Secretariat to the Meetings of States Parties.

3. UN Informal Consultative Process on Oceans and the Law of the Sea

Since 2000 the General Assembly of the United Nations has held an open-ended informal consultative process on ocean affairs and the law of the sea to assist its annual review of the subject area (following the Secretary-General's annual report). The consultative process aims to study developments in ocean affairs consistent with UNCLOS and Agenda 21, identifies issues to be considered by the General Assembly and facilitates intergovernmental and interagency cooperation. The meetings are open to intergovernmental organizations with competence in ocean affairs. They usually take place for about a week during the summer.

In 2004 the General Assembly also established an Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. The main objective of the Working Group is to indicate possible approaches to promote international cooperation for the conservation and sustainable use of marine biodiversity. The first meeting was convened in New York from 13 to 17 February 2006. Observers included IGOs, UN agencies and NGOs whose representatives stressed the need for the development of a new ocean governance regime for the high seas.

4. Informal Consultations of Parties to the UN Fish Stocks Agreement

The Parties to the UN Fish Stocks Agreement have held informal consultation meetings at UN headquarters in New York every year since 2002 to consider the regional and global implementation of the agreement, make recommendations to the General Assembly on the scope and content of the annual report of the Secretary-General relating to the Agreement and prepare for the Review Conference.[52] NGOs such as Greenpeace and WWF attend the meetings as observers.

An international conference was held in New York from 22 to 26 May 2006 to review the effectiveness of the Fish Stocks Agreement. The Review Conference encouraged States to recognize that the general principles of the Agreement should also apply to discrete fish stocks in the high seas. It also recommended that States individually and collectively through regional fisheries management organizations develop management tools, including closed areas, marine protected areas and marine reserves and criteria for their implementation to effectively conserve and manage straddling fish stocks, highly migratory fish stocks and high seas discrete stocks and protect habitats, marine biodiversity and vulnerable ecosystems. The Conference further agreed to continue the informal consultations of States Parties and keep the Agreement under review through the resumption of the Review Conference at a date not later than 2011.

5. Meetings of the International Seabed Authority

The principal organs of the International Seabed Authority (ISA) established under UNCLOS to control the exploitation of seabed resources beyond natural jurisdiction are the Assembly, the 36 State Council and the Secretariat. As the executive organ, the Council is largely responsible for the implementation of the Authority's mandate and the formation of policies. The Assembly in which all States Parties to UNCLOS have one representative is the forum that formally adopts most major decisions. It meets

52 http://www.un.org/Depts/los/convention_overview_fish_stocks.html

annually at the seat of the organisation in Jamaica. The Secretariat has responsibility for the ISA's administration and its relations with other organisations.

With the approval of the Council, the Secretariat makes suitable arrangements for consultation and cooperation with NGOs recognized by the Economic and Social Council of the United Nations. The Secretariat may also distribute to States Parties written reports submitted by NGOs on subjects in which they have special competence.

6. Conference of the Parties to CITES

The Parties to CITES meet every two to three years to review the implementation of the Convention. The Conference of the Parties (COP) meetings last for about two weeks and are usually hosted by one of the Member States. They provide the occasion for the Parties to review progress in the conservation of species, amend the Appendices and recommend measures to improve the effectiveness of the Convention. Any non-governmental organizations involved in the conservation or management of wild fauna and flora which has informed the Secretariat of its desire to attend the meeting may participate (without vote) as an observer unless at least one-third of the Parties object. The CITES Secretariat is housed in the United Nations Environment Programme (UNEP) and is located in Geneva, Switzerland.

7. Conference of the Parties to CMS

The decision-making organ of the Convention on the Conservation of Migratory Species and Wild Animals (CMS) is the Conference of the Parties (COP). The COP can make recommendations to the Parties on improving the conservation status of migratory species and the effectiveness of the Convention in general as well as on any additional measures that need to be taken to implement its objectives. A Standing Committee provides policy and administrative guidance between the regular meetings of the COP. A Secretariat under the auspices of the United Nations Environment Programme (UNEP) provides administrative support. The Conference of the Parties meets at intervals of not more than three years. The next CMS Conference of the Parties (COP9) will take place in 2008. NGOs may participate as observers subject to the same conditions provided for under CITES.

Several regional agreements and memoranda of understanding have been negotiated under the auspices of the CMS to promote cooperation in protecting individual maritime species such as cetaceans, seals in the Wadden Sea, migratory water birds, albatrosses, petrels, and marine turtles. These conservation regimes have their own organisational structures with meetings of Parties which are also open to observers from NGOs.[53]

8. International Whaling Commission

The International Whaling Commission was established by the 1946 Convention for the Regulation of Whaling. Member States are represented by one commissioner. Each year, usually in May or June, the Annual Meeting of the Commission is held, either by invitation in a member country or in the UK where the organisation's Secretariat is based. Any international organisation with offices in at least four countries may be represented at meetings of the Commission by an observer. The main duty of the International Whaling Commission is to review and revise the measures laid down in the Schedule to the Convention governing the conduct of whaling throughout the world.

53 See http://www.cms.int/about/intro.htm for a listing of agreements and MOUs.

Annex 1 – Regional agreements

Regional seas agreement

1959 Antarctic Treaty
1974 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), revised 1992
1976 Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) revised in June 1995 as the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (not yet in force)
1978 Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution (Kuwait Convention)
1980 Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region (Abidjan Convention)
1981 Convention for the Protection of the Marine Environment and Coastal Area of the South-East Pacific (Lima Convention)
1982 Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment (Jeddah Convention)
1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention)
1985 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (Nairobi Convention)
1986 Convention for the Protection of Natural Resources and Environment of the South Pacific Region (Noumea Convention)
1992 Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention)
1992 Convention for the Protection of the Marine Environment of the North-East Atlantic – Oslo and Paris conventions; adopted 1974, revised and combined into OSPAR Convention
2002 The Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific
2003 Framework Convention for the Protection of the Marine Environment of the Caspian Sea

Regional fisheries/marine resources management agreements

1948 Agreement for the Establishment of the Asia-Pacific Fishery Commission
1949 Agreement for the establishment of a General Fisheries Commission for the Mediterranean
1949 Convention for the establishment of an Inter-American Tropical Tuna Commission
1952 Agreement on the Organization of the Permanent Commission of the Conference on the Use and Conservation of the Marine Resources of the South Pacific
1966 International Convention for the Conservation of Atlantic Tuna
1967 Convention on Conduct of Fishing Operations in the North Atlantic
1973 Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and Belts
1979 Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries
1979 South Pacific Forum Fisheries Agency Convention
1980 Convention on the Conservation of Antarctic Marine Living Resources
1980 Convention on Future Multilateral Cooperation in the Northeast Atlantic Fisheries
1982 Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest
1982 Convention for the Conservation of Salmon in the North Atlantic Ocean
1982 Agreement Instituting the Latin American Organization for Fisheries Development
1984 Convention Concerning the Regional Development of Fisheries in the Gulf of Guinea

1985 Convention for the Establishment of a Sub-Regional Commission on Fisheries
1987 Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America
1991 Western Indian Ocean Tuna Organization Convention
1992 Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean
1992 Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region
1992 Arrangement for the Management of the Western Pacific Purse Seine Fishery (Palau Arrangement)
1993 Convention for the Conservation of Southern Bluefin Tuna
1993 Convention regarding the Determination of Conditions of Access to and Exploitation of Fisheries Resources off the Coasts of the Sub-Regional Fisheries Commission Member States
1993 Agreement for the Establishment of the Indian Ocean Tuna Commission
1994 Convention on the Conservation and Management of Pollock Resources Central Bering Sea
1999 Agreement for the Establishment of the Regional Commission for Fisheries
1999 Agreement concerning Certain Aspects of Cooperation in the Area of Fisheries
2000 Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean
2000 Agreement for the Establishment of the International Organization for the Development of Fisheries in Eastern and Central Europe
2001 Convention on the Conservation and Management of Fishery Resources in the South-East Atlantic Ocean
2001 South African Development Community Protocol on Fisheries
2002 Agreement establishing the Caribbean Regional Fisheries Mechanism
2003 Convention for the Strengthening of the Inter-American Tropical Tuna Commission established by the 1949 Convention between the United States of America and the Republic of Costa Rica

Annex 2 – Overview of high seas stakeholders

Stakeholders	Activities
Public entities	
International governmental organisations: Regional Fisheries Management Organizations, the International Maritime Organization and the International Seabed Authority	Cooperation with national authorities in formulating codes and regulations
Government authorities	Creation, monitoring and enforcement of rules related to high seas uses (e.g. fishing quotas or ban on bottom trawling), navigation of military vessels
Donors (international governmental organisations such as the World Bank or governments)	Provision of financial assistance to developing countries (e.g. capacity building on pollution prevention or ship registration)
Trade bodies	
International Association of Classification Societies	Definition of standards of safety for the entire maritime industry
International groups of protection and indemnity clubs	Coverage against third party liabilities in case of personal injuries, cargo damage, collision and oil pollution
Sea ports organisations (e.g. International Associations of Ports and Harbours)	Addressing environmental issues, such as the handling of hazardous and noxious substances carried by ocean vessels
Shipyards associations	Shipbuilding production
Seafarer and other Unions	Supporting activities in order to implement safety measures
Industries with a direct (potential) economic interest in the high seas	
Pharmaceutical industry	Research programmes on deep-sea genetic material
Recreational marine industry group	Cruise tourism
Fishing industry	Fish capture and aquaculture
Dredging industry	Dumping of nuclear waste or other solid waste
Ship-owners and maritime transport industry	Navigation
Seabed mining industry	Extractive activities related to e.g. polymetallic nodules, sulphides and cobalt-rich crusts
Oil & gas exploitation companies	Extractive activities for the purpose of energy development
Telecommunications industry	Implant of cables and pipelines
Science institutions	
Marine scientific research institutes	Meteorological and oceanographic observations, bioprospecting
Association of Universities in Marine Technology and Related Sciences	Marine vessels engineering studies
Marine Equipment Council	Development and supply of machinery and equipment to the marine value chain and stakeholders
Others	
Environmental Non- Governmental Organizations	Nature conservation, organising legal, economic and scientific projects related to the high seas (e.g. combating illegal and unreported fishing)

Further reading

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