



VECTORS of Change in Oceans and Seas Marine Life, Impact on Economic Sectors

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VECTORS Overview

'VECTORS seeks to develop integrated, multidisciplinary research-based understanding that will contribute the information and knowledge required for addressing forthcoming requirements, policies and regulations across multiple sectors.'

Marine life makes a substantial contribution to the economy and society of Europe. In reflection of this VECTORS is a substantial integrated EU funded project of 38 partner institutes and a budget of €16.33 million. It aims to elucidate the drivers, pressures and VECTORS that cause change in marine life, the mechanisms by which they do so, the impacts that they have on ecosystem structures and functioning, and on the economics of associated marine sectors and society. VECTORS will particularly focus on causes and consequences of invasive alien species, outbreak forming species, and changes in fish distribution and productivity. New and existing knowledge and insight will be synthesized and integrated to project changes in marine life, ecosystems and economies under future scenarios for adaptation and mitigation in the light of new technologies, fishing strategies and policy needs. VECTORS will evaluate current forms and mechanisms of marine governance in relation to the VECTORS of change. Based on its findings, VECTORS will provide solutions and tools for relevant stakeholders and policymakers, to be available for use during the lifetime of the project.

The project will address a complex array of interests comprising areas of concern for marine life, biodiversity, sectoral interests, regional seas, and academic disciplines and especially the interests of stakeholders. VECTORS will ensure that the links and interactions between all these areas of interest are explored, explained, modelled and communicated effectively to the relevant stakeholders. The VECTORS consortium is extremely experienced and genuinely multidisciplinary. It includes a mixture of natural scientists with knowledge of socio-economic aspects, and social scientists (environmental economists, policy and governance analysts and environmental law specialists) with interests in natural system functioning. VECTORS is therefore fully equipped to deliver the integrated interdisciplinary research required to achieve its objectives with maximal impact in the arenas of science, policy, management and society.

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EXECUTIVE SUMMARY

This report forms deliverable 6.1 of the VECTORS project. Part A comprises a comprehensive and technical review of the current International and European law related to three of the key VECTORS drivers; energy (renewable and non-renewable), fisheries and alien species and the implementation of these Conventions, Directives, Policy and Strategy documents into the national framework of the VECTORS community to protect the marine environment. The synthesis also concentrates on the three regional sea areas including the North Sea, the Baltic and the Western Mediterranean.

Chapter A1 provides a matrix of legal instruments and policy documents available to scientists/policy experts working on projects in the marine environment, which are relevant to the regional sea areas and also how they impact on the three key drivers. The table summarises which instruments and policies impact upon the activity. These are then linked to the reviews of the various instruments which detail the key parts of the relevant law in Chapters A2 to A4.

Chapter A2 reviews the International law including the fundamental marine law of UNCLOS and the major international environmental instruments resulting from the 1992 Rio Earth Summit (UN Conference on Environment & Development (UNCED)) including the Convention on Biological Diversity and the United Nations Framework Convention on Climate Control. It reviews specific Conventions agreed to control pollution from ships (Convention for the Control and Management of Ships Ballast Water & Sediments (BWM) and MARPOL) and the dumping of other wastes (London Convention and Protocol). The Environmental Impact Assessment in a Transboundary Context the (Espoo Convention) is reviewed together with the suite of Conventions, Strategies and Agreements designed to protect wildlife and habitats (Bern Convention, Ramsar, ASCOBANS, CITES and the European Strategy on Invasive Alien Species). Finally the Regional Seas Conventions of OSPAR, HELCOM and Barcelona are reviewed.

Chapter A3 details the relevant European legislation implemented to protect habitats and species (Habitats Directive, Wild Birds Directive, Common Fisheries Policy) and the health, quality and protection of marine and coastal waters through the Water Framework and Marine Strategy Framework Directives. Overall strategy documents to protect the marine environment and biodiversity are reviewed including the Integrated European Maritime Policy, the EU Biodiversity Strategy and the ICZM Protocol. Finally the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) Directives are summarised.

Chapter A4 shows the national legislation enacting the European policy and law within each of the VECTORS countries and the organisation responsible for its implementation.

Part B documents (on the basis of semi-structured interviews) the views of stakeholders and policy makers on a wide range of marine governance issues in a number of regional sea case studies across Europe. Chapter B1 provides a general introduction to the overall goals of the study, a list of the case study locations, and a summary of the development and implementation of the semi-structured questionnaire. The use of such qualitative research methods has enabled the researchers to provide an in depth analysis of stakeholders and policy makers' views on European marine governance issues.

Chapter B2 presents the case study evidence; there are four detailed case studies presented (Dogger Bank, Cataluña, Puck Bay, and Isola di Mal di Ventre) in addition to a more general assessment of the main barriers to and drivers for successful European marine resource management, which was undertaken at the EU-level. A case study approach was adopted as it allows for both an in depth analysis of stakeholder requirements and a better understanding of the implementation of sub-national, national, European and regional marine governance in practice. The case studies draw on new, unpublished empirical findings which are derived from a total of 69 semi-structured interviews with core stakeholders and policy makers but also analysis a wide range of primary documents in addition to assessing the relevant secondary literature.

Although the case studies focused on four different locations, in three different regional seas, there were several common themes which emerged as well as the general assessment of the main barriers to and drivers for successful European marine resource management. Chapter B3 presents a brief conclusion which includes a number of the main themes and common issues. For example, conflicts between different stakeholders about the use of certain parts of the marine environment, and possible conflict resolution strategies, constitute one of the important common themes identified by this research. In addition, conflicts were particularly intense between (would be) users and those stakeholders who would like to ensure as high a level of protection as possible for the marine environment. The EU-level study concluded that cooperation, dialogue and more integrated policies (ecosystem approach) are important elements for the better management and governance of the EU's regional seas.

By choosing four contrasting case studies, it has been possible to provide an in depth analysis in each of the three VECTORS regional sea areas, and by using a bespoke semi-structured questionnaire all questions of relevance to all of the VECTORS key drivers have been covered. As such the new empirical findings will be of interest to all work packages within the wider VECTORS project.

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**PART A - UNDERSTANDING POLICY AND LEGAL FRAMEWORKS AT THE INTERNATIONAL,
EUROPEAN AND NATIONAL LEVELS IN RELATION TO VECTORS KEY DRIVERS**

A1. INTRODUCTION

The European Union (EU) is a pre-eminent player in the field of sustainable regional development. In recent decades, it has adopted more than 200 directives, regulations and many other forms of legislation and amendments in the area of environmental policy that have direct repercussions for regional development. Many environmental directives, such as the Water Framework Directive (WFD), the Birds and Habitats Directives, the Flood Risk Management Directive and several Environmental Impact Assessment Directives have been formulated to include environmental issues in planning and decision making processes¹.

A1.1 Types of Law and Policy

International Law

International law is a set of rules that regulates the conduct of States. Legally binding forms of international law comprise treaties (conventions), custom, general principles and, as subsidiary means of determining the law, decisions of international tribunals and writing of high qualified publicists. These sources are increasingly supplemented by non-binding guidelines, codes and practices which can influence the conduct of States. Treaties are written agreements, binding on States parties when they enter into force. Individual treaties specify when they enter into force, and normally once a minimum number of States have ratified the agreement. A significant body of marine law is to be found in treaty law. Customary law is a body of law derived from the practice of States that is considered to be legally required or permitted. Practice is generally taken to be official government conduct, as reflected in public statements, legislation, judicial decisions, and diplomatic measures. Practice must be general and consistent. Customary law is generally binding on all States. General principles are principles of law common to most legal systems, such as estoppel, or rules of general application, such as freedom of the high seas.

Some rules of international law purport to regulate the conduct of individuals and other legal persons, but normally such rules have to be transposed into domestic law for them to take effect. However, some States make international law automatically part of domestic law, whilst others only recognise it as part of domestic law once it has been incorporated into domestic law, through, for example, legislation.

Policy

Policy can be defined as a set of decisions which are oriented towards a long-term goal or to a particular problem. A policy does not generally denote what is actually done to achieve or address such goals/problems. Policy can include proposals, initiatives and legislation which are intended to achieve EC aims in specific fields of activity. Such decisions by governments are often embodied in legislation and usually apply to a Member State as a whole rather than to one part of it.

Directives

Directives are EU decisions which are binding to Member States. Each Member State is required to achieve a particular result although the EC does not dictate the means of achieving that result. As such, Directives are well-suited to environmental measures, since the decisions on how to implement them are left to the individual Member States, which will each have different methods for setting environmental laws through enabling legislation². Directives can be adopted by means of a variety of

¹ Beunen, R., van der Knaap, W.G.M. & Biesbroek, G.R. 2009. Implementation and Integration of EU Environmental Directives. Experiences from The Netherlands. *Environmental Policy and Governance*, 19, 57–69

² Bell, S. & McGillivray, D., 2000. *Environmental Law*, 5th Edition, Blackstone Press, London, 726pp

legislative procedures depending on their subject matter. Most European Commission (EC) environmental legislation is in the form of Directives.

Statutory Instruments

Statutory Instruments, also referred to as secondary, delegated or subordinate legislation, are the most important form of delegated legislation. They allow the provisions of an Act of Parliament to be subsequently brought into force or altered without Parliament having to pass a new Act. They generally deal with matters which are too detailed to be included in an Act of Parliament and can easily be amended or repealed thus enabling governments to respond quickly to changing circumstances. Statutory instruments can be used to amend, update or enforce existing primary legislation.

Regulations

Regulations are legislative acts of general application, and as long as they are sufficiently precise they are normally directly effective. They are the most rigorous form of legislation as they provide instructions which are applicable throughout the European Community and are directly binding upon the Member States. Regulations become law in all Member States the moment they come into force, without the requirement for any implementing measure, and automatically override conflicting domestic provisions. National governments do not have to take action themselves to implement EU regulations.

A1.2 Objective

To synthesise the regulatory instruments at the International, European and national level for each of the three regional sea areas, focusing on the North Sea, the Baltic and the Western Mediterranean addressed in VECTORS Work Package 4. This report highlights where these instruments regulate or impact on three of the key VECTORS drivers; energy, fisheries and alien species.

A1.3 Methodology

All policy and legal frameworks at the international and European level are reviewed against the following three thematic topics, central to the VECTORS project, and one driver of change, energy, selected for its comparative novelty and its importance in terms of marine spatial planning in the future.

- Alien Species: There are two working definitions of alien species: 1) Invasive alien species³ which are a subset of established alien (non-indigenous species, non-native, exotic) species, which have spread, are spreading or have demonstrated their potential to spread elsewhere and have an adverse effect on one or more of the following: biological diversity, ecosystem functioning, socio-economic values or human health in invaded regions. 2) Outbreak forming species (OFS) are indigenous species or invasive alien species (IAS) undergoing pulse-like, short-term (days to few months) exponential population growth during which they have an adverse effect on one or more of the following: biological diversity, ecosystem functioning, socio-economic values and human health. With this agreement, IAS are limited to non-indigenous species (including cryptogenic species) and OFS include both native and non-indigenous species. Invasive alien species and outbreaking forming species are two separate themes in VECTORS but as much of the legislation is relevant to both they have been grouped together, under the heading of Alien Species, in this report.

At the international level, control and prevention of invasive alien species depends upon a complex intersection of environmental, trade and transport agreements. To date, these

³ Olenin, S., Elliott, M., Bysveen, I., Culverhouse, P., Daunys, D., Dubelaar, G.B.J., Gollasch, S., Gouletquer, P., Jelmert, A., Kantor, Y., Mézeth, K.B., Minchin, D., Occhipinti Ambrogi, A., Olenina, I. & Vandekerckhove, J. 2011. Recommendations on methods for the detection and control of biological pollution in marine coastal waters. *Marine Pollution Bulletin*. doi:10.1016/j.marpolbul.2011.08.011

differing areas of law have not been well coordinated and generally have developed piecemeal. Additionally, there have been concerns that differing requirements could lead to conflicts, most particularly between trade and environmental agreements⁴.

- Energy (renewables and non-renewable): Renewable sources include wind, solar, hydropower, and ocean energy including tidal and wave energy. Non-renewable sources include fossil fuels such as coal, crude oil, natural gas, peat, “unconventional” sources of oil and gas such as oil shale and tar sands, and metallic fuels for nuclear power such as uranium, plutonium and thorium.
- Fisheries: European fisheries are extremely diverse ranging from highly industrialised pelagic fisheries (mostly in the North Sea) to small-scale artisanal fisheries throughout much of the Mediterranean and Black Seas⁵. This report considers commercial fisheries as a ‘driver’ or ‘vector’ of environmental change and therefore all legislation and policy reviewed is related to the taking and protection of fish stocks.

The international and European policy and legal instruments reviewed here were selected by assessing their importance in relation to the above VECTORS of change. Table A1 provides a matrix of legal instruments and policy documents available to scientists/policy experts working on projects in the marine environment, which are relevant to the regional sea areas and also how they impact on the drivers and activity. These then relate to the reviews of the various instruments which detail the key parts of the relevant law in Chapters A2 to A4.

For each policy area the following information is presented:

1. A brief synopsis
2. Legal status (Contracting parties in relation to International)
3. Key Provisions
4. VECTORS Drivers (highlighting where alien species, energy (renewable and non-renewables) and fisheries are given specific mention in the text or impact on the ethos of the Convention/Directive)
5. Transboundary or domestic effect
6. Geographic scope
7. Institutional organisations
8. Subsidiary instruments

Each legal instrument is reviewed from its source text e.g. convention, directive or policy, using where appropriate the explanatory notes issued with the text.

Finally, VECTORS partners were asked to state how the policy and law described in Chapters A2 and A3 had been enacted in their national legislation and/or through policy documents. This is presented in a set proforma with the main VECTORS topics in the first column, followed by the European regulatory framework measure in the second, with the national legislation in the third. The final column indicates the main government body or organisation with responsibility for the implementation of the legislation.

⁴ Burgiel, S., Foote, G., Orellana, M., & Perrault, A. 2006. Invasive Alien Species and Trade: Integrating Prevention Measures and International Trade Rules

⁵ Pinnegar, J. 2012. Chapter 1.3: Fisheries. In: D1.1 Review of regional seas vectors and drivers. VECTORS of Change in Oceans and Seas Marine Life, Impact on Economic Sectors

Table A1 Policy and Legal frameworks reviewed and their links to the regional seas and Vectors of Change

POLICY & LEGAL FRAMEWORKS (WP6)	REGIONAL SEAS (WP4)			VECTORS OF CHANGE ADDRESSED BY EACH POLICY/INSTRUMENT						
	Western Mediterranean	North Sea	Baltic Sea	Alien species	Resource exploitation (fisheries)	Pollution and discharges	Maritime transport	Energy demands and new technologies	Introduction of new ballast water technologies and practices	Interactions between multiple users and sectors
International										
United Nations Convention on the Law of the Sea (UNCLOS)	X	X	X	X	X	X	X	X	X	X
The Convention on Biological Diversity (1992)	X	X	X	X	X	X	X	X	X	X
Climate Change Convention		X						X		X
IMO Ballast Water Convention (2004)	X	X	X	X		X	X		X	
International Convention for the Prevention of Pollution from Ships (MARPOL)	X	X	X		X			X		
London Dumping Convention and Protocol re carbon capture and storage	X	X	X		X	X	X			
Espos Convention on Environmental Impact Assessment in Transboundary Contexts 1991 (1991) 30 ILM 800 (Also Kiev protocol)	X	X	X	X	X	X	X	X		X
Bern Convention	X	X	X	X	X	X		X		X
European Strategy on Invasive Alien Species	X	X	X	X	X					
The Ramsar Convention	X	X	X	X	X			X		
Agreement on the Conservation of Small Cetaceans of the Baltic, NE Atlantic, Irish and North Seas		X			X			X		X
Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES)	X	X	X	X						
Oslo and Paris Convention (OSPAR)		X		X	X	X	X	X		X
Convention for the Protection of the Marine Environment of the Baltic Sea (1992)			X	X	X	X	X	X		X
Barcelona Convention and protocol	X			X	X	X	X	X		X
European										
Integrated European Maritime Policy (IMP)	X	X	X		X		X	X		X
Marine Strategy Framework Directive (MSFD)	X	X	X	X	X	X	X	X		X
Habitats Directive (SAC)	X	X	X	X	X	X		X		X
Wild Birds Directive (SPA)	X	X	X	X		X		X		X
EU Biodiversity Strategy	X	X	X	X	X					X
ICZM Protocol to the Barcelona Convention	X	X	X		X			X		X
Water Framework Directive (WFD)	X	X	X		X	X		X		X
Common Fisheries Policy (CFP)	X	X	X		X					
Environmental Impact Assessment Directive (EIA)	X	X	X			X	X	X		X
Strategic Environmental Assessment (SEA) Directive	X	X	X		X	X	X	X		X

A2. INTERNATIONAL LAW

A2.1 United Nations Convention on the Law of the Sea (UNCLOS)

Synopsis

The UN Convention on the Law of the Sea (UNCLOS) is the most significant international legal instrument in relation to marine environmental regulation and has been described as a constitution of the oceans. It comprises 320 Articles and 9 annexes and is supplemented by two treaties: the 1994 Implementation Agreement (concerning deep seabed mining) and the Fish Stocks Agreement 1995. It provides a framework for the regulation of all ocean spaces and activities, although many of its general provisions on protection of the marine environment and natural resources are developed through regional and local instruments. The provisions of UNCLOS are directed at States, so must be transposed into domestic law before they can become effective against individuals. UNCLOS provides the starting point for the regulation of fisheries, alien invasive species and offshore energy developments. Its general rules have been developed through more specific treaty regimes, as indicated below.

Legal Status

It was opened for signature in 1982 and entered into force in 1994. To date 161 states and the European Union have become party to UNCLOS. As a treaty, UNCLOS is binding on States parties. However, most of its provisions represent customary international law and such provisions are binding upon all States.

Key Provisions

The UNCLOS is a substantial Convention and apart from providing an overview of the general provisions, this review will only discuss in detail those parts relating to the three key drivers chosen: fisheries, energy (renewables and non-renewable) and alien species / ballast water.

Part II (Articles 2-33) of UNCLOS deals with the territorial sea, a band of water extending 12nm from the coastline (Article 3). Apart from navigational guarantees for third state vessels under the right of innocent passage, the coastal State has full authority to regulate all other activities in the territorial sea.

Part III (Articles 34-45) addresses navigation rights through straits used for international navigation.

Part IV dealing with archipelagic states (Articles 46-54), although no waters within the remit of VECTORS fall within this regime.

Part V (Articles 55-75) gives details relating to the Exclusive Economic Zone (EEZ). Article 56 establishes that the coastal States have sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil. This Article also details the other activities for the economic exploitation and exploration of the zone by the coastal state, such as the production of energy from the water, currents and winds; the establishment and use of artificial islands, installations and structures; marine scientific research and the protection and preservation of the marine environment. Article 57 states the EEZ shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured (therefore from 12 to 200 nautical miles).

Part VI (Articles 76-85) regulates the Continental Shelf. Article 76 defines it as the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance. Article 77 provides the jurisdiction of which the coastal state may exercise its sovereign rights over the continental shelf for the purpose of exploring it

and exploiting its natural resources. The natural resources referred to in this Part consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

Part VII (Articles 86-120) regulates the High Seas. The high seas are open to all states, whether coastal or land-locked. All states enjoy the freedom of the high seas subject to the conditions laid down by UNCLOS and by other rules of international law. This includes the (a) freedom of navigation; (b) freedom of overflight; (c) freedom to lay submarine cables and pipelines, subject to Part VI; (d) freedom to construct artificial islands and other installations permitted under international law, subject to Part VI; (e) freedom of fishing, subject to the conditions laid down in section 2, and (f) freedom of scientific research, subject to Parts VI and XIII. These freedoms shall be exercised with due regard for the interests of other States in their exercise of the freedom of the high seas, and also with due regard for the rights under this Convention with respect to activities in the area.

As VECTORS covers the regional seas of the Mediterranean and Baltic, Part IX of the UNCLOS on enclosed or semi-enclosed seas is relevant. For the purposes of the Convention, 'enclosed or semi-enclosed sea' means a gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States (Article 122). Article 123 states that States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention. This should include the coordination of management, conservation, exploitation and exploration of the living resources and the protection and preservation of the marine environment. States should coordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area.

Part XII of the Convention (Articles 192-237) addresses Protection and Preservation of the Marine Environment. Article 194 requests that coastal states shall either individually or jointly take measures consistent with the UNCLOS to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonise their policies in this connection. The measures should deal with all sources of pollution to the marine environment. The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life. Article 197 requires cooperation on a global or regional basis and mandates setting appropriate global and regional rules and standards for the protection and preservation of the marine environment. Articles 207 to 212 give basic obligations to prevent, reduce and control pollution from land-based sources; pollution from sea-bed activities subject to national jurisdiction; pollution from activities in the Area; pollution by dumping; pollution from vessels, and pollution from or through the atmosphere.

Part XIII of UNCLOS (Articles 238–265) gives the provisions related to marine scientific research of the oceans. All States, irrespective of their geographical location, and competent international organisations have the right to conduct marine scientific research and should promote and facilitate its development (Article 238). Research in territorial seas may be conducted only when the consent of the coastal State is affirmed by UNCLOS (Article 245). The most important provisions relating to research in the EEZ and on the continental shelf are contained in Articles 246-255 which are again subject to the consent of the coastal State. There is a distinction between 'pure' research (peaceful research for the benefit of mankind) and 'applied' research (research related to resource exploitation). Coastal States should grant consent for the former.

VECTORS Drivers

Energy (renewable and non-renewable)

Of particular relevance to renewable energy are Part V (Articles 55 to 75) on the Exclusive Economic Zone (EEZ) and Part VI on the Continental Shelf (Articles 76-85). Article 56 states that the coastal state has sovereign rights (in lay terms exclusive regulatory authority) with regard to the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds. Article 60 states the jurisdiction of coastal states in the EEZ with respect to the rights of establishing and the use of artificial islands, installations and structures. This includes the construction of windfarms. This Article also provides for the establishment of safety zones around these and should not exceed a distance of 500m. Articles 58 and 79 permit all States to lay submarine cables and pipelines on the seabed, subject to coastal State approval of routes and reasonable measures taken to exploit the resources of the continental shelf.

Fisheries

The United Nations Convention on the Law of the Sea (UNCLOS) establishes the global framework for the governance of fisheries. Part V (Articles 55 to 75) distinguishes between fisheries within the 200 nautical mile exclusive economic zone (EEZ), which are managed by the coastal State, and fisheries on the high seas outside the EEZ (Part VII Articles 86-120). It also contains special provisions for highly migratory stocks (that move between areas of EEZ and high seas, such as tuna) (Article 64), straddling stocks (that straddle both high seas and EEZ) (Article 63), anadromous stocks (that migrate between the sea and freshwater) (Article 66) and catadromous species (Article 67).

Coastal nations have exclusive authority to regulate fish stocks in their territorial sea and EEZ. The coastal state is required to conserve and manage fish stocks. This requires the coastal State to determine the maximum allowable catch for a given species, and the coastal States should adopt conservation and management measures to promote the optimum utilisation of fishery resources in their EEZs (Article 61). With respect to exploited stocks or stocks of associated species occurring both within the EEZ and in the area beyond and adjacent to the zone, UNCLOS calls upon the coastal States and States fishing in the high seas to seek agreement upon the measures necessary for the conservation of those stocks in the adjacent high seas area (Article 62). Some species are considered 'highly migratory' (listed in Annex I) and therefore nations engaged in fishing for these highly migratory species are required to cooperate with one another to maintain appropriate levels of these stock and to make sure that they are not overfished (Article 64). With respect to the high seas, UNCLOS recognises the free access and the freedom of fishing to all States subject to their treaty obligations. The Convention calls upon all States and particularly upon States fishing to cooperate in the conservation and management of fishery resources occurring in the high seas (Article 87)⁶. It should be noted that UNCLOS does not advance the ecosystem based approach which is a concept developed post UNCLOS.

Regional Fisheries Management Organisations (RFMOs) are international organisations established under agreements by States with fishing interests in a specified geographic area for the management of the high seas. RFMOs are expected to establish conservation and management measures for fish stocks within their geographical remit. The provisions of UNCLOS concerning the role of regional and subregional fisheries organisations are reiterated, emphasised and expanded by the UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks.

⁶ Maguire, J-J., Sissenwine, M., Csirke, J., Grainger, R., & Garcia, S. 2006. The state of world highly migratory, straddling and other high seas fishery resources and associated species. FAO Fisheries Technical Paper. No. 495. Rome: FAO. 2006. 84p.

Invasive Alien Species through Ballast Water

Of particular relevance to ballast water and alien species is Part XII of the Convention (Articles 192-237) addressing Protection and Preservation of the Marine Environment. Article 192 imposes a broad, general obligation on states to 'protect and preserve the marine environment'. Article 194(1) directs states to take measures 'necessary to prevent, reduce and control pollution of the marine environment from any source,' which would include pollution discharge from ship ballast tanks. Flag states would be required to prevent the introduction of aquatic organisms from ballast water to the extent that their introduction into a given marine environment would cause 'deleterious effects' to marine ecosystems or habitat. Specifically, Article 196(1) deals with the use of technologies or introduction of alien or new species. The Article expresses that States shall take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto. Another significant provision is contained in Article 211(2), which requires flag states to adopt laws and regulations to prevent, reduce and control vessel-source marine pollution that have 'at least ... the same effect as that of generally accepted international rules and standards established through the competent international organisation or general diplomatic conference.'

Transboundary or Domestic

Both.

Geographical Scope

All ocean areas.

Institutional Organisations

There is no single body responsible for coordinating the implementation of the UNCLOS as this is left to individual States. However, UNCLOS established new institutions to deal with specific issues: the Commission on the Limits of the Continental Shelf; the International Seabed Authority who is responsible for the governance of the Area, and the International Tribunal for the Law of the Sea. UNCLOS also relies on existing bodies to help develop rules in specific areas. Thus, the International Maritime Organisation is principally responsible for shipping matters and the Food and Agriculture Organisation has contributed the development of fisheries regulation.

Subsidiary Instruments

The UNCLOS is supported by a number of treaties and instruments including Regional Sea conventions, protocols and subsequent action plans, marine pollution and other specific treaties, as well as multilateral fisheries agreements⁷. Examples of those with specific relevance to VECTORS, and which are described further within this chapter, are: Convention for the Protection of the Marine Environment in the North-East Atlantic of 1992 – the OSPAR Convention (OSPAR), Convention on the Protection of the Marine Environment in the Baltic Sea Area of 1992 – the Helsinki Convention (HELCOM), Convention for the Protection of Marine Environment and the Coastal Region of the Mediterranean of 1995 – the Barcelona Convention (UNEP-MAP), Agreement on straddling stocks and highly migratory fish stocks (1995), Agreement on compliance with conservation and management measures (1993), and Code of Conduct for Responsible Fisheries (1995).

⁷ Techera, E.J. 2012. *Marine Environmental Governance. From International Law to Local Practice*. Routledge

A2.2 Particularly Sensitive Sea Areas (PSSA)

Synopsis

The Particularly Sensitive Sea Area (PSSA) concept is broadly recognised in the United Nations Convention on the Law of the Sea (UNCLOS) and specifically authorised in resolutions adopted by the International Maritime Organisation (IMO). PSSAs are areas of the marine environment that need special protection through action by the IMO because of their significance for recognised ecological, socio-economic and scientific attributes, where such attributes may be vulnerable to damage by international shipping activities.

When an area is approved as a PSSA, specific measures can be used to control the maritime activities in that area, such as routing measures, strict application of MARPOL discharge and equipment requirements for ships, such as oil tankers, and installation of Vessel Traffic Services (VTS) (see Chapter 2.6). There are currently 11 PSSAs designated globally, with four in European waters: the Wadden Sea (Denmark, Germany, Netherlands), Western European Waters, the Canary Islands, Spain and the Baltic Sea area (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden).

Legal Status

The PSSA concept has no legal status, as it is based on an IMO Assembly resolution. Furthermore, the designation of a sea area as a PSSA is made by a Marine Environment Protection Committee (MEPC) resolution. Protective measures for PSSAs are limited to actions that are to be, or have been, approved and adopted by the IMO.

Key Provisions

Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (PSSAs) (resolution A.982(24)) were adopted by the IMO Assembly in November-December 2005 at its 24th session. These guidelines for designation as a PSSA include three basic criteria established by the IMO:

- the area must have significant ecological, social, cultural, economic, scientific, and/or educational characteristics;
- the area must be at risk from international shipping activities, and
- there must be measures that can be adopted by the IMO that will provide increased protection to the area.

The provisions of the UNCLOS are also relevant.

A PSSA application, which may only be submitted by an IMO Member Government, must be accompanied by a proposal for associated protective measures. The proposed protective measures must be within the purview of the IMO. Designation as a PSSA does not confer on a State any additional legislative nor enforcement jurisdiction other than what are already available through IMO and UNCLOS. PSSA designation can, however, be regarded as providing added value with respect to the following:

- It raises the profile of an area as environmentally sensitive and could influence/change the behaviour of the users of the area (underlined by the approval of IMO and by the indication on sea charts of the associated protective measures to be applied within a PSSA);
- It could provide for/assist in approval under other international instruments of the sensitivity of the area (important in the context of a multi-use area);
- It lifts/increases the standards of care that may be expected in the assessment by courts of claims for damage to PSSAs;

- It might contain measures approved by the IMO which, although justified, cannot find a precise legal basis in existing international instruments.

The most common protective measures utilised in PSSAs are ship routing, ship reporting, and areas to be avoided. Other protective measures include anchorage prohibitions, traffic separation schemes and recommendations for pilotage.

VECTORS Drivers

Energy (Renewables & Non-renewables)

A PSSA can be protected by ships routing measures – such as an area to be avoided: an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships, or by certain classes of ships. Designation of areas protected in this way may have implications for the energy sector.

Fisheries

A PSSA is an area that needs special protection through action by the IMO because of its significance for recognised ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities. As such, although there are no direct provisions for protecting fisheries per se, areas which are important, for example, as breeding or as nursery grounds and which are at risk from marine traffic could be afforded protection.

Alien Species

Specific clauses within the designation of certain PSSAs may prohibit the discharge of ballast water and therefore limit the introduction of alien species.

Transboundary or Domestic

Both domestic and transboundary.

Geographical Scope

Global.

Institutional Organisations

Implementation is supported by the IMO. Designation of PSSAs within internal waters and the territorial sea can be performed by States, nationally as well as regionally, whereas the IMO is the competent international organisation for the designation of PSSAs outside the territorial sea. Applications for PSSA designation are submitted to the IMO MEPC, which will make an initial review of the application. The application will then be referred to the appropriate IMO sub-committee for further consideration of the proposed associated protective measures. Only after consideration by the pertinent IMO sub-committee may MEPC make a final decision on whether or not to designate a sea area as a PSSA.

Subsidiary Instruments

The PSSA concept has no legal status; protective measures for PSSAs are limited to actions that are to be, or have been, approved and adopted by the IMO. As such there are no subsidiary instruments to consider.

A2.3 The Convention on Biological Diversity

Synopsis

The Convention on Biological Diversity 1992 (CBD) was one of five major international environmental instruments resulting from the 1992 Rio Earth Summit (UN Conference on Environment & Development (UNCED))⁸. Among the existing global biodiversity-related agreements, it was the first to cover all aspects of biodiversity and to acknowledge the role of biodiversity in sustainable development. The three main objectives of the Convention relate to the conservation of biodiversity; the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources. Its overall objective is to encourage actions which will lead to a sustainable future. It is a framework convention, meaning that its general provisions must be developed through national strategies and plans of action.

Legal Status

The Convention was opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio 'Earth Summit'). It remained open for signature until 4 June 1993, by which time it had received 168 signatures. The Convention entered into force on 29 December 1993. At the end of April 2012, the Convention had 193 Parties, reflecting almost worldwide participation⁹.

Key Provisions

The CBD Convention focuses on the conservation of all species and ecosystems and therefore provides protection to all biodiversity. Article 3 expresses the general responsibility of all Parties to ensure that activities within their jurisdiction or control do not cause damage to the environment of areas beyond national jurisdiction. Article 22(2) states that implementation with respect to the marine environment must be consistent with the law of the sea. Contracting Parties are required to take conservation measures for the protection of biodiversity within the limits of national jurisdiction (Article 4). This supports the creation of marine conservation areas within Exclusive Economic Zones (EEZs). The Convention requires Contracting Parties to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or to adapt existing strategies (Article 6a). Article 8 of the Convention details how each Contracting Party should establish *in situ* conservation measures to protect and conserve biological diversity by developing guidelines for their selection, establishment and management within their natural habitats, including the establishment of protected areas¹⁰. Degraded ecosystems should be rehabilitated and restored to promote the recovery of threatened species through the development of management strategies (Article 8(f)).

Within the framework of the convention there are 15 Guiding Principles for the prevention, introduction and mitigation of impacts of alien species that threaten ecosystems, habitats or species. The principles provide an international framework for governments and other organisations to develop effective strategies to prevent introduction, control and eradicate invasive non-native species. Article 8(h) states that each Contracting Party shall prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species. Invasive alien species are also formally addressed in the Global Strategy on Plant Conservation.

The Convention also refers to the need for environmental impact assessment of proposed projects which are likely to have significant impact on biological diversity (Article 14(1)(a)).

⁸ Sunkin, M., D. Ong, and R. Wight. (1998). *Sourcebook on Environmental Law*. Cavendish Publishing Limited.

⁹ http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-8&chapter=27&lang=en (accessed 26/04/12)

¹⁰ In 2004, the Parties to the CBD Convention committed themselves to designating a system of representative, comprehensive and effectively managed Marine Protected Areas (MPAs) by 2012, including the establishment of an MPA network outside national jurisdiction.

The Convention covers biodiversity in its entirety promoting the conservation of every habitat and environment, which allows the protection of the marine environment to be fully addressed by Contracting Parties. It is of note, however, that the obligations under the Convention are weakened by the requirement for action to be taken as far as possible and appropriate.

VECTORS Drivers

Energy (Renewable and Non-renewable)

The CBD has emphasised the need for MPAs both inside and outside national jurisdiction which should be designated in accordance with international law including UNCLOS. These MPAs should be taken into account with marine spatial planning (MSP) and may influence the location of offshore renewable activities and related grid infrastructure.

Fisheries

Again, with the designation of MPAs both inside and outside national jurisdiction, these areas could influence the type of fishing activities occurring within these sites once established.

Invasive Alien Species (IAS)

The CBD is the only globally applicable, legally binding instrument to generally address alien species introduction, control and eradication across all biological taxa and ecosystems, identifying them as a major crosscutting theme¹¹. It requires Parties as far as possible and as appropriate, 'to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species' (Article 8(h)). In 2002, the CBD Conference of the Parties adopted specific Decision and Guiding Principles (see Decision VI/23 below) to help Parties implement this requirement. The Decision urges Parties, other governments and relevant organisations to prioritise the development of IAS strategies and action plans at national and regional level and to promote and implement the CBD Guiding Principles.

The CBD Guiding Principles set out a 'Three-stage hierarchical approach' as the basis for all action on IAS:

- prevention of IAS introductions between and within state is generally far more cost-effective and environmentally desirable than measures taken after IAS introduction and establishment;
- if an IAS has been introduced, early detection and rapid action are especially important to prevent its establishment; the preferred response is often to eradicate the organisms as soon as possible;
- where eradication is not feasible or resources are not available, containment and long-term control measures should be implemented (CBD Guiding Principle 2).

However, it is important to go further than this basically defensive approach. Conservation policies need to include restoration measures for species, natural habitats and ecosystems that have been affected by biological invasions.

Several Decisions and Mandates have been adopted under the Convention that refer specifically to invasive alien species:

– Decision V/8 on matters including development and implementation of national strategies and action plans; mechanisms for transboundary co-operation; using the ecosystem approach and precautionary and biogeographical approaches, and developing education, training and public awareness;

¹¹ Shine, C., Williams, N & Gündling, L. 2000. A Guide to Designing Legal and Institutional Frameworks on Alien Invasive Species. IUCN

- Decision VI/23 on Alien Species that threaten ecosystems, habitats and species (COPVI, 2002) to which are annexed the Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that threaten Ecosystems, Habitats or Species. This urges parties to ratify the International Plant Protection Convention; urges the International Maritime Organisation to complete the preparation of an international instrument to address the introduction of harmful aquatic organisms in ballast water and to develop mechanisms to minimise hull-fouling as an invasion pathway; reaffirming the importance of national and regional strategies; urges the creation of mechanisms to co-ordinate national programmes; facilitation of stakeholder involvement; development of risk assessment/analysis capacity, and importantly, adopting the Guiding Principles;
 - Decision VII/13 on matters including collaboration with the Convention on International Trade in Endangered Species (CITES); developing joint work plans with the International Plant Protection Convention; establishing closer links with the World Organisation for Animal Health (OIE) and supporting decision-making and rapid response through development of risk analysis capacity – noting the potential for wider application of existing risk assessment methodologies;
 - Decision VIII/27xxii on matters including capacity-building for developing national action on introduction pathways; encouraging inter-agency collaboration at national and regional levels over introduction, control and management, for example through national co-ordination committees and increasing public awareness. The Decision also contains sections on a number of specific areas including aquaculture/mariculture, ballast water, biofouling/hullfouling, civil air transport, tourism and inter-basin water transfer.
- Under the CBD, specific guidance on introductions to marine and coastal ecosystems has been developed in accordance with the Jakarta Mandate on Marine and Coastal Biological Diversity (Decision II/10, 1995). The Mandate recommends that 'because of the difficulties of complete containment, introduction of alien species, products of selective breeding, and living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of marine and coastal biodiversity should be responsibly conducted, using the precautionary principle/approach' (Annex I, para. XI). The Work Programme adopted in 1998 (Decision IV/5) calls for identification of gaps in existing or proposed legal instruments, guidelines and procedures to counteract the introduction of, and adverse effects exerted by, alien species and genotypes which threaten marine ecosystems, habitats or species, paying particular attention to transboundary effects. This was reinforced by the 5th meeting of the COP (Decision V/3)¹².

Transboundary or Domestic

Both

Geographical Scope

Global.

Institutional Organisations

Conference of the Parties is the governing body of the Convention.

Subsidiary Instruments

The CBD is supplemented by three Protocols:

- The *Cartagena Protocol on Biosafety to the Convention on Biological Diversity*. Montreal, 29 January 2000 which entered into force on 11 September 2011. This is concerned with living

¹² Shine, C., Williams, N & Gündling, L. 2000. A Guide to Designing Legal and Institutional Frameworks on Alien Invasive Species. IUCN

modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity and risks for human health.

- The *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity*. This Protocol was adopted by the Conference of the Parties (CoP) to the Convention on Biological Diversity at its tenth meeting on 29 October 2010 in Nagoya, Japan but is not yet in force. Decisions may be taken by the CoP. Such decisions are not legally binding, although they may guide future binding measures adopted through other means.
- The *Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety*. Nagoya, 15 October 2010. This protocol is not yet in force.

New programmes and tools have also been developed, notably the Global Invasive Species Programme (GISP) which actively promotes practical regional co-operation. GISP is an international network of volunteers from various backgrounds: scientists, economists, lawyers, policy makers, activists and others from all sectors and constituencies affected by invasive alien species. It has three partners: IUCN-The World Conservation Union; the intergovernmental bioscience organisation, CAB International, and the Scientific Committee on Problems of the Environment (SCOPE). GISP has published a Global Strategy on Invasive Alien Species and a Toolkit of Best Prevention and Management Practices¹³.

¹³ McNeely et al (2001) Global Strategy on Invasive Alien Species. IUCN; Wittenberg and Cock (2001) Invasive Alien Species: A Toolkit of Best Prevention and Management Practices. GISP/CAB International.

A2.4 United Nations Framework Convention on Climate Change (UNFCCC)

Synopsis

On 9 May 1992 at the Earth Summit, the United Nations Framework Convention on Climate Change (UNFCCC) treaty was adopted, and entered into force on 21 March 1994. Its main objective is achieving the stabilisation of greenhouse gas concentrations in the atmosphere at a low enough level to prevent dangerous anthropogenic interference with the climate system¹⁴. The UNFCCC is a 'Rio Convention', one of three adopted at the 'Rio Earth Summit' in 1992. Its 'sister Rio Conventions' are the UN Convention on Biological Diversity and the Convention to Combat Desertification. The three are intrinsically linked. It is in this context that the Joint Liaison Group was set up to boost cooperation among the three Conventions, with the ultimate aim of developing synergies in their activities on issues of mutual concern. There is also a cooperation/coordination between the CBD secretariat and the Secretariat for the Ramsar Convention on Wetlands. The CBD promotes the development of renewable energy sources to combat climate change.

Legal Status

The Convention has now been signed by 195 parties¹⁵ (194 States and the EU). It entered into force on 21 March 1994.

Key Provisions

Article 1 provides the important definitions with Article 2 stating the ultimate objective of the Convention. This is to stabilise greenhouse gas concentrations 'at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system'. It states that 'such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner'.

In working to achieve the objective of the Convention, governments agreed on guiding principles set out in Article 3. These guiding principles aim to protect the climate system for future generations on the basis of equity and 'in accordance with their common but differentiated responsibilities' of states, putting the onus on developed countries to lead the way in tackling climate change (Article 3.1). Developing countries on the other hand appear to be more vulnerable to the impacts of climate change and have a lower capacity to respond (Article 3.2). The precautionary principle says that the lack of full scientific certainty should not be used as an excuse to postpone action when there is a threat of serious or irreversible damage (Article 3.3). The principles of sustainable development and economic growth are highlighted in Articles 3.4 and 3.5.

The Convention divides States into three main groupings: Annex I, Annex II and non-Annex I, each of which is subject to differing commitments (detailed in Article 4):

- Annex I Parties include the developed countries that were members of the Organisation for Economic Cooperation and Development (OECD) in 1992 plus countries with economies in transition (EITs). Annex I parties accepted a voluntary commitment to return their emissions of GHGs to 1990 levels by year 2000. Subsequently, the Kyoto Protocol established legally binding GHG emissions targets for the 2008–12 period for Annex I Parties that are recorded in Annex B of the Protocol. The difference between these two lists is that Belarus and Turkey are Annex I countries, but not Annex B EU Member States.

¹⁴ United Nations Framework Convention on Climate Change, Article 2

¹⁵ http://unfccc.int/essential_background/convention/items/6036.php (accessed 15/12/11)

- Annex II Parties consist of the OECD members of Annex I. They accepted a commitment to provide financial aid to non-Annex I Parties to meet their agreed incremental costs under the UNFCCC. Annex II Parties also agreed to transfer environmentally-sound technologies to other Parties, particularly non-Annex I Parties, to enable them to reduce their GHG emissions.
- Non-Annex I Parties are the more than 150, mostly developing country, Parties that are not listed in Annex I¹⁶.

Article 4 sets out the commitments agreed to by contracting Parties. Both developed and developing countries accept a number of general commitments. All Parties will develop and submit national communications containing inventories of greenhouse gas emissions by source and greenhouse gas removals by sinks (Article 4.1a). They will adopt national programmes for mitigating climate change and develop strategies for adapting to its impacts (Article 4.1b). They should also promote technology transfer (Article 4.1c) and the sustainable management, conservation, and enhancement of greenhouse gas sinks and reservoirs (such as forests and oceans) (Article 4.1d). All Parties must cooperate in preparing for the adaptation to the impacts of climate change and develop integrated plans for coastal management (Article 4.1e). In addition, the Parties will take climate change into account in their relevant social, economic, and environmental policies (Article 4.1f); cooperate in scientific, technical, and educational matters (Article 4.1g&h), and promote education, public awareness and the exchange of information related to climate change (Articles 4.1i).

Article 4.2 commits all Annex I countries to meet several specific targets including adopting policies and measures aimed at returning their greenhouse gas emissions to 1990 levels by the year 2000 (emissions targets for the post-2000 period are addressed by the Kyoto Protocol¹⁷. They must also submit national communications on a regular basis detailing their climate change strategies (Article 4.2b). Several states may together adopt a joint emissions target (Article 4.2e).

The richest countries shall provide new and additional financial resources and facilitate technology transfer. These so-called Annex II countries (essentially the OECD) will fund the agreed full cost incurred by developing countries for submitting their national communications (Article 4.3). Annex II Parties will also help finance certain other Convention-related projects, and they will promote and finance the transfer of, or access to, environmentally sound technologies, particularly for developing country Parties (Article 4.5). The Convention recognises that the extent to which developing country Parties implement their commitments will depend on financial and technical assistance from the developed countries and their specific needs (Articles 4.7 & 4.9).

Article 5 sets out the research and systematic observation for Parties in carrying out their commitments in relation to Article 4.1g. Parties should support and further develop international and intergovernmental programmes aimed at furthering research and data collection. Parties should also support international and intergovernmental efforts to strengthen systematic observation and national scientific and technical research, particularly in developing countries, to promote the exchange of data. This requires taking into account the particular concerns of the developing countries.

Article 6 sets out the commitments for education, training and public awareness as described under Article 4.1i. These are to promote and facilitate at the national through to regional levels and through national laws the development and implementation of educational and public awareness programmes on climate change and its effects and provide training. Parties should cooperate in and promote, at the international level the development and exchange of educational and public awareness material on

¹⁶ IPIECA, 2008. The United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. A Guide to the Climate Change Negotiations

¹⁷ UNEP and UNFCCC, 2001. Climate Change Information Kit.

climate change and its effects, and the development and implementation of education and training programmes.

Articles 7 to 26 deal with the administration of the Convention.

VECTORS Drivers

Energy (Renewable and Non-renewable)

Article 4 requests that all Parties should 'promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases....in all relevant sectors...including the energy sector'. Article 4(10) also requests that Parties in developed nations should assist Parties from developing countries with economies that are vulnerable to the adverse effects of the implementation of measures to respond to climate change. This applies notably to Parties with 'economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives'.

Transboundary or Domestic

Both.

Geographical Remit

Global.

Institutional Organisations

The UNFCCC secretariat supports all institutions involved in the international climate change negotiations, particularly the Conference of the Parties (COP), the subsidiary bodies (which advise the COP), and the COP Bureau (which deals mainly with procedural and organisational issues arising from the COP and also has technical functions). The functions of these organisations are set out in the Convention.

Subsidiary Instruments

The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. The detailed rules for the implementation of the Protocol were adopted at COP 7 in Marrakesh in 2001, and are called the 'Marrakesh Accords.' The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialised countries and the European community for reducing greenhouse gas (GHG) emissions. These amount to an average of 5% against 1990 levels over the five-year period 2008-2012.

The major distinction between the Protocol and the Convention is that while the Convention encouraged industrialised countries to stabilise GHG emissions, the Protocol commits them to do so. Recognising that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of 'common but differentiated responsibilities'.

Under the Treaty, countries must meet their targets primarily through national measures. However, the Kyoto Protocol offers them an additional means of meeting their targets by way of three market-based mechanisms. The Kyoto mechanisms are:

- Emissions trading – known as 'the carbon market'

- Clean development mechanism (CDM)
- Joint implementation (JI)

The mechanisms help stimulate green investment and help Parties meet their emission targets in a cost-effective way¹⁸.

VECTORS Drivers

Energy (Renewable and Non-renewable)

The Protocol encourages the cooperation of governments to improve their energy efficiency, reform the energy and transportation sectors by promoting renewable forms of energy and limiting methane emissions from waste management and energy systems.

¹⁸ UNFCCC, 2011. Kyoto Protocol. United Nations Framework Convention on Climate Change. (accessed 04/01/12)

A2.5 International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)

Synopsis

Following the UN Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, the International Maritime Organisation (IMO) initiated negotiations to consider the possibilities of developing an internationally binding instrument to address the transfer of harmful aquatic organisms and pathogens in ships' ballast water. From 1999 onwards, the Ballast Water Working Group, established by the Marine Environment Protection Committee (MEPC) in 1994, focused on the preparation of a free-standing Convention on control and management of ships' ballast water and sediments¹⁹.

The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) aims at the implementation of a regulatory standardised framework for the management of ballast water for vessels at sea. The aim of all parties subject to the BWM convention is to prevent, minimise and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments. This framework is needed to prevent the transfer of invasive species in ships' ballast water which occur due to the increasing seaborne trade and traffic volume.²⁰ The Convention will require all ships to implement a Ballast Water and Sediments Management Plan. All ships will have to carry a Ballast Water Record Book and will be required to carry out ballast water management procedures to a given standard. Parties to the Convention are given the option to take additional measures which are subject to criteria set out in the Convention and to IMO guidelines.

Legal Status

The BWM was adopted in February 2004, after 14 years of negotiations between the IMO Member States. The Convention will enter into force 12 months after ratification by 30 states, representing 35% of world merchant shipping tonnage (Article 18 Entry into force). As of 31 March 2012, 33 States had ratified the Convention, representing 26.46% of world merchant shipping tonnage.²¹ However this still leaves the tonnage percentage below that required for entry into force.

Key Provisions

VECTORS Drivers – Ballast water & Invasive Species

The Convention is divided into Articles and an Annex which includes technical standards and requirements in the Regulations for the control and management of ship's ballast water and sediments. The IMO's GloBallast Partnerships website provides information on the BWM convention, and steps taken to implement it²².

Under Article 2, Parties undertake to give full and complete effect to the provisions of the Convention and Annex in order to prevent, minimise and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through the control and management of ship's ballast water and sediments. Parties may adopt more stringent measures that are established by the BWM so far as this is consistent with international law. Parties should ensure that ballast water management practices do not cause greater harm than they prevent to their environment, human health, property or resources, or those of other States.

¹⁹ IMO, 2011. <http://www.imo.org/OurWork/Environment/BallastWaterManagement/Pages/BWMConvention.aspx> (accessed 12/10/11)

²⁰ <http://www.imo.org/OurWork/Environment/BallastWaterManagement/Pages/Default.aspx> (accessed 12/10/11)

²¹ IMO, 2012. Status of Conventions. <http://www.imo.org/About/Conventions/StatusOfConventions/Pages/Default.aspx> (accessed 18/04/12)

²² GloBallast Partnership, 2011. Ballast Water Convention Adopted <http://globallast.imo.org/index.asp?page=mepc.htm> (accessed 12/10/11)

Generally, measures under the BWM are limited to ships flying the flag of States parties (Article 3), who shall require vessels flying their flag comply with the Regulations set out in the Annex. Parties shall also adopt domestic measures, in accordance with their capabilities, that promote the convention objectives (Article 4).

Under Article 5, Parties undertake to ensure that ports and terminals where cleaning or repair of ballast tanks occur, have adequate reception facilities for the reception of sediments.

Article 6 calls for Parties individually or jointly to promote and facilitate scientific and technical research on ballast water management, and monitor the effects of ballast water management in waters under their jurisdiction.

Ships are required to be surveyed and certified (Article 7) and may be inspected by port State control officers (Article 9) who can verify that the ship has a valid certificate, inspect the Ballast Water Record Book and/or sample the ballast water. If there are concerns, then a detailed inspection may be carried out and 'the Party carrying out the inspection shall take such steps as will ensure that the ship shall not discharge Ballast Water until it can do so without presenting a threat of harm to the environment, human health, property or resources.'

All possible efforts shall be made to avoid a ship being unduly detained or delayed (Article 12).

Under Article 13, Parties undertake, directly or through the Organisation and other international bodies, as appropriate, in respect of the control and management of ships' ballast water and sediments, to provide support for those Parties which request technical assistance to train personnel; to ensure the availability of relevant technology, equipment and facilities; to initiate joint research and development programmes, and to undertake other action aimed at the effective implementation of this Convention and of guidance developed by the Organisation related thereto.

Annex – Section A sets out general provisions including definitions, application and exemptions. Regulation A-2 provides that, except where expressly provided otherwise, the discharge of Ballast Water shall only be conducted through Ballast Water Management, in accordance with the provisions of this Annex.'

Annex – Section B establishes management and control requirements for ships. Ships are required to have onboard and implement a Ballast Water Management Plan approved by the Administration (Regulation B-1). The Ballast Water Management Plan is specific to each ship and includes a detailed description of the actions to be taken to implement the Ballast Water Management requirements and supplemental Ballast Water Management practices.

Ships must have a Ballast Water Record Book (Regulation B-2) to record when ballast water is taken on board; circulated or treated for Ballast Water Management purposes, and discharged into the sea. It should also record when Ballast Water is discharged to a reception facility and accidental or other exceptional discharges of Ballast Water. The specific requirements for ballast water management are contained in regulation B-3 Ballast Water Management for Ships.

Other methods of ballast water management may also be accepted as alternatives to the ballast water exchange standard and ballast water performance standard, provided that such methods ensure at least the same level of protection to the environment, human health, property or resources, and are approved in principle by IMO's Marine Environment Protection Committee (MEPC).

Under Regulation B-4 Ballast Water Exchange, all ships using ballast water exchange should whenever possible, conduct ballast water exchange at least 200 nautical miles from the nearest land and in water at least 200 metres in depth, taking into account Guidelines developed by IMO. However in cases where the ship is unable to conduct ballast water exchange as above, this should be as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land and in water at least 200 metres in depth. When these requirements cannot be met areas may be designated where

ships can conduct ballast water exchange. All ships shall remove and dispose of sediments from spaces designated to carry ballast water in accordance with the provisions of the ships' ballast water management plan (Regulation B-4).

Annex - Section C sets out additional measures that may be adopted individually or jointly to prevent, reduce, or eliminate the transfer of Harmful Aquatic Organisms and Pathogens through ships' Ballast Water and Sediments. In these cases, the Party or Parties should consult with adjoining or nearby States that may be affected by such standards or requirements and should communicate their intention to establish additional measure(s) to the Organisation at least 6 months, except in emergency or epidemic situations, prior to the projected date of implementation of the measure(s). When appropriate, Parties will have to obtain the approval of IMO.

Annex – *Section D Standards for Ballast Water Management*. Regulation D-1 details the *Ballast Water Exchange Standard*, and Regulation D-2 the *Ballast Water Performance Standard*. Ballast Water Management systems must be approved by the Administration in accordance with IMO Guidelines (Regulation D-3 *Approval requirements for Ballast Water Management systems*). These include systems which make use of chemicals or biocides; make use of organisms or biological mechanisms; or which alter the chemical or physical characteristics of the Ballast Water.

Regulation D-4 covers *Prototype Ballast Water Treatment Technologies*. It allows for ships participating in a programme approved by the Administration to test and evaluate promising Ballast Water treatment technologies to have a leeway of five years before having to comply with the requirements.

Under Regulation D-5 *Review of Standards by the Organisation*, IMO is required to review the Ballast Water Performance Standard, taking into account a number of criteria including safety considerations; environmental acceptability, i.e., not causing more or greater environmental impacts than it solves; practicability, i.e., compatibility with ship design and operations; cost effectiveness, and biological effectiveness in terms of removing, or otherwise rendering inactive harmful aquatic organisms and pathogens in ballast water. The review should include a determination of whether appropriate technologies are available to achieve the standard, an assessment of the above mentioned criteria, and an assessment of the socio-economic effect(s) specifically in relation to the developmental needs of developing countries, particularly small island developing States.

Annex - *Section E Survey and Certification Requirements for Ballast Water Management* gives requirements for initial renewal, annual, intermediate and renewal surveys and certification requirements. Appendices give form of Ballast Water Management Certificate and Form of Ballast Water Record Book.

Transboundary or Domestic

Both transboundary and domestic.

Geographical Scope

Worldwide.

Institutional Organisation(s)

Implementation is supported by the International Maritime Organisation.

Subsidiary Instruments

The IMO's Marine Environment Protection Committee (MEPC), at its fifty-first session in April 2004, approved a programme for the development of guidelines and procedures for uniform implementation of the BWM Convention, listed in Conference resolution 1 including additional guidance required but not listed in the resolution. The programme was further expanded at the fifty-third session of the MEPC in July 2005 to develop and adopt a set of Guidelines:

- Guidelines for sediment reception facilities (G1) (resolution MEPC.152(55))
- Guidelines for ballast water sampling (G2) (resolution MEPC.173(58))
- Guidelines for ballast water management equivalent compliance (G3) (resolution MEPC.123(53))
- Guidelines for ballast water management and development of ballast water management plans (G4) (resolution MEPC.127(53))
- Guidelines for ballast water reception facilities (G5) (resolution MEPC.153(55))
- Guidelines for ballast water exchange (G6) (resolution MEPC.124(53))
- Guidelines for risk assessment under regulation A-4 of the BWM Convention (G7) (resolution MEPC.162(56))
- Guidelines for approval of ballast water management systems (G8) (resolution MEPC.174(58))
- Procedure for approval of ballast water management systems that make use of Active Substances (G9) (resolution MEPC.169(57))
- Guidelines for approval and oversight of prototype ballast water treatment technology programmes (G10) (resolution MEPC.140(54))
- Guidelines for ballast water exchange design and construction standards (G11) (resolution MEPC.149(55))
- Guidelines on design and construction to facilitate sediment control on ships (G12) (resolution MEPC.150(55))
- Guidelines for additional measures regarding ballast water management including emergency situations (G13) (resolution MEPC.161(56))
- Guidelines on designation of areas for ballast water exchange (G14) (resolution MEPC.151(55))
- Guidelines for ballast water exchange in the Antarctic treaty area (resolution MEPC.163(56))

A2.6 International Convention for the Prevention of Pollution from Ships (MARPOL)

Synopsis

The International Convention for the Prevention of Pollution from Ships (MARPOL) is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. It is a combination of two treaties adopted in 1973 and 1978 respectively, and also includes the Protocol of 1997 (Annex VI). It has been updated by amendments through the years²³. MARPOL 73/78 is one of the most important international marine environmental conventions designed to minimise pollution of the seas, including dumping, oil and exhaust pollution and applies to oil tankers, cruise ships, general cargo and container vessels, tugs, ferries, yachts and small pleasure craft. Its main objective is to 'preserve the marine environment through the complete elimination of pollution by oil and other harmful substances and the minimisation of accidental discharge of such substances'. The Convention contains six annexes, concerned with preventing different forms of marine pollution from ships, including: oil, noxious liquid substances carried in bulk, harmful substances carried in packaged form, sewage, garbage, and air pollution.

Legal Status

MARPOL was adopted on 2 November 1973 at the International Marine Organisation (IMO) and covered pollution by oil, chemicals, harmful substances in packaged form, sewage and garbage. The Protocol of 1978 relating to the 1973 International Convention for the Prevention of Pollution from Ships (1978 MARPOL Protocol) was adopted at a Conference on Tanker Safety and Pollution Prevention in February 1978 held in response to a spate of tanker accidents in 1976-1977. As the 1973 MARPOL Convention had not yet entered into force, the 1978 MARPOL Protocol absorbed the parent Convention. The combined instrument is referred to as the International Convention for the Prevention of Marine Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), and it entered into force on 2 October 1983 (Annexes I and II). In 1997 a Protocol was adopted to add a new Annex VI.

As at 31st March 2012²⁴, 154 contracting states/parties were ratified to Annex I/II; 140 to Annex III; 132 to Annex IV; 146 to Annex V and 69 to Annex VI.

Key Provisions

The Convention includes regulations aimed at preventing and minimising pollution from ships - both accidental pollution and that from routine operations - and currently includes six technical Annexes. Special Areas with strict controls on operational discharges are included in most Annexes (IMO, 2011)²⁵.

Annex I Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983)

This covers prevention of pollution by oil from operational measures as well as from accidental discharges. The 1992 amendments to Annex I made it mandatory for new oil tankers to have double hulls and brought in a phase-in schedule for existing tankers to fit double hulls, which was subsequently revised in 2001 and 2003.

Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force 2 October 1983)

²³ IMO, 2011. International Convention for the Prevention of Pollution from Ships (MARPOL).

[http://www.imo.org/about/conventions/listofconventions/pages/international-convention-for-the-prevention-of-pollution-from-ships-\(marpol\).aspx](http://www.imo.org/about/conventions/listofconventions/pages/international-convention-for-the-prevention-of-pollution-from-ships-(marpol).aspx) (accessed 12/10/11)

²⁴ IMO, 2012. Summary of Status of Convention. <http://www.imo.org/About/Conventions/StatusOfConventions> (accessed 18/04/12)

²⁵ IMO, 2011. International Convention for the Prevention of Pollution from Ships (MARPOL).

Annex II details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk. Some 250 substances were evaluated and included in the list appended to the Convention. The discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with. In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land. More stringent restrictions applied to the Baltic and Black Sea areas.

Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July 1992)

Annex III contains general requirements for the issuing of detailed standards on packing, marking, labelling, documentation, stowage, quantity limitations, exceptions and notifications for preventing pollution by harmful substances. The International Maritime Dangerous Goods (IMDG) Code has, since 1991, included marine pollutants.

Annex IV Prevention of Pollution by Sewage from Ships (entered into force 27 September 2003)

Annex IV contains requirements to control pollution of the sea by sewage.

Annex V Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988)

This deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of. The requirements are much stricter in a number of 'special areas' but perhaps the most important feature of the Annex is the complete ban imposed on the dumping into the sea of all forms of plastic. 'Special areas' have been designated which, 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. Regulation 5 of Annex V states these areas as the Mediterranean Sea, the Baltic Sea Area, the Black Sea area, the Red Sea Area, the Gulfs area, the North Sea, the Wider Caribbean Region and Antarctic Area.

Building upon this Annex, the IMO adopted Guidelines for the Designation of Special Areas and the identification of Particularly Sensitive Sea Areas (PSSA) (see Chapter A2.2).

Annex VI Prevention of Air Pollution from Ships (entered into force 19 May 2005)

The regulations in this annex set limits on sulphur oxide and nitrogen oxide emissions from ship exhausts as well as particulate matter and prohibit deliberate emissions of ozone depleting substances. Emission control areas set more stringent standards.

VECTORS Drivers

Energy (renewable / non-renewable)

Annex V of the Convention is concerned with the dumping of garbage into the sea. Regulation 5 states that offshore platforms including all fixed or floating platforms engaged in exploration or exploitation or associated processing of seabed mineral resources located more than 12 nautical miles from the nearest land and ships when alongside or within 500 metres of such platforms are prohibited from dumping plastics including synthetic ropes, fishing nets and plastic bags; floating dunnage, lining, and packing materials; paper, rags, glass, metal; bottles, crockery and similar refuse, and food waste. All fixed and floating platforms are required to carry and implement a garbage management plan that specifies procedures to be followed to ensure proper and efficient handling and storage of garbage.

PSSA boundaries appear on international navigation charts and the designation carries with it the associated protective measures recognised by the IMO. Although offshore renewable activities are not prohibited in these areas, they will require an impact assessment²⁶.

Fishing

Annex V of the Convention also prohibits the dumping of plastics including synthetic ropes, fishing nets and plastic bags from vessels inside and outside special areas. This prohibition is subject to an emergency exception for accidental fishing gear losses if all reasonable precautions have been taken (Regulation 6). Fishing vessel operators are required to record the discharge or loss of fishing gear in the Garbage Record Book or Ship's log as specified within regulations 7.1 and 10.3.4 of Annex V. The IMO MEPCs Guidelines for the Implementation of Annex V of MARPOL contains much of the details that is lacking in the regulations. The guidelines state that fishing gear, once discharged, may harm the marine environment or create a navigation hazard. Fishing vessel operators, their organisations and respective governments are encouraged to undertake research, technological development and regulations as may be necessary to minimise the probability of loss, and maximise the probability of recovery of lost gear from the ocean²⁷.

Fish, including shellfish, carried on board as cargo that have died during the voyage are considered to be animal carcasses and should, to the extent practicable, be treated under Regulation 4.1.4 of MARPOL Annex V. This states that the carcasses can be disposed of at sea as long as the vessel is en route, is outside a special area and is as far from the nearest land as possible (>100nm) and at the maximum depth of water.

Transboundary or Domestic

Both transboundary and domestic.

Geographical Scope

Worldwide.

Institutional Organisation(s)

Implementation is supported by the International Maritime Organisation (IMO).

Subsidiary Instruments

Implemented through national legislation adopted by contracting parties.

²⁶ Jacques, S., Adigilou, B., & Joseph, P. 2011. Analysis of the Existing International Maritime Spatial Planning Instruments Affecting the Deployment of Offshore Renewable Energies. Seenergy 2020.

²⁷ MEPC, 2012. Annex 24 Resolution MEPC.219(63) Adopted On 2 March 2012: 2012 Guidelines For The Implementation Of Marpol Annex V

A2.7 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention & Protocol)

Synopsis

The Inter-Governmental Conference on the Convention on the Dumping of Wastes at Sea, which met in London in November 1972 at the invitation of the United Kingdom, adopted this global instrument, generally known as the London Convention 1972. It entered into force on 30th August 1975 with further amendments adopted in 1993 which entered into force in 1994. The London Convention was one of the first global conventions to protect the marine environment from human activities. Its objective is to promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes.

The 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention 1972) entered into force on 24th March 1996 at the Special Meeting of Contracting Parties to the London Convention 1972. Eventually, the 1996 Protocol will supersede the London Convention 1972 as between Contracting Parties to the Protocol, which are also Contracting Parties to the Convention (Article 23).

Both the London Convention and Protocol provide the global rules and standards on dumping as called for in Article 210(6) of the UN Convention on the Law of the Sea (1982).

Legal Status

As of 31st March 2012, there are 90 States which are Parties to the London Convention. In 1996, the 'London Protocol' was adopted to modernise the Convention and currently has 40 Parties²⁸.

Key Provisions

The London Convention has a global character, and contributes to the international control and prevention of marine pollution. It prohibits the dumping of certain hazardous materials, requires a prior special permit for the dumping of a number of other identified materials and a prior general permit for other wastes or matter. 'Dumping' has been defined as the deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures, as well as the deliberate disposal of these vessels or platforms themselves. Annexes list wastes which cannot be dumped and others for which a special dumping permit is required. Amendments adopted in 1993 (which entered into force in 1994) banned the dumping into sea of low-level radioactive wastes. In addition, the amendments phased out the dumping of industrial wastes by 31 December 1995 and banned the incineration at sea of industrial wastes. The following review is aided by the IMO guidance²⁹.

In 1996, Parties adopted the 1996 London Protocol which will eventually replace the 1972 Convention, and represents a major change of approach to the question of how to regulate the use of the sea as a depository for waste materials. Its most significant effect will be to move away from a list of materials which may not be dumped at sea (as under London Convention 1972) to a restricted list of materials which may be considered for disposal at sea, all others being prohibited. In addition, before a decision is taken on the disposal at sea of any waste, a rigorous assessment will have to be undertaken in each case to ensure that this is the best practical environmental option.

Articles 1 and 2 set out the definitions and objectives for contracting parties. Article 2 states that 'Contracting Parties shall individually and collectively protect and preserve the marine environment from all sources of pollution and take effective measures, according to their scientific, technical and economic capabilities, to prevent, reduce and where practicable eliminate pollution caused by dumping

²⁸ IMO, 2012. Status of Conventions <http://www.imo.org/About/Conventions/StatusOfConventions/Pages/Default.aspx> (accessed 18/04/12)

²⁹ IMO, 2010, Guidance on the National Implementation of the 1996 Protocol to the London Convention 1972. (Adopted in 2001).

or incineration at sea of wastes or other matter. Where appropriate, they shall harmonise their policies in this regard’.

Article 3(1) on general obligations emphasises the ‘precautionary approach’. This requires that ‘appropriate preventative measures are taken when there is reason to believe that wastes or other matter introduced into the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects’.

Article 3(2) also states that ‘the polluter should, in principle, bear the cost of pollution’ and it emphasises that Contracting Parties should ensure that the Protocol should not simply result in pollution being transferred from one part of the environment to another. Rather than state which materials may not be dumped, the 1996 Protocol restricts all dumping except for a permitted list.

Article 4(1(1)) states that Contracting Parties ‘shall prohibit the dumping of any wastes or other matter with the exception of those listed in Annex 1.’ These include:

1. Dredged material
2. Sewage sludge
3. Fish waste, or material resulting from industrial fish processing operations
4. Vessels and platforms or other man-made structures at sea
5. Inert, inorganic geological material
6. Organic material of natural origin
7. Bulky items primarily comprising iron, steel, concrete and similar unarmful materials for which the concern is physical impact and limited to those circumstances, where such wastes are generated at locations, such as small islands with isolated communities, having no practicable access to disposal options other than dumping.
8. CO₂ streams from CO₂ capture processes (added under amendments adopted in 2006, which entered into force in 2007).

Incineration of wastes and other matter at sea is specifically prohibited by Article 5 of the 1996 Protocol.

Article 6 of the Protocol states that ‘Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea.’

Article 7 deals with internal waters and states that each Contracting Party shall at its discretion either apply the provisions of this Protocol or adopt other effective permitting and regulatory measures to control the deliberate disposal of wastes or other matter in marine internal waters where such disposal would be ‘dumping’ or ‘incineration at sea’ within the meaning of Article 1, if conducted at sea (Article 7(2)). Each Contracting Party should also provide the Organisation with information on legislation and institutional mechanisms regarding implementation, compliance and enforcement in marine internal waters (Article 7(3)).

Article 8 deals with exceptions and permits dumping to be carried out ‘in cases of force majeure caused by stress of weather, or in any case which constitutes a danger to human life or a real threat to vessels...’.

Article 9 requires Contracting Parties to designate an appropriate authority or authorities to issue permits in accordance with the detailed criteria listed in Annex III to the Convention. The London Dumping Convention very clearly states that Contracting Parties to the Convention by their national laws may take more stringent measures than those provided by the convention, in particular with regard to the complete prohibition of the dumping of certain substances.

Each Contracting Party shall apply the measures required to implement this Protocol to all vessels and aircraft registered in its territory or flying its flag; vessels and aircraft loading in its territory the wastes or other matter which are to be dumped or incinerated at sea, and vessels, aircraft and platforms or other

man-made structures believed to be engaged in dumping or incineration at sea in areas within which it is entitled to exercise jurisdiction in accordance with international law (Article 10).

The Protocol recognises the importance of implementation and Article 11 details compliance procedures under which, no later than two years after the entry into force of the Protocol, the Meeting of Contracting Parties 'shall establish those procedures and mechanisms necessary to assess and promote compliance...'

The Protocol contains three annexes:

Annex I details substances which are known to cause harm to aquatic organisms even in low concentrations (Black List), are prohibited from disposal, unless they can be shown to be 'rapidly rendered harmless' providing they will not taint edible organisms and/or endanger human or domestic animal health. Dredged material containing the Black List substances as 'trace contaminants' is exempted but is given Annex II status, however 'trace' is not defined.

Annex II substances (Grey List or Special Care Substances) require a prior special permit if the quantity exceeds 'significant amounts' and all other wastes require a prior general permit.

To determine whether any permit should be issued, Annex III lists the considerations which need to be made (in addition to the Annex I and Annex II considerations to determine whether undesirable effects may result) and can be divided into three sections:

- Characteristics and composition of matter to be dumped. This includes details of the quantity, its form, its physical, chemical and biological properties, its toxicity and persistence and its susceptibility to change.
- Characteristics of the dump site and the method of disposal. Factors to consider include location, disposal rate, form of material immediately prior to disposal, dispersal, water and bed characteristics of the site, and previous dumping history.
- General environmental considerations including possible effects on amenities, marine life, other uses of the sea and the practical availability of alternative disposal or treatment.

Amendments to the annexes are adopted through a tacit acceptance procedure under which they will enter into force not later than 100 days after being adopted. The amendments will bind all Contracting Parties except those which have explicitly expressed their non-acceptance.

VECTORS Drivers

Fishing

The definition of 'pollution' in the Protocol means the introduction, directly or indirectly, by human activity, of wastes or other matter into the sea which results or is likely to result in such deleterious effects as harm to living resources and marine ecosystems, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities (Article 1(10)).

Annex I of the 1996 Protocol states that fish waste, or material resulting from industrial fish processing operations may be considered for dumping being mindful of the Objectives and General Obligations of the Protocol set out in Articles 2 and 3. The Protocol emphasises that dumping can occur where permitted but only when the material dumped poses no serious obstacle to fishing or navigation.

Energy (renewable/non-renewable)

At the end of their life all offshore installations should be removed to ensure safety of navigation and prevent potential harm to the marine environment. See IMO Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone

(Resolution A.672(16)). If dumping, in full or part, is the preferred disposal option, then this will require a permit under the London Convention, which would set conditions for any such disposal.

Transboundary or Domestic

Transboundary and domestic.

Geographical Scope

All marine waters other than the internal waters of States, as well as the seabed and the subsoil thereof; it does not include sub-seabed repositories accessed only from land.

Institutional Organisations

When the Convention came into force on 30 August 1975, IMO was made responsible for the Secretariat duties related to it.

Subsidiary Instruments

London Convention and Protocol resolutions adopted at the Meetings of the Contracting Parties

- Resolution LP.3(4) on the Amendment to Article 6 of the Protocol
- Resolution LP.2(2) on the Terms of Reference for the LP Scientific Group
- Resolution LP.1(1) on the Amendment to include CO₂ Sequestration in sub-seabed geological formations in Annex 1 to the London Protocol
- In 1995 the London Convention adopted the 'Dredged Material Assessment Framework' (DMAF)

A2.8 Convention On Environmental Impact Assessment In A Transboundary Context (Espoo Convention)

Synopsis

In 1991 Member States of the UN Economic Commission for Europe (UNECE) signed the Convention on Environmental Impact in a Transboundary Context, known as the Espoo Convention. This Convention is open to UNECE Member States and the European Union. The Espoo Convention required its parties to assess the transboundary environmental effects of certain actions within their jurisdiction and to notify and consult with potentially affected states about those effects. Parties should be aware of the interrelationship between economic activities and their environmental consequences, and affirm the need to ensure environmentally sound and sustainable development. International cooperation should be secured in assessing environmental impact in particular in a transboundary context and be mindful of the need and importance to develop anticipatory policies and of preventing, mitigating and monitoring significant adverse environmental impact in general and more specifically in a transboundary context.

Legal Status

The Espoo Convention entered into force on 10 September 1997 in accordance with Article 18(1). At the end of April 2012, there were 30 signatories and 45 parties to the Convention. The most important countries eligible to join the Convention that have not done so are Iceland, Russia and the United States, all of which have signed but not ratified³⁰.

Key Provisions

The Convention contains 20 Articles and 7 Appendices. Article 2(1) states that Parties shall, either individually or jointly, take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities. Article 2(2) of the Convention states that each Party shall take the necessary legal, administrative or other measures to implement the provisions of this Convention, including, with respect to proposed activities listed in Appendix I that are likely to cause a significant adverse transboundary impact. The projects listed in Annex I are 'subject to a decision of a competent (i.e. governmental) authority' (Article 2) and include:

1. Crude oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 metric tons or more of coal or bituminous shale per day.
2. (a) Thermal power stations and other combustion installations with a heat output of 300 megawatts or more, and
(b) Nuclear power stations and other nuclear reactors, including the dismantling or decommissioning of such power stations or reactors 1/ (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).
3. (a) Installations for the reprocessing of irradiated nuclear fuel;
(b) Installations designed:
 - For the production or enrichment of nuclear fuel;
 - For the processing of irradiated nuclear fuel or high-level radioactive waste;
 - For the final disposal of irradiated nuclear fuel;
 - Solely for the final disposal of radioactive waste; or

³⁰ United Nations Treaty Collection http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-4&chapter=27&lang=en#1 (accessed 25/04/12)

- Solely for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the production site.
- 4. Major installations for the initial smelting of cast iron and steel and for the production of non-ferrous metals.
- 5. Installations for the extraction of asbestos and for the processing and transformation of asbestos and products containing asbestos: for asbestos-cement products, with an annual production of more than 20,000 metric tons finished product; for friction material, with an annual production of more than 50 metric tons finished product, and for other asbestos utilisation of more than 200 metric tons per year.
- 6. Integrated chemical installations.
- 7. (a) Construction of motorways, express roads 2/ and lines for long-distance railway traffic and of airports 3/ with a basic runway length of 2,100 metres or more;
(b) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road, would be 10 km or more in a continuous length.
- 8. Large-diameter pipelines for the transport of oil, gas or chemicals.
- 9. Trading ports and also inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1,350 metric tons.
- 10. Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes.
- 11. Large dams and reservoirs.
- 12. Groundwater abstraction activities or artificial groundwater recharge schemes where the annual volume of water to be abstracted or recharged amounts to 10 million cubic metres or more.
- 13. Pulp, paper and board manufacturing of 200 air-dried metric tons or more per day.
- 14. Major quarries, mining, on-site extraction and processing of metal ores or coal.
- 15. Offshore hydrocarbon production. Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 metric tons/day in the case of petroleum and 500 000 cubic metres/day in the case of gas.
- 16. Major storage facilities for petroleum, petrochemical and chemical products.
- 17. Deforestation of large areas.

Article 4 states that the environmental impact assessment (EIA) documentation should be submitted to the competent authority of the Party of origin and shall contain, as a minimum, the information described in Appendix II. Appendix II lists the following:

- (a) A description of the proposed activity and its purpose;
- (b) A description, where appropriate, of reasonable alternatives (for example, locational or technological) to the proposed activity and also the no-action alternative;
- (c) A description of the environment likely to be significantly affected by the proposed activity and its alternatives;
- (d) A description of the potential environmental impact of the proposed activity and its alternatives and an estimation of its significance;
- (e) A description of mitigation measures to keep adverse environmental impact to a minimum;
- (f) An explicit indication of predictive methods and underlying assumptions as well as the relevant environmental data used;
- (g) An identification of gaps in knowledge and uncertainties encountered in compiling the required information;
- (h) Where appropriate, an outline for monitoring and management programmes and any plans for post-project analysis, and
- (i) A non-technical summary including a visual presentation as appropriate (maps, graphs, etc.).

The procedural requirements in many ways reflect pre-existing domestic EIA procedures under Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. The way this Convention goes beyond pre-existing domestic EIA law is to ensure that domestic EIA procedures apply without discrimination to transboundary impacts. The Convention requires states to consider transboundary effects in their domestic EIA procedures and to open those procedures to full participation by affected states and their publics³¹. For a proposed activity listed in Appendix I that is likely to cause a significant adverse transboundary impact, the Party of origin shall, for the purposes of ensuring adequate and effective consultations under Article 5, notify any Party which it considers may be an affected Party as early as possible and no later than when informing its own public about that proposed activity (Article 3). Article 5 also states that the Party of origin shall, after completion of the EIA, without undue delay enter into consultations with the affected Party concerning, inter alia, the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact (Article 5).

It is important to note that the Espoo Convention does not establish an international EIA procedure but outlines specific conditions which should be incorporated into national environmental impact assessment procedures (Articles 3.5 to 3.8 and Articles 4 to 7).

The first amendment to the Convention was adopted in 2001. Once in force, it will open the Convention to accession upon approval by UN Member States that are not members of the UNECE. A second amendment to the Convention was adopted in 2004. Once in force, it will allow, as appropriate, affected Parties to participate in scoping; require reviews of compliance; revise the Appendix I (list of activities as detailed above), and make other minor changes.

Protocol on Strategic Environmental Assessment 2003

A Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, Kiev, 21 May 2003 entered into force on 11th July 2010. The SEA-Protocol augments the Espoo Convention by ensuring that individual Parties evaluate the environmental consequences and integrate environmental assessment into their official draft plans and programmes at the earliest stages, so helping to lay the groundwork for sustainable development. The SEA-Protocol allows the identification and prevention of possible environmental impact right from the start in decision-making, and it enables environmental objectives to be considered on a par with socio-economic ones, bringing sustainable development closer. The SEA-Protocol also provides for extensive public participation in the governmental decision-making process and also addresses policies and legislation, though the application of SEA to these is not mandatory (Article 1).

Article 4 of the SEA-Protocol lists the main programmes for which environmental assessment for plans and programmes are likely to have significant environmental and health effects. It states that a SEA shall be carried out for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent for projects listed in Annex I and any other project listed in Annex II that requires an environmental impact assessment under national legislation.

For each plan and programme subject to SEA, each Party shall ensure that an environmental report is prepared (Article 7). Article 9 requests that each Party shall designate the authorities to be consulted which are likely to be concerned by the environmental, including health, effects of the implementation of a plan or programme. Article 12 states that each Party shall monitor the significant environmental, including health, effects of the implementation of the plans and programmes, in order to identify at any stage, unforeseen adverse effects and to be able to undertake appropriate remedial action.

³¹ Knox, J.H. 2002. The myth and reality of transboundary environmental impact assessment. *American Journal of International Law*. Vol.96 No.291

VECTORS Drivers

Energy (Renewables & Non-renewables)

Offshore hydrocarbon production (the extraction of petroleum and natural gas) and large-diameter pipelines for the transport of oil, gas or chemicals are listed under Annex I of the Espoo Convention and in Annex I of the SEA-Protocol, and therefore consultation and cross border cooperation in the planning process of these activities is promoted. Article 4 of the SEA-Protocol states that an SEA should be prepared for a plan or programmes which are prepared for 'energy'. Annex II of the SEA-Protocol also lists pipelines for transport of gas or oil, as far as not included in Annex I.

In the context of offshore renewable energy, once the second amendment to the Convention adopted in 2004 comes into force, it will revise the projects listed in Appendix I to include major installations for the harnessing of wind power for energy production (wind farms). Annex II of the SEA-Protocol lists installations for the harnessing of wind power for energy production (wind farms) as a plan which requires an SEA under national legislation. However other offshore renewable energy installations, such as wave and tidal energy projects, are not mentioned in the Annex.

Both the Espoo Convention and the SEA-Protocol have a direct impact on the licensing process for offshore renewable energy projects. Planning of activities is covered by legal rules and procedures allowing or rejecting a license or concession for the planned activity.

Fisheries

Article 4 of the SEA-Protocol lists the main programmes for which environmental assessment for plans and programmes are likely to have significant environmental and health effects. It states that an SEA shall be carried out for plans and programmes which are prepared for 'fisheries'. However with the exception of intensive fish farming and the construction of harbours and port installations, including fishing harbours, as far as not included in Annex I, there is no mention of other fisheries activities requiring an SEA.

Alien Species

Procedural and substantive requirements for the assessment of transboundary impacts are laid down in this Convention and it is felt these should be applied to alien species³².

Transboundary or Domestic

Transboundary remit.

Geographical Remit

Contracting parties to the Convention should apply this Convention throughout their jurisdiction and take into account those effects it may have on the jurisdiction of another Party.

Institutional Organisations

Article 13 states that the Secretariat functions of the Convention will be carried out by the Executive Secretary of the Economic Commission for Europe.

Subsidiary Instruments

- Amendment to the Convention on Environmental Impact Assessment in a Transboundary Context. Sofia, 27 February 2001 (not yet in force).

³² Shine, Williams and Gundling, 2000. A guide to Designating Legal and Institutional Frameworks on Alien Invasive Species. IUCN

- Amendment to the Convention on Environmental Impact Assessment in a Transboundary Context. Cavtat, 4 June 2004 (not yet in force). This second amendment lists the following plans and programmes to update Annex I of the Espoo Convention:

18. (a) Works for the transfer of water resources between river basins where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year; and

(b) In all other cases, works for the transfer of water resources between river basins where the multi-annual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5 per cent of this flow.

In both cases transfers of piped drinking water are excluded.

19. Waste-water treatment plants with a capacity exceeding 150 000 population equivalent.

20. Installations for the intensive rearing of poultry or pigs with more than:

- 85 000 places for broilers;
- 60 000 places for hens;
- 3 000 places for production pigs (over 30 kg); or
- 900 places for sows.

21. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.

22. Major installations for the harnessing of wind power for energy production (wind farms).

It should be noted that items 18 to 22 in Appendix I will only come into force once three fourths of the Parties have ratified, approved or accepted the Second Amendment. At end April 2012, only 20 parties have ratified the Second Amendment³³.

³³ United Nations Treaty Collection http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-4-c&chapter=27&lang=en (accessed 26/04/12)

A2.9 Bern Convention on the Conservation of European Wildlife and Natural Habitats

Synopsis

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was agreed in Bern in September 1979, and entered into force in June 1982. The Bern Convention is a binding international legal instrument in the field of nature conservation, which covers most of the natural heritage of the European continent and extends to some States of Africa. It aims to conserve wild flora and fauna and their natural habitats, and to promote European cooperation in that field. The Convention places a particular importance on the need to protect endangered natural habitats and endangered vulnerable species, including migratory species³⁴. Parties should undertake all appropriate measures to ensure the conservation of the habitats of the wild flora and fauna species. Such measures should be included in the Parties planning and development policies and pollution control, with particular attention to the conservation of wild flora and fauna. The Parties undertake to promote education and disseminate general information concerning the need to conserve species of wild flora and fauna and their habitats³⁵.

Legal Status

As of end of April 2012, 49 Parties and the European Union have ratified this Convention.

Key Provisions

The Convention begins by imposing very general obligations on the parties to maintain the population of wild flora and fauna at, or to adapt it to, a level which corresponds to ecological, scientific and cultural requirements, taking account of economic and recreational requirements (Article 2).

Article 3 sets out the general obligation for each Contracting Party to take action individually, with respect to the conservation of wild flora and fauna and all natural habitats in general, by promoting national conservation policies; having regard for conservation in regional planning policies and pollution abatement, and promoting education and information.

Article 4 deals with the conservation of habitats. This chapter, with Chapter III, which is concerned with the protection of species, together cover the two principal approaches to nature conservation. Article 5 deals with the protection of species and sets out the obligations for the Contracting Parties regarding the protection of the flora specified in Appendix I. Article 5 only regulates internal commerce in endangered species leaving the regulation of international trade to the Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Article 6 sets out the obligations for the Contracting Parties to ensure the special protection of the fauna listed in Appendix II, with Article 7 setting the obligations to ensure the protection of the fauna listed in Appendix III. Article 8 bans the use of large-scale and non-selective ways and means of capture and killing of fauna which may otherwise be captured, killed or exploited, or for which an exception has been made by the Contracting Parties with the exceptions to the rule given in Article 9.

The Parties should undertake to coordinate their efforts under the Convention in relation to migratory species (Article 10) and to encourage and coordinate research related to the purposes of the Convention (Article 11(1)). Further, under Article 11(2) of the Convention, each Contracting Party is required to 'strictly control the introduction of non-native species'.

Appendix I lists *strictly protected flora species* which in accordance with Article 5 are to be specially protected. This includes the deliberate picking, collecting, cutting or uprooting to be prohibited, as is

³⁴ Council of Europe - http://www.coe.int/t/dq4/cultureheritage/nature/bern/default_en.asp (accessed 12/12/11)

³⁵ Treaty Office on <http://conventions.coe.int>

their possession and sale. Appendix II lists the *fauna species to be strictly protected* which in accordance with Article 6 are to be specially protected through prohibiting all forms of deliberate capture, keeping and killing, deliberate damage to or destruction of breeding or resting sites, deliberate disturbance which is significant in relation to the aims of the Convention, deliberate destruction, taking or keeping of eggs, and the possession and trading in the animals, alive or dead. For a further category of animals listed in Appendix III, measures are to be taken to ensure their protection. In accordance with Article 7, certain exploitation is possible if the population level permits with regulation on their sale.

It was decided for practical reasons to confine the flora and fauna listed in Appendices I, II and III to the taxonomic level of the species, excluding mention of sub-species, varieties and other taxonomic subordinate levels, and essentially those species occurring on the territories of the States that had elaborated this Convention. The lists in the appendices include only those indigenous species on which general agreement could be obtained. Rather than attempting to reach agreement on all those species that merit strict protection under this Convention it seemed preferable at this stage to confine recommendations to generally acceptable species, thereby facilitating accession to the Convention, which could thus come into force without undue delay. The lists could be developed further by the Standing Committee, where there would be the opportunity for States to deepen their mutual understanding by working closely together and thus accelerate the effective working of the Convention³⁶.

VECTORS Drivers

Energy (Renewables & Non-renewables)

The underlying principles of the Bern Convention are that the contracting Parties should undertake all appropriate measures to ensure the conservation of the habitats of the wild flora and fauna species and migratory species. With offshore energy production playing an increasing role in the commitment to greener energy production, there is a need to balance the risks and benefits and to minimise any adverse environmental effects. Measures such as site selection, planning and development policies and strategic environmental assessments (SEA) (See Chapter 3.10) should be carried out by Parties to minimise impacts on wild fauna. The Council of Europe, on behalf of the Bern Convention, commissioned BirdLife International³⁷ to prepare a report leading to the draft recommendation proposed for adoption, reviewing the impacts on birds from wind farms and providing guidance on environmental assessment and site selection.

Fisheries

Several fish are listed on Annex II and III of the Bern Convention, for example, the Sea Lamprey (Annex III species). Article 4 states that Parties should undertake to give special attention to the protection of areas that are of importance for the migratory species specified in Appendices II and III and which are appropriately situated in relation to migration routes, as wintering, staging, feeding, breeding or moulting areas.

Alien Species

Article 11 sets out a number of supplementary obligations for the Contracting Parties, with regard to inter-State co-operation, research, reintroduction and introduction of species and information from the Standing Committee. Article 11.2.b specifically requires Parties 'to strictly control the introduction of non-native species'. The Standing Committee to the Bern Convention has actively promoted the

³⁶ Council of Europe Explanatory note. <http://conventions.coe.int/Treaty/EN/Reports/HTML/104.htm> (accessed 12/12/11)

³⁷ Langston, R.H.W & Pullan, J.D. 2003. Windfarms and Birds: An analysis of the effects of windfarms on birds, and guidance on environmental assessment criteria and site selection issues. BirdLife International.

development of more effective legal measures to deal with alien invasive species, by commissioning legal research and analysis and by developing specific recommendations regarding introductions and eradications of alien invasive species and the reintroduction of native species³⁸.

Transboundary or Domestic

Both domestic and transboundary.

Geographical Scope

Global.

Institutional Organisations

The Standing Committee is the governing body of the Bern Convention. It includes all Contracting Parties as well as observer states and organisations, both governmental and non-governmental, at the national and international level. It meets annually at the Council of Europe premises in Strasbourg and adopts recommendations concerning measures that should be taken to achieve the Convention's objectives and improve its effectiveness. It also monitors the implementation of the Convention and provides guidance on its implementation and further development. The Convention is also managed by the Bureau and Secretariat, with groups of experts on the conservation of Amphibian and Reptiles; Birds; Invertebrates; Plants; the setting up of the Emerald Network of Areas of Special Conservation; on Invasive Alien Species and on Biodiversity and Climate Change.

Subsidiary Instruments

- European Strategy on Invasive Alien Species³⁹ (see Chapter 2.9)
- Emerald Network
- European Plant Conservation Strategy
- European Strategy on the Conservation of Invertebrates
- Council Decision of 21 December 1998 concerning the approval, on behalf of the Community, of amendments to Appendices II and III to the Berne Convention on the conservation of European wildlife and natural habitats adopted at the 17th meeting of the Convention's Standing Committee (Official Journal L 358 of 31.12.1998).

³⁸ Genovesi, P. & Shine, C. 2004. European strategy on invasive alien species. Convention on the Conservation of European Wildlife and Habitats (Bern Convention). Nature and environment, No. 137. Council of Europe.

³⁹ As above.

A2.10 European Strategy on Invasive Alien Species

Synopsis

The Bern Convention initiative for a European Strategy on Invasive Alien Species (IAS), in collaboration with the European Section of the IUCN Invasive Species Specialist Group, began in 2000. It has been welcomed by the Second Intergovernmental Conference on Biodiversity in Europe in Budapest and the CBD⁴⁰. It promotes the development and implementation of co-ordinated measures and co-operative efforts throughout Europe to prevent or minimise adverse impacts of IAS on Europe's biodiversity, as well as their consequences for the economy and human health and well-being. The Strategy provides guidance to help Bern Convention Parties in their efforts to:

- rapidly increase awareness and information on IAS issues and ways to tackle them;
- strengthen national and regional capacity and co-operation to deal with IAS issues;
- prevent the introduction of new invasive alien species into and within Europe and support rapid response to detected incursions;
- reduce the adverse impact of existing invasive alien species;
- recover species and restore natural habitats and ecosystems that have been adversely affected by biological invasions, where feasible and desirable; and
- identify and prioritise key actions to be implemented at the national and regional level.

The Strategy aims to facilitate implementation of international commitments and best practice and to support development of realistic policies, measures and targets. Priority actions are proposed that are key in terms of time and feasibility of implementation.

Legal Status

The Strategy is a non-statutory document and its implementation will depend upon effective cooperation, co-ordination and communication between those involved in delivering its objectives. The partnership approach which has underpinned work to date will be key to implementing the Strategy. There is a wide range of International, European and National policy drivers for the Strategy. Many countries are committed to a number of International Conventions and agreements, such as the Convention on Biological Diversity (CBD), the Ramsar Convention and the Bern Convention, which require them to take account of invasive alien species. At a European level, the UK Government is committed to the target to halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020 and is obliged under the EU Birds and the Habitats Directives to have certain measures in place concerning the introduction of invasive alien species.

Key Provisions / VECTORS Drivers

Invasive Alien Species

In 2002, the Convention on Biological Diversity (CBD) Conference of the Parties adopted a specific Decision and Guiding Principles (GP)⁴¹. This Strategy is structured into components which reflect the challenges of IAS and are in line with the guiding principles set out by the CBD and the Global Invasive Species Programme. The first component deals with building awareness and support (CDB GP6) through stakeholders who are actively engaged in the development of best practices to prevent IAS impacts. Key actions include setting up education and public awareness programmes, disseminating information and best practice and supporting the holding of conferences on IAS.

⁴⁰ Genovesi, P. & Shine, C. 2004. European strategy on invasive alien species. Convention on the Conservation of European Wildlife and Habitats (Bern Convention). Nature and environment, No. 137. Council of Europe

⁴¹ Decision VI/23 on *Alien Species that threaten ecosystems, habitats and species* (COPVI, The Hague, April 2002) to which are annexed the *Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that threaten Ecosystems, Habitats or Species*.

The second component addresses the collection, management and sharing of information on IAS. This includes keeping species inventories (CBD GP8.1) with the actions of developing national inventories and the sharing of information through global information networks. Through research and systematic monitoring (CBD GPs 5 & 9.d), the ecology, distribution, patterns of spread and response to management of IAS could be better understood. This also strengthens the capacity to predict the consequences of alien species introductions. The regional exchange of information (CBD GPs 4.3, 8.1 & 9.a) aims to ensure that effective systems are in place to share IAS information between neighbouring countries, trading partners and regions to facilitate identification, early warning and coordination of prevention, mitigation and restoration measures. Key actions include identifying lead organisations, registers of European IAS experts and promoting regular meetings and workshops.

The third component of the Strategy is strengthening national policy, legal and institutional frameworks. It is especially important that Parties initiate a coordinated review process of their institutional and legal frameworks and their strategies, policies and approaches relevant to IAS issues. This includes that clear leadership and appropriate coordination is in place for IAS prevention and mitigation. Key actions suggest that a national authority is established to lead and coordinate efforts and for them to work closely with counterpart national focus points for relevant instruments and organisations (CBD, GISP, Ramsar, CMS, UNESCO Man and the Biosphere Programme, IMO, IPPC/EPPO etc.) in the development and implementation of national IAS strategies and management responses. The Strategy also promotes IAS prevention, eradication, and control being fully incorporated in national/subnational legislation and in biodiversity and other relevant policies, strategies and action plans, consistent with international law. Parties should all have specific strategies and action plans in place to address all aspects of IAS prevention and mitigation. These should be developed using stakeholder consultation and specialist input and the action plans should address specific problems identified e.g. for priority IAS, pathways and VECTORS, vulnerable sites, ecosystems, etc.

The third component also addresses the key approaches and tools (CBD GPs 1, 2 & 3) which determines the strategies, legal frameworks and measures needed to follow and support the key approaches supported by the CBD Guiding Principles. Key actions need the provision for the application of the precautionary approach to IAS decision-making, consistent with international law, within a risk analysis framework that takes account of possible impacts on native biodiversity and ecosystem function. IAS risk criteria should also be incorporated into environmental impact assessment (EIA) and strategic environmental assessment (SEA) procedures, as appropriate and relevant. The Third key issue also addresses ancient introductions of IASs and compliance and enforcement.

The fourth component of the European Strategy on IAS is on regional cooperation and responsibility. Cooperation between Bern Convention Parties (CBD GPs 4.1, 4.2, 8.2 & 9.a) incorporates the need for States to recognise the risk that activities within their jurisdiction or control may pose to other States as a potential source of IAS and take appropriate individual and cooperative actions to minimise that risk. It is felt that the Bern Convention is well-placed to promote national and European cooperation on IAS issues by facilitating national implementation of this Strategy and strengthening cooperation with relevant regional and global institutions. Subregional cooperation (CBD GPs 3 & 9) is encouraged to share common problems with IAS prevention, monitoring and mitigation within a subregion, including States not party to the Bern Convention, are encouraged to develop and participate in relevant programmes.

The fifth component addresses the prevention of IAS (CBD GPs 2.1-2). This includes prevention at source and on arrival: border control and quarantine measures (CBD GP7) with Parties cooperating to strengthen and prioritise border control and quarantine measures for alien species that are or could become invasive, making the best use of existing resources and information systems. Intentional introductions (CBD GP1, 9.a, 9.c & 10) where proposed introductions are assessed through a

comprehensive screening system based on risk analysis; unintentional introductions (CBD GP11) where appropriate measures and operational resources are in place to minimise unintentional introductions resulting from sectoral activities; in-country prevention (CBD GPs 7.2, 10 & 11) where species native in one part of a country, may be alien, even invasive, in another part of the same country. Therefore measures need to be in place to minimise the introduction, establishment and spread of IAS or potential IAS within a country; special measures for isolated ecosystems (CBD GP3) and the prediction and prevention of spontaneous spread which allows a timely response by neighbouring states.

The sixth component of the Strategy is on early detection and rapid response. Early detection of IAS is essential because of the need for rapid action before significant populations are established. Surveillance activities (CBD GP2.2) aimed at identifying alien species new to the country is a critical element of prevention. All Parties should have comprehensive and cost-effective surveillance procedures in place, such as setting up an Early Warning System, and organise regular surveillance of high-risk areas (e.g. ports and highly disturbed areas). In addition parties should develop rapid response and contingency planning (CBD GPs 2.2, 12 & 13) so the time between documenting an introduction and implementing a response is reduced through the clear allocation of roles and powers, and the development of contingency plans for eradicating newly detected alien species, except those recognised as low risk.

The seventh component is on the mitigation of impacts. When the establishment of an IAS has been detected, appropriate management responses (eradication, containment, control) are needed in the earliest possible stages of invasion to mitigate adverse effects. This is consistent with the three-stage hierarchical approach set out in CBD Guiding Principle 2. Policy and legal aspects (CBD GPs 1, 2.2, 6 & 12) need to be transparent in order that all Parties have a clear legal basis for mitigation measures and procedures to consult and involve affected communities and stakeholders. This can be achieved by equipping competent authorities with powers to take appropriate mitigation measures, based on the precautionary approach and an examination of the long-term benefits and costs (environmental, economic and social). Affected States should also be able to promote coordinated mitigation measures for species identified as a transboundary, subregional or regional problem using existing structures where possible. Management tools for mitigation include:

- Eradication (CBD GP13) is an essential management tool and should be encouraged and promoted where appropriate and feasible. However realistic priorities for eradication should be agreed and implemented and the results disseminated.
- Containment (CBD GP14) methods should be selected with regard to their efficiency, selectivity and the undesired effects they may cause.
- Control programmes (CBD GP15) based on cost/benefit analysis should reduce the density and abundance of an IAS to keep its impact to an acceptable level in the long term.

The final component of the Strategy addresses the restoration of native biodiversity (CBD GP3). As part of a holistic approach, IAS policies and measures need to go further than the defensive three-stage hierarchical approach (CBD GP2) and support restoration measures for species, natural habitats and ecosystems that have been affected by biological invasions. IAS strategies and eradication and control programmes should promote restoration measures for native biodiversity and wherever possible, the use of native species of local provenance in preference to alien species.

FISHERIES

To prevent unintentional introductions of IAS in aquaculture and mariculture activities, the Strategy promotes the implementation and further development of standards, codes of conduct and best practices. Best practice examples include the International Council for the Exploration of the Sea (ICES) Code of Practice on the Introductions and Transfers of Marine Organisms (1994) and the FAO

Code of Conduct for Responsible Fisheries (1995). Countries should work with key stakeholders (e.g. Federation of European Aquaculture Producers) to address risks to native biodiversity associated with escapes from fish farms and introduction of alien parasites in fish stock. Consideration should be given for stricter controls on the use of highly invasive alien fish species and stronger animal health measures.

Transboundary or Domestic

Both transboundary and domestic in nature.

Geographical Scope

The Strategy covers terrestrial, freshwater and marine environments under the sovereignty or jurisdiction of Bern Convention Parties. It also provides guidance for activities carried out in areas beyond national jurisdiction (e.g. shipping).

Institutional Organisations

There is no lead organisation for this Strategy. The Strategy is primarily targeted at governments of Contracting Parties to the Bern Convention and of other European states. It is a comprehensive document addressed to nature conservation agencies and all other sectoral agencies with responsibility for activities relevant to IAS prevention or management. It is recognised that many aspects of implementation will be delivered through existing plant, animal and human health agencies which have long-standing expertise in particular areas (e.g. micro-organisms).

A2.11 Ramsar Convention

Synopsis

The Convention on Wetlands of International Importance, signed in Ramsar, Iran in 1971, is an intergovernmental treaty which provides the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources. The Convention entered into force on the 21 December 1975 and the Convention's member countries cover all geographic regions of the planet. The Ramsar Convention is the only global environmental treaty that deals with a particular ecosystem. Its three main objectives are to 1) designate suitable wetlands for the List of Wetlands of International Importance ("Ramsar List") and ensure their effective management; 2) to work towards the wise use of all their wetlands through national land-use planning, appropriate policies and legislation, management actions, and public education, and 3) to cooperate internationally concerning transboundary wetlands, shared wetland systems, shared species, and development projects that may affect wetlands.

Legal Status

There are currently 160 Contracting Parties to the Ramsar Convention, with 2005 Ramsar sites designated worldwide protecting 192,819,251 hectares⁴².

Key Provisions

The Convention gives 'wetlands' a broad definition covering areas of marsh, fen, peatland or water, natural or artificial, permanent or temporary. Wetlands include areas with "water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres" (Article 1(1)).

Article 2(1) states that each Contracting Party should designate suitable wetlands within its territory for inclusion in 'the List' of Wetlands of International Importance maintained by the Convention by Wetlands International as Ramsar sites with clearly defined boundaries. These wetlands should be selected on account of their international significance in terms of ecology, botany, zoology, limnology or hydrology (Article 2(2)). Any Contracting Party shall have the right to add to the List further wetlands situated within its territory, to extend the boundaries of those wetlands already included by it in the List, or, because of its urgent national interests, to delete or restrict the boundaries of wetlands already included by it in the List and shall, at the earliest possible time, inform the organisation or government responsible for the continuing bureau duties specified in Article 8 of any such changes (Article 2(5)). Each Contracting Party shall consider its international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl, both when designating entries for the List and when exercising its right to change entries in the List relating to wetlands within its territory (Article 2(6)).

Under Article 3, each Contracting Party should undertake to formulate and implement their planning so as to promote the conservation of the wetlands designated under the Convention, and as far as possible the wise use of wetlands in their territory. Each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the organisation or government responsible for the continuing bureau duties specified in Article 8.

⁴² http://www.ramsar.org/cda/en/ramsar-home/main/ramsar/1_4000_0 (accessed 26/04/12)

Article 4 states that each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening. Where in the national interest, a Ramsar site is lost or is restricted, a compensatory wetland habitat should be created either in the same area or elsewhere of an adequate portion of the original habitat.

Article 5 states that Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.

Articles 6 to 12 deal with the administration of the Convention.

VECTORS Drivers

Energy (Renewables & Non-renewables)

A draft resolution which will be discussed at the 11th Meeting of the Conference of the Parties to the Convention on Wetlands in Bucharest, Romania, 6-13 July 2012 has been written entitled *Resolution XI.10 Wetlands and energy issues*. This recognises that energy demands, and specifically that of renewable sources, are increasing and this could have a deleterious impact on the ecological character of wetlands, both in terms of location of sites and their associated infrastructure.

Fisheries

Resolution IX.4 on the *Ramsar Convention and Conservation, Production and Sustainable Use of Fisheries Resources* covers issues in inland, coastal and marine fisheries in wetlands within the scope of Article 1 and Ramsar sites within the scope of Article 2.1 of the Ramsar Convention. It encourages each Contracting Party to take necessary steps within their policies and national systems of protected areas for establishment and recognition of inland, coastal and marine protected areas as a tool for biodiversity conservation and fisheries resources management. It requests that fisheries authorities responsible for managing fisheries within, adjacent to or associated with Ramsar sites to ensure that their activities support the maintenance of the ecological character of the Ramsar site (or sites). The resolution also urges each Contracting Party to take necessary steps within their policies and national systems of protected areas for establishment and recognition of inland, coastal and marine protected areas as a tool for biodiversity conservation and fisheries resources management. Contracting Parties should also assist fishers in gaining access to environmentally friendly technologies for fisheries and related activities.

Resolution VI.2: *Adoption of specific criteria based on fish for identifying Wetlands of International Importance* also emphasises that a wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

Invasive Species

The Ramsar Convention has no explicit provision on alien invasive species however the Convention has a number of resolutions addressing various related issues. *Resolution VII.14 on Invasive Species and Wetlands* calls for inventories of invasive species; prioritised programmes to control or eradicate invasive species, and a review of existing legislation to prevent the introduction of new and

environmentally dangerous alien species and the movement or trade of such species within the jurisdictions of Contracting Parties⁴³.

Resolution VIII.18 on Invasive Species and Wetlands makes Contracting Parties aware that alien species that become invasive continue to pose a major threat to the ecological character of wetlands worldwide, and to wetland species, and that such invasions can cause major social and economic damage and loss. It also predicts that the effects of global climate change will include invasion by alien species into new areas, and that species formerly regarded as benign may become invasive.

Resolution IX.4 on the Ramsar Convention and conservation, production and sustainable use of fisheries resources strongly urges each Contracting Party, in order to maintain the ecological character of wetlands, to adopt effective legal tools and programmes to prevent and minimise the introduction of alien and/ or invasive species within wetlands. This would be the introduction of aquatic biota for aquaculture and the aquarium industry, to control the accidental movement of species for example through ballast water, to avoid introduction of invasive and/or alien species, and to undertake the necessary measures to prevent the introduction or spread of known alien and/or invasive in natural fishing areas and aquatic biota (including invasive alien genes) that puts at risk the survival of native species, in line with Resolution VIII.18;

Transboundary or Domestic

In some instances, Ramsar Contracting Parties have established their new and existing Ramsar sites as parts of Transboundary Ramsar Sites (TRS), meaning that an ecologically coherent wetland extends across national borders and the Ramsar site authorities on both or all sides of the border have formally agreed to collaborate in its management, and have notified the Secretariat of this intent. This is a cooperative management arrangement and not a distinct legal status for the Ramsar sites involved⁴⁴.

Geographical Scope

The boundaries of each wetland shall be precisely described and also delimited on a map and they may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands, especially where these have importance as waterfowl habitat (Article 2.1).

Institutional Organisations

The implementation of the Ramsar Convention is a continuing partnership between the Contracting Parties, the Standing Committee, and the Convention Secretariat, with the advice of the subsidiary expert body, the Scientific and Technical Review Panel (STRP), and the support of the International Organisation Partners (IOPs). Every three years, representatives of the Contracting Parties meet as the Conference of the Contracting Parties, the policy-making organ of the Convention which adopts decisions (Resolutions and Recommendations) to administer the work of the Convention and improve the way in which the Parties are able to implement its objectives.

Subsidiary Instruments

- The Paris Protocol to the Ramsar Convention on Wetlands, 1982.

⁴³ http://www.ramsar.org/res/key_res_vii.14e.htm (accessed 12/12/11)

⁴⁴ http://www.ramsar.org/cda/en/ramsar-about-sites/main/ramsar/1-36-55_4000_0 (accessed 12/12/11)

A2.12 Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)

Synopsis

ASCOBANS was concluded in 1991 as the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS) under the auspices of the Convention on Migratory Species (Bonn Convention) and entered into force in 1994. In February 2008, an extension of the agreement area came into force which changed the name to "Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas". Signatories and observers to ASCOBANS address the scientific advice and practical solutions required to protect small cetaceans from fishing by-catch and other threats (e.g. pollution and disturbance). The aim of the Agreement is to promote close cooperation amongst Parties with a view to achieving and maintaining a favourable conservation status for small cetaceans in the ASCOBANS Area. A conservation and management plan, which forms part of the Agreement, obliges Parties to engage in habitat conservation and management, surveys and research, pollution mitigation and public information. To achieve its aim, ASCOBANS also cooperates with Range States that have not (yet) acceded to the Agreement, with relevant intergovernmental organisations and non-governmental organisations.

Legal Status

As end of April 2012, ASCOBANS has ten Parties: Belgium, Denmark, Finland, France, Germany, Lithuania, the Netherlands, Poland, Sweden and the United Kingdom⁴⁵. ASCOBANS is open for accession by all Range States (i.e. any state that exercises jurisdiction over any part of the range of a species covered by the Agreement or whose flag vessels engage in operations adversely affecting small cetaceans in the Agreement Area) and regional economic integration organisations. Many, but not all countries in the Agreement Area have already become Parties to the Agreement and ASCOBANS continues to grow. In addition, there are seven non-Party Range States: Estonia, Ireland, Latvia, Norway, Portugal, Russian Federation and Spain whose cooperation has been required to achieve its aim.

Key Provisions

Article 1 states that the agreement shall apply to all small cetaceans found within the area of the agreement with 'small cetaceans' including any species, subspecies or population of toothed whales *Odontoceti*, except the sperm whale *Physeter macrocephalus*. The Agreement asks that all Parties undertake to cooperate closely in order to achieve and maintain a favourable conservation status for small cetaceans (Article 2(1)). In particular, each Party shall apply within the limits of its jurisdiction and in accordance with its international obligations, the conservation, research and management measures prescribed in the Annex (Article 2(2)).

The Annex details the Conservation and Management Plan which should be applied to all small cetaceans populations defined in Article 1(1). The plan should consist of:

1. Habitat conservation and management - where Parties should work towards (a) the prevention of the release of substances which are a potential threat to the health of the animals, (b) the development, in the light of available data indicating unacceptable interaction, of modifications of fishing gear and fishing practices in order to reduce by-catches and to prevent fishing gear from getting adrift or being discarded at sea, (c) the effective regulation, to reduce the impact on the animals, of activities which seriously affect their food resources, and (d) the prevention of other significant disturbance, especially of an acoustic nature.

⁴⁵ http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-9&chapter=27&lang=en (accessed 30/04/12)

2. Surveys and research - Investigations, to be coordinated and shared in an efficient manner between the Parties and competent international organisations, shall be conducted in order to (a) assess the status and seasonal movements of the populations and stocks concerned, (b) locate areas of special importance to their survival, and (c) identify present and potential threats to the different species.

3. Use of by-catches and strandings - Each Party shall endeavour to establish an efficient system for reporting and retrieving by-catches and stranded specimens and to carry out, in the framework of the studies mentioned above, full autopsies in order to collect tissues for further studies and to reveal possible causes of death and to document food composition. The information collected shall be made available in an international database.

4. Legislation - Without prejudice to the provisions of paragraph 2 above, the Parties shall endeavour to establish (a) the prohibition under national law, of the intentional taking and killing of small cetaceans where such regulations are not already in force, and (b) the obligation to release immediately any animals caught alive and in good health. Measures to enforce these regulations shall be derived at the national level.

5. Information and education - Information shall be provided to the general public in order to ensure support for the aims of the agreement in general and to facilitate the reporting of sightings and strandings in particular, and to fishermen in order to facilitate and promote the reporting of by-catches and the delivery of dead specimens to the extent required for research under the agreement.

VECTORS Drivers

Energy (Renewables & Non-renewables)

Parties to the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS) at their 5th Meeting (2006) called for further research to be conducted on the effects of wind farms on small cetaceans (Resolution 4).

A Resolution focusing on noise from offshore construction activities for renewable energy production was passed by ASCOBANS Parties in 2009 (Resolution 6.2) which includes recommendations that Parties and Range States consider a strategic approach to the siting of marine renewable energy developments. It includes Strategic Environmental Assessments and Environmental Impact Assessments carried out prior to the construction of marine renewable energy developments and taking into account the construction phase and cumulative impacts. It also requests the appropriate siting of devices to minimise impacts on small cetaceans; avoiding certain times of year for construction work when the highest densities of small cetaceans are present, alerting small cetaceans to the onset of potentially harmful construction noise, and implement technical measures for reducing the sound emission during construction works, if potentially significant adverse effects on small cetaceans cannot be avoided by other measures. Resolution 6.2 also requests the continued development of effective mitigation measures, guidelines and technological adaptations to minimise any potentially significant adverse effects on small cetaceans due to offshore construction in the framework of marine renewable energy production, including disturbance effects and physical damage. This has resulted in national regulations and guidelines having already been developed and implemented by some Parties to ASCOBANS (e.g. Belgium, Germany, France and Poland).

A report was also made to the 19th meeting of the ASCOBANS Advisory Committee on the Scope and aims of the symposium Towards an Environmentally Sound Offshore Wind Energy Deployment, held in Stralsund, Germany January 2012.

Fisheries

Fishing gear (monofilament line, nets and ropes) was found to be the most significant source of entanglements in all documented records regarding cetaceans and other marine life. The greatest

source of this material was considered to be commercial fishing operations, although recreational fishing and cargo ships were also considered potential sources⁴⁶. Considered the most serious threat to cetacean populations in the ASCOBANS area, resolutions addressing this bycatch problem have been passed at almost all Meetings of the Parties⁴⁷. Most significantly, ASCOBANS Resolution No. 3 on the Incidental Take of Small Cetaceans sets a bycatch rate target of 1.7%. ASCOBANS tries to engage actively with fishermen throughout the Agreement Area. To this effect, a working group on bycatch has been established by the Advisory Committee. It was estimated that some 100,000 marine mammals died every year from entanglement or ingestion of fishing gear and related marine debris⁴⁸.

It is also considered that fisheries have a major, albeit difficult to quantify, indirect impact on cetaceans⁴⁹ through the targeted prey of cetaceans. Over exploitation of fish stocks by the fishing industry could make the marine species who depend on them vulnerable. This is especially true for populations with restricted or localised coastal distributions. Perrin et al (2009) observed a correlation between the decline in abundance of preferred fish species and the shifts in diet of harbour porpoises in Scottish waters and the southern North Sea and in other parts of the world outside of the ASCOBANS Area⁵⁰.

Transboundary or Domestic

Since migrating cetaceans regularly cross national boundaries, their effective protection can only be achieved by international cooperation through transboundary conservation. Thus, ASCOBANS' aim is to promote close cooperation amongst its Parties with a view to achieving and maintaining a favourable conservation status for small cetaceans.

Geographical Scope

The Agreement covers the marine environment of the Baltic and North Seas and contiguous area of the North East Atlantic, as delimited by the shores of the Gulfs of Bothnia and Finland; to the south-east by latitude 36°N, where this line of latitude meets the line joining the lighthouses of Cape St. Vincent (Portugal) and Casablanca (Morocco); to the south-west by latitude 36°N and longitude 15°W; to the north-west by longitude 15° and a line drawn through the following points: latitude 59°N/longitude 15°W, latitude 60°N/longitude 05°W, latitude, 61°N/longitude 4W;latitude 62N/ longitude 3W; to the north by latitude 62°N, and including the Kattegat and the Sound and Belt passages⁵¹.

Institutional Organisations

Each Party shall designate a Coordinating Authority (Article 3) for activities under this agreement and establish a Secretariat (Article 4) and an Advisory Committee (Article 5). The Meeting of the Parties (MOP) is the decision-making body of ASCOBANS (Article 6). It meets every three years to review progress made and difficulties encountered in the implementation of the Agreement and to lay down the priorities for the next triennium. The Advisory Committee meets annually and provides advice and information to the Secretariat and the Parties on the conservation and management of small cetaceans and on other matters related to the running of the Agreement.

⁴⁶ Simmonds, M, 2012. Cetaceans and Marine Debris. Agenda Item 5.2 Implementation of the Triennium Work Plan (2010-2012) V Other Issues Review of New Information on Pollution and its Effect. 19th ASCOBANS Advisory Committee Meeting AC19/Doc.5-05 (O) rev.1 Galway, Ireland, 20-22 March 2012 Dist. 23 February 2012. Submitted by the Whale and Dolphin Conservation Society.

⁴⁷ <http://www.ascobans.org/bycatch.html> (accessed 26/04/12)

⁴⁸ Laist, D.W., 1997. Impacts of marine debris: entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In: Coe, J.M., Rogers, D.B. (Eds.), *Marine Debris: Sources, Impacts and Solutions*. Springer Verlag, New York, NY, pp. 99–140.

⁴⁹ http://www.ascobans.org/competition_with_fisheries.html (accessed 01/05/2012)

⁵⁰ Perrin, Würsig & Thewissen (Eds.) 2009. *Encyclopaedia of Marine Mammals*. Second Edition

⁵¹ http://www.ascobans.org/the_agreement.html (accessed 13/12/11)

A2.13 Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES)

Synopsis

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. CITES was drafted as a result of a resolution adopted in 1963 at a meeting of members of IUCN (The World Conservation Union). The text of the Convention was finally agreed at a meeting of representatives of 80 countries in Washington DC, USA on 3 March 1973, and on 1 July 1975 CITES entered in force.

Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Because the trade in wild animals and plants crosses borders between countries, the effort to regulate it requires international cooperation to safeguard certain species from over-exploitation. CITES was conceived in the spirit of such cooperation. Today, it accords varying degrees of protection to more than 30,000 species of animals and plants⁵² by making international trade in specimens of selected species subject to certain controls. These require that the import, export, re-export and introduction from the sea of species covered by the Convention have to be authorised through a licensing system. The species covered by CITES are listed in three Appendices, according to the degree of protection they need. Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances. Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilisation incompatible with their survival. Appendix III contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

Legal Status

Currently 175 Parties have ratified CITES⁵³. Although not a Party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in its own right, the European Community has been fully implementing the Convention since 1 January 1984. The EU wildlife trade regulations not only implement the provisions of CITES and the majority of CITES Resolutions, they also go beyond the requirements of the Convention in some respects. The CITES Appendices are replaced by Annexes A, B, C and D. Commission Regulation 709/2010 provides a complete list of species.

Key Provisions

The animal and plant species subject to different degrees of regulation are listed in three appendices. Currently, over 2,500 animal and 25,000 plant species are included in the CITES Appendix I, II or III.

Article II states the fundamental principles of the Convention with Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorised in exceptional circumstances. Appendix II shall include (a) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilisation incompatible with their survival, and (b) other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control. Appendix III shall include all species which any Party identifies as being subject to regulation within its

⁵² <http://www.cites.org/eng/disc/what.php> (accessed 13/12/11)

⁵³ <http://www.cites.org/eng/disc/parties/index.php> (accessed 14/12/11)

jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade.

Article III of the Convention provides the regulation of trade in specimens of species included in Appendix I. Appendix I lists species that are the most endangered among CITES-listed animals and plants and for which trade must be subject to particularly strict regulation and only authorised in exceptional circumstances. These species are threatened with extinction and CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial, for instance for scientific research. In these exceptional cases, trade may take place provided it is authorised by the granting of both an import permit and an export permit (or re-export certificate) (Article III). Article VII of the Convention provides for a number of exemptions to this general prohibition.

Article IV of the Convention provides the regulation of trade in specimens of species included in Appendix II. Appendix II lists species that are not necessarily now threatened with extinction but may become so unless trade is strictly regulated. Appendix II further contains so-called 'look-alike species', which are controlled because of their similarity in appearance to the other regulated species, thereby facilitating a more effective control thereof (Article II.2). International trade in specimens of Appendix II species may be authorised by the granting of an export permit or re-export certificate. No import permit is necessary for these species under CITES (although a permit is needed in some countries that have taken stricter measures than CITES requires). Permits or certificates should only be granted if the relevant authorities are satisfied that certain conditions are met, above all that trade will not be detrimental to the survival of the species in the wild.

Article V describes the regulation of trade in specimens of species included in Appendix III. Appendix III contains species that are subject to regulation within the jurisdiction of a Party and for which the cooperation of other Parties is needed to prevent unsustainable or illegal exploitation (Article II.3). International trade in specimens of species listed in this Appendix is allowed only on presentation of the appropriate permits or certificates.

The permits and certificates granted under the provisions of Articles III, IV, and V shall be granted in accordance with the provisions of Article VI. These involve questions with regard to whether or not trade as such, or a certain type of trade in a species, will be detrimental to its survival, the legal acquisition of specimens, the preparation for shipment of live specimens and, for Appendix I species, whether the importer has suitable facilities to house and care for live specimens. Imports of Appendix I specimens cannot take place if they are to be used for primarily commercial purposes. The Convention provides for several conditioned exemptions from its provisions. They concern transit and transshipment, specimens acquired before the Convention became applicable to them, certain specimens that are personal or household effects, captive bred animals and artificially propagated plants, the exchange of specimens in the collection of scientists and scientific institutions and of captive bred or pre-Convention specimens held by travelling exhibitions.

Article VII provides the exemptions and other special provisions relating to trade.

Article VIII states the measures to be taken by the Parties. Monitoring of trade is an essential tool for achieving the aims of the Convention. Scientific Authorities are to monitor export permits granted for Appendix II species and the actual export thereof. They have to advise their Management Authorities of suitable measures to limit the issue of export permits whenever they determine that the export should be limited in order to maintain a species throughout its range at a level consistent with its role in the ecosystems in which it occurs and well above the level at which it might become eligible for inclusion in Appendix I. A second important monitoring system is based on the trade records to be kept by all Parties and to be reported to the Secretariat on an annual basis. The annual reports of all Parties together should provide statistical information on the total volume of world trade in CITES species, which is an invaluable element for the assessment of their conservation status (Article VIII.6). Thirdly,

the Parties have to report to the Secretariat, on a biennial basis, on the legislative, regulatory and administrative measures taken to ensure enforcement of CITES (Article VIII.7)⁵⁴

Article XV details how species may be added to or removed from Appendix I and II, or moved between them, only by the Conference of the Parties, either at its regular meetings or by postal procedures. But species may be added to or removed from Appendix III at any time and by any Party unilaterally (although the Conference of the Parties has recommended that changes be timed to coincide with amendments to Appendices I and II).

VECTORS Drivers

Invasive Species

CITES Parties are asked to contribute to the development, review, updating and revision of National Biodiversity Strategies and Action Plans (NBSAPs). These should include setting their own biodiversity targets. So for example by 2020, they should have identified and prioritised invasive alien species and their pathways, and to ensure that priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment (CITES, 2011)⁵⁵.

Transboundary or Domestic

Transboundary.

Geographical Scope

Global including terrestrial and marine areas.

Institutional Organisations

The Convention provides for a Secretariat (Article XII) and a Conference of the Parties (Article XI), which play a major role in the functioning of the Convention. The Secretariat has a coordinating, advisory and servicing role fundamental for the working of the Convention. The Conference of the Parties is convened every two years and it considers proposals to amend the Appendices, review the implementation of CITES and progress made and makes recommendations to improve the effectiveness of the Convention (Article XII.3). The Conference of the Parties recommendations may take the form of Resolutions or Decisions. Resolutions are generally intended to provide long-standing guidance while Decisions are mostly directed to a specific body of CITES (e.g. Animals Committee, CITES Secretariat) and are designed to be implemented by a specified deadline. Both instruments are important tools for the development of the Convention, but are not legally binding. The Conference of the Parties established a number of permanent committees, which play an important role in between its biennial meetings: the Standing Committee, the Animals Committee, the Plants Committee and the Nomenclature Committee⁵⁶.

Subsidiary Instruments

Examples of Resolutions agreed by the Conference of the Parties:

- Resolution Conf. 9.7 (Rev. CoP15) - Transit and transshipment
- Resolution Conf. 9.24 (Rev. CoP15) - a set of biological and trade criteria to help determine whether a species should be included in Appendices I or II.

⁵⁴ http://ec.europa.eu/environment/cites/background_en.htm (accessed 14/12/11)

⁵⁵ CITES, 2011. Contributing to the development, review, updating and revision of National Biodiversity Strategies and Action Plans (NBSAPs). A Draft Guide for CITES Parties.

⁵⁶ http://ec.europa.eu/environment/cites/background_en.htm (accessed 14/12/11)

- Resolution Conf. 13.6 - for specimens that were acquired before CITES provisions applied to them (known as pre-Convention specimens).
- Resolution Conf. 13.7 (Rev. CoP14) - for specimens that are personal or household effects.
- Resolution Conf. 10.16 (Rev.) - for animals that were 'bred in captivity'.
- Resolution Conf. 11.11 (Rev. CoP15) - for plants that were 'artificially' propagated.
- Resolution Conf. 12.3 (Rev. CoP15) - for animals or plants forming part of a travelling collection or exhibition, such as a circus.

How the European Union has implemented the CITES Convention:

- Council Regulation (EC) No. 338/97 on the protection of species of wild fauna and flora by regulating trade therein (the Basic Regulation) – amended by (EU) No 709/2010.
- Commission Regulation (EC) No 865/2006 laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 (the Implementing Regulation).
- In addition, a specific Regulation is in place to suspend the introduction into the Community of certain species from certain countries (known as the *Suspensions Regulation*).
- Commission Recommendation No 2007/425/EC identifying a set of actions for the enforcement of Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein) specifies further the measures that should be taken for the enforcement of the Wildlife Trade Regulations.

A2.14 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)

Synopsis

The OSPAR Commission is a mechanism by which fifteen Governments of the western coasts and catchments of Europe, together with the European Community, cooperate to protect the marine environment from pollution from land-based sources, dumping, and offshore sources and for the conservation of the North-East Atlantic. The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) entered into force on 25 March 1998. It replaces the 1972 Oslo Convention against dumping and the 1974 Paris Convention covering land-based sources and the offshore industry but Decisions, Recommendations and all other agreements adopted under those Conventions continue to be applicable, unaltered in their legal nature, unless they are terminated by new measures adopted under the 1992 OSPAR Convention. In 1998, an additional annex on biodiversity and ecosystems was adopted in order to cover non-polluting human activities that can affect the sea⁵⁷.

Contained within the OSPAR Convention are a series of Annexes which deal with the following specific areas: Annex I: Prevention and elimination of pollution from land-based sources; Annex II: Prevention and elimination of pollution by dumping or incineration; Annex III: Prevention and elimination of pollution from offshore sources, and Annex IV: Assessment of the quality of the marine environment. The first Ministerial Meeting of the OSPAR Commission at Sintra, Portugal in 1998 adopted Annex V to the Convention, to extend the cooperation of the Contracting Parties to cover all human activities that might adversely affect the marine environment of the North-East Atlantic.

Legal Status

The Convention has been signed and ratified by all of the Contracting Parties to the original Oslo or Paris Conventions (Belgium, Denmark, the European Community, Finland, France, Germany, Iceland, Ireland, the Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom of Great Britain and Northern Ireland) and by Luxembourg and Switzerland.

Article 15 of the Convention provides that any amendment will enter into force for 'those Contracting Parties which have ratified, accepted or approved it on the thirtieth day after receipt by the Depositary Government of notification of its ratification, acceptance or approval by at least seven Contracting Parties'. For any other Contracting Parties to the Convention, the amendment shall enter into force on the thirtieth day after those Parties have deposited their instruments of ratification, acceptance or approval of the amendment. Thus far, the amendments have been ratified by Norway (November 2007), the UK (April 2010), the European Union (August 2010), and Germany (September 2010). The Netherlands has declared that the ratification of the amendments to the OSPAR Convention will follow the transposition of the EU Directive on the geological storage of carbon dioxide.

Key Provisions

The primary aim of the Parties is to prevent and eliminate 'pollution', defined by the Convention as 'the introduction by man, directly or indirectly, of substances or energy into the maritime area which results, or is likely to result, in hazards to human health, harm to living resources and marine ecosystems, damage to amenities or interference with other legitimate uses of the sea' (Article 1). Dumping is defined in the Convention as any deliberate disposal in the maritime area of wastes or other matter from vessels or aircraft, or from offshore installations. This includes the deliberate disposal of vessels, aircraft or offshore installations and pipelines themselves. Other items may be discharged, including

⁵⁷ http://www.ospar.org/content/content.asp?menu=00010100000000_000000_000000 (accessed 16/11/11)

matter that is placed for a purpose other than mere disposal, and waste or other matter that is generated within the normal operation of vessels, aircraft or offshore installations. The definition of wastes or other matter includes all materials, except for 'human remains, offshore installations, offshore pipelines and unprocessed fish and fish offal discarded from fishing vessels'.

Contained within the OSPAR Convention are a series of Annexes which are made reference to through the main body of the Convention. They deal with the following specific areas:

- Annex I: Prevention and elimination of pollution from land-based sources;
- Annex II: Prevention and elimination of pollution by dumping or incineration;
- Annex III: Prevention and elimination of pollution from offshore sources; and
- Annex IV: Assessment of the quality of the marine environment.
- The first Ministerial Meeting of the OSPAR Commission at Sintra, Portugal in 1998 adopted Annex V to the Convention, to extend the cooperation of the Contracting Parties to cover all human activities that might adversely affect the marine environment of the North-East Atlantic.

Article 2(1)(a) sets out the primary obligation under the Convention: 'The Contracting Parties shall, in accordance with the provisions of the Convention, take all possible steps to prevent and eliminate pollution and shall take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected.'

To this end, parties are required, individually and jointly, to adopt programmes and measures, and harmonise their policies and strategies (Article 2(1)(b)). They are, however, entitled under the Convention to adopt more stringent measures than those required by the main objective, with regard to pollution or the protection of the maritime area. Article 2 also contains more general requirements for Parties and requires them to apply any adopted programmes or measures in a manner that will 'prevent an increase in pollution of the sea outside the maritime area or in other parts of the environment' (Article 2(4)). The 'precautionary principle' and the 'polluter pays principle' have a legal basis in the Convention and Parties are also required to take into account best available techniques and best environmental practice.

Articles 3 to 5 provide specific obligations with regard to the prevention, elimination and monitoring of pollution from specific sources, including land-based sources, dumping or incineration and offshore sources. The Convention also requires Parties to cooperate with a view to adopting additional Annexes prescribing measures, procedures and standards to deal with 'pollution from other sources', insofar as such pollution is not already subject to other 'effective measures agreed by other international organisations or prescribed by other international conventions' (Article 7).

Specifically, Article 3 and Annex I require Parties to take all possible steps to reduce and eliminate pollution from land-based sources, which are defined as 'point and diffuse sources on land from which substances or energy reach the maritime area by water, through the air, or directly from the coast'. These sources also include 'sources associated with any deliberate disposal under the sea-bed made accessible from land by tunnel, pipeline or other means and sources associated with man-made structures placed, in the maritime area under the jurisdiction of a Contracting Party, other than for the purpose of offshore activities'. Parties are obliged under Annex I to authorise and regulate discharges into the marine environment from these sources and then monitor their compliance with authorisations.

Article 4 and Annex II address pollution caused by dumping or incineration. It prohibits the dumping or incineration of waste or other matter, save for:

- dredged material;
- inert materials of natural origin, that is solid, chemically unprocessed geological material the chemical constituents of which are unlikely to be released into the marine environment;

- sewage sludge (until 31 December 1998);
- fish waste from industrial fish processing operations;
- vessels or aircraft (until 31 December 2004); and
- low and intermediate level radioactive substances, including wastes (for a limited period, subject to review by the Commission).

The materials listed in Annex II may be dumped, but they must be subject to a strict authorisation and monitoring process. Those authorisation and monitoring processes have to agree criteria, guidelines and procedures that are adopted by the Commission. As previously noted, 'dumping' does not include placement for purposes other than mere disposal. However Article 5 of Annex II states: "No placement of matter in the maritime area for a purpose other than that for which it was originally designed or constructed shall take place without authorisation or regulation by the competent authority of the relevant Contracting Party." This article provides some restriction upon the placement of material in the marine environment, by introducing a permitting aspect. The restrictions set out in Annex II may, however, be partially waived in cases of force majeure or emergency (Articles 7 and 9 of Annex II).

In June 2007, the OSPAR Commission adopted amendments to Annex II of the Convention to allow for the storage of CO₂ in geological formations under the seabed. These amendments will not come into force until the ratification process is completed in accordance with the Convention's provisions. This amendment includes CO₂ in the list of wastes or other matter that may be dumped in the marine environment, provided the CO₂ streams which are stored in this manner meet the other preconditions listed in the revised text. Stored CO₂ streams may only be stored in accordance with an authorisation issued by the Parties' relevant authorities and carried out in accordance with their regulation. These authorisations and regulations must in turn be 'in accordance with the relevant applicable criteria, guidelines and procedures adopted by the Commission' (Article 4(1), Annex II).

Article 5 and Annex III require Parties to take all possible steps to reduce and eliminate *Pollution from Offshore Sources*, which are defined as 'offshore installations and offshore pipelines from which substances or energy reach the maritime area'. Under the Convention, an 'offshore installation' is 'any man-made structure, plant or vessel or parts thereof, whether floating or fixed to the seabed, placed within the maritime area for the purpose of offshore activities'. Offshore pipelines are those which have been placed in the marine environment for 'the purpose of offshore activities'. Offshore activities are in turn defined as those 'carried out in the maritime area for the purposes of the exploration, appraisal or exploitation of liquid and gaseous hydrocarbons'. Under Annex III, any dumping of wastes from offshore installations is prohibited, although the prohibition does not relate to discharges or emissions from offshore sources (Article 3). These discharges or emissions must be subject to authorisation and regulation by the Contracting Parties, by means of permits.

In June 2007, the OSPAR Commission also adopted amendments to Annex III to accommodate carbon capture and storage (CCS) technologies. This amendment provides an exception for CCS activities from the prohibition contained in Annex III, with regard to the dumping of wastes or other matter from offshore installations. However, these activities are required to meet the preconditions listed in sub-sections (a) to (d) and be stored in accordance with the relevant authority's authorisations and regulations.

Article 6 and Annex IV require Parties to undertake and publish at regular intervals joint *Assessments of the Quality (status) of the Marine Environment* and of its development, for the maritime area or for regions or sub-regions. The assessments should include both an evaluation of the effectiveness of the measures taken and planned for the protection of the marine environment and the identification of priorities for action. OSPAR publishes general assessments in the form of Quality Status Reports (QSRs) of the North-East Atlantic and its sub-regions. QSRs are published periodically as major benchmark assessments resulting from the joint efforts of the Contracting Parties. In 2000, to fulfil obligations under Annex IV to the OSPAR Convention the OSPAR Commission published the first

comprehensive Quality Status Report (QSR) on the quality of the marine environment of the OSPAR maritime area. This was followed up by a QSR in 2010.

The first Ministerial Meeting of the OSPAR Commission at Sintra, Portugal in 1998 adopted Annex V and an accompanying Appendix 3 with criteria for identifying human activities for the purpose of Annex V to the Convention, to extend the cooperation of the Contracting Parties to cover all human activities that might adversely affect the marine environment of the North-East Atlantic. Annex V provides a framework for the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area, for contracting parties to develop their own conservation measures. Article 2 requires parties to 'take the necessary measures to protect and conserve the ecosystems and the biological diversity of the maritime area, and to restore, where practicable, marine areas which have been adversely affected'.

The Commission has adopted six strategies for directing its work. Measures and programmes within the Biodiversity and Ecosystems Strategy include the identification of ecological quality objectives for the North Sea, development of lists of species and habitats in need of protection, identification and selection of marine protected areas, and the prevention and control of adverse impacts from human activities. Much of this work is moving from its initial developmental phases into delivery phases, including via monitoring programmes, updated assessments on status and the identification of programmes and measures for improved management of human activities (JNCC, 2010)⁵⁸.

VECTORS Drivers

Energy (Renewables & Non-renewables)

Under the Biodiversity and Ecosystem Strategy⁵⁹, OSPAR reviewed the main activities that might impact on the marine environment. Of this list, exploration for oil, gas and solid materials; construction in the sea (especially offshore windfarms), and cables and pipelines were highlighted. The OSPAR Commission adopts legally binding regulations requiring Member States to adopt procedure and actions relating to marine environmental protection which can influence the licensing and permitting procedure for the development phase of offshore energy projects. Similarly during the decommissioning of any offshore installations, OSPAR has adopted legally binding regulations concerning their disposal.

Exploration of oil and gas in the OSPAR maritime area has primarily taken place in the North Sea which has led to the development of the Offshore Oil and Gas Industry Strategy⁶⁰. This aims to prevent and eliminate pollution from offshore sources and to protect the OSPAR maritime area against the adverse effects of offshore activities so as to safeguard human health and conserve the marine ecosystems. When practical, marine areas which have been adversely affected shall be restored. The Offshore Oil and Gas Industry Strategy sets out the development and implementation of programmes and measures in respect of all phases of offshore activities. It requires the OSPAR Commission to collect information about threats to the marine environment; establish priorities for taking action, and develop and periodically review environmental goals.

Regarding offshore renewable energy activities, one of OSPAR's important initiatives is the guidance on windfarms⁶¹ whose objective is to assist Contracting Parties, developers, consultants, regulators and

⁵⁸ The Convention for the Protection of the Marine Environment of the North-East Atlantic (The Ospar Convention) <http://jncc.defra.gov.uk/page-1370> (accessed 16/11/11)

⁵⁹ OSPAR Commission, 2010. The North-East Atlantic Environment Strategy. Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020 (OSPAR Agreement 2010-3)

⁶⁰ OSPAR Commission, 2010. The North-East Atlantic Environment Strategy. Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020 (OSPAR Agreement 2010-3)

⁶¹ OSPAR Commission 2008. OSPAR Guidance on Environmental Considerations for Offshore Wind Farm Development. Ref no: 2008-3.

any other interested parties in the identification and consideration of the environmental effects of offshore wind development. Two other documents authored by OSPAR on offshore wind farms include: The OSPAR Background Document on Problems and Benefits Associated with the Development of Offshore Wind Farms⁶² which identifies some of the potential advantages and disadvantages of offshore wind farms. The second is the OSPAR Review of the Current State of Knowledge on the Environmental Impacts of the Location, Operation and Removal/Disposal of Offshore Wind-Farms⁶³ which seeks to clarify where information and understanding is good and where it is lacking.

Fisheries

The OSPAR Quality Status Report 2010 identified fisheries as one of the human activities with large and widespread implications for the marine environment. Impacts include the continued exploitation of stocks beyond sustainable levels; the depletion of key predator and prey species and disruption to food webs; damage to sea bed communities and habitats by fishing gears, and the by-catch of non-target fish, seabirds and marine mammals in Regions II, III and IV. The Convention itself states that 'questions relating to the management of fisheries are appropriately regulated under international and regional agreements dealing specifically with such questions'. The following fisheries management regimes exist within the OSPAR maritime area:

- the EU Common Fisheries Policy for the waters of EU Member States
- Faroese national fisheries policy and regulation within Faroese waters
- Greenland national fisheries policy and regulation for the waters around east Greenland
- Icelandic national fisheries policy and regulation within Icelandic waters
- Norwegian national fisheries policy and regulation within Norwegian Waters
- 1982 Convention on the future multilateral cooperation in North-East Atlantic Fisheries for fisheries in areas of the North-East Atlantic beyond national jurisdiction and some straddling stocks. This implemented through the North East Atlantic Fisheries Commission with whom OSPAR has agreed a memorandum of understanding
- The International Commission for the Conservation of Atlantic Tunas
- The Convention for the Conservation of Salmon in the North Atlantic Ocean⁶⁴

Where the Commission feels some action is required related to the management of fisheries activities in order to protect and conserve the North East Atlantic region, they will liaise with the authority or international body with the competency to act e.g. the Regional Fisheries Management Organisations. Article 4 of the Convention states 'In accordance with the penultimate recital of the Convention, no programme or measure concerning a question relating to the management of fisheries shall be adopted under this Annex. However where the Commission considers that action is desirable in relation to such a question, it shall draw that question to the attention of the authority or international body competent for that question. Where action within the competence of the Commission is desirable to complement or support action by those authorities or bodies, the Commission shall endeavour to cooperate with them'.

Under the thematic strategy of Biological Diversity and Ecosystems, and with regard to the management of human activities in the context of Article 4 of Annex V to the OSPAR Convention, the

⁶² OSPAR, 2004. The Background Document on Problems and Benefits Associated with the Development of Offshore Wind Farms identifies some of the potential advantages and disadvantages of offshore wind farms. Publication number: 214-2004

⁶³ OSPAR, 2006. Review of the Current State of Knowledge on the Environmental Impacts of the Location, Operation and Removal/Disposal of Offshore Wind-Farms. Publication number: 278-2006

⁶⁴ OSPAR Commission, 2012. Fish and Ships. http://www.ospar.org/content/content.asp?menu=00710302220000_000000_000000 (accessed 03/05/12)

North East Atlantic Environment Strategy⁶⁵ states that OSPAR will 'collaborate and exchange information (e.g. on vulnerable marine ecosystems) with fisheries management authorities, advisory organisations, the fishing industry and other relevant stakeholders, so as to promote and support the integration of fisheries management with ecosystem-based management of the North-East Atlantic, the sustainable management of fisheries consistent with OSPAR Ecological Quality Objectives, and an improved assessment of fisheries which supports measures to achieve good environmental status'.

Invasive Species

Under the Biodiversity and Ecosystem Strategy, OSPAR reviewed the main activities that might impact on the marine environment. On this list, the introduction of alien species was highlighted.

The OSPAR Commission has put in place voluntary guidelines for the shipping industry that requests vessels entering the waters concerned to exchange all their ballast tanks at least 200 nautical miles from the nearest land in water at least 200 metres deep. The General Guidance on the Voluntary Interim application of the D1 Ballast Water Exchange Standard was agreed by all 20 Contracting Parties, together with the European Community, and entered into force on 1 April 2008⁶⁶.

Transboundary or Domestic

Both transboundary and domestic in nature.

Geographical Scope

North-East Atlantic maritime area. The Convention applies to the 'maritime area', which is defined as the 'internal waters and the territorial seas of the Contracting Parties', the adjacent areas of sea under the jurisdiction of the coastal state and certain parts of the Arctic and Atlantic Oceans defined in Article 1. This Article also states that the maritime area includes 'the bed of all those waters and its sub-soil'.

Institutional Organisations

The Convention established the OSPAR Commission, which is described as 'the forum through which the Contracting Parties co-operate'. The Commission is made up of representatives of each of the Parties which convenes once a year. The Commission is responsible for supervising the implementation of the Convention; reviewing the condition of the maritime area; drawing up programmes and measures for the prevention and elimination of pollution; establishing its work programme; setting up subsidiary bodies and defining their terms of reference, and considering and, where appropriate, adopting proposals for the amendment of the Convention (Article 10).

Subsidiary Instruments

Reports under Annex IV:

- The Quality Status Report 2000 presented a comprehensive assessment of the environmental quality of the North-East Atlantic based upon regional QSRs prepared for each of the five OSPAR regions.
- The Quality Status Report 2010 examines all aspects of human influence on the sea, including contaminants, nutrient pollution and radioactive substances and the effects of human activities such as the offshore oil and gas industry, offshore wind farms, maritime transport, and fisheries. An evaluation has been made of the effectiveness of the policies being taken for the protection of the marine environment and identifies priorities for future action.

⁶⁵ OSPAR Commission, 2010. The North-East Atlantic Environment Strategy. Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020 (OSPAR Agreement 2010-3)

⁶⁶ General Guidance on the Voluntary Interim Application of the D1 Ballast Water Exchange Standard in the North East Atlantic and the Baltic Sea. http://www.ospar.org/html_documents/ospar/html/ospar_helcom_guidance_ballast_water.pdf (accessed 03/05/12)

A2.15 Convention on the Protection of the Marine Environment of the Baltic Sea Area 1992 (Helsinki Convention)

Synopsis

The Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) was first signed in 1974 by seven Baltic coastal states and came into force in 1980. The Helsinki Commission (HELCOM) was convened in order to find solutions to protect the marine environment of the Baltic Sea from all sources of pollution and to establish a good ecological status and it is the governing body of the Convention. In the light of political changes, a new Convention was signed in 1992 which entered into force on 17 January 2000, including all states bordering the whole Baltic Sea area and the European Community⁶⁷. The Convention covers the whole of the Baltic Sea area, including inland waters as well as the water of the sea itself and the sea-bed. Measures are also taken in the whole catchment area of the Baltic Sea to reduce land-based pollution. Also in 1992, the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) was established.

HELCOM's vision for the future is a healthy Baltic Sea environment with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable economic and social activities. The Convention's key rules include applying the precautionary principle, promoting the use of Best Environmental Practice and Best Available Technology to prevent and eliminate pollution of the Baltic Sea area. Parties should apply the polluter-pays principle and be scientifically accountable when monitoring discharges of emissions from point sources and diffuse sources to water and air. In order to protect the Baltic Sea Area from hazardous substances, Contracting Parties shall endeavour to minimise and, whenever possible, to ban the use of the substances listed in Annex I which include harmful and hazardous substances and pesticides.

Legal Status

The contracting parties of HELCOM include Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.

Key Provisions

The Helsinki Convention has since been amended, with changes to the annexes adopted by the Helsinki Commission in 2000, 2001, 2003 and 2007.

Article 1 defines the area of the Convention, with Article 2 providing definitions of pollution, pollution from land-based sources, ships, dumping and others. "Pollution" in the context of this Convention means introduction by man, directly or indirectly, of substances or energy into the sea, including estuaries, which are liable to create hazards to human health, to harm living resources and marine ecosystems, to cause hindrance to legitimate uses of the sea including fishing, to impair the quality for use of sea water, and to lead to a reduction of amenities.

Article 3 sets out the fundamental principles and obligations of the Convention. Contracting Parties shall individually or jointly take all appropriate legislative, administrative or other relevant measures to prevent and eliminate pollution in order to promote the ecological restoration of the Baltic Sea Area and the preservation of its ecological balance (Article 3(1)). Contracting Parties should apply the precautionary principle (Article 3(2)) and promote the use of Best Environmental Practice and Best Available Technology (as defined in Annex II of this Convention) to prevent and eliminate pollution of the Baltic Sea area (Article 3(3)). Article 3(4) states that Contracting Parties should apply the polluter-pays principle and be scientifically accountable when monitoring discharges of emissions from point sources and diffuse sources to water and air (Article 3(5)).

⁶⁷ <http://www.helcom.fi/>

This Convention shall apply to the protection of the marine environment of the Baltic Sea Area which comprises the water-body and the seabed including their living resources and other forms of marine life and each Contracting Party shall implement the provisions within its territorial sea and internal waters (Article 4).

Article 5 states that the Contracting Parties must undertake to prevent and eliminate pollution of the marine environment of the Baltic Sea Area caused by harmful substances from all sources, according to the provisions of this Convention, implementing the procedures and measures of Annex I. Part 1.1 of Annex I lists the criteria on the allocation of substances based on their intrinsic properties namely: persistency; toxicity or other noxious properties; tendency to bio-accumulation; as well as on characteristics liable to cause pollution such as the ratio between observed concentrations and concentrations having no observed effect; anthropogenically caused risk of eutrophication; transboundary or long-range significance; risk of undesirable changes in the marine ecosystem and irreversibility or durability of effects; radioactivity; serious interference with harvesting of sea-foods or with other legitimate uses of the sea; distribution pattern (i.e. quantities involved, use pattern and liability to reach the marine environment), and their proven carcinogenic, teratogenic or mutagenic properties in or through the marine environment. Part 1.2 lists the priority groups of harmful substances including mercury and cadmium, chrome, copper, lead, hydrocarbons, pesticides, radioactive materials, acids, oils and petrochemical waste, materials and substances which may float, etc. Large quantities of the substances referred to may not be introduced without a prior special permit issued by the appropriate national authority.

Part 2 of Annex I requests the Parties to the Convention to prohibit, totally or partially, the use of the following hazardous substances or groups of substances in the Baltic Sea Area including dichlorodiphenyltrichloroethane (DDT) and its derivatives (DDE and DDD), polychlorinated biphenyls (PCBs) and polychlorinated triphenyls (PCTs).

Part 3 of Annex I lists the pesticides which Contracting Parties shall endeavour to minimise and, whenever possible, to ban the use of in the Baltic Sea Area and its catchment area. These include a list of 26 pesticides including cadmium-compounds, dieldrin, lead-compounds and mercury compounds etc.

Article 6 gives the principles and obligations concerning pollution from land-based sources, by using Best Environmental Practice for all sources and Best Available Technology for point sources (as described in Annex II). The Contracting Parties shall implement the procedures and measures set out in Annex III (Part I - prevention of pollution from industry and municipalities and Part II - prevention of pollution from agriculture). This states that they must co-operate in the development and adoption of specific programmes, guidelines, standards or regulations concerning emissions and inputs to water and air, environmental quality, and products containing harmful substances and materials and the use thereof (Article 6(2)). Harmful substances from point sources shall not, except in negligible quantities, be introduced directly or indirectly into the marine environment of the Baltic Sea Area, without a prior special permit as detailed in Annex III.

Environmental impact assessments of proposed activities likely to cause a significant adverse impact on the marine environment of the Baltic Sea should be put to consultation with the Commission and any Contracting Parties which may be affected by Transboundary impacts. Cooperation between Parties should then ensure that all potential impacts are fully investigated and the Contracting Parties shall jointly take appropriate measures in order to prevent and eliminate pollution including cumulative deleterious effects (Article 7).

Article 8 states that to prevent pollution from ships, Contracting Parties shall take measures as set out in Annex IV. Parties should co-operate within the International Maritime Organisation in particular in promoting the development of international rules, based on the fundamental principles and obligations of this Convention which also includes the promotion of the use of Best Available Technology and Best

Environmental Practice as defined in Annex II, and entails applying the provisions of Annexes I-V of MARPOL 73/78. 'Ships' include a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms (Article 2(3)). Parties must take a series of measures to protect the Baltic Sea area against pollution linked to spillage of hydrocarbons and other harmful substances and the discharge of waste water and sewage from ships (establishment of international rules, assistance with ship inspections, application of standard rules on the transport of harmful substances and the discharge of waste water, etc.).

Article 9 states that Contracting Parties must adopt specific measures applicable to pleasure craft, notably to ensure the creation of adequate waste reception facilities.

Article 11 states that the Contracting Parties must ban the dumping of waste in the Baltic Sea area, except for dredged material, provided a special permit has been issued by the appropriate national authority and cases where the safety of human life or of a ship or an aircraft at sea is threatened by the complete destruction or total loss of the ship or the aircraft, if dumping appears to be the only way of averting the threat. Annex V lists four regulations relating to the exemptions from the general prohibition of dumping of waste and other matter in the Baltic Sea Area.

Each Contracting Party must take all the necessary measures to prevent pollution resulting from exploration or exploitation of the sea bed or the subsoil thereof (Article 12). In order to do this, Contracting Parties must undertake to implement the procedures and measures set out in the nine regulations of Annex VI on the prevention of pollution from offshore activities. This includes adopting measures and cooperating to minimise pollution by hydrocarbons and other harmful substances.

Article 14 states that all Contracting Parties must co-operate in combating marine pollution as set out in the eleven Regulations in Annex VII - Response to pollution incidents.

Article 15 on nature conservation and biodiversity states that the signatories shall individually and jointly take all appropriate measures with respect to the Baltic Sea Area and its coastal ecosystems influenced by the Baltic Sea to conserve natural habitats and biological diversity and to protect ecological processes. Such measures shall also be taken in order to ensure the sustainable use of natural resources within the Baltic Sea Area. Contracting Parties shall aim at adopting subsequent instruments containing appropriate guidelines and criteria.

Article 16 of the Convention requires Contracting Parties to report to the Commission at regular intervals on the legal, regulatory, or other measures taken for the implementation of the provisions of this Convention, of its Annexes and of recommendations adopted, the effectiveness of the measures taken to implement the provisions and any problems encountered in the implementation of the provisions.

Article 19 of the Convention sets up a Baltic Marine Environment Protection Commission to monitor the implementation of the Convention, make recommendations on measures and assume such other functions as may be appropriate under the terms of the Convention, with Article 20 listing its duties. They must cooperate in the field of scientific and technological research (Article 24) and undertake jointly to adopt rules concerning responsibility for damage resulting from infringements of the Convention (Article 25).

VECTORS Drivers

Energy (Renewables & Non-renewables)

The HELCOM Baltic Sea Action Plan adopted in 2007 includes the recommendations on the development of Marine Spatial Planning (MSP) principles for the Baltic Sea region. It targets the development of common standards and processes, through cooperation across borders to ensure coherence of plans across ecosystems. As MSP takes into account all activities in the sea, it will

indirectly develop policy recommendations and influence the development of offshore energy generation⁶⁸.

HELCOM Recommendation 15/1 for the guidelines for sustainable and environmentally friendly tourism in the coastal zones of the Baltic Sea area states that 'water resources should only be used in proportion to their renewal capacity, and energy supply should be based increasingly on renewable energy sources'.

HELCOM contracting parties are working hard on MSP initiatives with offshore renewable energy being considered within these for the Baltic Sea. Examples of this include Germany, who have adopted a new federal energy concept, with ambitious targets for renewable energy (up to 25000 MW in 2030) and who will evaluate in 2012 the development of offshore wind energy which could lead to amendments of the MSP legal ordinance. Finland has drafted National Guidelines for the construction of wind farms, on both land and sea, which will be published soon. Poland has developed a permitting system; for artificial structures, that amongst others will allow for the construction of wind-farms (HELCOM-VASAB, 2012)⁶⁹.

With regards to non-renewable activities (e.g. oil and gas), Annex VI of the Convention prevents pollution from offshore activities. Regulation 2 states that Contracting Parties should undertake to prevent and eliminate pollution from offshore activities by using the principles of Best Available Technology and Best Environmental Practice as defined in Annex II, with Regulation 3 of Annex VI stating that an environmental impact assessment should be made before an offshore activity is permitted to start.

Fisheries

Annex V (Reg 3) of the Convention gives protection to spawning, nursery and fishing areas from dumping of pollutants. Annex VI refers to the prevention of pollution from offshore activities, making developers use the Best Available Technology, Best Environmental Practice and environmental impact assessment to assess the environmental sensitivity and importance of the area as fishing or spawning grounds for fish and shellfish, and for aquaculture.

There is ongoing research into the Baltic Sea fisheries with a Baltic-wide assessment of coastal fish communities in support of an ecosystem-based management (HELCOM FISH-PRO) (2011-2013). With the overall vision of achieving a healthy Baltic Sea with a balanced and functioning ecosystem that supports sustainable social and economic human activities, the 2007 HELCOM Baltic Sea Action Plan (BSAP) aims at aligning the goal "favourable conservation status of marine biodiversity" with corresponding goals and objectives of already existing regulations which also address biodiversity and nature conservation. In order to reach a favourable conservation status of biodiversity, HELCOM has adopted Ecological Objectives covering topics referring to:

- the restoration and maintenance of sea floor integrity at a level that safeguards the functions of the ecosystems;
- that habitats, including associated species, show a distribution, abundance and quality in line with prevailing physiographic, geographic and climatic conditions; and
- a water quality that enables the integrity, structure and functioning of the ecosystem to be maintained or recovered.

Most importantly concerning coastal fish, the HELCOM Contracting Parties agreed and invited competent authorities:

⁶⁸ <http://www.vasab.org/> (accessed 21/05/12)

⁶⁹ HELCOM-VASAB, 2012. Maritime spatial planning developments reported by contracting parties/ member countries. Joint HELCOM - VASAB Maritime Spatial Planning Working Group. Fourth Meeting, Riga, Latvia, 7-8 February 2012

- to establish an international co-operation network to agree on guidelines to promote the ecosystem-based management of coastal fisheries in the Baltic region;
- to develop long-term plans for protecting, monitoring and sustainably managing coastal fish species, including the most threatened and/or declining, including anadromous ones (according to the HELCOM Red list of threatened and declining species of lampreys and fishes of the Baltic Sea, BSEP No. 109), by 2012,
- develop a suite of indicators with region-specific reference values and targets for coastal fish as well as tools for assessment and sustainable management of coastal fish by 2012⁷⁰.

Invasive Species

Although there is no specific mention to invasive or alien species in text, Article 15 of the Convention states that 'Contracting Parties shall individually and jointly take all appropriate measures with respect to the Baltic Sea Area and its coastal ecosystems influenced by the Baltic Sea to conserve natural habitats and biological diversity and to protect ecological processes. Such measures shall also be taken in order to ensure the sustainable use of natural resources within the Baltic Sea Area. To this end, the Contracting Parties shall aim at adopting subsequent instruments containing appropriate guidelines and criteria'.

The HELCOM countries have also agreed to ratify by 2010, or at the latest by 2013, the 2004 International Convention on the Control and Management of Ships' Ballast Water and Sediments (BWM Convention). The entry into force of the BWM Convention would be a crucial step towards the reduction of spreading of non-indigenous species regionally and worldwide. To facilitate ratification, the 'HELCOM Ballast Water Road Map' was adopted as a part of the HELCOM Baltic Sea Action Plan⁷¹.

Transboundary or Domestic

Both.

Geographical Scope

The Convention applies to the Baltic Sea Area. For the purposes of this Convention the "Baltic Sea Area" shall be the Baltic Sea and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57° 44.43'N. It includes the internal waters, i.e., for the purpose of this Convention waters on the landward side of the base lines from which the breadth of the territorial sea is measured up to the landward limit according to the designation by the Contracting Parties. A Contracting Party shall, at the time of the deposit of the instrument of ratification, approval or accession inform the Depositary of the designation of its internal waters for the purposes of this Convention (Article 1).

Institutional Organisations

Article 19 of HELCOM establishes the Helsinki Commission which meets annually. Ministerial level meetings are also held occasionally. Article 20 sets out the duties of the Commission which include adopting Recommendations for the protection of the marine environment which the governments of the Contracting Parties must act on in their respective national programmes and legislation. The working structure of HELCOM, supported by the Secretariat (Article 21), consists of the meetings of the Helsinki Commission, the Heads of Delegation, and the five main groups (monitoring and assessment group; the land-based pollution group; habitat protection and biodiversity group; the maritime group, and the response group). In 2003 a HELCOM Ministerial Meeting decided that all HELCOM actions must be based on an "ecosystem approach" to the management of the human activities.

⁷⁰ http://www.helcom.fi/projects/on_going/en_GB/FISH_PRO/ (accessed 21/05/12)

⁷¹ Alien Species – an increasing threat http://www.helcom.fi/environment2/biodiv/alien/en_GB/alienspecies/ (accessed 21/05/12)

Subsidiary Instruments

One of the most important duties of the Helsinki Commission is to make Recommendations on measures to address certain pollution sources or areas of concern. These Recommendations are to be implemented by the Contracting Parties through their national legislation. Since the beginning of the 1980s HELCOM has adopted some 200 HELCOM Recommendations for the protection of the Baltic Sea.

The HELCOM Baltic Sea Action Plan (BSAP) was adopted in 2007 at the ministerial meeting of the Helsinki Commission⁷². BSAP is aiming at achieving good ecological status of the Baltic Sea by 2021. The BSAP acknowledges that the ecosystem approach is based on an integrated management of all human activities impacting on the marine environment, stresses the need for integrated management of human activities and the need to take into account their impacts on the marine environment in all policies and programmes implemented in the Baltic Sea region. The HELCOM vision of “A healthy Baltic Sea environment, with diverse biological components functioning in balance, resulting in a good environmental/ecological status and supporting a wide range of sustainable human economic and social activities” and refers to the desired state of the marine environment, namely a “Baltic Sea unaffected by eutrophication”, “Baltic Sea with life undisturbed by hazardous substances”, “Maritime activities carried out in an environmentally friendly way”, all of which will lead to a “Favourable conservation status of Baltic Sea biodiversity”. The BSAP is implemented through National Implementation Plans (NIP’s). The participating countries are at different stages in development of NIP’s, they use different instruments and measures to support BSAP implementation. Another issue to mention is that some NIPs do not describe any management measures for certain objectives.

In 2001 the HELCOM Copenhagen Declaration was signed to ensure the safety of navigation and swift national and trans-national response to maritime pollution incidents.

⁷² HELCOM (2007) Baltic Sea Action Plan. Helsinki: HELCOM. 102 pp.

A2.16 United Nations Environment Programme - Mediterranean Action Plan (UNEP-MAP) & the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean Sea (Barcelona Convention as amended)

Synopsis

As a result of the 1972 Stockholm Conference on Human Environment and within the framework of the United Nations Environment Programme (UNEP) Regional Seas Programme in 1974, the Mediterranean became the first region to adopt an Action Plan. The 1975 United Nations Environment Programme - Mediterranean Action Plan (UNEP-MAP) was adopted with its aim to contribute to the protection and conservation of the Mediterranean environment including the control of marine pollution, the formulation of national environment policies, the optimal allocation of resources and the improvement of governmental decisions related to the Mediterranean shorelines. In 1995, the Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (UNEP-MAP Phase II) was agreed and adopted. The key Mediterranean Action Plan (Phase II) objectives are to ensure sustainable management of natural marine and land resources and to integrate the environment in social and economic development, and land-use policies; to protect the marine environment and coastal zones through prevention of pollution, and by reduction and, as far as possible, elimination of pollutant inputs, whether chronic or accidental; to protect nature, and protect and enhance sites and landscapes of ecological or cultural value; to strengthen solidarity among Mediterranean coastal States in managing their common heritage and resources for the benefit of present and future generations, and to contribute to improvement of the quality of life.

The Barcelona Convention for the Protection of the Mediterranean Sea against Pollution was adopted in 1976 and entered into force in 1978 (amended 1995, which entered into force 2004 renamed the Convention for the Protection of the Marine Environment and the Coastal Regions of the Mediterranean Sea). Today, the Barcelona Convention, the UNEP-MAP and a succession of seven landmark protocols are equally important for the sustainable development of the Mediterranean region⁷³. The Barcelona Convention's main objectives are to assess and control marine pollution; to ensure sustainable management of natural marine and coastal resources; to integrate the environment in social and economic development; to protect the marine environment and coastal zones through prevention and reduction of pollution, and as far as possible, elimination of pollution, whether land or sea-based; to protect the natural and cultural heritage; to strengthen solidarity among Mediterranean coastal States, and to contribute to improvement of the quality of life.

Legal Status

There are currently 22 contracting parties who have adopted the UNEP - Mediterranean Action Plan, Barcelona Convention and its protocols. These are Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, the European Community, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, and Turkey⁷⁴.

Key Provisions

THE BARCELONA CONVENTION:

For the purpose of the Convention, pollution means “the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results, or is likely to result, in such deleterious effects as harm to living resources and marine life, hazards to human health,

⁷³ <http://www.unepmap.org/index.php> (accessed 15/12/11)

⁷⁴ <http://www.unepmap.org/index.php?module=content2&catid=001001> (accessed 15/12/11)

hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of seawater and reduction of amenities”.

Article 3 provides that Contracting Parties may enter into agreements for the promotion of sustainable development, the protection of the environment, the conservation and preservation of natural resources in the Mediterranean Sea Area. Contracting Parties are also encouraged to take individual or joint initiatives. Such measures should be compatible with international law through the relevant international organisations to encourage the implementation of the provisions of this Convention and its Protocols by all the non-party States.

Article 4 states the general obligations of Contracting Parties to individually or jointly take all appropriate measures in accordance with the provisions of this Convention and those Protocols in force to which they are party to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area. This should be done by the implementation of the Mediterranean Action Plan (Article 4(2)); applying the precautionary principle (Article 4(3)(a)); by applying the polluter pays principle (Article 4(3)(b)); undertaking environmental impact assessment (EIA) for proposed activities that are likely to cause a significant adverse impact on the marine environment (Article 4(3)(c)) and promote EIA in a transboundary nature between and among States (Article 4(3)(d)) and committing themselves to promote integrated management of the coastal zones (Article 4(3)).

In implementing the Convention and the related Protocols, the Contracting Parties shall also adopt programmes and measures which contain, where appropriate, time limits for their completion, and utilise the best available techniques and the best environmental practices (Article 4(4)). Contracting Parties must also in the formulation and adoption of Protocols, prescribing agreed measures, procedures and standards for the implementation of this Convention and promote sustainable development (Article 4(6)).

Article 5 requires parties to take all appropriate measures to prevent, abate and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area caused by dumping from ships and aircraft or incineration at sea.

Article 6 requires parties to take all measures in conformity with international law to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area caused by discharges from ships and to implement international laws to control pollution.

Article 7 relates to pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil, with Article 8 dealing with pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil. The Convention states that Contracting Parties shall take all appropriate measures to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area resulting from these activities.

Article 9 requires parties to cooperate in taking the necessary measures for dealing with pollution emergencies in the Mediterranean Sea Area, and any pollution emergency in the Area should be notified without delay to the Organisation and any Contracting Party likely to be affected by such emergency.

Article 10 requires parties to individually or jointly take all appropriate measures to protect and preserve biological diversity, rare or fragile ecosystems, as well as species of wild fauna and flora which are rare, depleted, threatened or endangered and their habitats, in the area to which this Convention applies.

Article 11 requires parties to take all appropriate measures to prevent, abate and to the fullest possible extent eliminate pollution of the environment which can be caused by transboundary movements and disposal of hazardous wastes, and to reduce to a minimum, and if possible eliminate, such transboundary movements.

Contracting Parties are requested to establish, in close cooperation with the international bodies which they consider competent, complementary or joint programmes, including, as appropriate, programmes at the bilateral or multilateral levels, for pollution monitoring in the Mediterranean Sea Area and shall endeavour to establish a pollution monitoring system for that Area (Article 12). A competent authority for pollution monitoring should also be designated.

Article 13 encourages Contracting Parties to cooperate in the fields of science and technology and to exchange data as well as other scientific information for the purpose of this Convention. The Contracting Parties are requested to adopt legislation implementing the Convention and the Protocols (Article 14). Article 15 encourages the Contracting Parties to involve their general public in the decision making process and facilitation of information about the Convention.

The remaining Articles (16 – 35) deal with the institutional arrangements and administration of this Convention. The protocols relating to Articles 6-11 are listed under subsidiary instruments below.

THE UNITED NATIONS ENVIRONMENT PROGRAMME - MEDITERRANEAN ACTION PLAN (UNEP - MAP PHASE II)

Although the initial focus of the UNEP-MAP was on marine pollution control, experience confirmed that socio-economic trends, combined with inadequate development planning and management are the root of most environmental problems. Consequently, the focus of UNEP-MAP gradually shifted to include integrated coastal zone planning and management as the key tool through which solutions are being sought⁷⁵.

Part I of the UNEP-MAP addresses the sustainable development in the Mediterranean. Chapter 1 deals with the sustainable management of natural marine and land resources and the integration of the environment in social and economic development and land-use policies. This will be carried out at both the regional and national levels. Economic activities of concern for the sustainability of the Mediterranean environment include agriculture, industry, energy, tourism and transport. The UNEP-MAP also requests that future management strategies for the Mediterranean coastal regions are developed in an integrated manner ensuring limited and fragile resources are used in a sustainable manner by means of planning and regulations. Integrated coastal area management should gradually become the standard approach for tackling problems in the Mediterranean, and national and sub-national legislation should be enacted. This can be carried out through the implementation of the newly established Protocol on Integrated Coastal Zone Management (ICZM) in the Mediterranean.

Chapter 2 deals with the conservation of nature, landscapes and sites and asks Contracting Parties to protect nature, and protect and enhance sites and landscapes of ecological or cultural value. This component of UNEP-MAP takes into account the Barcelona Convention and the Protocol concerning Specially Protected Areas and Biological Diversity. It also requires Mediterranean coastal States to strengthen their solidarity in managing their common heritage and resources for the benefit of present and future generations. This will all be carried out through the implementation of the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean.

Chapter 3 asks Contracting Parties to protect the marine environment and coastal zones through prevention of pollution, and by reduction and, as far as possible, elimination of pollutant inputs, whether chronic or accidental. The main objective is the elimination of pollution of the Mediterranean Sea from land-based and sea-based activities at both a regional and national level in the perspective of sustainable development. This can be done through the implementation of the five Protocols relating to pollution prevention (as listed under the subsidiary instruments section).

Chapter 4 deals with public information and participation which are essential elements to the policy of sustainable development and environmental protection. The objectives include enhancing the

⁷⁵ <http://www.unepmap.org/index.php?module=content2&catid=001001002> (accessed 15/12/11)

environmental awareness of the population and to facilitate public access to activities for the protection and management of the environment both on a national and regional level.

Part II of the UNEP-MAP addresses strengthening of the legal framework, describes the Protocols made under the Barcelona Convention and encourages the Contracting Parties to play a fundamental role in ensuring the success of the action plan by strengthening and developing a legal framework at the national and regional levels for the protection of the environment and sustainable development.

Part III of the UNEP-MAP deals with the financial and institutional arrangements of the action plan. The key UNEP-MAP priorities for the coming decade are:

- to bring about a massive reduction in pollution from land-based sources;
- to protect marine and coastal habitats and threatened species;
- to make maritime activities safer and more conscious of the Mediterranean marine environment;
- to intensify integrated planning of coastal areas;
- to monitor the spreading of invasive species;
- to limit and intervene promptly on oil pollution;
- to further promote sustainable development in the Mediterranean region⁷⁶.

VECTORS Drivers

Energy (Renewables & Non-renewables)

The Protocol to the Barcelona Convention concerning Specially Protected Areas and Biological Diversity in the Mediterranean (adopted 1995 (Barcelona, Spain), in force 1999) places a general obligation on Parties 'to protect, preserve and manage in a sustainable and environmentally sound way areas of particular natural or cultural value, notably by the establishment of specially protected areas' (Article 3(1)(a) called 'Specially Protected Area of Mediterranean Interest' (SPAMI)). These protection measures should be taken into account for Marine Spatial Planning (MSP) and may influence the location of offshore energy developments by regulating or prohibiting some activities within SPAMI areas.

It is also stated in the UNEP-MAP that through the use of fossil fuels, the pollution and environmental damage in the Mediterranean is increasing. Therefore the UNEP-MAP is encouraging the use of new and renewable sources of energy.

Fisheries

The UNEP-MAP recognises that fish stocks are under pressure and in order to reverse this, action is required at several levels (fishing community, fisheries organisations and government). The objective is the sustainable management of living resources at both national and regional levels with the main activities aimed at developing common resources management policies inspired by the precautionary principle; establishing through the General Fisheries Council for the Mediterranean (GFCM) the legal framework for a cooperative approach to the protection of living marine resources outside territorial waters, and ensuring compliance FAO code of conducts and the UNCLOS.

Invasive Species

The Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995) states that with regard to 'specially protected areas' (SPAs), Parties must regulate the introduction of any alien species to the SPA as well as the introduction or re-introduction of species that are or have been present in the SPA (Article 6(d)). More generally, they must take all appropriate

⁷⁶ <http://www.unepmap.org/index.php?module=content2&catid=001001002> (accessed 15/12/11)

measures to regulate the intentional or accidental introduction of alien species and genetically modified organisms to the wild and prohibit such introductions where these may have harmful impacts on the ecosystem, habitats or species in the area covered by the Protocol (Shine et al, 2000⁷⁷).

Transboundary or Domestic

Both.

Geographical Scope

Article 1 of the Convention states that the 'Mediterranean Sea Area' shall mean the maritime waters of the Mediterranean Sea proper, including its gulfs and seas, bounded to the west by the meridian passing through Cape Spartel lighthouse, at the entrance of the Straits of Gibraltar, and to the east by the southern limits of the Straits of the Dardanelles between Mehmetcik and Kumkale lighthouses. The application of the Convention may be extended to coastal areas as defined by each Contracting Party within its own territory. Any Protocol to this Convention may extend the geographical coverage to which that particular Protocol applies.

Institutional Organisations

There are several organisations with a role in implementing the Barcelona Convention and the UNEP-MAP.

The Mediterranean Commission on Sustainable Development (MCS D) was created in 1996 by the Contracting Parties to the Barcelona Convention conveying their commitment to sustainable development and to the effective implementation, at the regional and national levels, of the decisions of the Earth Summit and the United Nations Commission for Sustainable Development. The MCS D is made up of 46 members: 22 permanent, representing each of the Contracting Parties to the Barcelona Convention, as well as 24 rotating representatives from wider community (local authorities, the business community, NGOs, scientific community, intergovernmental organisations and eminent experts) and 14 alternate members, that in principle have a mandate of 2 years.

The MCS D dwells upon the assessment of major sustainable development issues of common concern to the countries of the region or set out in international and regional agendas. It makes relevant proposals and recommendations to the Contracting Parties. The MCS D facilitates between the global and regional frameworks, and the national policies and actions at the local levels. The MCS D also enhances cooperation between the countries of the region and allows synergies between the UNEP-MAP system and other institutions and initiatives concerning the region.

The UNEP-MAP Coordination Unit ensures the role of MCS D Secretariat and coordinates the different working groups on a permanent basis. The UNEP-MAP Regional Activity Centres and specialised programmes provide technical and organisational support according to their respective domains of responsibility.

Six Regional Activity Centres (RAC's) are responsible for the implementation of respective components of UNEP-MAP under the supervision of the Coordinating Unit (MEDU).

The MedPartnership is another parallel organisation led by UNEP/MAP-World Bank and funded mainly by Global Environmental Facility and is focused on helping in the implementation of Strategic Action Plans (SAP MED and SAP BIO) and National Action Plans, as well as the ICZM protocol.

Global Water Partnership is a global organisation with regional representatives in the Mediterranean focused on supporting and promoting Integrated Water Resource Management (IWRM) in the Mediterranean.

⁷⁷ Shine, Williams and Gundling, 2000. A Guide to Designing Legal and Institutional Frameworks on Alien Invasive Species

The International Union for Conservation of Nature (IUCN) -Med Marine Programme; IUCN Centre for Mediterranean Cooperation. This organisation tackles with enhancing governance across the issue of undeclared Exclusive Economic Zones due to geopolitical reasons with special regard to Marine Protected Areas, supporting the establishment of a Marine Protected Areas Network, ecosystems approach to fisheries, sustainable aquaculture, biodiversity, and risks derived from maritime traffic. The IUCN and their programmes will probably be a principal driver for pressing through more restrictive conservation measures and the implementation of Marine Protected Areas, especially in susceptible areas.

General Fisheries Commission for the Mediterranean (GFCM) is a FAO organisation in charge of fishing and fisheries affairs to which the EU belongs. This organisation is of primary importance in the implementation and compliance of the Common Fisheries Policy in the Mediterranean Sea.

Subsidiary Instruments

The seven landmark protocols of the Barcelona Convention are:

- Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (adopted 1995 (Barcelona, Spain) not yet in force).
- Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (adopted 1996 (Syracuse, Italy), in force 2008).
- Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (adopted 1995 (Barcelona, Spain), in force 1999). *The Annexes to the SPA and Biodiversity Protocol were adopted on 24 November 1996 (Monaco).*
- Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (adopted 2002 (Malta), in force 2004).
- Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (adopted 1994 (Madrid, Spain), in force 2011).
- Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (adopted 1996 (Izmir, Turkey), in force 2008).
- Protocol on Integrated Coastal Zone Management (ICZM) in the Mediterranean (adopted, 2008 (Madrid, Spain), in force 2011).

A3. EUROPEAN LAW

A3.1 Integrated European Maritime Policy (IMP)

Synopsis

The Integrated European Maritime Policy (IMP) (The Blue Book) COM(2007) 575, 10.10.2007 was launched in October 2007 and is the vehicle which will deliver the maritime element of the EC's Strategic Objectives for the period 2005-2009. The IMP is a result of the discussion on the document 'Towards a future Maritime Policy for the Union: European vision for the Oceans and Sea – The EU Maritime Green Paper' published in 2006 and became effective in 2007 (COM(2006)275 final volume II—annex). The Green Paper emphasised the need for an integrated approach to management across European Member States, and highlights the economic aspects of marine biodiversity. While the Green Paper deals to an extent with the scientific and conservation aspects of marine biodiversity, in most cases, the emphasis lies on the exploitation of the resource, including for example, our increasing technological ability to exploit marine biodiversity for fisheries⁷⁸ and for blue biotechnology in support of industrial sectors from aquaculture to healthcare and from cosmetics to food products⁷⁹.

The Green Paper makes reference to proposals in the Thematic Strategy for the Marine Environment to introduce the principle of ecosystem-based spatial planning, with particular consideration for marine regions consisting of the Baltic Sea, the North East Atlantic Ocean, the Mediterranean Sea and the Black Sea⁸⁰. Ecosystem-based management is dependent on successful implementation of an integrated approach. As a result, a challenge for the over-arching Maritime Policy will be to achieve its articulation within sectoral European policies like the Common Fisheries Policy, Transport Policy and Common Agricultural Policy and with other environmental Directives like the Birds and Habitats Directives, Water Framework Directive, Nitrates Directive and the Urban Waste Water Treatment Directive⁸¹.

The IMP seeks to provide a more coherent approach to maritime issues, with increased coordination between different policy areas. No preference is given to any one policy over another and it is anticipated that all will reach an accommodation under its terms. It faces a holistic and integrated approach covering marine activities from an economic and sustainable perspective⁸². It specifically covers the cross-cutting policies of marine data and knowledge, integrated maritime surveillance, maritime spatial planning, blue growth and sea basin strategies. The principles anticipated to inform decision-making under the IMP and guide action under the plan are 'subsidiarity and competitiveness, the ecosystem approach, and stakeholder participation'. It seeks to coordinate and not replace policies on specific maritime sectors.

Legal Status

The IMP was adopted by the European Parliament in 2007 (COM(2007) 575, 10.10.2007). The IMP is accompanied by the other 3 documents:

- a Report on the stakeholder consultation results
- a detailed Action Plan-aiming at exploring the full potential of sea-based economic activity in an environmental sustainable manner
- an Impact Assessment

⁷⁸ Green Paper Page 10

⁷⁹ Green Paper Pages 16-17

⁸⁰ Queffelec, B., Cummins, V., & Bailly, D. Integrated management of marine biodiversity in Europe: Perspectives from ICZM and the evolving EU Maritime Policy framework. *Marine Policy* 33:871–877

⁸¹ Borja A. 2006. The new European marine strategy directive: difficulties, opportunities, and challenges. *Marine Pollution Bulletin* 52:239–42.

⁸² http://ec.europa.eu/maritimeaffairs/subpage_en.html

The IMP is not a legal measure but will shape the direction and content of subsequent legal measures. Thus in April 2011, Regulation 1255/2011 of the European Parliament and European Council established a Programme to further support the continued development of an Integrated Maritime Policy.⁸³

Key Provisions

The IMP covers a wide spectrum of issues related to sustainable development including marine transport, the competitiveness of marine businesses, employment in the marine sectors, scientific research and protection of the marine environment.

The IMP lays the foundation for the maritime governance framework and cross-cutting policy tools necessary for an EU Integrated Maritime Policy. The Commission recommends that Member States take further steps to embrace a more integrated governance approach and invites them to draw up their own integrated national maritime policies based on common principles and working closely with their stakeholders, in particular the coastal regions. To this end, in 2008 the Commission issued a set of guidelines on common principles and stakeholder involvement for maritime policies and which reported on the Member States actions by 2009. Crosscutting maritime policy should also include simplification and streamlining of the regulatory system to overcome regulatory obstacles and to promote collective learning and the exchange of best practice.

An integrated governance framework for maritime affairs requires cross-sectoral tools that cut across sea-related sectoral policies and support joined up policy making. The most relevant tools include:

- A European network for maritime surveillance - for the safe and secure use of marine space which includes promoting improved cooperation between Member States' Coastguards and appropriate agencies by the Commission and also taking steps towards a more interoperable surveillance system to bring together existing monitoring and tracking systems used for maritime safety and security, protection of the marine environment, fisheries control, control of external borders and other law enforcement activities.
- Maritime Spatial Planning and ICZM - for sustainable decision-making. The IMP acknowledges that, following the EU Recommendation 2002/413/EC, Member States have begun to use ICZM to regulate the spatial deployment of economic activities and to set up spatial planning systems for Europe's coastal waters. Therefore it proposes ICZM as a cross-sectoral tool along with Maritime Spatial Planning to support joined up policy making in the integrated governance framework for maritime affairs.
- A comprehensive and accessible source of Data and Information - for informed decision-making which includes steps in 2008 by the Commission towards a European Marine Observation and Data Network (building inter alia on the GMES initiative) and to promote the multi-dimensional mapping of Member States' waters, in order to improve access to high quality data.

The IMP addresses maximising the sustainable use of the oceans and seas not only focusing on maintaining the competitiveness of existing sea-related industries and activities, but should also actively promote their development over the long term and the creation of more and better jobs but in a sustainable way. With this objective in mind, the Commission is proposing a number of actions covering maritime transport; ports and logistics; the development of multisectoral clusters enhancing the competitiveness of Europe's maritime companies; the strengthening of careers and employment in the maritime sectors; sustainable maritime tourism; reduction of air pollution from ships; ship dismantling; mitigation and adaptation to climate change, and the protection of the high seas; these will

⁸³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:321:FULL:EN:PDF> (accessed 22/05/12)

be accompanied by action strengthening the ecosystem approach to maritime activities and to fisheries in particular.

The IMP also sets out the main actions that the Commission will pursue, during the course of this mandate, in the action areas of building a knowledge and innovation base for the maritime policy; delivering the highest quality of life in coastal regions; promoting Europe's leadership in international maritime affairs, and raising the visibility of maritime Europe.

VECTORS Drivers

Energy (Renewables & Non-renewables)

Section 4.7 of the IMP addresses action on marine-based energy infrastructures and resources. Marine energy resources, both fossil and renewables, will be important in the diversification of Europe's energy supply. In this context, the Commission, in its Communication on an Energy Policy for Europe⁸⁴, declared that it will be necessary to develop further the use of oceans and seas to promote the EU's energy goals, given their potential to support the generation of energy and to diversify energy transport and methods. As in the TEN-E guidelines⁸⁵, the Priority Interconnection Plan and endorsed by the European Council, European coordinators have been nominated to monitor and facilitate the implementation of the most critical identified priority projects. One such project is offshore wind connections in the Baltic and North Sea areas.

The Commission has taken action with a Working Document 'Energy policy and maritime policy: ensuring a better fit'⁸⁶, prepared in the context of the package on maritime policy, looking at the connections and synergies between Europe's energy policy and maritime policy. Revisions of existing energy legislation and policy targets were promised. Marine-based energy infrastructures and resources will be considered, including Liquefied Natural Gas and offshore wind. The long term and stable maritime policy will, for example, facilitate the high-quality investments in marine-based energy infrastructures and resources, which need to be made over the coming years and will encompass innovative technologies. In the framework of Europe's energy policy, regulatory and other cooperation is already being developed to facilitate cross-border and other common interest energy infrastructure investments. As many of these involve undersea connections and offshore resources, experience with marine-based energy projects is growing.

Section 6 of the IMP addresses delivering the highest quality of life in coastal regions with section 6.3 specifically setting out the main actions for mitigation and adaptation to climate change. Offshore wind farms, together with tidal and wave energy, are set to provide an increasing share of renewables in Europe's energy mix.

Fisheries

Good governance in fisheries management was specifically addressed in the section of the Communication entitled, 'Maximising the Sustainable Use of the Oceans and Seas'. The Commission sought to give weight to three particular interests in the development of future policy: coastal communities, the marine environment and other marine activities. More forcefully, the Commission gave notice that 'the recovery of fish stocks will be energetically pursued'. To do so, sound scientific information would need to be obtained and the shift to multi-annual planning strengthened. The Commission stated it would 'take action to ensure that the Common Fisheries Policy reflects the ecosystem-based approach of the Strategy for the Marine Environment'. With this in mind, the

⁸⁴ COM(2007) 1.

⁸⁵ Trans-European energy networks - Decision No 1364/2006/EC of 6 September 2006 laying down guidelines for trans-European energy networks and repealing Decision 96/391/EC and Decision No 1229/2003/EC

⁸⁶ Brussels, 10.10.2007 SEC(2007) 1283

Commission stated it would take 'firm action' to eliminate illegal, unreported and unregulated fishing, and to eliminate discards and destructive fishing practices such as high seas bottom trawling in sensitive habitats. Sustainable use is anticipated to be attained through the management of stocks at maximum sustainable yields, reciting that this would be to contribute to Europe's food security by 2015 in line with the EU's international commitments. The safety of fishermen should be addressed but this should be done in the context of maritime working conditions generally. Finally, the Communication urged that 'fishermen's experience and knowledge of the sea should be harnessed on behalf of society as a whole'⁸⁷.

To implement the above, the Commission will:

- take firm action towards the elimination of discards⁸⁸ and of destructive fishing practices such as high seas bottom trawling in sensitive habitats;
- take firm action to eliminate illegal, unreported and unregulated fisheries;
- promote the development of an environmentally safe aquaculture industry in Europe.

Transboundary or Domestic

Transboundary and domestic.

Geographical Scope

Across the European Union and addressing specifically the following regional seas Black Sea, Mediterranean Sea, Atlantic Ocean, North Sea, and Baltic Sea.

Institutional Organisations

Paper proposed by the EC to all Member States.

Subsidiary Instruments

- Regulation (EU) No 1255/2011 of the European Parliament and of the Council of 30 November 2011 establishing a Programme to support the further development of an Integrated Maritime Policy (05.12.2011)
- Proposal for continued financial support of the Integrated Maritime Policy (29.09.2010)
- Progress Report (15.10.2009)
- European Parliament resolution of 20 May 2008 on an integrated maritime policy for the European Union
- Guidelines to Member States on an Integrated Approach to Maritime Policy

Communication on the international dimension of the Integrated Maritime Policy

⁸⁷ Wakefield, J. 2010. Undermining the Integrated Maritime Policy. *Marine Pollution Bulletin* 60: 323–333

⁸⁸ Communication from the Commission to the Council and the European Parliament: A policy to reduce unwanted by-catches and eliminate discards in European fisheries - COM(2007) 136.

A3.2 The Marine Strategy Framework Directive (2008/56/EC)

Synopsis

In 2008, Directive 2008/56/EC (OJ L164/19) of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy (Marine Strategy Framework Directive) was introduced. The Marine Strategy Framework Directive (MSFD) is one of seven thematic strategies adopted by the EC as a result of the EU's 6th Environment Action Programme (6EAP). The MSFD seeks to establish an integrated framework for the management of marine spaces, and, in particular, establish a particular standard of good environmental status (GES) for community waters by 2020. It is the first legislative instrument in relation to the marine biodiversity policy in the European Union, as it contains the explicit regulatory objective that 'biodiversity is maintained by 2020', as the cornerstone for achieving good environmental status. It enshrines in a legislative framework the ecosystem approach to the management of human activities having an impact on the marine environment, integrating the concepts of environmental protection and sustainable use. In order to achieve the objective the Member States have to develop Marine Strategies which serve as Action Plans and which apply an ecosystem-based approach to the management of human activities. The MSFD will support OSPAR and other international and regional marine agreements. The MSFD has also been welcomed by the European Council as the environmental pillar of the Integrated European Maritime Policy (IMP) (reviewed in Chapter A3.1).

Legal Status

The Directive entered into force on the 15th July 2008 with all Member States required to transpose the directive into national law by 15th July 2010. Other non-EU Member States will also have to be involved in the development of monitoring strategies where they border on the regional seas of the North East Atlantic, Mediterranean, Black and Baltic Seas.

Key Provisions

Chapter 1 states the general provisions of the Directive. The Directive covers 'all marine waters' (Art 2(1)), including the seabed and subsoil, as measured from the coastal baseline (usually the mean low-water mark) to the extent of Member State jurisdiction (usually the 200 nautical mile Exclusive Economic Zone). The seabed and subsoil of coastal waters (insofar as they are not covered by the Water Framework Directive - Directive 2000/60/EC) also come within its provisions (Recital 12).

'[G]ood environmental status' under the MSFD is defined (Article 3(5)) as 'the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use of the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations [...]'. The reference to human use is significant, as the definition allows for a greater level of human activity than is permitted by that of 'good ecological status' under the Water Framework Directive.

Pollution is defined broadly (Article 3(8)) as "the direct or indirect introduction into the marine environment, as a result of human activity, of substances or energy, including human-induced marine underwater noise, which results or is likely to result in deleterious effects such as harm to living resources and marine ecosystems [...]".

The MSFD applies an ecosystem approach to marine management, on the basis of four key marine regions (the Baltic Sea, the North-East Atlantic Ocean, the Mediterranean Sea and the Black Sea) or by reference to smaller areas, provided such sub-divisions are compatible with a set of marine sub-regions designated under Article 4(2).

Article 5 states that all Member States must prepare marine strategies for each marine region or sub-region within their jurisdiction. The key components of this strategy are:

- an initial assessment of the current environmental status of the waters and the impact of human activities thereon (by 2012);
- a determination of the criteria for good environmental status and a series of targets and indicators for each marine region (by 2012);
- the establishment and implementation of a monitoring programme for on-going assessment and regular updating of targets (by 2014); and
- a programme of measures designed to achieve good environmental status (in place by 2015 and in operation by 2016).

Article 6 requires that, in developing their marine strategies, Member States use, where practical and appropriate, existing regional cooperation structures, to co-ordinate among themselves and to make every effort to coordinate their actions with those of third countries in the same region or sub-region e.g. OSPAR, HELCOM.

Article 7 requests all Member States to designate competent authorities to implement this Directive with respect to their marine waters.

Chapter 2 of the Directive addresses the Marine Strategies and their preparation. In respect of each marine region or subregion, Article 8 requests that each Member State should make an assessment of their marine waters comprising an analysis of the essential features and characteristics and current environmental status of those waters based on the indicative lists of elements set out in Table 1 of Annex III and covering the physical and chemical features, the habitat types and the biological features and hydromorphology. This assessment should also include an analysis of the predominant pressures and impacts, including human activity on the environmental status of those waters (based on an indicative list of elements in Table 2 of Annex III). Article 8 also requests that an economic and social analysis is undertaken of use of those waters and of the cost of degradation of the marine environment. These analyses should all be done over coastal, transitional and territorial waters.

The Commission Decision on criteria and methodological standards on good environmental status (GES) of marine waters in the framework of Article 9 (3) of the MSFD contains a number of criteria and associated indicators for assessing good environmental status, in relation to the 11 descriptors of good environmental status laid down in Annex I of the Directive (see below). The criteria build on existing obligations and developments within the EU legislation, covering further relevant elements of the marine environment, not yet addressed in the acting policies. Once adopted, the Decision will be a major stepping stone to establish precise objectives for the achievement of GES within the implementation of the MSFD. The eleven high level descriptors of Good Environmental Status (Annex I) include:

1. Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.
3. Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
4. All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.
5. Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters.

6. Sea floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.
7. Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.
8. Concentrations of contaminants are at levels not giving rise to pollution effects.
9. Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.
10. Properties and quantities of marine litter do not cause harm to the coastal and marine environment.
11. Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

The next step towards achieving good environmental status should be the establishment of environmental targets and monitoring programmes for ongoing assessment (Article 10). When devising these targets and indicators, Member States should take into account the continuing application of relevant existing environmental targets to make them compatible with national, Community and international objectives.

Coordinated monitoring programmes should be established for the ongoing assessment of the environmental status of marine waters based on the indicative lists of elements set out in Annex III and the list set out in Annex V (Article 11). They should also be compatible with other Community legislation including the Habitats and Birds Directives or under international agreements.

Chapter 3 deals with Marine Strategies and programmes of measures which are designed to achieve or maintain good environmental status. These measures should be devised on the basis of the precautionary principle and the principles that preventive action should be taken, that environmental damage should, as a priority, be rectified at source and that the polluter pays. The MSFD leaves much discretion to the Member States on the actual measures and criteria they set for each marine region, provided they fulfil the procedural requirements of the Directive and follow the guidelines given in the annexes. One stipulation, in Article 13(4), is that programmes of measures must contain 'spatial protection measures' which would enhance marine protection under EU and international habitats and species conservation law.

VECTORS Drivers

Energy (Renewables & Non-renewables)

The Directive requires Member States to draw up a strategy aimed at achieving GES by 2020 in all of its marine waters, including the Renewable Energy Zone and all those areas of the Continental Shelf over which it has jurisdiction. The Directive states that good environmental status should ensure that anthropogenic inputs of substances and energy, including noise, into the marine environment do not cause pollution effects. Annex I qualitative descriptors for determining GES includes: 11) Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment. This is an important factor when considering the underwater noise created during the construction and operation of offshore renewables e.g. wind farms and tidal turbines. The Directive also specifies that Member States should enable the sustainable use of marine goods and services and to ensure the marine environment is safeguarded for the use of future generations.

Fisheries

The MSFD significantly strengthens Member States' competences and responsibilities to maintain or achieve GES for all exploited fish and shellfish stocks inside territorial waters and the exclusive economic zones (EEZs) with common goals⁸⁹. Measures regulating fisheries management can be

⁸⁹ Hans-Joachim, J, Dörner, H., Scott, R. & Barbas, T. 2010. Complementary roles of European and national institutions under the Common Fisheries Policy and the Marine Strategy Framework Directive. *Marine Policy*, 34(5) p1028–1035

taken in the context of the Common Fisheries Policy, as set out in Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy⁹⁰, based on scientific advice with a view to supporting the achievement of the objectives addressed by this Directive, including the full closure to fisheries of certain areas, to enable the integrity, structure and functioning of ecosystems to be maintained or restored and, where appropriate, in order to safeguard, inter alia, spawning, nursery and feeding grounds. The MSFD will inevitably guide future European Fisheries Council decisions towards long term objectives even at regional levels instead of short term national socio-economic concerns and will take into account the environmental impacts of fishing and the objectives of this Directive. With such provisions, MSFD is thought to foster and harmonise European fisheries management with ecosystem approaches.

In the text of the Directive, Annex I providing qualitative descriptors for determining good environmental status specifically address fisheries requiring that:

- (3) Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
- (9) Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.

In respect of Member States preparing marine strategies, determining GES, establishing environmental targets and monitoring programmes, Annex III Table 1 of the Directive gives indicative lists of characteristics, pressures and impacts, including information on the structure of fish populations, including the abundance, distribution and age/size structure of the populations. Annex III Table 2 gives information on pressures and impacts listing commercial fishing activities as a source of both physical damage (e.g. abrasion/impact on the seabed of commercial fishing, boating, anchoring) and biological disturbance (i.e. the selective extraction of species, including incidental non-target catches (e.g. by commercial and recreational fishing)). These aspects all need to be addressed in order to achieve GES.

Invasive Alien Species

The Annex I qualitative descriptors for determining good environmental status specifically address alien species by requiring that: 2) Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.

In respect of Member States preparing marine strategies, determining GES, establishing environmental targets and monitoring programmes, Annex III Table 1 of the Directive gives indicative lists of characteristics, pressures and impacts. This requires 'an inventory of the temporal occurrence, abundance and spatial distribution of non-indigenous, exotic species or, where relevant, genetically distinct forms of native species', which are present in the marine region or subregion. Annex III Table 2 gives information on pressures and impacts listing non-indigenous species as a source of biological disturbance (i.e. the introduction of non-indigenous species and translocations). These aspects all need to be addressed in order to achieve GES.

Transboundary or Domestic

Both.

⁹⁰ OJ L 358, 31.12.2002, p. 59. Regulation as amended by Regulation (EC) No 865/2007 (OJ L 192, 24.7.2007, p. 1).

Geographical Scope

The MSFD has a spatial application from the baseline to 200nm or the extent of the Member States Continental Shelf (e.g. UK) in all regional seas. However, by implication the Directive will take account of activities from outside the area, since they will impact upon GES within the area.

Institutional Organisations

EU Marine Directors agreed on a work structure for an informal Common Implementation Strategy (CIS) of the MSFD at EU level. At present, the CIS consists of Marine Directors; Marine Strategy Coordination Group; Three working groups: 1) a working group on good environmental status (GES); 2) a working group on data information and knowledge exchange (DIKE), and 3) a working group on economic and social assessment (ESA); Two Technical Working Groups covering noise and litter, and Stakeholder involvement from EU level organisations.

The Directive requires that in developing their marine strategies, Member States use, where practical and appropriate, existing regional cooperation structures, including those under the regional sea conventions to co-ordinate among themselves and to make every effort to coordinate their actions with those of third countries in the same region or subregion. This includes the OSPAR Convention (OSPAR), the Helsinki Convention (HELCOM), the Barcelona Convention (UNEP-MAP) and the Bucharest Convention.

Subsidiary Instruments

- Commission Decision of 1 September 2010 on criteria and methodological standards on good environmental status of marine waters (notified under document C(2010) 5956) (Text with EEA relevance) (2010/477/EU).

A3.3 Habitats Directive (92/43/EEC)

Synopsis

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (The Habitats Directive) is the means by which the European Union meets its obligations under the Bern Convention. The Directive was amended in 1997 by a technical adaptation Directive with further amendments of the annexes by the Environment Chapter of the Treaty of Accession 2003 and in 2007 when Bulgaria and Romania joined the EU.

The Habitats Directive obliges Member States to promote the maintenance of biodiversity by requiring measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status and introducing robust protection for those habitats and species of European importance. In applying these measures, Member States are required to take account of economic, social and cultural requirements, as well as regional and local characteristics. Together with the Birds Directive, it forms the cornerstone of Europe's nature conservation policy. The Directive protects over 1000 animals and plant species and over 200 so called 'habitat types' (e.g. special types of forests, meadows, wetlands, etc.), which are of European importance.

Legal Status

The Directive entered into force on the 10th June 1992 and has been adopted by all EU Member States.

Key Provisions

The provisions of the Directive require Member States to introduce a range of measures, including:

Article 1 provides the formal definitions of both *conservation status* and also *favourable conservation status* of habitats and species. These are required to be met in order to maintain or restore European protected habitats and species listed in the Annexes. The concept of favourable conservation status is central to the EC Habitats Directive and to emphasise its importance, Article 2 setting out the aim of the Directive, states that "Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest". Habitats and species of 'Community interest' are the habitats listed in Annex I and the species listed in Annexes II, IV and V of the Directive.

To contribute to a coherent European ecological network of protected sites, Member States should designate Special Areas of Conservation (SACs) for habitats listed in Annex I and for species listed in Annex II. These measures are also to be applied to Special Protection Areas (SPAs) classified under Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network (Article 3). This enables the habitats and species in the Annexes to be maintained at, or where appropriate restored to, a favourable conservation status.

For SACs, Member States shall establish the necessary conservation measures, involving, if need be, appropriate management plans which correspond to the ecological requirements of the habitats and species present on the sites (Article 6.2). Member States are required to take appropriate steps to avoid the deterioration of natural habitats and habitats of species, and the significant disturbance of species for which areas have been designated.

Where plans or projects are proposed which may have a likely significant effect on a site, an assessment of the impact (appropriate assessment) is required. Unless other provisions are satisfied, consent can only be given having ascertained no adverse effect on the integrity of the site. This precautionary approach is the fundamental principle underpinning the Directive. In spite of a negative assessment a plan or project may still proceed if there are no alternatives and imperative reasons of overriding public interest, including those of a social or economic nature. For rarer habitats and species (priority habitats and species) the only considerations are those relating to public health or safety or of

beneficial consequences to the environment. Where such plans and projects are permitted, Member States must take compensatory measures to ensure the overall coherence of Natura 2000 is protected (Articles 6.3 & 6.4). The Habitats Directive amends the EC Birds Directive (79/409/EEC) so that the protection measures contained within Article 6.2, 6.3 & 6.4 apply to SPAs (Article 7).

Article 11 requires Member States to undertake surveillance of the conservation status of habitats and species of wild fauna and flora of Community interest. Particular regard to priority habitats and species is required.

Measures for the protection of species listed in Annex IV of the Directive are contained in Article 12 and prohibit:

- deliberate capture or killing of these species in the wild;
- deliberate disturbance of these species particularly during breeding, rearing, hibernation and migration;
- deliberate destruction or taking of eggs from the wild;
- deterioration or destruction of breeding sites or resting places, and
- the keeping, transport, sale or exchange, or offering for sale or exchange, of species taken from the wild.

Article 12 is important in the marine context, asking Member States to establish a system with which to monitor incidental capture and killing of listed species and to undertake further research or conservation measures to ensure that no 'significant negative impact' occurs on the species concerned.

Article 13 provides specific measures to protect plant species listed in Annex IV prohibiting:

- deliberate picking, collecting, cutting, uprooting or destruction of such plants in their natural range in the wild, and
- the keeping, transport, sale or exchange, or offering for sale or exchange, of species taken from the wild.

Member States shall take measures to ensure that the taking from the wild of species listed in Annex V as well as their exploitation, is compatible with being maintained at favourable conservation status (Article 14). Measures may be introduced to ensure compliance with this Article including:

- regulation of the period and or methods of taking specimens;
- application, when specimens are taken, of hunting and fishing rules which take account of the conservation of such populations;
- establishment of a system of licensing;
- regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens.

Article 15 requires Member States to prohibit certain means of capture and killing listed in Annex VI.

Article 17 requires Member States to report on the implementation of measures undertaken under the Directive every six years. The report is to include information on measures taken on SACs and an evaluation of the effect of these measures to secure the conservation status of Annex I habitats and Annex II species. The report also requires that national reports include the main results of the surveillance referred to in Article 11.

VECTORS Drivers

Energy (Renewables & Non-renewables)

The Habitats Directive does control, but does not absolutely prohibit development on European wildlife sites (SPAs and SACs), however the controls that apply in such areas are strict, and permit damaging

development only in exceptional circumstances. Articles 6(3) and 6(4) of the Habitats Directive have the greatest influence on whether energy developments can occur in the marine environment, specifically in the location of a Natura 2000 site. The purpose of this assessment is to determine whether the development is likely to have a significant effect on the integrity of the conservation objectives of the international sites. If it is considered that a significant effect is likely to occur, an Appropriate Assessment will be necessary. An Appropriate Assessment identifies any adverse effect on the integrity of a SPA or SAC and, if they are necessary, identifies mitigation measures that will reduce (ideally eliminate) those effects. If effects cannot be reduced sufficiently then the AA will conclude that an adverse effect on the integrity will occur. If the proposer of a plan or project wishes it to go ahead, then a case for imperative reasons for overriding public interest has to be made to the Secretary of State, and compensatory measures determined.

Fisheries

With regards fishing activities and the Habitats Directive, fisheries are not defined as a 'plan or project' within the Habitats Directive, and have therefore been open to a lot of debate. In guidance provided by the European Commission⁹¹ on the provisions of Article 6 and in case law of the European Court of Justice (ECJ), the term 'project' has been interpreted widely. The ECJ may take the view that commercial fishing authorised by a general licence is a plan or project under Article 6(3) as in the Wadenzee case (C-127/02) concerning mechanical cockle fishing damaging a European Marine Site. If a fishing activity affects European Marine Sites, the Member State should implement measures necessary under Article 6(2) of the Directive which states that 'Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.

Article 11 requests Member States to undertake surveillance of the conservation status of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and priority species. If surveillance suggests that damage is being done, measures shall be introduced to ensure that the taking of wild specimens of species of wild fauna and flora listed in Annex V as well as their exploitation is compatible with their being maintained at a favourable conservation status (Article 14). These measures shall include the temporary or local prohibition of the taking of specimens in the wild and exploitation of certain populations; the regulation of the periods and/or methods of taking specimens; application, when specimens are taken, of hunting and fishing rules which take account of the conservation of such populations, and the establishment of a system of licences for taking specimens or of quotas.

Annex VI lists the prohibited methods and means of capture and killing. With regards to the taking of mammals (including marine mammals), the directive prohibits the use of 'nets which are non-selective according to their principle or their conditions of use'. Fish are also not allowed to be taken using poison or explosives.

Alien Species

Article 22b of the Directive states that Member States should ensure that the deliberate introduction into the wild of any species which is not native to their territory is regulated so as not to prejudice natural habitats within their natural range or the wild native fauna and flora and, if they consider it necessary, prohibit such introduction. The results of the assessment undertaken shall be forwarded to the committee for information.

⁹¹ EC (2002) Managing Natura 2000 sites, The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC

Transboundary or Domestic

SACs in the coastal and marine environment can be both domestic and transboundary.

Geographical Scope

The Habitats Directive is applicable to the European territory of the Member States to which the Treaty applies. This includes land, coastal, territorial waters and out to the limit of Member State's Exclusive Economic Zones (EEZs) or the Continental Shelf in the case of the UK (UKCS) which extends beyond the 200nm limit of EEZs. With the inclusion of Bulgaria and Romania to the EU in 2007, two new biogeographic regions were added to the existing seven (Continental, Mediterranean, Alpine, Atlantic, Macaronesian, Boreal, Pannonian): the Black Sea and the Steppic Regions.

Institutional Organisations

The EC is the main organisation overseeing the implementation of the Directive within the Member States. The Commission is assisted by a Committee (Article 20) in the implementation of this Directive and in particular when decisions on Community co-financing are taken. Any amendments required to the Annexes of the Directive to technical and scientific progress shall be adopted by the Council acting by qualified majority on a proposal from the Commission.

A3.4 Wild Birds Directive (2009/147/EC)

Synopsis

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (this is the codified version of Directive 79/409/EEC as amended) is the EU's oldest piece of nature legislation and one of the most important, creating a comprehensive scheme of protection for all wild bird species naturally occurring in the Union. It was adopted unanimously by the Member States in 1979 as a response to increasing concern about the decline in Europe's wild bird populations resulting from pollution, loss of habitats as well as unsustainable use. It was also in recognition that wild birds, many of which are migratory, are a shared heritage of the Member States and that their effective conservation required international co-operation⁹². This Directive also meets the European Union's obligations for bird species under the Bern Convention and the Bonn Convention.

Legal Status

Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds has been substantially amended several times. In the interests of clarity and rationality this Directive was codified. The codified version of 30th November 2009 and has been adopted by all EU Member States.

Key Provisions

The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities, although the precise legal mechanisms for their achievement are at the discretion of each Member State. The main provisions of the Directive are:

Article 1 states that the Directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the Treaty applies. It addresses their protection, management and control and shall apply not only to the birds, but their eggs, nests and habitats. Member States should take the requisite measures to maintain the population of all wild bird species referred to in Article 1 across their natural range at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements (Article 2). This should be done with the encouragement of various activities to that end (Article 3), including the creation of protected areas; upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones; re-establishment of destroyed biotopes, and the creation of biotopes.

The Directive recognises that habitat loss and degradation are the most serious threats to the conservation of wild birds. It therefore places great emphasis on Member States to identify and classify Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex I of the Directive, as well as for all regularly occurring migratory species (not listed in Annex I), paying particular attention to the protection of wetlands of international importance (Article 4). Since 1994, with the Special Areas of Conservation designated under the Habitats Directive, SPAs form an integral part of the Natura 2000 ecological network⁹³. The protection measures afforded to classified SPAs is amended by the EC Habitats Directive so that they are the same as that for SACs⁹⁴.

Article 5 encourages Member States to establish a general scheme of protection for all wild birds referred to in Article 1 prohibiting in particular the deliberate killing or capture by any method; the deliberate destruction of, or damage to their nests and eggs or removal of their nests; taking their eggs

⁹² http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

⁹³ Article 3 EC Habitats Directive

⁹⁴ Article 7 EC Habitats Directive

in the wild and keeping these eggs even if empty; the deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant having regard to the objectives of this Directive, and keeping birds of species of which hunting and capture is prohibited. Article 6 also places restrictions on the sale and keeping of wild birds.

Article 7 specifies that due to their population level, geographical distribution and reproductive rate throughout the Community, species listed in Annex II may be hunted under national legislation. The Directive recognises hunting as a legitimate activity and provides a comprehensive system for the management of hunting (limited to species listed in Annex II - II/1 allows hunting in all Member States; II/2 allows hunting in listed Member States) to ensure that this practice is sustainable. This includes a requirement to ensure that birds are not hunted during the periods of their greatest vulnerability, such as the return migration to the nesting areas, reproduction and the raising of chicks.

Article 8 requires Member States to outlaw all forms of non-selective and large scale killing of birds, (especially the methods listed in Annex IV e.g. snares & explosives as detailed in Annex IV). However under Article 9, Member States may derogate from the provisions of Articles 5-8, that is, the conditions under which permission may be given for otherwise prohibited activities. Such derogations must specify the species affected; the means, arrangements or methods of capture or killing, and condition of risk and circumstances of time and place. The derogations authority must specify the conditions, arrangements etc. within what limits and by whom and be reported to the Commission (Article 9).

The conservation of birds and, in particular, migratory birds still presents problems which call for scientific research. Such research will also make it possible to assess the effectiveness of the measures taken therefore Article 10 and Annex V encourages certain forms of relevant research.

Member States are required to prepare a composite report on the implementation of the Directive every 3 years (Article 12).

Article 14 states that Member States may introduce stricter protective measures than those provided for under this Directive.

VECTORS Drivers

Energy (Renewables & Non-renewables)

The EU Birds and Habitats Directives do control, but do not absolutely prohibit development on European wildlife sites (SPAs and SACs), however the controls that apply in such areas are strict, and permit damaging development only in exceptional circumstances.

Alien Species

Article 11 states the requirements to ensure that the introduction of non-native birds do not threaten other biodiversity. Care should be taken in consultation with the Commission to see that the introduction of any species of wild bird not naturally occurring in the European territory of the Member States does not cause harm to local flora and fauna.

Transboundary or Domestic

SPAs in the coastal and marine environment can be both domestic and transboundary.

Geographical Scope

The Birds Directive is applicable to the European territory of the Member States to which the Treaty applies which includes land, coastal, territorial waters and out to the limit of Member State's Exclusive Economic Zones (EEZs) or the Continental Shelf in the case of the UK (UKCS) which extends beyond the 200nm limit of EEZs. The geographical remit and coverage of habitat types and bird species was increased in 2007 with the joining of Bulgaria and Romania to the EU.

Institutional Organisations

The EC is the main organisation overseeing the implementation of the Directive within the Member States. The Commission is assisted by the Committee for Adaptation to Technical and Scientific Progress (Article 16).

A3.5 EU Biodiversity Strategy

Synopsis

In March 2010, EU leaders recognised that the 2010 biodiversity target set by the UN Convention on Biodiversity would not be met, failing to reach the EU's shared goal of halting further losses despite some major successes, such as establishing Natura 2000, the world's largest network of protected areas. It was felt that the EU's approach to tackling biodiversity loss over the previous decade was too wide-ranging and not effective enough. The EU responded by addressing the failing targets and the global mandate set in Nagoya 2010 (see Chapter 2.2) by endorsing the long-term vision and ambitious headline target proposed by the Commission in its Communication 'Options for an EU vision and target for biodiversity beyond 2010'⁹⁵. This sets the following vision statement and headline targets for all EU countries:

2050 vision

By 2050, European Union biodiversity and the ecosystem services it provides - its natural capital - are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.

2020 headline target

Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

The EU has encapsulated both mandates in a new strategy entitled *Our life insurance, our natural capital: an EU biodiversity strategy to 2020* (COM(2011) 244 final) (EU Biodiversity Strategy), which is aimed at reversing biodiversity loss and speeding up the EU's transition towards a resource efficient and green economy. It is an integral part of the Europe 2020 Strategy⁹⁶, and in particular the resource efficient Europe flagship initiative⁹⁷.

The EU Biodiversity Strategy responds to EU obligations and the global mandate set by the Nagoya Protocol, setting the EU on the right track to meet its own biodiversity objectives and its global commitments. The Commission hopes to achieve this by working with Member States and the European Environment Agency to develop by 2012 an integrated framework for monitoring, assessing and reporting on progress in implementing the strategy. National, EU and global monitoring, reporting and review obligations will be improved and streamlined as far as possible with requirements under other environmental legislation, such as the Water Framework Directive. The EU 2010 biodiversity baseline and the updated EU biodiversity indicators⁹⁸ will be key components of this framework.

Legal Status

On the 3rd May 2011, the EC adopted *Our life insurance, our natural capital: an EU biodiversity strategy to 2020* (COM(2011) 244 final) (EU Biodiversity Strategy). The EU Biodiversity Strategy is not a legal measure but will shape the direction and content of subsequent legal measures. Thus in April 2011,

⁹⁵ COM(2010) 4.

⁹⁶ COM(2010) 2020

⁹⁷ COM(2011) 21

⁹⁸ <http://biodiversity.europa.eu/topics/sebi-indicators>. Other relevant indicators include the EU's sustainable development and agro-environmental indicators.

Regulation 1255/2011 of the European Parliament and European Council established a Programme to further support the continued development of the Strategy⁹⁹.

Key Provisions

The 2020 Biodiversity strategy includes six mutually supportive and inter-dependent targets that respond to the objectives of the 2020 headline target¹⁰⁰. These are:

Target 1 ensures that a time-bound, quantified target will accelerate the enforcement of EU laws and the implementation of the birds and habitats directives and the achievement of objectives within them.

Target 1

To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status, and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.

Target 2 focuses on maintaining and enhancing ecosystem services and restoring degraded ecosystems by incorporating green infrastructure in spatial planning.

Target 2

By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15 % of degraded ecosystems.

Targets 3 and 4 seek to improve integration in key sectors, specifically through targets and action to enhance the positive contribution of the agriculture, forest and fisheries sectors to biodiversity conservation and sustainable use. Target 4 ensures sustainable use of fisheries resources by reducing catches to scientifically determined limits by 2015.

*Target 3**

A) Agriculture: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement() in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management.*

*B) Forests: By 2020, Forest Management Plans or equivalent instruments, in line with Sustainable Forest Management (SFM)²¹, are in place for all forests that are publicly owned and for forest holdings above a certain size** (to be defined by the Member States or regions and communicated in their Rural Development Programmes) that receive funding under the EU Rural Development Policy so as to bring about a measurable improvement(*) in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared to the EU 2010 Baseline.*

() For both targets, improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under target 2.*

*(**) For smaller forest holdings, Member States may provide additional incentives to encourage the adoption of Management Plans or equivalent instruments that are in line with SFM.*

⁹⁹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:321:FULL:EN:PDF> (accessed 22/05/12)

¹⁰⁰ http://ec.europa.eu/news/environment/110503_en.htm

Target 4:

Fisheries: Achieve Maximum Sustainable Yield (MSY)¹⁰¹ by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.

Target 5 addresses the significant threat posed by invasive alien species (IAS) to biodiversity in the EU. With the exception of legislation concerning the use of alien and locally absent species in aquaculture, there is currently no dedicated, comprehensive EU policy to address them. The EU Biodiversity Strategy proposes filling this gap with a dedicated EU legislative instrument.

Target 5:

By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.

Target 6 aims to ensure that the EU meets the international 2020 biodiversity goals and objectives agreed to under the CBD. Through this strategy, targeted efforts will strive to alleviate pressure on biodiversity emanating from the EU while contributing to greening the economy in line with EU priorities for the 2012 United Nations Conference on Sustainable Development. The EU will also need to meet specific COP10 commitments relating to resource mobilisation and implement the Nagoya Protocol on ABS if it is to continue to lead international biodiversity policy.

Target 6:

By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

The specific detailed actions related to these 6 targets are set out in the Annex to the Communication. It is anticipated that reaching the 2020 target will require the full implementation of existing EU environment legislation, as well as action at national, regional and local level. The Water Framework Directive (2000/60/EC), the Climate and the Marine Strategy Framework Directive (2008/56/EC) will have

The shared EU and CBD targets need to be pursued through a mix of sub-national, national and EU-level action. Close coordination will therefore be needed to track progress in reaching the targets, including those addressed through policy measures outside the scope of this strategy, and to ensure consistency between EU and Member State action. For this purpose, the Commission will work with Member States to develop a common framework for implementation involving also other key actors, sectors and institutions based on best practice, and setting out the roles and responsibilities of each in ensuring success. The Commission will support and complement Member States' efforts by enforcing environmental legislation, filling policy gaps by proposing new initiatives, providing guidelines, funding, and fostering research and the exchange of best practice.

VECTORS Drivers

Fisheries

The EU Biodiversity Strategy seeks to improve integration in key sectors, specifically through targets and action to enhance the positive contribution of the fisheries sector to biodiversity conservation and sustainable use (see Target 4 above). The forthcoming reform of the Common Fisheries Policy (CFP) and the new Multiannual Financial Framework present opportunities to enhance synergies and maximise coherence between biodiversity protection objectives and those of these and other policies.

¹⁰¹ The EU signed up to a target of achieving MSY levels by 2015 at the World Summit on Sustainable Development in 2002 and to the new 2020 fisheries target adopted at CBD COP10.

Target 4 will be reached through two main actions: Action 13 commits to improving the management of fished stocks, and Action 14 aims to eliminate adverse impacts on fish stocks, species, habitats and ecosystems.

Invasive Alien Species

The EU Biodiversity Strategy considers invasive alien species (IAS) to pose a significant threat to biodiversity in the EU, and this threat is likely to increase in the future unless robust action is taken at all levels to control the introduction and establishment of these species and address those already introduced¹⁰². The Biodiversity Strategy proposes to fill the gap in legislation with a dedicated EU legislative instrument which could tackle outstanding challenges relating inter alia to IAS pathways, early detection and response and containment and management of IAS. Target 5 above will be reached through two main actions: Action 15 aims to strengthen the EU Plant and Animal Health Regimes by integrating additional biodiversity concerns into existing regimes by 2012, and Action 16 which will establish a dedicated instrument on Invasive Alien Species to fill the policy gaps in combating IAS by 2012.

Transboundary or Domestic

This Strategy is both transboundary and domestic.

Geographical Scope

This strategy applies within EU Member States and in overseas countries and territories. The Commission and Member States will work with the outermost regions and overseas countries and territories, which host more endemic species than the entire European continent, through the BEST (Biodiversity and Ecosystem Services in Territories of European Overseas) initiative to promote biodiversity conservation and sustainable use.

Institutional Organisations

The Strategy is being promoted by the Commission and through the Member States. The Commission has set up the EU Business and Biodiversity Platform, which currently brings together businesses from six different sectors (agriculture, extractive industries, finance, food supply, forestry and tourism) to share their experiences and best practices. The Commission will further develop the Platform and encourage greater cooperation between businesses in Europe, including SMEs, and links to national and global initiatives.

¹⁰² IEEP, 2010 (as cited in COM(2011) 244 final)

A3.6 ICZM Protocol to the Barcelona Convention

Forward

The Convention for the Protection of the Mediterranean Sea against Pollution, which was subsequently renamed as the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (hereinafter referred to as 'the Barcelona Convention') was concluded on behalf of the European Community by the Council in Decisions 77/585/EEC¹⁰³ and 1999/802/EC¹⁰⁴. Article 4.3(e) of the Barcelona Convention, requests the Contracting Parties to promote the integrated management of the coastal zones, taking into account the protection of areas of ecological and landscape interest and the rational use of natural resources. A Protocol was developed to provide a common framework for the Contracting Parties to promote and implement ICZM. The Barcelona Convention is described in greater detail in Chapter A2.16.

Synopsis

The Protocol on Integrated Coastal Zone Management in the Mediterranean¹⁰⁵ is the seventh Protocol in the framework of the Barcelona Convention and represents a crucial milestone in the history of the United Nations Environment Programme - Mediterranean Action Plan (UNEP-MAP). It provides a framework to stimulate a more concerted and integrated approach, involving public and private stakeholders including civil society and economic operators. It promises to effectively tackle the problems of coastal degradation in the Mediterranean and commits the EU to the protection and sustainable management of the Mediterranean coast. It will allow the Mediterranean countries to better manage and protect their coastal zones, as well as to deal with the emerging coastal environmental challenges, such as climate change. Such an inclusive approach, based on best available scientific observation and knowledge, is required to address these problems more effectively and achieve a more sustainable development of the Mediterranean coastal zones. The ICZM Protocol covers a broad range of provisions which will need to be implemented by different levels of administration, having regard to the principles of subsidiarity and proportionality. While it is appropriate for the Union to act in support of integrated coastal zone management, bearing in mind, inter alia, the cross-border nature of most environmental problems, the Member States and their relevant competent authorities will be responsible for the design and implementation on the coastal territory of certain detailed measures laid down in the ICZM Protocol, such as the establishment of zones where construction is not allowed.

Legal Status

The Council adopted the decision to ratify the ICZM Protocol to the Barcelona Convention (2010/631/EU), and having been ratified by six contracting parties, the Protocol entered into force on the 24th of March 2011. The ratification, or conclusion, of the Protocol means that the Protocol now becomes part of EU law and has binding effects.

Key Provisions

Part I gives the general provisions of the Protocol on Integrated Coastal Zone Management in the Mediterranean. Article 1 requires Parties to establish a common framework for the integrated management of the Mediterranean coastal zone and shall take the necessary measures to strengthen regional cooperation for this purpose.

Article 5 sets out the objectives of integrated coastal zone management which are to facilitate the sustainable development of the coastal zone, by ensuring that the environment and landscapes are

¹⁰³ OJ L 240, 19.9.1977, p. 1

¹⁰⁴ OJ L 322, 14.12.1999, p. 32

¹⁰⁵ (OJ L 34, 4.2.2009, p. 19–28)

taken into account in harmony with economic, social and cultural development; the coastal zones are preserved for the benefit of current and future generations; ensure the sustainable use of natural resources, particularly with regard to water use; ensure preservation of the integrity of coastal ecosystems, landscapes and geomorphology; prevent and/or reduce the effects of natural hazards and in particular of climate change, which can be induced by natural or human activities, and achieve coherence between public and private initiatives and between all decisions by the public authorities, at the national, regional and local levels, which affect the use of the coastal zone.

Article 6 lists the general principles of integrated coastal zone management. In implementing the Protocol, the Parties shall be guided by the biological, physical, socio-economic and cultural aspects of the system, applying the ecosystem approach and sustainable planning and management of the coastal zone. Governance should allow stakeholder participation, a cross sectoral organisation of all competent authorities and the formulation of strategies, plans, and programmes which cover all areas of sectoral coastal use. The allocation of uses throughout the entire coastal zone should be balanced and unnecessary concentration and urban sprawl should be avoided. Risk assessment should be carried out on human activities and infrastructure, and damage to the coastal environment should be prevented and where necessary restoration implemented.

Articles 5 and 6 form the key objectives and principles of the ICZM Protocol.

Article 7 states that countries should ensure institutional coordination, including the creation of appropriate bodies or mechanisms in order to avoid sectoral approaches and facilitate comprehensive approaches.

Part II of the Protocol addresses elements of integrated coastal zone management. Article 8 addresses the protection and sustainable use of the coastal zone by ensuring the sustainable use and management of coastal zones in order to preserve the coastal natural habitats, landscapes, natural resources and ecosystems, in compliance with international and regional legal instruments. This should be carried out by the zoning of areas where construction is not allowed, taking into account climate change and natural risks. These areas should be given statutory protection through national legal instruments including criteria for sustainable use of the coastal zone.

Article 9 deals with economic activities in the coastal zone, ensuring that specific attention is given to economic activities that require immediate proximity to the sea. These activities need to ensure that they minimise the use of natural resources and take into account the needs of future generations, avoiding pollution, ensuring sustainable use of the coastal zone and promote the use of codes of good practice amongst public authorities, economic actors and non-governmental organisations.

Article 10 requires Parties to take measures to protect the characteristics of certain specific coastal ecosystems, including wetlands and estuaries, marine habitats, coastal forests and woods and dunes through legislation, planning, management and cooperation. Parties should recognise the specific aesthetic, natural and cultural value of coastal landscapes, irrespective of their classification as protected areas, and shall adopt measures to give protection through legislation, planning, management and joint actions for transboundary features (Article 11). Article 12 asks Parties to offer special protection to islands. Article 13 requires Parties to adopt all appropriate measures to preserve and protect the cultural, in particular archaeological and historical, heritage of coastal zones, including the underwater cultural heritage, with the applicable national and international instruments.

Article 14 deals with participation with a view to ensuring efficient governance throughout the process of the integrated management of coastal zones, the Parties shall take the necessary measures to ensure the appropriate involvement in the phases of the formulation and implementation of coastal and marine strategies, plans and programmes or projects, as well as the issuing of the various authorisations, of the various stakeholders. Article 15 asks Parties to undertake at the national, regional or local level

awareness-raising, training, education and research to further knowledge of integrated coastal zone management.

Part III of the Protocol addresses instruments for integrated coastal zone management. Article 16 looks at the monitoring and observation mechanisms and networks where Parties are asked to strengthen existing appropriate mechanisms for monitoring and observation, or create new ones if necessary. They shall also prepare and regularly update national inventories of coastal zones which should cover, to the extent possible, information on resources and activities, as well as on institutions, legislation and planning that may influence coastal zones.

Article 17 asks Parties to undertake to cooperate for the promotion of sustainable development and integrated management of coastal zones, taking into account the Mediterranean Strategy for Sustainable Development and complementing it where necessary.

Article 18 requests each Party to further strengthen or formulate a national strategy for integrated coastal zone management and coastal implementation plans and programmes consistent with the common regional framework and in conformity with the integrated management objectives and principles of this Protocol and shall inform the Organisation about the coordination mechanism in place for this strategy. This strategy should set objectives, determine priorities with an indication of the reasons, identify coastal ecosystems needing management, as well as all relevant actors and processes, enumerate the measures to be taken and their cost as well as the institutional instruments and legal and financial means available, and set an implementation schedule.

Article 19 looks at environmental assessments and asks Parties to ensure that the process and related studies of environmental impact assessment for public and private projects likely to have significant environmental effects on the coastal zones, and in particular on their ecosystems, take into consideration the specific sensitivity of the environment and the interrelationships between the marine and terrestrial parts of the coastal zone. They should also formulate strategic environmental assessment of plans and programmes affecting the coastal zone and the environmental assessment should take into consideration cumulative impacts.

Article 20 covers land policy and Article 21 the economic, financial and fiscal instruments for the implementation of national coastal strategies and coastal plans and programmes.

Part IV of the Protocol addresses risks affecting the coastal zone. Article 22 asks Parties within the framework of national strategies for integrated coastal zone management, to develop policies for the prevention of natural hazards. To this end, they should undertake vulnerability and hazard assessments of coastal zones and take prevention, mitigation and adaptation measures to address the effects of natural disasters, in particular of climate change. Article 23 addresses coastal erosion and Article 24 at the response to natural disasters.

Part V of the Protocol requires international cooperation, through training and research (Article 25), scientific and technical assistance (Article 26) and the exchange of information and activities of common interest (Article 27). Article 28 requests transboundary cooperation to coordinate their national coastal strategies, plans and programmes related to contiguous coastal zones. Article 29 addresses transboundary environmental assessment where Parties, before authorising or approving plans, programmes and projects that are likely to have a significant adverse effect on the coastal zones of other Parties, should exchange information and consultation in assessing the environmental impacts of such plans, programmes and projects, taking into account Article 19 of this Protocol and Article 4(3)(d) of the Barcelona Convention.

Part VI deals with the institutional provisions and Part VII with the administrative details of the Protocol.

VECTORS Drivers

Energy (Renewables & Non-renewables)

Specifically, Article 9.2f deals with the infrastructure, energy facilities, ports and maritime works and structures which should be subject to authorisation so that their negative impact on coastal ecosystems, landscapes and geomorphology is minimised or, where appropriate, compensated by non-financial measures. 9.2g states that maritime activities should be conducted in such a manner as to ensure the preservation of coastal ecosystems in conformity with the rules, standards and procedures of the relevant international conventions.

The ICZM Recommendation (detailed below) sets out the common principles (including coherence of spatial planning across the land-sea boundary) and calls on Member States to develop ICZM strategies. As Marine Spatial Planning (MSP) takes into account all the activities in the sea, the ICZM Protocol indirectly influences offshore energy (both renewables and non-renewable) and energy deployment including transboundary issues.

Fisheries

Article 9.2b addresses fishing and states that Parties should take into account the need to protect fishing areas in development projects and to ensure that fishing practices are compatible with sustainable use of natural marine resources. With regard to aquaculture, Parties should take into account the need to protect aquaculture and shellfish areas in development projects, and to regulate aquaculture by controlling the use of inputs and waste treatment.

Transboundary or Domestic

This Protocol is both domestic and transboundary in context dealing with coastal zones and landscapes within the Mediterranean. It specifically asks for transboundary cooperation with regards to cooperation and environment assessments.

Geographical Scope

Article 3 states that the area to which the Protocol applies shall be the Mediterranean Sea area as defined in Article 1 of the Barcelona Convention. The area is also defined by (a) the seaward limit of the coastal zone, which shall be the external limit of the territorial sea of Parties, and the landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties. Each Party shall adopt or promote at the appropriate institutional level adequate actions to inform populations and any relevant actor of the geographical coverage of the present Protocol.

Institutional Organisations

The Protocol shall be administered through the Mediterranean strategy for integrated coastal zone management (the Organisation). The Parties undertake to cooperate for the promotion of sustainable development and integrated management of coastal zones, taking into account the Mediterranean Strategy for Sustainable Development and complementing it where necessary. To this end, the Parties shall define, with the assistance of the Centre, a common regional framework for integrated coastal zone management in the Mediterranean to be implemented by means of appropriate regional action plans and other operational instruments, as well as through their national strategies (Article 17).

Subsidiary Instruments

- *Council Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC)*

In 2002, the European Parliament and the Council adopted a Recommendation on Integrated Coastal Zone Management which defines the principles of sound coastal planning and management (ICZM

Recommendation). These include the need to base planning on sound and shared knowledge, the need to take a long-term and cross-sector perspective, to pro-actively involve stakeholders and the need to take into account both the terrestrial and the marine components of the coastal zone.

Chapter I of the ICZM Recommendation deals with a strategic approach where Member States should take into account the sustainable development strategy and the Decision of the European Parliament and of the Council laying down the sixth Community environment action programme, and take a strategic approach to the management of their coastal zones based on the protection of the coastal environment; the recognition of the threat to coastal zones posed by climate change and of the dangers entailed by the rise in sea level and the increasing frequency and violence of storms; appropriate and ecologically responsible coastal protection measures; sustainable economic opportunities and employment options; a functioning social and cultural system in local communities; adequate accessible land for the public, both for recreational purposes and aesthetic reasons; in the case of remote coastal communities, maintenance or promotion of their cohesion, and improved coordination of the actions taken by all the authorities concerned both at sea and on land, in managing the sea-land interaction.

Chapter II lists eight principles defining the essential characteristics of ICZM. In formulating national strategies and measures based on these strategies, Member States should follow the principles of integrated coastal zone management to ensure good coastal zone management. Management should be based on a broad overall perspective (thematic and geographic) which will take into account the interdependence and disparity of natural systems and human activities with an impact on coastal areas; take account of the precautionary principle and the needs of present and future generations; adaptive management; local specificity and the great diversity of European coastal zones; working with natural processes and respecting the carrying capacity of ecosystems; involving all the stakeholders; improve coordination between national, regional and local levels, and the use of a combination of instruments designed to facilitate coherence between sectoral policy objectives and coherence between planning and management.

Chapter III describes a national stocktaking initiative, where Member States should conduct or update an overall stocktaking to analyse which major actors, laws and institutions influence the management of their coastal zone.

Based on the result of the stocktaking and the eight principles of ICZM, Chapter IV of the Recommendation invites coastal Member States, in partnership with the regional authorities and inter-regional organisations, to develop a national strategy or, where appropriate, several strategies, to implement the principles for integrated management of the coastal zone. The national strategy should identify the roles of the different administrative actors within the country or region and identify the appropriate mix of instruments for implementation of the principles outlined in Chapter II. The plans should develop or maintain national and, where appropriate, regional or local legislation or policies and programmes which address both the marine and terrestrial areas of coastal zones together and identify sources of funding.

Given the cross-border nature of many coastal processes, coordination and cooperation with neighbouring countries and in a regional sea context are also needed (Chapter V).

In 2011, the EC launched a review of the EU ICZM Recommendation, with a view to a follow-up proposal. An impact assessment is conducted to explore the need and options for future EU action and to assess potential social, economic and environmental consequences that new initiatives proposed by the EC may have.

- *Communication from the Commission - Report to the European Parliament and the Council: an evaluation of Integrated Coastal Zone Management (ICZM) in Europe (COM/2007/308 final)*

The EU ICZM Recommendation of 30 May 2002 (ICZM Recommendation) requested the EC to review the implementation of the Recommendation and present an evaluation report to the Council and the European Parliament. This evaluation, and policy directions for the further promotion of ICZM in Europe were presented by the Commission in its Communication of 7 June 2007 (COM(2007)308 final). The evaluation used the reports submitted by the EU coastal Member States further to the EU ICZM Recommendation and the EEA state-of-the coast assessment of 2006.

The evaluation of the EU ICZM Recommendation has shown that the EU ICZM Recommendation has had a positive impact in stimulating progress towards a more integrated planning and management of coastal zones in Europe. It is considered that the future EU Maritime Policy and its environmental pillar, the EU Marine Strategy, will give new impetus to the ICZM policy and further improve its implementation in the years to come.

The Communication stated that continued efforts to support ICZM are required at EU level including encouraging coastal Member States to implement their national ICZM strategies, the clarification of the principles underlying sound coastal zone planning and management, to develop ICZM strategies in close co-ordination with the Marine Strategy Framework Directive and work of the regional seas conventions, and to put emphasis on ICZM strategies related to the impacts of climate change on our coastal zones.

The communication also concluded that to address the continuing problems of environmental degradation in the coastal zones, a number of specific instruments have been proposed or adopted since the launch of the EU ICZM Recommendation. The Commission will continue to ensure coherence and synergies among the many EU policies and instruments that affect the coastal zones. Overall, the current EU ICZM Recommendation remains valid to support the implementation of the national strategies and to further ICZM along Europe's coast.

A3.7 The Water Framework Directive (2000/60/EC)

Synopsis

In October 2000 the 'Directive 2000/60/EC of the European Parliament and of the Council of 23rd October 2000 established a framework for Community action in the field of water policy' (Water Framework Directive or WFD). The overriding goal of the Directive is that Member States should aim to achieve 'Good Chemical and Good Ecological Status' or in the case of Heavily Modified Water bodies (HMWB) 'Good Chemical Status' and 'Good Ecological Potential' of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater and also to prevent deterioration in the status of those water bodies by 2015. The WFD looks at the ecological health of surface water bodies (defined as a slight variation from undisturbed natural conditions), as well as achieving traditional chemical standards. In particular it will help deal with diffuse pollution which remains a big issue after big steps have been made to improving most point source discharges. Successful implementation of the WFD will help to protect all elements of the water cycle and enhance the quality of groundwaters, rivers, lakes, estuaries and seas.

Legal Status

The Directive was published in the Official Journal (OJ L 327) on the 22nd December 2000, entered into force the same day and has been adopted by all EU Member States. Some amendments have been introduced into the Directive since 2000.

Key Provisions

Article 1 states the purpose of the Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which: (a) prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems; (b) promotes sustainable water use based on a long-term protection of available water resources; (c) aims at enhanced protection and improvement of the aquatic environment, inter alia, through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances; (d) ensures the progressive reduction of pollution of groundwater and prevents its further pollution, and (e) contributes to mitigating the effects of floods and droughts and thereby contributes to:

- the provision of the sufficient supply of good quality surface water and groundwater as needed for sustainable, balanced and equitable water use,
- a significant reduction in pollution of groundwater, the protection of territorial and marine waters,
- achieving the objectives of relevant international agreements, including those which aim to prevent and eliminate pollution of the marine environment, by Community action under Article 16(3) to cease or phase out discharges, emissions and losses of priority hazardous substances, with the ultimate aim of achieving concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances.

Article 3 asks Member States to identify individual river basins and assign them to river basin districts. Ground waters and coastal waters should be identified and assigned to the nearest or most appropriate river basin district. Competent authorities should be identified for each river basin district. River basins which are transboundary in nature should be classified as international river basin districts and each Member State with an interest should ensure the appropriate administrative arrangements, including the identification of the appropriate competent authority, for the application of the rules of this Directive within the portion of any international river basin district lying within its territory. Article 3 continues to

ask Member States to ensure that the requirements of this Directive for the achievement of the environmental objectives established under Article 4, and in particular all programmes of measures are coordinated for the whole of the river basin district. Article 3(8) asks the Member States to provide the list of information detailed in Annex I on the competent authorities within each of its river basin districts as well as the portion of any international river basin district lying within their territory.

Article 4 sets the environmental objectives to be achieved for each classification of water body. Article 4(1a) details surface waters (which incorporates a lake, reservoir, stream, river or canal (or part thereof), a transitional water or a stretch of coastal water), where Member States should implement the necessary measures to prevent deterioration of the status of all bodies of surface water. Member States shall protect, enhance and restore all bodies of surface water, with the aim of achieving 'good surface water status' at the latest 15 years after the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V. Member States shall protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving 'good ecological potential' and 'good surface water chemical status' at the latest 15 years from the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V. Member States should aim to progressively reduce pollution from priority substances and cease or phase out emissions, discharges and losses of priority hazardous substances without prejudice to the relevant international agreements.

Article 4(1b) sets the environmental objectives for groundwater which requests Member States to implement the measures necessary to prevent or limit the input of pollutants into groundwater and to prevent the deterioration of the status of all bodies of groundwater. Member States shall protect, enhance and restore all bodies of groundwater, ensure a balance between abstraction and recharge of groundwater, with the aim of achieving 'good groundwater status' at the latest 15 years after the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V. The approach comprises a prohibition on direct discharges to groundwater, and (to cover indirect discharges) a requirement to monitor groundwater bodies so as to detect changes in chemical composition and to reverse any anthropogenically induced upward pollution trend.

Article 4(1c) states that conservation sites identified under the Habitats Directive and Birds Directive (with water-related features) will be designated as 'protected areas' under the Water Framework Directive (Annex IV). Member States shall achieve compliance with any standards and objectives at the latest 15 years after the date of entry into force of this Directive, unless otherwise specified in the Community legislation under which the individual protected areas have been established.

A body of surface water may be designated as artificial or heavily modified under Article 4(3), when the changes to the hydromorphological characteristics of that body which would be necessary for achieving good ecological status would have significant adverse effects on: the wider environment; navigation, including port facilities, or recreation; activities for the purposes of which water is stored, such as drinking-water supply, power generation or irrigation; water regulation, flood protection, land drainage, or other equally important sustainable human development activities.

It should be noted that for surface waters and ground waters, Article 4(4) of the Directive allows Member States to extend the deadline for achieving good ecological status by up to twelve years beyond 2015. Such extension is justified in case of adverse natural conditions, disproportionate costs and for the reasons of technical feasibility in the attempt of reaching good quality status. Article 4(5) allows Member States to apply less stringent objectives for specific water bodies when they are affected by human activity or their natural condition is such that the achievement of good status objective would be infeasible or disproportionately expensive.

Annex V defines 'good ecological status' in terms of the quality of the biological quality elements, the hydromorphological quality elements and physio-chemical quality elements. As no absolute standards for biological quality can be set which apply across the Community, because of ecological variability, the controls are specified as allowing only a slight departure from the biological community which would

be expected in conditions of minimal anthropogenic impact. A set of procedures for identifying that point for a given body of water, and establishing particular chemical or hydromorphological standards to achieve it, is provided, together with a system for ensuring that each Member State interprets the procedure in a consistent way (to ensure comparability) (EC, 2012¹⁰⁶).

Annex V also defines 'good chemical status' in terms of compliance with all the quality standards established for chemical substances at European level. The Directive provides a mechanism for renewing these standards and establishing new ones by means of a prioritisation mechanism for hazardous chemicals. This will ensure at least a minimum chemical quality, particularly in relation to very toxic substances, everywhere in the Community.

Article 5 requires that each Member State shall ensure that for each river basin district or for the portion of an international river basin district falling within its territory that an analysis of its characteristics, a review of the impact of human activity on the status of surface waters and on groundwater, and an economic analysis of water use is undertaken according to the technical specifications set out in Annexes II and III. This should be completed at the latest four years after the date of entry into force of this Directive. The analyses and reviews should be reviewed, and if necessary updated at the latest 13 years after the date of entry into force of this Directive and then every six years thereafter.

Article 6 requests that Member States shall ensure the establishment of a register of all areas lying within each river basin district which have been designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater or for the conservation of habitats and species directly depending on water. Article 7 asks Member States to identify waters used for the abstraction of drinking water within each river basin district and those bodies of water intended for such future use.

Article 8 addresses the monitoring of surface water status, groundwater status and protected areas ensuring that each Member States establishes a programme for the monitoring of water status in order to establish a coherent and comprehensive overview of water status within each river basin district. Such monitoring shall be in accordance with the requirements of Annex V.

The WFD in Article 10 promotes a combined approach for point and diffuse pollution sources. Member States shall ensure that all discharges into surface waters are controlled according to a combined approach using control of pollution at source through the setting of emission limit values and of environmental quality standards. It also sets out a framework comprising the development of a list of priority substances for action at EU level, prioritised on the basis of risk, and then the design of the most cost-effective set of measures to achieve load reduction of those substances, taking into account both product and process sources.

Having undertaken the analyses of river basin characteristics and setting the appropriate environmental objectives, Article 11 requires competent authorities to develop, on the basis of collected information, a Programme of Measures which is aimed at improving the situation in the river basins. Basic measures are listed in text, with supplementary measures listed in Annex VI.

Article 13 details the river basin management plans (RBMPs) which should be produced for each river basin district lying entirely within their territory. In the case of an international river basin district falling entirely within the Community, Member States shall ensure coordination with the aim of producing a single international river basin management plan. The river basin management plan shall include the information detailed in Annex VII and that collected in the Programme of Measures (Article 11). The plan is a detailed account of how the objectives set for the river basin (ecological status, quantitative status, chemical status and protected area objectives) are to be reached within the timescale required.

¹⁰⁶ EC, 2012. Introduction to the new EU Water Framework Directive. http://ec.europa.eu/environment/water/water-framework/info/intro_en.htm

The plan will include the river basin's characteristics, a review of the impact of human activity on the status of waters in the basin, estimation of the effect of existing legislation and the remaining 'gap' to meeting these objectives, and a set of measures designed to fill the gap. One additional component is that an economic analysis of water use within the river basin must be carried out. River basin management plans shall be published at the latest nine years after the date of entry into force of this Directive and should be reviewed and updated at the latest 15 years after the date of entry into force of this Directive and every six years thereafter.

Article 22 lists the repeals and transitional provisions. The Directives to be repealed by the end of 2007 include the Surface Water Abstraction Directive (75/440/EEC), the Exchange of Information on Surface Water Decision (77/795/EEC), and the Surface Water Abstraction Measurement / Analysis Directive (79/869/EEC). The Directives to be repealed by the end of 2013 include the Freshwater Fish Directive (78/659/EEC), the Shellfish Waters Directive (79/923/EEC), Groundwater Directive (80/68/EEC) and the Dangerous Substances Directive (76/464/EEC).

Therefore the main components of this Directive include:

- Setting of water quality objectives for all water bodies with objectives of 'good status' met within 15 years i.e. by 2015.
- Classification of waters into *surface water* according to ecological quality objectives and *groundwater* according to quantitative and chemical quality objectives.
- Promoting sustainable water use based on the long term protection of resources.
- Development of river basin management plans including an economic analysis of water use.
- Adopting a 'combined approach' to pollution control i.e. combining the control of sources by emission limit values and by quality objectives to suit the receiving waters.
- Ensuring that prices charged to water consumers reflect the true costs.
- Promoting full public participation.
- Addressing the pressures on water quality from point and diffuse sources and ensuring that necessary measures to meet quality and quantity objectives to achieve 'good status' are achieved.
- Ensuring that deterioration of water quality ecological status does not take place.
- Maintaining obligations under International Agreements e.g. OSPAR including an end to discharging hazardous substances.
- Establishing a framework for protection of water which conserves aquatic ecosystems e.g. wetlands.

Key milestones for implementing the Directive into law in all Member States are:

- 2003-The Directive's provisions must be transposed into Law (separate provisions for Scotland and England/Wales) in all Member States.
- 2003-2008 Prepare draft River Basin Management Plans (RBMPs) and carrying out Public Consultation.
- 2009-Publish River Basin Management Plans and establish a Programme of Measures.
- 2010-Ensure proper pricing policies are in place
- 2012-Programme of measures to be fully operational
- 2015-Environmental Objectives fully met (except where derogations apply giving further period of up to 12 years to achieve the required status)
- Every 6 years thereafter: Review and update RBMPs

VECTORS Drivers

Energy (Renewables & Non-renewables)

The Directive makes reference to the fact that further integration of protection and sustainable management of water into other Community policy areas such as energy, transport, agriculture, fisheries, regional policy and tourism is necessary. This Directive should provide a basis for a continued dialogue and for the development of strategies towards a further integration of policy areas. This Directive can also make an important contribution to other areas of cooperation between Member States, inter alia, the European spatial development perspective (ESDP).

Fisheries

Annex V requests the Composition and abundance of fish fauna for the biological elements assessment of Transitional waters. An effective and coherent water policy must take account of the vulnerability of aquatic ecosystems located near the coast and estuaries or in gulfs or relatively closed seas, as their equilibrium is strongly influenced by the quality of inland waters flowing into them. Protection of water status within river basins will provide economic benefits by contributing towards the protection of fish populations, including coastal fish populations.

Transboundary or Domestic

The Directive has to be applied in the domestic and transboundary sense. For example, river basin management plans can be transboundary when a river catchment is shared between a number of countries.

Geographical Scope

The WFD has a spatial application within estuaries and coastal areas within Europe and is applicable from the baseline out to 1nm.

Institutional Organisations

The Directive is promoted by the Commission and through the Member States. Article 21 states that the Commission will be assisted by a regulatory committee. Member States are to designate a competent authority for the application of the rules provided for in this Framework-Directive within each river basin district.

Subsidiary Instruments

- The Groundwater Directive (WFD Daughter Directive) Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration.
- The Priority Substances (WFD Daughter Directive) - Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council.

A3.8 Common Fisheries Policy

Synopsis

The Common Fisheries Policy (CFP) is the framework for fisheries management in the EU. In the four decades that have elapsed since its conception in the late 1960s, the Common Fisheries Policy (CFP) of the European Community (EC) has undergone substantial development and modification. There has been five stages of development: the years 1957-73 (covering the conception, birth, and early development of the CFP); 1973-83 (the adoption of an EC system of fisheries management in response to major changes in the international law of the sea); 1983-92 (the challenge of Iberian accession and the consolidation of the EC's fisheries management system); 1993-2002 (the second decade of the fisheries management system), and the period since 2002, which has seen major reform of the CFP and an almost doubling of the EC's membership¹⁰⁷. The CFP was put in place in 1983 after the introduction of the 200nm Exclusive Economic Zone required a common policy due to the Treaty of Rome for the formation of the European Community. In this treaty, fisheries already should be managed under a common policy but only after countries with strong interests in fisheries joined the EU was this really operationalised. The aim of the CFP is to promote sustainable fisheries and aquaculture in a healthy marine environment which can support an economically viable industry providing employment and opportunities for coastal communities.

The 2002 reform of the CFP diagnosed a number of specific problems. The European fleet had grown far too large for the dwindling fish stocks in our oceans, which it was capable of catching many times over. Too many management decisions at both EU and national level were short-term measures, often taken under political pressure, and were not backed up by any coherent long term strategy. The regulations and rules were often not respected due to difficulty in enforcing them and also because the will and means to enforce them were not there. At the core of all these failings lay a lack of trust between stakeholders and regulators, which seemed to overshadow even the successes of those parts of the CFP which clearly did work¹⁰⁸.

The 2002 reform addressed these issues in four main ways:

1. It promoted greater involvement of stakeholders in all aspects of policy development, both through existing channels, and through a major new exercise in permanent consultation –the creation of the Regional Advisory Councils (RACs);
2. Subsidies were carefully redirected to support the life of coastal communities while the industry restructures and fleet capacity is reduced: aid for the building of new capacity was discontinued, while responsibility for capacity management reverted to the Member States;
3. Regulations were simplified and streamlined across the board, to reduce the burden on both fishers and administrators, and to ensure a 'level playing field' for control and enforcement;
4. Annual decisions on TACs and quotas became increasingly subordinate to long term strategic commitments, through the establishment of multi-annual plans.

The most important areas of action of the common fisheries policy are the laying down of rules to ensure Europe's fisheries are sustainable and do not damage the marine environment. To provide national authorities with the tools to enforce these rules and punish offenders and to monitor the size of the European fishing fleet and preventing it from expanding further. The CFP can provide funding and technical support for initiatives that can make the industry more sustainable through the European Fisheries Fund. The CFP provides a framework for negotiating on behalf of EU countries in international fisheries organisations and with non-EU countries around the world. The CFP can help

¹⁰⁷ Churchill, R. & Owen, D. 2010. The EC Common Fisheries Policy. Oxford EC Law Library.

¹⁰⁸ European Commission, 2009. The Common Fisheries Policy – A user's guide. Luxembourg: Office for Official Publications of the European Communities. 36pp

producers, processors and distributors get a fair price for their produce and ensuring consumers can trust the seafood they eat. It supports the development of a dynamic EU aquaculture sector (fish, seafood and algae farms) and provides funding for scientific research and data collection, to ensure a sound basis for policy and decision making¹⁰⁹.

On 13 July 2011, the EC presented its proposals for the reform of the EU Common Fisheries Policy and, on 2 December 2011, it proposed a new fund for the EU's maritime and fisheries policies for the period 2014-2020: the European maritime and fisheries fund (EMFF). The key points of the reform package¹¹⁰ include:

- Discard ban
- Maximum Sustainable Yield
- Regionalisation
- Social dimension
- Transferrable fishing concessions

During 2012, the reform proposals will be discussed in the European Parliament and in the Council. The reformed CFP will enter into force in 2013.

The CFP is now only one element of the overall IMP and in combination with the MSFD shall assure to achieve a harvest policy under the maximum sustainable yield framework. Furthermore the CFP shall be integrated with the MSFD and consider the impacts of fishing on marine living resources in European waters. An important objective of regulations under the CFP is to reduce the negative impacts of fisheries on the environment with e.g. technical measures such as mesh size or effort days restrictions. Several regulations had been enacted which contribute to the objectives of the MSFD¹¹¹.

Legal Status

The CFP is implemented mainly by means of Regulations. Decisions also play an important role, whereas Directives are used only very rarely. The current basic regulation implementing the CFP is Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy¹¹². Regulations adopted under the CFP are directly applicable in all twenty-seven Member States, whether landlocked or coastal. The CFP is reviewed every ten years with the last review occurring in 2002. The CFP is currently under revision with the EU Commission expected to publish the decision for the new regulation at the end of 2012.

Key Provisions

Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy¹¹³ is the current basic regulation (Basic Regulation). This includes a framework under which specific regulation for technical measures or conservation of fish stocks are covered.

Chapter I details the scope and objectives of the Basic Regulation. Article 1 states that the CFP shall cover the conservation, management and exploitation of marine resources, and the processing and marketing of fishery and aquaculture products. It provides for coherent measures concerning:

¹⁰⁹ EC Commission, 2012. The Common Fisheries Policy (CFP) http://ec.europa.eu/fisheries/cfp/index_en.htm (accessed 22/02/12)

¹¹⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions; Reform of the common fisheries policy COM(2011) 417

¹¹¹ http://ec.europa.eu/fisheries/cfp/index_en.htm

¹¹² as amended by Regulation (EC) No [865/2007](#) and Regulation (EC) No [1224/2009](#)

¹¹³ as amended by Regulation (EC) No [865/2007](#) and Regulation (EC) No [1224/2009](#)

- conservation, management and exploitation of living aquatic resources;
- limitation of the environmental impact of fishing;
- conditions of access to waters and resources;
- fleet capacity;
- control;
- aquaculture;
- common organisation of the markets;
- international relations.

Article 2 gives the objectives, promising that the CFP shall ensure exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions. For this to be achieved, the Community shall apply the precautionary approach and apply the ecosystem based management approach to protect and conserve living aquatic resources, to provide for their sustainable exploitation and to minimise the impact of fishing activities on the marine ecosystems. The CFP shall be guided by principles of good governance including clear definition of responsibilities at the Community, national and local levels; decisions based on sound scientific advice; broad involvement of stakeholders at all stages of the policy, and for the CFP to be consistent with other Community policies.

Chapter II addresses conservation and sustainability (Articles 4 to 10), with Article 4 looking at the types of measures to be used to promote the sustainable exploitation of fish stocks. This will be achieved by European Union (EU) taking necessary measures to govern access to fishing zones and resources and the sustainable pursuit of fishing activities. The following measures apply to each stock of fish or to groups of stocks with their intention to limit fishing mortality and the environmental impact of fishing activities by:

- adopting recovery plans for stocks outside safe biological limits;
- adopting management plans to maintain stocks within safe biological limits;
- setting objectives for sustainable exploitation of stocks;
- limiting catches;
- fixing the number and type of vessels authorised to fish;
- limiting fishing effort;
- adopting technical measures to promote more selective fishing or fishing which has a smaller impact on marine eco-systems and non target species fishing. These measures may also relate to the structure of fishing gear, the number and size of fishing gear on board, the introduction of zones and/or periods in which fishing activities are prohibited or restricted.
- establish incentives, including economic ones, to promote more selective or low impact fishing;
- conduct pilot projects on alternative types of fishing management techniques.

The Council shall adopt recovery plans for fisheries exploiting stocks which are outside safe biological limits in order to ensure their recovery (Article 5). For those fish stocks within safe biological limits, Article 6 states that the Council shall adopt management plans to maintain these stocks. For both types of plan, conservation reference points such as targets should be used expressed in terms of population size and/or long term yields and/or fishing mortality rate and/or stability of catches. Both types of plan should be drawn up using the precautionary principle, be based on sound scientific advice and ensure the sustainable exploitation of stocks. These multi-annual plans should establish targets for sustainable exploitation of the stocks concerned, contain harvesting rules laying down the manner in which annual catch and/or fishing effort limits are to be calculated and provide for other specific management measures, taking account also of the effect on other species. The content of multi-annual plans should be commensurate with the conservation status of the stocks, the urgency of their recovery, and the characteristics of these stocks and the fisheries in which they are caught.

Articles 7 and 8 detail the emergency measures the EC and the Member States may take in the event of a serious threat to the conservation of resources or to the ecosystem. The Commission may decide on emergency measures which last up to six months. If after that time the measures need to be extended, then can be for no more than 6 months. The Member States' decisions may apply only to waters falling under their sovereignty and can last for up to three months. They may also take non-discriminatory conservation measures, within the 12-mile limit, to preserve the ecosystem. Where these measures affect the vessels of other Member States, the Commission, the national governments and the Regional Advisory Councils concerned must be consulted. Member States may adopt other conservation and management measures for vessels flying their flag provided that they are compatible with the objectives of the Common Fisheries Policy (CFP).

Chapter III details the adjustment of fishing capacity (Articles 11 to 16). Article 11 states that Member States have an obligation to adjust their fishing capacity in order to balance fishing capacity with fishing opportunities. The necessary reductions in capacity are part of the management and recovery plans. Any withdrawal of a vessel that benefits from a public grant (from the Member State and/or the Community) is definitive and the vessel withdrawn may therefore not be replaced.

Articles 17 to 20 come under Chapter IV on rules on access to waters and resources. Community fishing vessels all enjoy equal access to waters and resources except in the 12-mile zone, which falls within the sovereignty of the Member States (Annex I) (Article 17). Special rules apply in the Shetland Box (Annex II) (Article 18). Total allowable catches (TAC) are set annually by the Council and fishing opportunities are distributed among Member States taking care to ensure that fishing activities for each stock or fishery remain relatively stable for each State (Article 20). Member States are then free to allocate these opportunities to their vessels and may exchange those allocated to them. The Council also decides on the fishing opportunities available to third countries with access to Community waters¹¹⁴.

Chapter V deals with community control and enforcement (Articles 21 to 28). Article 21 sets out the objective that 'under the Community control and enforcement system, access to waters and resources and the pursuit of activities as set out in Article 1 shall be controlled and compliance with the rules of the Common Fisheries Policy enforced'. In order to ensure effective implementation of the CFP the division of responsibilities between the Member States' authorities and the Commission should be further clarified, as implemented through Council Regulation (EEC) No 2847/93 of 12 October 1993 establishing a control system applicable to the Common Fisheries Policy. Article 22 states the conditions for access to waters and resources and for the marketing of fisheries products. Provisions on control, inspection and enforcement concern, on the one hand, obligations for the masters of fishing vessels and operators in the marketing chain and, on the other hand, spell out the different responsibilities for the Member States (Article 23) and the Commission (Article 26).

Regional Advisory Councils (RACs) should be established to contribute to the achievements of the objectives detailed in Article 2 and in particular to advise the Commission on matters of fisheries management in respect of certain sea areas or fishing zones (Article 31)¹¹⁵. Each RAC will consist of a general assembly and an executive committee. The general assembly will approve each year the annual report and the annual strategic plan drawn up by the executive committee. The general assembly will appoint an executive committee of up to 24 members, which will manage the work of the RAC and adopt its recommendations. The RACs will consist of representatives of the fisheries sector and other interest groups affected by the CFP. These will be proposed by the organisations

¹¹⁴ EU, 2010. Conservation and exploitation of marine resources. Europa – summaries of EU legislation. http://europa.eu/legislation_summaries/maritime_affairs_and_fisheries/fisheries_resources_and_environment/l66006_en.htm (accessed 23/02/12)

¹¹⁵ Established under Council Decision 2004/585/EC of 19 July 2004 establishing Regional Advisory Councils under the Common Fisheries Policy (as amended).

representing the fisheries sector and other interest groups to the Member States concerned who will select all the members of the general assembly. Scientists will be invited to participate as experts in the work of the RACs. The Commission, national and regional administrations of the Member States concerned, a representative of the Advisory Committee on Fisheries and Aquaculture (ACFA), and representatives of the fisheries sector and other interest groups from third countries on an invitation from the RAC may also participate as active observers. The RACs are a mainstay of the reform of the CFP and seek to involve fishermen and other stakeholders in the fisheries sector more closely in the decision-making process in this field. Through these ongoing forums, all the parties concerned will be able to maintain a dialogue and cooperate in the development and implementation of the CFP.

Transboundary or Domestic

The CFP and its associated regulations and decisions are both domestic and transboundary in nature.

Geographical Scope

In principle, the territorial scope of the CFP is the same as that for the EC Treaty.

Rules in place restricting access to resources within the 12 nautical mile zones of Member States have operated satisfactorily benefiting conservation by restricting fishing effort in the most sensitive part of Community waters and preserving traditional fishing activities on which the social and economic development of certain coastal communities is highly dependent. They should therefore continue to apply until 31 December 2012 (Article 17).

Institutional Organisations

Decisions concerning fisheries are taken by the European Parliament and the Council on a proposal from the Commission after consulting the Economic and Social Committee and the Committee of the Regions. In some cases, a decision will be taken with the consent of the Advisory Committee on Fisheries and Aquaculture in accordance with the procedure established by Decision 1999/468/EC laying down the procedures for the exercise of implementing powers conferred on the Commission.

Advice on the determinations of TAC limits and implementations of new technical measures is obtained from the International Council for the Exploration of the Seas (ICES). With the last reform Regional Advisory Councils were established (including North Sea, Baltic Sea and Mediterranean), however, these councils consist of stakeholders such as fisheries organisations and conservation NGO and have no real management responsibility. The RACs are established in order to increase the involvement of the fishing industry and other groups affected by the CFP, such as environmental protection and consumer groups. There are seven RACs under the CFP, five are based on geographically and biologically coherent zones. The two others are based on the exploitation of certain stocks: pelagic stocks in Community waters (except in the Mediterranean and Baltic Seas), and high-sea fisheries outside Community waters.

The Commission is assisted by the Advisory Committee on Fisheries and Aquaculture (ACFA) created in 1971. ACFA is a forum for permanent dialogue with the industry. Its 21 members represent the main branches of the fisheries and aquaculture industry (production, processing and trade), as well as consumer groups and organisations which deal with environmental protection and development. ACFA is made up of four working groups responsible for preparing opinions:

- Group 1: Access to fisheries resources and management of fishing activity;
- Group 2: Aquaculture: fish, shellfish and molluscs;
- Group 3: Markets and trade policy;
- Group 4: General questions: economics and sectoral analysis.

Subsidiary Instruments

These are just some of the regulations, decisions and communications related to the CFP:

- Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966/2006
- Communication from the Commission to the Council and the European Parliament of 28 March 2007 on a policy to reduce unwanted by-catches and eliminate discards in European fisheries COM(2007) 136 final
- Commission Communication of 26 February 2007 on rights-based management tools in fisheries COM(2007) 73 final
- Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy.
- Council Decision 2004/585/EC of 19 July 2004 establishing Regional Advisory Councils under the Common Fisheries Policy - as amended by:
 - Commission Decision 2008/695/EC of 29 August 2008 declaring operational the Regional Advisory Council for Mediterranean Sea under the Common Fisheries Policy [Official Journal L 232 of 30.8.2008].
 - Commission Decision 2007/222/EC of 4 April 2007 declaring operational the Regional Advisory Council for the south-western waters under the common fisheries policy [Official Journal L 95 of 5.4.2007].
 - Commission Decision 2007/206/EC of 29 March 2007 declaring operational the Regional Advisory Council for the High Seas/Long Distance Fleet under the common fisheries policy [Official Journal L 91 of 31.3.2007].
 - Commission Decision 2006/191/EC of 1 March 2006 declaring operational the Regional Advisory Council for the Baltic Sea under the common fisheries policy [Official Journal L 66 of 8.3.2006].
 - Commission Decision 2005/668/EC of 22 September 2005 declaring operational the Regional Advisory Council for the north-western waters under the common fisheries policy [Official Journal L 249 of 24.9.2005].
 - Commission Decision 2005/606/EC of 5 August 2005 declaring operational the Regional Advisory Council for pelagic stocks under the common fisheries policy [Official Journal L 206 of 9.8.2005].
 - Commission Decision 2004/774/EC of 9 November 2004 declaring operational the Regional Advisory Council for the North Sea under the common fisheries policy [Official Journal L 342 of 18.11.2004].

A3.9 Environmental Impact Assessment Directive (97/11/EC)

Synopsis

Directive 97/11/EC amends the original Directive 85/337/EEC on 'The assessment of the effects of certain public and private projects on the environment', which came into effect in July 1988. Environmental impact assessment (EIA) is an important procedure for ensuring that the likely effects of new development on the environment are fully understood and taken into account before the development is allowed to go ahead. The procedure is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects, and the scope for reducing them, are properly understood by the public and the relevant competent authority before it makes its decision. EIA enables environmental factors to be given due weight, along with economic or social factors, when planning applications are being considered. The Regulations apply to two separate lists of projects: 'Schedule 1 projects', for which EIA is required in every case and 'Schedule 2 projects', for which EIA is required only if the particular project in question is judged likely to give rise to significant environmental effects.

Legal Status

The 1985 EIA Directive and its three amendments have been codified by Directive 2011/92/EU of 13 December 2011 and has been adopted by all EU Member States. Directive 97/11/EC brought the Directive in line with the UN ECE Espoo Convention on EIA in a Transboundary Context. The Directive of 1997 widened the scope of the EIA Directive by increasing the types of projects covered, and the number of projects requiring mandatory environmental impact assessment (Annex I). It also provided for new screening arrangements, including new screening criteria (at Annex III) for Annex II projects, and established minimum information requirements. Directive 2003/35/EC was seeking to align the provisions on public participation with the Aarhus Convention on public participation in decision-making and access to justice in environmental matters. Directive 2009/31/EC amended the Annexes I and II of the EIA Directive, by adding projects related to the transport, capture and storage of carbon dioxide (CO₂).

Key Provisions

Article 1 states that this Directive shall apply to 'the assessment of the environmental effects of those public and private projects which are likely to have significant effects on the environment'.

Member States shall adopt measures necessary to ensure that projects which are likely to have a significant effect on the environment by their nature, size and or location are subject to an assessment with regard to their effects (Article 2).

For each individual case, the EIA must identify the direct and indirect effects of a project on the following factors: man, fauna and flora; the soil, water, air, climate and the landscape, material assets and the cultural heritage and the interaction between these various elements (Article 3).

Article 4(1) states that projects listed in Annex I shall be made subject to an assessment. All projects listed in Annex I are considered as having significant effects on the environment and require a mandatory EIA. Projects include long-distance railway lines, motorways and express roads, airports with a basic runway length ≥ 2100 m, installations for the disposal of hazardous waste, installations for the disposal of non-hazardous waste >100 tonnes/day, waste water treatment plants > 150.000 p.e.

Article 4(2) states that projects listed in Annex II shall be made subject to an assessment at the discretion of Member States. All projects listed in Annex II will go through a "screening procedure", which determines the effects of projects on the basis of thresholds/criteria or on a case by case examination. However, the national authorities must take into account the criteria laid down in Annex

III. Examples of projects listed in Annex II include agricultural activities, extractive industries, smaller energy projects, food industry and infrastructure projects.

When a case by case examination is carried out or thresholds or criteria are set for the purpose of Annex II projects, then Annex III selection criteria will be used (Article 4(3)). Annex III requires the assessment to include the characteristics of the project for example size, cumulative impacts with other projects etc; the location of the project and the environmental sensitivity of the landscape, and the characteristics of the potential impact including (a) the extent of the impact (geographical area and size of the affected population); (b) the transfrontier nature of the impact; (c) the magnitude and complexity of the impact; (d) the probability of the impact; (e) the duration, frequency and reversibility of the impact.

Article 5 describes the 'scoping' process which determines the content and extent of the matters to be covered in the environmental information to be submitted by the developer to the competent authority. The preparation of the environmental statement or report uses the information given in Annex IV and includes (1) a full description of the project including the land-use requirements during the construction and operational phases, a description of the production process and types of emissions; (2) an outline of the main alternatives studied by the developer, (3) a description of the aspects of the environment likely to be significantly affected by the proposed project and the interrelationship between the different environmental features, (4) a description of the likely significant effects of the proposed project on the environment resulting from the existence of the project, the use of natural resources and the emission of pollutants etc, (5) a description of the forecasting methods used to assess the effects on the environment, (6) a description of the measures envisaged to prevent, reduce and where possible offset any significant adverse environmental effects, (7) a non-technical summary of the information and (8) an indication of any difficulties encountered by the developer in compiling the requested information.

Articles 6 and 7 state that with due regard for rules and practices regarding commercial and industrial secrecy, the information must be made available to interested parties sufficiently early in the decision-making process including the competent environmental authorities likely to be consulted on the authorisation of the project; the public, by the appropriate means (including electronically) at the same time as information (in particular) on the procedure for approving the project, details of the authority responsible for approving or rejecting the project and the possibility of public participation in the approval procedure; other Member States, if the project is likely to have transboundary effects. Each Member State must make this information available to interested parties on its territory to enable them to express an opinion.

At the end of the procedure, the following information must be made available to the public and transmitted to the other Member States concerned (Article 9): the approval or rejection of the project and any conditions associated with it; the principal arguments upon which the decision was based after examination of the results of the public consultation, including information on the process of public participation; any measures to reduce the adverse effects of the project.

VECTORS Drivers

Energy (Renewables & Non-renewables)

Energy projects which require a mandatory EIA as referred to in Article 4(1) are included in Annex I. Annex 1.14 of the Directive covers the extraction of offshore petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes per day in the case of petroleum and 500 000 cubic metres per day in the case of gas. Annex 1.16 includes oil and gas pipe-lines with a diameter of more than 800 millimetres and a length of more than 40 kilometres fall within Annex I of the Directive. Pipeline installations which are below either of these thresholds fall within Annex II. These pipelines are for the transport of gas, oil, chemicals, and for the transport of carbon dioxide (CO₂) streams for the purposes of geological storage, including associated booster stations.

Offshore renewable activities such as wind parks and other energy projects are listed under Annex II of this directive. Annex II.3(i) legislates for installations for the harnessing of wind power for energy production (wind farms) and II.3(j) for installations for the capture of CO₂ streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations not covered by Annex I to this Directive. Annex II.10 also includes oil and gas pipeline installations and pipelines for the transport of CO₂ streams for the purposes of geological storage (projects not included in Annex I).

Fisheries

Intensive fish farming and infrastructure projects like the construction of harbours and port installations, including fishing harbours (not included in Annex I) which are all directly related to the fishing industry and are listed under Annex II.

Alien Species

It is mandated under Article 14 of the Convention on Biological Diversity (see Chapter 2.3), not only for specific projects but also in a strategic perspective for programmes and policies which are likely to have significant adverse effects on biodiversity. The CBD has called on its Parties to integrate EIA into work programmes on alien species (Decision V/18). However there is no specific mention of alien species in the Directive.

Transboundary or Domestic

Both.

Geographical Scope

Europe wide.

Institutional Organisations

The Directive is promoted by the Commission and through the Member States.

A3.10 Strategic Environmental Assessment Directive (2001/42/EC)

Synopsis

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (hereinafter the SEA Directive) applies to a wide range of public plans and programmes (e.g. on land use, transport, energy, waste, agriculture, etc) and aims to supplement the EIA Directive (See Chapter 3.9). Plans and programmes in the sense of the SEA Directive must be prepared or adopted by an authority (at national, regional or local level) and are required by legislative, regulatory or administrative provisions. The prime purpose of SEA is to integrate environmental considerations into certain plans and programming adopted by public authorities in order to ensure a high level of protection of the environment. As a tool to aid decision making, SEA is widely seen as a proactive environmental safeguard that, combined with public participation and consultation may help to meet the EU's wider environmental objectives and policy principles¹¹⁶.

Legal Status

The SEA Directive was adopted by Council in 2001. The Directive states that Member States should bring into force the laws, regulations and administrative provisions necessary to comply with the SEA Directive before 21 July 2004.

Key Provisions

Article 1 lays down two objectives for the carrying out of an environmental assessment in accordance with the Directive:

- To provide for a high level of protection of the environment.
- To contribute to the integration of environmental considerations into the preparation and adoption of certain plans and programmes with a view to promoting sustainable development.

Article 2 sets out certain characteristics which plans and programmes must possess for the Directive to apply to them. Article 3 then sets out rules for determining which of those plans and programmes are likely to have significant effects on the environment and must therefore be subject to environmental assessment. 'Plans and programmes' means plans and programmes, including those co-financed by the European Community, as well as any modifications to them which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and which are required by legislative, regulatory or administrative provisions.

Article 3 sets out the scope of application of the Directive and is fundamental to its operation. It begins by expressing the requirement for an environmental assessment of certain plans and programmes which are likely to have significant environmental effects (paragraph 1). Article 3(2) makes SEA mandatory for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent for projects listed in Annexes I and II of the Environmental Impact Assessment (EIA) Directive (97/11/EC); or which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive (92/43/EEC).

Article 5 provides information of what information should be included in the Environmental Report as listed in Annex I. This includes the contents of the plan or programme and its main objectives and links

¹¹⁶ COWI, 2009. European Commission, DG ENV Study concerning the report on the application and effectiveness of the SEA Directive (2001/42/EC) Final report April 2009

to other relevant plans and programmes; the existing environmental situation and its likely development if the plan or programme is not implemented; the environmental characteristics of any area likely to be significantly affected by the plan or programme; any existing environmental problems which are relevant to the plan or programme, specifically those relating to zones in the Natura 2000 network; the national, Community or international environmental protection objectives which are relevant to the plan or programme in question; the likely significant environmental effects of implementing the plan or programme; the measures envisaged to prevent, reduce and offset any significant adverse effects on the environment; an outline of the reasons for selecting other alternatives; a description of how the assessment was carried out ; the envisaged monitoring measures; a non-technical summary of this information. There is a mandatory requirement to consult designated statutory bodies on 'the scope and level of detail of the information which must be included in the Environmental Report' (Article 5(4)).

The draft Environmental Report must be made available to the authorities responsible for environmental issues and to the public. The authorities and the public shall have the opportunity to express their views on the draft plan or programme at an early stage and within appropriate time frames prior to its adoption or submission to the legislative process (Article 6).

With regards plans and programmes which are likely to have significant effects on the environment in another Member State, the Member State in whose territory the plan or programme is being prepared must consult the other Member State(s) (Article 7). On this issue the SEA Directive follows the general approach taken by the SEA Protocol to the UN ECE Convention on Environmental Impact Assessment in a Transboundary Context.

Article 8 states that in the environmental report, the opinions expressed by the relevant authorities and the public and the results of any transboundary consultations must be taken into account by the competent authority during the preparation of the plan or programme and before it is adopted.

Article 10 of the SEA Directive places a duty on Member States to 'monitor the significant environmental effects of the implementation of plans and programmes in order to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate action'.

VECTORS Drivers

Energy (Renewables & Non-renewables)

This Directive states that an SEA should be carried out for plans and programmes which are prepared for the energy sector and which set the framework for development consent of projects under the EIA Directive. An SEA is also required for plans and programmes for which an assessment is required under Articles 6 and 7 of the Habitats Directive (Directive 92/43/EEC). The preparation of maritime spatial plans requires a Strategic Environmental Assessment according to the SEA Directive and therefore influences the offshore energy industry (both renewables and non-renewable) including transboundary issues.

Fisheries

This Directive states that an SEA should be carried out for plans and programmes which are prepared for the fisheries sector and which set the framework for development consent of projects under the EIA Directive. An SEA is also required for plans and programmes for which an assessment is required under Articles 6 and 7 of the Habitats Directive (Directive 92/43/EEC).

Alien Species

Although there is no specific mention of alien species in the Directive, plans and programmes which set the framework for future development consent of projects other than those under the EIA Directive (not limited to the sectors listed above) and which Member States have identified as likely to have significant environmental effects should be subject to SEA. Member States shall determine this either through

case-by-case examination or by specifying types of plans and programmes or by combining both approaches.

Transboundary or Domestic

Both.

Geographical Scope

Europe wide.

Institutional Organisations

The Directive is promoted by the Commission and through the Member States.

A4. NATIONAL IMPLEMENTATION OF INTERNATIONAL AND EUROPEAN LEGISLATION

Each VECTORS representative country was asked to provide details on how both the International and European legislation had been enacted in the national context. The following tables in Chapter A4 show this information for the following countries (contributing authors are provided in brackets):

- Denmark (L. Berner)
- Estonia (H. Ojaveer)
- France (K. Frangoudes)
- Germany (R. Döring & S. Gollasch)
- Greece (C. Avanitidis)
- Ireland (Republic of) (T. Crowe)
- Israel (B. Galil)
- Italy (P. Magni & A. Occhipinti)
- Lithuania (A. Zaiko)
- Poland (J. Piwowarczyk)
- Slovenia (M. David)
- Spain (L. Piñol & L. Rodriguez)
- The Netherlands (L. Teal, L. & D. Slijkerman)
- UK (specifically England & Scotland) (S. Boyes)

Table A4.1 Marine and coastal regulatory framework for Denmark

TOPIC	EUROPEAN REGULATORY FRAMEWORK	DANISH REGULATORY FRAMEWORK	DANISH AUTHORITY RESPONSIBLE
Integrated Marine Environment Protection	Marine Strategy Framework Directive (Directive 2008/56/EC)	Marine Strategy Act (Lov om havstrategi - no 522 of 26/05/2010)	Ministry of Environment Administering authority: City and Landscape Agency (By- og Landskabsstyrelsen)
Water quality	I. Water Framework Directive - EC II. The revised Bathing Water Directive (76/160/EEC) is an updated version of the current Bathing Water Directive (76/160/EEC) .	Act of Environmental Goals (Miljømålsloven) – which implements the Water Framework Directive through the Water Plans (Vandplanerne) Various ministerial orders on bathing water and bathing areas: <ul style="list-style-type: none"> Order on quality assurance for environmental assessments (Bekendtgørelse om kvalitetskrav til miljømålinger, no 332 of 25/03/2010) Order on amendments to the order on wastewater permissions according to the Environmental Protection Law, chapter 3 an 4 Order no 1448 of 11/12/2007 (Spildevandsbekendtgørelsen) 	Ministry of Environment Administering authority: City and Landscape Agency/Environmental centres/ local authorities
Marine Protected Areas	EU biodiversity strategy to 2020 Natura 2000 Network	Act of Environmental Goals (Miljømålsloven), cf. Order no 1028 of 20/10/2008, with amendments following from § 2 in Act no. 1402 of 27/12/2008 and § 8 Act no 514 of 12/06/2009. Environmental Protection Act no 933 of 24/09/2009. cf. Order no 1042 of 20/10/2008, with amendments following from § 31 Act no 1336 of 19/12/2008 and § 1 Act no. 514 of 12/06/2009. Target program for the Natura 2000 plans for the period of 2010-2015	Ministry of Environment Administering authority: Forest & Nature Agency; local authorities
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	Act on the Protection of the Marine Environment (Havmiljøloven) and the Environmental Protection Act (Miljøbeskyttelsesloven) - Implementation of parts of the ballast water convention and sets the regulation on environmental impact assessments (EIAs) for aquaculture placed more than 1 nm from the coast	Ministry of Environment Administering authority: Nature Agency
Invasive Alien Species	- Global Invasive Species Programme (GISP); - Invasive Alien Species (IAS) – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS.	- Environmental Protection Act § 31, part 1 (order no 85/2002), determines that animals that do not naturally occur in Denmark should not be set out in nature without permission from the Ministry of Environment The Fisheries Law (marine aquaculture requires permission, order no. 281/1999). Action plan for invasive species: http://www.naturstyrelsen.dk/NR/rdonlyres/DB812145-4733-4D7F-95AA-9EB940A61D1E/0/Handlingsplanforinvasivearter2.pdf	Ministry of Environment
Fisheries	Common Fisheries Policy	The Fisheries Law	Ministry of Food, Agriculture and Fisheries (Fødevareministeriet) Administering authorities: - Directorate of Fisheries ('Fiskeridirektoratet') - Food Industry Agency

TOPIC	EUROPEAN REGULATORY FRAMEWORK	DANISH REGULATORY FRAMEWORK	DANISH AUTHORITY RESPONSIBLE
Energy and Climate change		<p>Renewable Energy Act no. 1392 of 27/12/2008, with amendments following from act no. 509 of 12/06/2009; § 2 of Act no. 1267 of 16/12/2009; § 13 of Act no. 1384 of 21/12/2009; § 6 of Act no. 622 of 11/06/2010; and § 5 of Act no. 466 of 18/05/2011.</p> <p>Act On The Use Of Denmark's Underground, Cf. Lorder No. 889 Of 04/07/2007, With The Amendments Following From § 2 Ofact No. 1400 Of 27/12/2008; § 51 Of Act. No. 718 Of 25/06/2010; And Act No. 541 Of 30/05/2011.</p> <p>Danish Strategy for Adaptation to a Changing Climate, March 2008</p>	<p>Ministry of Climate, Energy and Building</p> <p>Administering authority: Energy Agency</p>

Table A4.2 Marine and coastal regulatory framework for Estonia

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ESTONIAN REGULATORY FRAMEWORK	ESTONIAN AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	none	County-level thematic planning in place in a few counties.
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	Transposed into Water Act (2011)	Ministry of Environment
Water quality	i) Water Framework Directive (2000/60/EC)	Water Act (2011)	Ministry of Environment
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Water Act (2011)	Ministry of Environment
Marine Protected Areas	EU biodiversity strategy to 2020	Nature Conservation Act (2004), Nature Conservation Development Plan to 2020 (draft)	Ministry of Environment
	Natura 2000 Network Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	Nature Conservation Act (2004), Hunting Act (2004), Environmental Impact Assessment and Environmental Management System Act (2005)	Ministry of Environment
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	Nature Conservation Act (2004)	Ministry of Environment
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	None. Ratification of the BWMC is planned to 2013.	Ministry of Environment
Invasive Alien Species	Invasive Alien Species (IAS) - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species	Nature Conservation Act (2004) Sub-item: List on non-native species likely to disrupt natural balance (2004, updated 2007)	Ministry of Environment
Fisheries	Common Fisheries Policy	Fisheries Act (1991)	Ministry of Environment, Ministry of Agriculture
Energy and Climate change	EU Climate Change Policy European Renewable Energy Directive 2009/28/EC which amends & subsequently repeals Directives 2001/77/EC & 2003/30/EC	Ambient air protection act (2004) Liquid Fuel Act (2003), Long-term Public Fuel and Energy Sector Development Plan until 2015	Ministry of Environment Ministry of Economic Affairs and Communication

Table A4.3 Marine and coastal regulatory framework for France

TOPIC	EUROPEAN REGULATORY FRAMEWORK	FRENCH REGULATORY FRAMEWORK	FRENCH AUTHORITY RESPONSIBLE
Integrated Marine Environment Protection	Marine Strategy Framework Directive (Directive 2008/56/EC)	Loi Grenelle 2, Loi n°2010-788 du 12 juillet 2010, chapitre V, dispositions relatives à la mer, article 166. Cette loi portant engagement national pour l'environnement modifie le code de l'environnement dont les articles L. 219-9 à L. 219-18 fixent les dispositions relatives au Plan d'Action pour le Milieu Marin (PAMM) pour chaque sous-région marine	Ministère de l'Écologie, du Développement durable, des Transports et du logement (MEDDTL)
Water quality	I. Water Framework Directive - EC II. The revised Bathing Water Directive (76/160/EEC) is an updated version of the current Bathing Water Directive (76/160/EEC) .	La loi n° 2004-338 du 21 avril 2004 portant transposition de la directive cadre sur l'eau Loi n° 2006-1772 du 30 décembre 2006 sur l'eau et les milieux aquatiques Les nouvelles orientations qu'apporte la LEMA sont : - de se donner les outils en vue d'atteindre en 2015 l'objectif de « bon état » des eaux fixé par la Directive Cadre sur l'Eau (DCE) - d'améliorer le service public de l'eau et de l'assainissement : accès à l'eau pour tous avec une gestion plus transparente - de moderniser l'organisation de la pêche en eau douce. Enfin, la LEMA tente de prendre en compte l'adaptation au changement climatique dans la gestion des ressources en eau. Code de l'environnement Livre 2 Code de la santé publique Code général des collectivités territoriales Code de l'urbanisme Code rural	Ministère de l'Écologie, du Développement durable, des Transports et du logement (MEDDTL) Agences de l'eau
Marine Protected Areas	EU biodiversity strategy to 2020 Natura 2000 Network	Biodiversité, Espèces Et Milieux : Articles 123 A 150 De La Loi Grenelle Ii, Loi N° 2010-788 Du 12 Juillet 2010 Création des parcs marins : Loi n° 2006-436 du 14 avril 2006 et le Décret n° 2006-1266 du 16 octobre 2006. (articles L334-3 et suivants et R.334-27 et suivants du code de l'environnement) "La stratégie nationale pour la création d'aires marines protégées : Note de doctrine pour les eaux métropolitaines" Code de l'environnement Livre 3 : espaces naturels	Ministère de l'Écologie, du Développement durable, des Transports et du logement (MEDDTL) Agence des Aires Marines Protégées
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention)	Loi Grenelle 1, Loi n° 2009-967 du 3 août 2009 de programmation relative à la mise en œuvre du Grenelle de l'environnement Articles 23 et 35	Ministère de l'Écologie, du Développement durable, des Transports et du logement (MEDDTL)

TOPIC	EUROPEAN REGULATORY FRAMEWORK	FRENCH REGULATORY FRAMEWORK	FRENCH AUTHORITY RESPONSIBLE
Invasive Alien Species	<ul style="list-style-type: none"> - Global Invasive Species Programme (GISP); - Invasive Alien Species (IAS) - International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. 	<p>L'article L.411-3 du Code de l'environnement prévoit la possibilité d'interdire l'introduction dans le milieu naturel des espèces exotiques envahissantes et que dès que la présence dans le milieu naturel d'une des espèces visées est constatée, l'autorité administrative peut procéder ou faire procéder à la capture, au prélèvement, à la garde ou à la destruction des spécimens de l'espèce introduite et aux sanctions.</p> <p>L'arrêté interministériel en date du 30 juillet 2010 fixe la liste des espèces d'animaux vertébrés dont l'introduction dans le milieu naturel, sur le territoire métropolitain, est interdite.</p>	Ministère de l'Écologie, du Développement durable, des Transports et du logement (MEDDTL)
Fisheries	Common Fisheries Policy	<p>Loi n°2010-874 du 27 juillet 2010 de modernisation de l'agriculture et de la pêche</p> <p>Code rural et de la pêche maritime (Livre 9)</p>	Ministère de l'Agriculture, de l'Alimentation, de la Pêche, de la Ruralité et de l'Aménagement du Territoire (MAAPRAT), Direction des Pêches Maritimes et de l'Aquaculture (DPMA)
Energy and Climate change		<p>Loi Grenelle 2, loi n° 2010-788 du 12 juillet 2010 portant engagement national pour l'environnement (Titre III, articles 67 à 93 de la loi Grenelle II)</p> <p>Code l'environnement article L. 229-25 (émissions de gaz à effet de serre)</p>	Ministère de l'Écologie, du Développement durable, des Transports et du logement (MEDDTL)

Table A4.4 Marine and coastal regulatory framework for Germany

TOPIC	EUROPEAN REGULATORY FRAMEWORK	GERMAN REGULATORY FRAMEWORK	GERMAN AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	National Strategy for the sustainable use and protection of the marine	Ministry for Environment, Nature Protection and Nuclear Safety http://www.bmu.de/files/pdfs/allgae_mein/application/pdf/broschuere_meeresstrategie_bf.pdf
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	No specific national legislation yet Prospectively through the Federal Water Act (Wasserhaushaltsgesetz (BGBl. I S. 2585)) from 31 July 2009, last amendment December 2011.	The Federal Environment Agency and the Federal Agency for Nature Conservation Regional ministries in the Federal States
Water quality	i) Water Framework Directive (2000/60/EC)	Federal Water Act (Wasserhaushaltsgesetz (BGBl. I S. 2585)) from 31 July 2009, last amendment December 2011. Also the Bund-Länderarbeitsgemeinschaft Wasser (LAWA) has developed national guidelines on the WFD to support and to some extent harmonise the activities of the individual federal states.	The Federal Environment Agency and the Federal Agency for Nature Conservation in cooperation with the regional ministries in the Federal States
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	No specific national legislation Regional legislation in the Federal States	The Federal Environment Agency and the Federal Agency for Nature Conservation in cooperation with the regional ministries in the Federal States
Marine Protected Areas	EU biodiversity strategy to 2020	National Strategy on Biological Diversity	Ministry for Environment, Nature Protection and Nuclear Safety
	Natura 2000 Network Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	The Federal Nature Conservation Act (2009) Regional legislation in the Federal States	Ministry for Environment, Nature Protection and Nuclear Safety (Berlin, National Level) Also regional environmental ministries in the Federal States
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	The Federal Nature Conservation Act (2009) Regional legislation in the Federal States	Ministry for Environment, Nature Protection and Nuclear Safety (Berlin, National Level) Regional environmental ministries in the Federal States

TOPIC	EUROPEAN REGULATORY FRAMEWORK	GERMAN REGULATORY FRAMEWORK	GERMAN AUTHORITY RESPONSIBLE
Ballast Water	<p>Ballast Waters Management</p> <ul style="list-style-type: none"> - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention) 	<p>Ballast Waters Management</p> <ul style="list-style-type: none"> - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London 2004 (BWM Convention); 	<p>Ministry of Transport, Building and Urban Development (Bonn/Berlin).</p> <p>Federal Maritime and Hydrographic Agency (Hamburg/Rostock), supported by</p> <ul style="list-style-type: none"> • Federal Environment Agency (Dessau/Berlin) • Federal Institute for Risk Assessment (Berlin) • BG Verkehr (Hamburg) • Germanischer Lloyd (Hamburg)
Invasive Alien Species	<p>Invasive Alien Species (IAS)</p> <ul style="list-style-type: none"> - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species 	<ul style="list-style-type: none"> - The Federal Nature Conservation Act (2009) addresses alien species. 	<p>Ministry for Environment, Nature Protection and Nuclear Safety (Berlin, National Level)</p> <p>Federal Agency for Nature Conservation (Bonn)</p>
Fisheries	<p>Common Fisheries Policy</p>	<p>Sea Fisheries Law (SeeFischG) (2011)</p> <p>Regional legislation in the Federal States</p>	<p>Federal Ministry for Nutrition, Agriculture and Consumer Protection</p> <p>Regional agricultural ministries in the Federal States</p>
Energy and Climate change	<p>EU Climate Change Policy</p> <p>European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC</p>	<p>German Emissions Trading Authority</p> <p>Renewable Energy Law (2002)</p> <p>Renewable Energy and Thermal law (2009)</p>	<p>Federal Ministry for Nutrition, Agriculture and Consumer Protection</p>

Table A4.5 Marine and coastal regulatory framework for Greece

TOPIC	EUROPEAN REGULATORY FRAMEWORK	GREEK REGULATORY FRAMEWORK	GREEK AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	Ongoing; a new spatial Framework for ICZM is under preparation by the Ministry of Environment Information on the current status of its implementation can be found in: Energy and Climate Change http://www.waddensea-forum.org/archive/ReportsArchive/Specialissues/Coastal%20Planning/EU_Final%20Report_progress_ICZM.pdf (Information for Greece on p. 58)	Ministry of Environment, Energy and Climate Change; http://www.ypeka.gr
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	Law 3983/2011 (Government Gazette 144/A/17.06.2011)	Special Secretariat for Water (Ministry of Environment Energy and Climate Change) http://www.ypeka.gr/Default.aspx?tabid=347&locale=en-US&language=el-GR
Water quality	i) Water Framework Directive (2000/60/EC)	Law 3199/2003(Government Gazette 280/A/09.12.2003) Also: Presidential Decree 51 (Government Gazette 54/18.03.2007)	Special Secretariat for Water (Ministry of Environment Energy and Climate Change) http://www.ypeka.gr/Default.aspx?tabid=347&locale=en-US&language=el-GR
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Common Ministerial Decision 8600/416/E103/2009 (Government Gazette 356/B/26.02.2009) http://www.ypeka.gr/LinkClick.aspx?fileticket=L4QL9M63VeE%3D&tabid=253&language=el-GR	Special Secretariat for Water (Ministry of Environment Energy and Climate Change) http://www.ypeka.gr/Default.aspx?tabid=347&locale=en-US&language=el-GR
Marine Protected Areas	EU biodiversity strategy to 2020	Still in its infancy; information on its current implementation status in: http://ec.europa.eu/environment/nature/biodiversity/policy/index_en.htm http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm	Ministry of Environment Energy and Climate Change; http://www.ypeka.gr
	Natura 2000 Network	The Natura 2000 Network in Greece includes 202 Special Protection Areas (SPA) and 241 Sites of Community Importance (SCI) The implementation of the Directive 79/409/EK is currently made through the following Common Ministerial Decisions: 414985/29.11.85 (Government Gazette 757/B/18.12.85), 366599/16.12.96 (Government Gazette 1188/B/31.12.96), 294283/23.12.97 (Government Gazette 68/B/04.02.98)	- Ministry of Environment Energy and Climate Change; - Directorate of Environmental planning. - Department of Natural Environment Management http://www.ypeka.gr
	Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	Ministerial Decision 414985/85 (Government Gazette 757/B/18.12.1985) and Common Ministerial Decision 37338/1807/E.103/2010 (Government Gazette 1495/B/06.09.2010)	As above along with the Special Secretariat for Forests
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	Common Ministerial Decision 33318/3028/11.12.1998 (Government Gazette 1289/B/28.12.1998), amended by the Common Ministerial Decision 14849/853 /E 103/04.04.2008 (Government Gazette 645/B/11.4.2008)	Ministry of Environment Energy and Climate Change; Directorate of Environmental planning, Department of Natural Environment Management http://www.ypeka.gr

TOPIC	EUROPEAN REGULATORY FRAMEWORK	GREEK REGULATORY FRAMEWORK	GREEK AUTHORITY RESPONSIBLE
Ballast Water	<p>Ballast Waters Management</p> <ul style="list-style-type: none"> - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention); 	<p>Accepted and directly implemented in practice; not yet been ratified by national legislation</p> <p>Information (in Greek) can be found in:</p> <p>a) http://dspace.lib.ntua.gr/bitstream/123456789/3415/3/kapelanead_wbm.pdf</p> <p>b) http://invenio.lib.auth.gr/record/128632/files/GRI-2012-8145.pdf?version=1</p>	<p>Ministry of Development, Competitiveness, and Shipping; No specific Secretariat or Directorate is yet authorised</p>
Invasive Alien Species	<p>Invasive Alien Species (IAS)</p> <ul style="list-style-type: none"> - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. - EU Strategy on Invasive Alien Species 	<p>Still in its infancy by the Greek State. Some elements of the current status of its implementation can be found in: http://ec.europa.eu/environment/nature/invasivealien/docs/IAS_policies_country%20assessments2011.pdf (p. 138)</p> <p>The CBD has been ratified in Greece by:</p> <p>Law: 2204/1994 (Government Gazette 59A/15.4.1994) and Law 3937/2011 (Government Gazette 60/A/31.03.2011)</p>	<p>Ministry of Environment Energy and Climate Change; Ministry of Rural Development and Food</p> <p>http://www.ypeka.gr</p> <p>http://www.minagri.gr/en/index.html</p>
Fisheries	Common Fisheries Policy	<p>Already partly implemented by the Greek authorities, in the context of the EU regulation 2371/2002 (and 1967/2006, 1224/2009)</p> <p>http://ec.europa.eu/fisheries/cfp/eff/national_plans/list_of_national_strategic_plans/greece_el.pdf</p> <p>The national plan for the development of fisheries will be funded through the structural funds (2007-2013)</p>	<p>Ministry of Development, Competitiveness, and Shipping;</p> <p>Directorate General for Fisheries</p> <p>http://www.mindev.gov.gr/?page_id=1208</p>
Energy and Climate change	<p>EU Climate Change Policy</p> <p>European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/87/EC</p> <p>Incorporation of the Kyoto Protocol (16/3/1998, Japan) in the EU legislation through the Directives: 2003/87/EC and 2004/101/EC</p>	<p>Common Ministerial Decisions:</p> <p>Government Gazette 1931/B/27.12.2004</p> <p>Government Gazette 2575/B/19.12.2008</p> <p>Government Gazette 2030/B/29.12.2010</p> <p>A report for the implementation of the Directive in Greece can be found in: http://ec.europa.eu/energy/renewables/transparency_platform/doc/resubmitted_nre_ap_greece_en.pdf</p> <p>Ratified by Greece; Law 3017/2002 (Government Gazette, 117/A/30.5.2002)</p>	<p>Ministry of Environment Energy and Climate Change; General Secretariat for Energy and Climate Change; Emissions trading Office;</p> <p>http://www.ypeka.gr/Default.aspx?tabid=345&locale=en-US&language=el-GR</p>

Table A4.6 Marine and coastal regulatory framework for Ireland (Republic of)

TOPIC	EUROPEAN REGULATORY FRAMEWORK	IRISH NATIONAL REGULATORY FRAMEWORK	IRISH AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.		Department of Environment Community and Local Government
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	European Communities (Marine Strategy Framework) Regulations 2011 - SI 249/2011	Department of Environment Community and Local Government (via Marine Institute)
Water quality	i) Water Framework Directive (2000/60/EC)	European Communities (Water Policy) Regulations 2003 – SI 722/2003	DECLG
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Bathing Water Quality Regulations (SI No 79 of 2008)	
Marine Protected Areas	EU biodiversity strategy to 2020	National Biodiversity Plan (2002)	Department of Arts Heritage and Gaeltacht (National Parks and Wildlife Service)
	Natura 2000 Network Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	European Communities (Birds and Natural Habitats) Regulations 2011 - SI 477/2011	DAHG (NPWS)
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	European Communities (Birds and Natural Habitats) Regulations 2011- SI 477/2011	DAHG (NPWS)
Ballast Water	Ballast Waters Management	Sea Pollution (Miscellaneous Provisions) Act 2006 - (29/2006)	DECLG
	- IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);		Department of Transport
Invasive Alien Species	Invasive Alien Species (IAS) - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species	European Communities (Birds and Natural Habitats) Regulations 2011 - SI 477/2011	DAHG (NPWS)
Fisheries	Common Fisheries Policy	Fisheries Acts (SI 17/1939 To SI 21/2003) and subsequent amendments Sea-Fisheries and Maritime Jurisdiction Act 2006 (8/2006)	Department of Agriculture, Food and the Marine

TOPIC	EUROPEAN REGULATORY FRAMEWORK	IRISH NATIONAL REGULATORY FRAMEWORK	IRISH AUTHORITY RESPONSIBLE
Energy and Climate change	EU Climate Change Policy European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC		DECLG

Table A4.7 Marine and coastal regulatory framework for Israel

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ISRAELI REGULATORY FRAMEWORK	ISRAELI AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	<p>Israel signed the Barcelona Convention's ICZM Protocol in 2008</p> <p>Legislation:</p> <ul style="list-style-type: none"> Protection of the Coastal Environment Law, 2004 – which integrates ICZM policy Planning and Building Law (1965) – through which ICZM principles are implemented <p>Policy documents, national project:</p> <ul style="list-style-type: none"> Coastal Area Management Programme (CAMP) for Israel (1996-2000) Territorial Waters Policy Document (1999)-which founded on ICZM principles 	Ministry of the Environmental Protection
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	<p>National Legislation: None</p> <p>national project with relevance:</p> <p>National monitoring plan (2001-onwards): a plan for monitoring Environmental quality of Israel's Mediterranean coastal waters</p> <p>[Comment: IOLR submitted proposals to expand the scope of the national plan to include elements from the Directive]</p>	<p>Ministry of the Environmental Protection through Israel Oceanographic & Limnological Research Ltd.</p> <p>http://www.sviva.gov.il/bin/en.jsp?enPage=BlankPage&enDisplay=view&enDispWhat=Object&enDispWho=Articals%5E1731&enZone=sunvevs</p>
Water quality	i) Water Framework Directive (2000/60/EC)	<p>Marine quality Legislation :</p> <ul style="list-style-type: none"> -The Prevention of Sea Pollution from Land-Based Sources Law, 1988 -Prevention of Sea Pollution (Dumping of Waste) Regulations, 1984 -Protection of the Coastal Environment Law, 2004 -Prevention of Sea Pollution from Land-Based Sources Regulations (Prevention of Sea Pollution Levy), 2011 <p>national project:</p> <p>National monitoring plan (2001-onwards): a plan for monitoring Environmental quality of Israel's Mediterranean coastal waters</p>	<p>Ministry of Environmental Protection</p> <p>http://www.sviva.gov.il/Enviroment/bin/en.jsp?enPage=e_BlankPage&enDisplay=view&enDispWhat=Zone&enDispWho=Marine_Legal&enZone=Marine_Legal</p> <p>http://www.sviva.gov.il/Enviroment/bin/en.jsp?enPage=e_BlankPage&enDisplay=view&enDispWhat=Object&enDispWho=Articals%2374&enZone=mar_qual</p> <p>http://www.sviva.gov.il/Enviroment/Static/Binaries/Articals/protection_of_the_coastal_environment_law_2004_1.pdf</p> <p>http://www.sviva.gov.il/Enviroment/bin/en.jsp?enPage=e_BlankPage&enDisplay=view&enDispWhat=Object&enDispWho=Articals%16987&enZone=mar_qual</p>
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	<p>The Bathing Places Law, 1964</p> <p>The Law for the Protection of the Coastal Environment, 2004: aims to, among others, to preserve the coastal environment and the coastal sand for the benefit and enjoyment of the public in present and future generations.</p>	<p>Ministry of Interior</p> <p>Ministry of Environmental Protection</p>
Marine Protected Areas	EU biodiversity strategy to 2020	<p>strategy document:</p> <p>Israel's National Biodiversity Plan (2010)</p>	<p>Ministry of Environmental Protection, but with implementation by a joint task force of government ministries and public bodies.</p> <p>Available at:</p>

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ISRAELI REGULATORY FRAMEWORK	ISRAELI AUTHORITY RESPONSIBLE
			http://www.sviva.gov.il/Enviroment/Static/Binaries/ModulKvatzim/biodiversity_plan_1.pdf
	Natura 2000 Network	None	
	Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	Provisions similar to the Wild Birds Directive are implemented through the: - National Parks, Nature Reserves, National sites and Monuments Law, 1998 - Wildlife Protection Law 1955 (as amended)	Ministry of Environmental Protection through Israel Nature and parks Authority
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	- National Parks, Nature Reserves, National sites and Monuments Law, 1998	Ministry of Environmental Protection through Israel Nature and parks Authority
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	The Prevention of Sea Water Pollution by Oil Ordinance, 1980 (proposals submitted for amendments according to MARPOL Convention) The Ports Ordinance, 1971 (regulations under the law covers ballast waters management)	Ministry of Environmental Protection
Invasive Alien Species	Invasive Alien Species (IAS) - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species	Relevant legislation: The main legal source for intentional introduction of alien aquatic species: - the Fisheries Ordinance, 1937 Other legislation includes: -the Fisheries Regulations 1937 -National Parks, Nature Reserves, National sites and Monuments law, 1998 -National Parks, Nature Reserves, National Sites and Monuments Announcement (Protected Nature Values) 2005 -Israel Public Health Regulations (food) Fish 1981 (as amended) : regulating fish and seafood safety	Ministry of Agriculture and Rural development through its administrative units Israel Nature and parks Authority <i>no translation of the Israeli regulations from Hebrew</i>
Fisheries	Common Fisheries Policy	the Fisheries Ordinance, 1937 the fisheries regulations, 1937 (as amended)	Ministry of Agriculture and Rural development
Energy and Climate change	EU Climate Change Policy European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC	Climate Change Policy: • Government Resolution No. 1504 (March 14, 2010) • Establishment of an interministerial committee on climate change, including representatives of relevant government ministries, industries and non-governmental organisations (2010) • Formulation of a national plan for reduction of greenhouse gas emissions in Israel (2010) • Greenhouse gas reduction action plan (2011) Renewable Energy: <i>no regulatory initiative for environmental protection in this context.</i> • government decision (2002) as amended in 2009, 2011 • solar energy Tariffs) regulations (2008)	Ministry of environmental protection http://www.sviva.gov.il/Enviroment/Static/Binaries/ModulKvatzim/greenhouse_2.pdf http://www.sviva.gov.il/Enviroment/Static/Binaries/ModulKvatzim/GGRAP_Bulletin37_1.pdf

Table A4.8 Marine and coastal regulatory framework for Italy

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ITALIAN REGULATORY FRAMEWORK	ITALIAN AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	<p>Towards the activation and implementation of the National Strategy for ICZM according to:</p> <ul style="list-style-type: none"> • Recommendation relating to the activation of ICZM in Europe (2002/413/CE) of 30 May 2002; • MSFD 2008/56/CE; • Barcelona Convention and related Resolution (c.d. interim arrangements); • Chart of Siracusa on Biodiversity, signed 24 April 2009 (G8 Environment). <p>Competent administrations for the activation and implementation of the National Strategy for ICZM include: central administrations on tourism, fisheries, infrastructure, transport, etc., regional and local administrations and various stakeholders with sectoral interests (both economic and social).</p>	<p>Ministry for Environment, Territory and Sea and coastal Regions (including Sardinia)</p> <p>http://www.minambiente.it/home_it/menu.html?mp=/menu/menu_attivita&m=argomenti.html%7CMar_e.html%7CGestione_Integrata_delle_Zone_Costiere_.html%7CVerso_la_Strategia_Nazionale_per_la_Gest.html</p> <p>http://www.minambiente.it/export/sites/default/archivio/allegati/var/dpn_report_nazionale_Gizc_2006_2010.pdf</p> <p>http://www.sardegnaambiente.it/index.php?xsl=611&s=23&v=9&c=5121&na=1&n=10&nodesc=2</p>
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	D.Lgs 190/2010 (13 October 2010)	<p>Ministry for Environment, Territory and Sea</p> <p>http://www.camera.it/parlam/leggi/deleqhe/testi/10190dl.htm</p>
Water quality	i) Water Framework Directive (2000/60/EC)	D.Lgs 152/2006; D.M. 131/2008; D.M. 56/2009; D.M. 260/2010	<p>Ministry for Environment, Territory and Sea and coastal Regions (including Sardinia)</p> <p>http://www.direttivaacque.minambiente.it/</p>
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	<p>Decree of the Ministry of Health, 30 marzo 2010</p> <p>Definizione dei criteri per determinare il divieto di balneazione, nonché modalita' e specifiche tecniche per l'attuazione del decreto legislativo 30 maggio 2008, n. 116, di recepimento della direttiva 2006/7/CE, relativa alla gestione della qualità delle acque di balneazione. (10A06405)</p> <p>D.Lgs n. 116 - 30 May 2008</p> <p>Attuazione della direttiva 2006/7/CE relativa alla gestione della qualità delle acque di balneazione e abrogazione della direttiva 76/160/CEE</p> <p>D.Lgs n. 94 - 11 July 2007</p>	<p>Ministry of Health</p> <p>http://www.salute.gov.it/balneazione/archivioNormativaBalneazione.jsp?lingua=italiano&menu=normativa</p>
Marine Protected Areas	EU biodiversity strategy to 2020	<p>Dlgs n. 979/1982 Sea Protection Act, December 31st, 1982 (GURI n° 16, January 18th, 1983)</p> <p>Dlgs n.394/1991 (GURI n° 292, December 13th, 1991) [for Protected Areas and National Parks].</p> <p>Law n° 426-98 promoting new interventions in the environmental field, December 9th, 1998 (GURI n° 291, December 14th, 1998) [for Protected Areas and National Parks].</p> <p>Testo della Strategia Nazionale per la Biodiversità</p> <p>Decreto di istituzione del Comitato paritetico per la Biodiversità, dell'Osservatorio nazionale per la Biodiversità e del Tavolo di consultazione</p> <p>Conferenza Nazionale per la Biodiversità e Workshop</p>	<p>Ministry for Environment, Territory and Sea</p> <p>http://www.minambiente.it/home_it/menu.html?mp=/menu/menu_attivita&m=argomenti.html#biodiversita_fa.html#strategia_Nazionale_per_la_biodiversita.html</p>

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ITALIAN REGULATORY FRAMEWORK	ITALIAN AUTHORITY RESPONSIBLE
		<p>preparatori</p> <p>Strumenti a supporto della strategia: il Sistema Ambiente 2010 e il Network Nazionale della Biodiversità</p> <p>Breve guida alla Strategia Nazionale per la Biodiversità</p>	
	<p>Natura 2000 Network</p> <p>Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)</p>	<p>L. 157 11 Feb 92</p> <p>D.P.R. n. 357/1997</p>	<p>Ministry for Environment, Territory and Sea and Regions (including Sardinia)</p> <p>http://www.contrattidifiume.alessandria.it/file/RETE%20NATURA%202000/DPR%20357-97.pdf</p> <p>http://www.regione.sardegna.it/ij/v/137?s=3111&v=2&c=392&t=1http://www.sardegnaambiente.it/foreste/foreste_parchi/areeprotette/</p>
	<p>Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC</p>	<p>D.P.R. n. 357/1997 (8 Sep 97)</p> <p>D.P.R. n. 120/2003</p>	<p>Ministry for Environment, Territory and Sea and Regions (including Sardinia)</p> <p>http://www.contrattidifiume.alessandria.it/file/RETE%20NATURA%202000/DPR%20357-97.pdf</p> <p>http://www.minambiente.it/export/sites/default/archivio/allegati/rete_natura_2000/DPR_12_marzo_2003x_n_120.PDF</p> <p>http://www.regione.sardegna.it/ij/v/137?s=3111&v=2&c=392&t=1http://www.sardegnaambiente.it/foreste/foreste_parchi/areeprotette/</p>
Ballast Water	<p>Ballast Waters Management</p> <ul style="list-style-type: none"> - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention); 	<p>Decree of the General Director of the Ministry of the Environment on the management of BW. However, there is not yet the decree for the implementation of the BWM convention.</p>	<p>Ministry for Environment, Territory and Sea</p>
Invasive Alien Species	<p>Invasive Alien Species (IAS)</p> <ul style="list-style-type: none"> - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species 	<p>D.Lgs. 190 13 Oct 2010</p> <p>Invasive Alien Species (IAS); National strategy for the biodiversity: Chart of Siracusa (not a law).</p>	<p>Ministry for Environment, Territory and Sea</p> <p>http://www.minambiente.it/home_it/menu.html?mp=/menu/menu_attivita/&m=argomenti.html biodiversita_fa.html strategia_Nazionale_per_la_biodiversita.html</p>
Fisheries	<p>Common Fisheries Policy</p>	<p>D.P.R. n. 327/1950; L. n. 963/1965; D.P.R. n. 1627/1965</p> <p>D.P.R. n. 1639/1968; D.Lgs. n. 226/2001;</p> <p>D.Lgs. n.153/2004; D.Lgs. n. 4/2012</p>	<p>Ministry of Agriculture</p> <p>Coastal regions (including Sardinia)</p> <p>http://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/4615</p>

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ITALIAN REGULATORY FRAMEWORK	ITALIAN AUTHORITY RESPONSIBLE
Energy and Climate change	EU Climate Change Policy European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC	D.Lgs. 28 3 March 2011	Ministry of Economic Development; Ministry for Environment, Territory and Sea

Table A4.9 Marine and coastal regulatory framework for Lithuania

TOPIC	EUROPEAN REGULATORY FRAMEWORK	LITHUANIAN REGULATORY FRAMEWORK	LITHUANIAN AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	Coastline law (Nr. IX-1016) Law on protection of the marine environment (Nr. VIII-512) Coastal management setup order (Nr. 570)	Ministry of Environment, EPA
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	Law on changes to law on protection of the marine environment (Nr. XI-1205)	Ministry of Environment, EPA
Water quality	i) Water Framework Directive (2000/60/EC)	Law on changes to water law (2003, Nr. 36-1544)	Ministry of Environment, EPA
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Lithuanian Hygiene Standard "HN 92:2007 "Beaches and Bathing water quality"	Ministry of Health, Ministry of Environment, State Food and Veterinary Service
Marine Protected Areas	EU biodiversity strategy to 2020	National Environmental Strategy of Lithuania Biodiversity Conservation Strategy and Action Plan	Ministry of Environment
	Natura 2000 Network Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	Wild Birds Directive 79/409/EEC	Ministry of Environment
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	Habitats Directive 92/43/EEB	Ministry of Environment
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	Law on changes to law on protection of the marine environment (Nr. XI-1205)	Ministry of Environment
Invasive Alien Species	Invasive Alien Species (IAS) - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species	Order by the Minister of Environment (Nr. 352, 2002 July 1) on the "Introduction, reintroduction and relocation of non-indigenous organisms, invasive species control and management programme confirmation"	Ministry of Environment

TOPIC	EUROPEAN REGULATORY FRAMEWORK	LITHUANIAN REGULATORY FRAMEWORK	LITHUANIAN AUTHORITY RESPONSIBLE
Fisheries	Common Fisheries Policy	Common Fisheries Policy	Ministry of agriculture
Energy and Climate change	EU Climate Change Policy European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC	National Renewable Energy Resource Development Strategy (LR Government resolution Nr. 789)	Ministry of energy

Table A4.10 Marine and coastal regulatory framework for Poland

TOPIC	EUROPEAN REGULATORY FRAMEWORK	POLISH REGULATORY FRAMEWORK	POLISH AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.		
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	An amendment to the Water Law bill (2001; <i>Prawo wodne</i>) and other legal acts is in progress;	Ministry of the Environment Chief Inspectorate of Environmental Protection National Water Management Authority
Water quality	i) Water Framework Directive (2000/60/EC)	Water Law (2001; <i>Prawo wodne</i>) Environmental Law (2001; <i>Prawo ochrony środowiska</i>) Legal act on water supply and sewage disposal (2001; <i>ustawa o zbiorowym zaopatrzeniu w wodę i zbiorowym odprowadzaniu ścieków</i>) <i>Note: several bylaws and implementing acts/regulations exist;</i>	Ministry of the Environment National Water Management Authority
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Water Law (2001; <i>Prawo wodne</i>) <i>Note: most important bylaws and implementing acts/regulations are as follow:</i> <ul style="list-style-type: none"> ▪ Legal act on bathing water profile (2011; Ministry of the Environment; <i>rozporządzenie w sprawie profilu wody w kąpielisku</i>), ▪ Legal act on registration and labeling bathing places (2011; Ministry of Health; <i>rozporządzenie w sprawie ewidencji kąpielisk oraz sposobu oznakowania kąpielisk i miejsc wykorzystywanych do kąpielii</i>), ▪ Legal act on the supervision over the quality of bathing water and places used for bathing (2011; Ministry of Health; <i>rozporządzenie w sprawie prowadzenia nadzoru nad jakością wody w kąpielisku i miejscu wykorzystywanym do kąpielii</i>); 	Ministry of the Environment Ministry of Health National Water Management Authority Chief Sanitary Inspectorate
Marine Protected Areas	EU biodiversity strategy to 2020	The National Strategy for the protection and sustainable use of biodiversity and the Action Programme for 2007-2013 (<i>Krajowa strategia ochrony i zrównoważonego użytkowania różnorodności biologicznej oraz Program działań na lata 2007-2013</i>) Please note: this is a soft instrument but is indirectly implemented by several legal acts; it is not targeted at marine areas, but covers all different issues and sectors related to the biodiversity;	Most relevant institutions include: Ministry of the Environment, Ministry of Agriculture and Rural Development, Governors of the provinces & local authorities, Maritime Offices; Other institutions are also involved depending on the operational objectives;
	Natura 2000 Network	Nature Conservation Act (2004; <i>Ustawa o ochronie przyrody</i>);	Ministry of the Environment
	Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended) Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	Environmental law (2001; <i>Prawo Ochrony środowiska</i>); Legal act on the prevention of environmental damages and their restoration (2007; <i>Ustawa o zapobieganiu szkodom w środowisku i ich naprawie</i>) Legal act on public access to information about the environment and its protection, public participation in environmental protection and environmental impact assessment (2008; <i>ustawa udostępnianiu informacji o</i>	The General Directorate for Environmental Protection Regional Directorates for Environmental Protection Maritime Offices and national parks

TOPIC	EUROPEAN REGULATORY FRAMEWORK	POLISH REGULATORY FRAMEWORK	POLISH AUTHORITY RESPONSIBLE
		<p><i>środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko</i>)</p> <p><i>Note: several bylaws and implementing acts/regulations exist;</i></p>	
Ballast Water	<p>Ballast Waters Management</p> <ul style="list-style-type: none"> - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention); 	<p>IMO:</p> <p>International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London, Mexico City, Moscow, Washington, 29 December 1972) adopted by Poland in 1984 (Dz.U. 1984, no. 11, poz. 46)</p> <p>Legal act on the prevention of pollution from ships (1995; <i>ustawa o zapobieganiu zanieczyszczeniu morza przez statki</i>);</p> <p><i>Note: several bylaws and implementing acts/regulations exist;</i></p> <p>BWM Convention: is not ratified. The process is likely to finish in 2013, preliminary implementation analysis was prepared;</p>	<p>Ministry of Transport, Construction and Maritime Economy</p> <p>Maritime Offices</p>
Invasive Alien Species	<p>Invasive Alien Species (IAS)</p> <ul style="list-style-type: none"> - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. <p>EU Strategy on Invasive Alien Species</p>	<p>Convention on Biological Diversity adopted by Poland in 1995 (Dz. U. 2002 r. no 184, poz. 1532)</p> <p>Nature Conservation Act (2004; <i>Ustawa o ochronie przyrody</i>);</p> <p>Legal act on alien species of plants and animals, which, if released to the environment, may threaten native species and habitats (2011; <i>rozporządzenie w sprawie listy roślin i zwierząt gatunków obcych, które w przypadku uwolnienia do środowiska przyrodniczego mogą zagrozić gatunkom rodzimym lub siedliskom przyrodniczym</i>)</p>	<p>Ministry of the Environment</p> <p>The General Directorate for Environmental Protection</p>
Fisheries	Common Fisheries Policy	<p>Fisheries Act (2004; <i>Ustawa o rybołówstwie</i>);</p> <p>Inland Fisheries Act (1985; <i>Ustawa o rybactwie śródlądowym</i>);</p> <p>Legal act on the organisation of fisheries market (2008; <i>Ustawa o organizacji rynku rybnego</i>);</p> <p>Legal act on supporting the sustainable development of the fisheries sector through the European Fisheries Fund (2009; <i>Ustawa o wspieraniu zrównoważonego rozwoju sektora rybackiego z udziałem Europejskiego Funduszu Rybackiego</i>);</p> <p><i>Note: several bylaws and implementing acts/regulations exist;</i></p>	<p>Ministry of Agriculture and Rural Development; The Department of Fisheries;</p> <p>Please note: number of actions are carried out in cooperation / through the government agencies, e.g., regional sea fisheries inspectorates or regional branches of Agency for Restructuring and Modernisation of Agriculture;</p>
Energy and Climate change	<p>EU Climate Change Policy</p> <p>European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC</p>	<p>Polish Climate Policy: strategies to reduce greenhouse gas emissions in Poland till 2020 (2003; Ministry of the Environment; <i>Polityka Klimatyczna Polski: strategie redukcji emisji gazów cieplarnianych w Polsce do roku 2020</i>)</p> <p>Renewable energy development strategy (2001; <i>Strategia rozwoju energetyki odnawialnej</i>);</p> <p>Please note: these are a soft instrument but is indirectly implemented by several legal acts;</p>	<p>Ministry of the Environment</p> <p>Ministry of Economic Affairs</p>

TOPIC	EUROPEAN REGULATORY FRAMEWORK	POLISH REGULATORY FRAMEWORK	POLISH AUTHORITY RESPONSIBLE
		<p>Energy Law (1997; <i>Prawo energetyczne</i>)</p> <p><i>Note:</i> several bylaws and implementing acts/regulations exist;</p> <p>Draft legal act on renewable energy sources (<i>Projekt ustawy o odnawialnych źródłach energii</i>) is currently under the approval process (by the government);</p>	

Table A4.11 Marine and coastal regulatory framework for Slovenia

TOPIC	EUROPEAN REGULATORY FRAMEWORK	SLOVENIAN REGULATORY FRAMEWORK	SLOVENIAN AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	Water Act (2002), Nature Conservation Act (1999) and Spatial Planning Act (2007) – which embeds principles of ICZM Regional strategy documents: <ul style="list-style-type: none"> Regional development plan of South Primorska Coastal management programme Slovenia 	Ministry of Infrastructure and Spatial Planning of the Republic of Slovenia http://www.mzjp.gov.si/ Regional development Centre of South Primorska http://www.rrc-kp.si/si/regionalni-razvoj/rp.html http://www.rrc-kp.si/si/referencni-projekti/107-camp-program-upravljania-z-obalnim-obmocjem.html
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	Water Act (2002) and Decree on detailed content of marine environment management plan (2010)	Ministry of agriculture and environment http://www.mko.gov.si/
Water quality	i) Water Framework Directive (2000/60/EC)	Water Act (2002) and Decree on the detailed content and method of drawing up a water management plan (2006)	Ministry of agriculture and environment
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Water Act (2002) and Decree concerning the management of bathing water quality (2008)	Ministry of agriculture and environment
Marine Protected Areas	EU biodiversity strategy to 2020	Nature Conservation Act (1999) Strategy document: <ul style="list-style-type: none"> Biodiversity Conservation Strategy of Slovenia (2001) 	Ministry of agriculture and environment
	Natura 2000 Network Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	Nature Conservation Act (1999) and Decree on special protection areas (Natura 2000 areas) (2004) Strategy document: <ul style="list-style-type: none"> Operational programme - Natura 2000 management programme for the period from 2007 to 2013 	Ministry of agriculture and environment
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	Nature Conservation Act (1999), Decree on habitat types (2003) and Decree on protected wild animal species (2004)	Ministry of agriculture and environment
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London, 2004 (BWM Convention);	BWM Convention in ratification process, hence no national regulation is related yet	Not decided yet, potential authorities are Maritime and Environmental

TOPIC	EUROPEAN REGULATORY FRAMEWORK	SLOVENIAN REGULATORY FRAMEWORK	SLOVENIAN AUTHORITY RESPONSIBLE
Invasive Alien Species	<p>Invasive Alien Species (IAS)</p> <ul style="list-style-type: none"> - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species 	Nature Conservation Act (1999) and Water Act (2002) and Decree on the river basin management plan for the Danube Basin and the Adriatic Sea Basin (2011)	Ministry of agriculture and environment
Fisheries	Common Fisheries Policy	Marine Fisheries Act (2006)	Ministry of agriculture and environment
Energy and Climate change	<p>EU Climate Change Policy</p> <p>European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC</p>	Decree of Parliament of the Republic of Slovenia regarding climate changes (2009) and Climate change act (in preparation)	Ministry of agriculture and environment

Table A4.12 Marine and coastal regulatory framework for Spain

TOPIC	EUROPEAN REGULATORY FRAMEWORK	SPANISH REGULATORY FRAMEWORK	SPANISH AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	Estrategia Nacional de GIZC	Ministerio de Medio Ambiente http://www.magrama.gob.es/es/constas/publicaciones/Informe_GIZC_Spain_enviado_tcm7-30301.pdf
Marine Environment Protection	Marine Strategy Framework Directive (Directive 2008/56/EC)	Ley de Protección del Medio Marino	Boletín Oficial del Estado. http://www.boe.es/boe/dias/2010/12/30/pdfs/BOE-A-2010-20050.pdf
Water quality	I. Water Framework Directive - EC II. The revised Bathing Water Directive (76/160/EEC) is an updated version of the current Bathing Water Directive (76/160/EEC) .	III. LEY 62/2003, de 30 de diciembre, de medidas fiscales, administrativas y del orden social. IV. Real Decreto 1341/2007, de 11 de octubre, por el que se establecen normas de calidad de las aguas de baño (BOE 257 26/10/2007), que recoge y describe las labores de vigilancia sanitaria.	Boletín Oficial del Estado. http://www.marm.es/es/agua/temas/planificacion-hidrologica/ley62-2003_tcm7-29015.pdf Ministerio de Medio Ambiente. Transposition of Water Framework Directive. http://www.magrama.gob.es/es/agua/temas/planificacion-hidrologica/marco-del-aqua/Textos_legislativos.aspx
Marine Protected Areas	EU biodiversity strategy to 2020 Natura 2000 Network	Ley 42/2007 del Patrimonio Natural y de la Biodiversidad	Noticias Jurídicas. http://noticias.juridicas.com/base_datos/Admin/14-2007.tp.html#a4
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	Orden de 15 de Marzo de 1982, sobre nueva clasificación de los buques tanque destinados a la importación de petróleo crudo que hayan adoptado el sistema de lastre separado (BOE de 15.03.1982) Orden Ministerial de 4 de marzo de 1976, por la que se dictan normas para la ejecución de lo establecido en el Convenio Internacional sobre Responsabilidad Civil por daños debidos a la contaminación de las aguas del mar por hidrocarburos (BOE nº 60, de 10.03.1976)	Boletín Oficial del Estado. http://www.boe.es/diario_boe/txt.php?id=BOE-A-1982-7069
Invasive Alien Species	- Global Invasive Species Programme (GISP); - Invasive Alien Species (IAS) - International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. Recognising the increasingly serious problem of invasive alien species in Europe, the Commission is currently working on an EU Strategy on Invasive Alien Species which is due to be adopted in 2012.	Royal Decree 1628/2011, of November 14 th , for the regulation of the Spanish list and catalogue of invasive species: (Real Decreto 1628/2011, de 14 de noviembre, por el que se regula el listado y catálogo español de especies exóticas invasoras.)	http://www.boe.es/boe/dias/2011/12/12/pdfs/BOE-A-2011-19398.pdf
Fisheries	Common Fisheries Policy	Ley 3/2001, de 26 de marzo, de Pesca Marítima del Estado. Anteproyecto Ley de Pesca Sostenible	Noticias Jurídicas. http://noticias.juridicas.com/base_datos/Admin/I3-2001.html La Moncloa http://www.lamoncloa.gob.es/consejodeministros/referencias/2010/refc20100820.htm#PescaSoste

Port reception facilities for ship-generated waste	<p>MARPOL Convention</p> <p>Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues.</p>	<p>Ley 33/2010, De 5 De Agosto, De Modificación De La Ley 48/2003, De 26 De Noviembre, De Régimen Económico Y De Prestación De Servicios En Los Puertos De Interés General.</p>	<p>nible</p> <p>Boletín Oficial del Estado. http://www.boe.es/boe/dias/2010/08/07/pdfs/BOE-A-2010-12703.pdf</p>
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Table A4.13 Marine and coastal regulatory framework for The Netherlands

TOPIC	EUROPEAN REGULATORY FRAMEWORK	DUTCH REGULATORY FRAMEWORK	DUTCH AUTHORITY RESPONSIBLE
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	Wet Ruimtelijke ordening (2006) IBN (Integraal Beheersplan Noordzee) 2011 Nationaal Waterplan (2009)	Ministry of Infrastructure and Environment & provinces and local communities until 1km into the sea
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	Transposed into Water Act via Waterbesluit(2010) Nationaal Waterplan (2009)	Ministry of Infrastructure and Environment
Water quality	i) Water Framework Directive (2000/60/EC)	Water Act (2009) Nationaal Waterplan (2009)	Ministry of Infrastructure and Environment
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	Included in Water Act: Wet hygiëne en veiligheid bad- en zwemgelegenheden (Whvbz) +Besluit hygiëne en veiligheid badinrichtingen en zwemgelegenheden (Bhvz).	Ministry of Infrastructure and Environment
Marine Protected Areas	EU biodiversity strategy to 2020	Flora & Fauna Act ('Flora-en fauna wet'), Natuurbeschermingswet (1998) Beleidsprogramma biodiversiteit 2008-2011 Nationaal Waterplan (2009)	Ministry of Economic Affairs, Agriculture and Innovation Ministry of Infrastructure and Environment
	Natura 2000 Network Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)	Flora & Fauna Act ('Flora-en fauna wet'), Natuurbeschermingswet (1998) Nationaal Waterplan (2009)	
	Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC	Flora & Fauna Act ('Flora-en fauna wet'), Natuurbeschermingswet (1998) Nationaal Waterplan (2009)	
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	Ratification of the BWMC in 2010, and implemented when international regulation is operative. National guidelines are laid down in "BVVS Besluit Voorkoming Verontreiniging door Schepen".	Ministry of Infrastructure and Environment
Invasive Alien Species	Invasive Alien Species (IAS) - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. • EU Strategy on Invasive Alien Species	Beleidsnota Invasieve Exoten (2007) Beleidslijn Verplaatsing Schelpdieren (2011) (transfer bivalves policy) Other indirect frameworks such as Flora en fauna Act.	Ministry of Economic Affairs, Agriculture and Innovation

TOPIC	EUROPEAN REGULATORY FRAMEWORK	DUTCH REGULATORY FRAMEWORK	DUTCH AUTHORITY RESPONSIBLE
Fisheries	Common Fisheries Policy	Fisheries Act (1963)	Ministry of Economic Affairs, Agriculture and Innovation
Energy and Climate change	EU Climate Change Policy European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC	None, but ambition set in 'klimaatbrief 2050: uitdagingen voor Nederland bij het streven naar een concurrerend, klimaatneutraal Europa', which relates to Roadmap for moving to a competitive low-carbon economy (EU, 2011) Local guidelines via: Lokale Klimaat Agenda 2011-2014 'Werk maken van Klimaat'	Ministry of Economic Affairs, Agriculture and Innovation

Table A4.14 Marine and coastal regulatory framework for UK (specifically England and Scotland)

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ENGLISH & SCOTTISH REGULATORY FRAMEWORK	REGULATORY AUTHORITIES
Integrated Coastal Zone Management	ICZM Protocol to the Barcelona Convention.	<u>England</u> Marine and Coastal Access Act 2009 – which embeds principles of ICZM Strategy Documents: <ul style="list-style-type: none"> 2011 – ‘UK Marine Policy Statement’ (HM Government) 2009 - ‘A strategy for promoting an integrated approach the management of coastal areas in England’ 2002 – ‘Safeguarding Our Seas: A Strategy for the Conservation and Sustainable Development of Our Marine Environment’ 	Defra through its Executive Non-departmental Public Body the Marine Management Organisation (MMO) http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf http://archive.defra.gov.uk/environment/marine/documents/protectef/czcm/iczm-strategy-england.pdf http://www.defra.gov.uk/publications/files/pb6187-marine-stewardship-020425.pdf
		<u>Scotland</u> Marine (Scotland) Act 2010 Strategy Documents: <ul style="list-style-type: none"> 2011 – ‘UK Marine Policy Statement’ (HM Government) 2005 - Seas the Opportunity: A Strategy for the Long Term Sustainability of Scotlands Coasts and Seas 	Scottish Government through its Directorate Marine Scotland http://www.legislation.gov.uk/asp/2010/5/contents http://www.scotland.gov.uk/Resou/rce/Doc/57346/0017023.pdf
Integrated Marine Environment Protection	Marine Strategy Framework Directive (2008/56/EC)	<u>England & Scotland</u> The Marine Strategy Regulations 2010	Defra & Scottish Ministers http://www.legislation.gov.uk/uksi/2010/1627/contents/made
Water quality	i) Water Framework Directive (2000/60/EC)	<u>England</u> Water Environment (Water Framework Directive) (England and Wales) Regulations 2003	Defra through the Environment Agency (EA) http://www.legislation.gov.uk/uksi/2003/3242/contents/made
		<u>Scotland</u> Water Environment and Water Services (Scotland) Act (WEWS) 2003	Scottish Ministers through the Scottish Environment Protection Agency (SEPA). http://www.legislation.gov.uk/asp/2003/3/contents
	ii) Bathing Water Directive (2006/7/EC - the "new" Directive) repealing by 2014 the "old" Bathing Water Directive (76/160/EEC)	<u>England</u> The Bathing Water Regulations 2008	Defra through the EA http://www.legislation.gov.uk/uksi/2008/1097/pdfs/uksi_20081097_en.pdf
		<u>Scotland</u> The Bathing Waters (Scotland) Regulations 2008	Scottish Government through SEPA. http://www.legislation.gov.uk/ssi/2008/170/contents/made
Marine Protected Areas (MPAs)	EU biodiversity strategy to 2020	<u>England</u> Marine and Coastal Access Act 2009 – which embeds marine planning and MPAs Strategy Documents: <ul style="list-style-type: none"> UK Marine Policy Statement (HM Government) 	Defra through the Joint Nature Conservancy Council (JNCC). Also MMO. http://www.defra.gov.uk/publications/files/pb13583-biodiversity-strategy-2020-111111.pdf http://www.defra.gov.uk/publications/files/pb13583-biodiversity-strategy-2020-111111.pdf

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ENGLISH & SCOTTISH REGULATORY FRAMEWORK	REGULATORY AUTHORITIES
		<p>2011)</p> <ul style="list-style-type: none"> Biodiversity 2020: A strategy for England's wildlife and ecosystem services (Defra, 2011) Working with the grain of nature: a biodiversity strategy for England (Defra, 2002) UK National Ecosystem Assessment (NEA) published 2011 UK Biodiversity Action Plans 	<p>ns/files/pb7718-biostrategy-021016.pdf</p> <p>http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx</p>
	<p>Natura 2000 Network</p> <p>Wild Birds Directive 2009/147/EC (this is the codified version of Directive 79/409/EEC as amended)</p>	<p><u>Scotland</u></p> <p>Marine (Scotland) Act 2010 - - which embeds marine planning and MPAs</p> <p>Strategy Documents:</p> <ul style="list-style-type: none"> UK Marine Policy Statement (HM Government 2011) Scotland's Biodiversity - It's In Your Hands 2004 The 2020 Challenge for Scotland's Biodiversity (draft) 2012 	<p>Scottish Government through Scottish Natural Heritage (SNH)</p> <p>http://scotland.gov.uk/Resource/Doc/25954/0014583.pdf</p> <p>http://www.snh.gov.uk/docs/B1018377.pdf</p>
	<p>Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, which in turn was amended by The Natural Environment and Rural Communities Act 2006</p>	<p><u>England</u></p> <p>Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, which in turn was amended by The Natural Environment and Rural Communities Act 2006</p>	<p>Defra through a number of agencies namely Natural England, but with the MMO, EA, Inshore Fisheries Conservation Authorities (IFCAs) and other competent authorities.</p> <p>http://www.legislation.gov.uk/ukpga/1981/69</p> <p>http://www.legislation.gov.uk/ukpga/2000/37/contents</p>
	<p>Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC</p>	<p><u>Scotland</u></p> <p>Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) Act 2004 and various Commencement Orders.</p>	<p>Scottish Government through SNH.</p> <p>http://www.legislation.gov.uk/asp/2004/6/contents</p>
	<p>Conservation of natural habitats and of wild fauna and flora (Habitats Directive) 92/43/EEC</p>	<p><u>England</u></p> <p>The Conservation (Natural Habitats, &c.) Regulations 1994 as amended by the Conservation of Habitats and Species Regulations 2010</p> <p><u>Scotland</u></p> <p>The Conservation (Natural Habitats, &c.) Regulations 1994 as amended in Scotland by the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004 No. 475; 2007 No.80; 2008 No. 17 & 2008 No.425.</p> <p><u>Offshore England & Scotland</u></p> <p>Offshore Marine Conservation (Natural Habitats & c.) Regulations 2007 as amended by The Offshore Marine Conservation (Natural Habitats, &c.) (Amendment) Regulations 2010</p> <p>Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001</p>	<p>Defra through a number of agencies namely Natural England, but with the MMO, EA, IFCAs and other competent authorities.</p> <p>http://www.legislation.gov.uk/uksi/1994/2716/contents/made</p> <p>http://www.legislation.gov.uk/uksi/2010/490/contents/made</p> <p>Scottish Government through SNH and other competent authorities.</p> <p>http://www.legislation.gov.uk/ssi/2004/475/contents/made</p> <p>Defra and the Scottish Government through JNCC and other enforcement agencies.</p> <p>http://www.legislation.gov.uk/uksi/2007/1842/contents/made</p> <p>http://www.legislation.gov.uk/uksi/2010/491/contents/made</p>

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ENGLISH & SCOTTISH REGULATORY FRAMEWORK	REGULATORY AUTHORITIES
		as amended by the Offshore Petroleum Activities (Conservation of Habitats) (Amendment) Regulations 2007	http://www.legislation.gov.uk/ukxi/2001/1754/pdfs/ukxi_20011754_en.pdf http://www.legislation.gov.uk/ukxi/2007/77/contents/made
Ballast Water	Ballast Waters Management - IMO International Convention for the Control and Management of Ships Ballast Water and Sediments, London - 2004 (BWM Convention);	<u>England & Scotland</u> Marine Guidance Notes (MGNs): <ul style="list-style-type: none"> MGN 81 (M+F) - Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens MGN 363 (M+F) - The Control and Management of Ships' Ballast Water and Sediments <p>MGNs have been written due to the adoption of the 2004 BWM Convention, and the development of new supporting Guidelines. The MGNs provide information and interim guidance for use until the Convention has been implemented and the UK ratifies the Convention, after developing domestic legislation.</p> <p>Strategies and Reviews:</p> <ul style="list-style-type: none"> Ballast Water Management Strategy for North West Europe (scoping study) 	Department for Transport through the Maritime & Coastguard Agency (MCA) http://www.dft.gov.uk/mca/mgn0081.pdf http://www.dft.gov.uk/mca/mgn_363.pdf http://www.seas-at-risk.org/1images/Microsoft%20Word%20-%20ospar%20ballast%20water%20management%20report%202006.pdf
Invasive Alien Species	Invasive Alien Species (IAS) - Global Invasive Species Programme (GISP); - IAS – International obligations under the Convention on Biological Diversity (CBD); Management tools used to monitor IAS. <ul style="list-style-type: none"> EU Strategy on Invasive Alien Species 	<u>England & Scotland</u> Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 Nature Conservation (Scotland) Act 2004 Natural Environment and Rural Communities Act 2006 Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 Import of Live Fish Act 1980 and Import of Live Fish (Scotland) Act 1978 Fish Health Regulations 1992; Fish Health (Amendment) Regulations 1997 Strategies and Reviews: <ul style="list-style-type: none"> Review of Non-Native Species Policy (Defra, 2003) Invasive Non-native Species Framework Strategy (Defra, 2008) 	Defra through the Advisory Committee on Releases to the Environment (ACRE). Also the Non-Native Species Secretariat within the Great Britain Non-Native Species (NNS) Programme Board. Driven through the national statutory nature conservation bodies, the Joint Nature Conservation Committee, the Environment Agency, the Scottish Environment Protection Agency, plant health inspectors and others. http://www.legislation.gov.uk/asp/2004/6/contents http://www.legislation.gov.uk/ukpg/a/2006/16 http://www.legislation.gov.uk/ukpg/a/1980/27/contents http://archive.defra.gov.uk/wildlife-pets/wildlife/management/non-native/documents/review-report.pdf https://secure.fera.defra.gov.uk/n

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ENGLISH & SCOTTISH REGULATORY FRAMEWORK	REGULATORY AUTHORITIES
			onnativespecies/index.cfm?sectionid=55
Fisheries	Common Fisheries Policy	<p><u>England & Scotland</u></p> <p>Sea Fisheries Act 1968</p> <p>Sea Fisheries Regulation Act 1966 as amended by Environment Act 1995</p> <p>Sea Fisheries (Shellfish) Act 1967 as amended by: Marine and Coastal Access Act 2009 (England) & Marine (Scotland) Act 2010 (Scotland)</p> <p>Sea Fish (Conservation) Act 1967 as amended by Sea Fisheries (Wildlife Conservation) Act 1992 & Environment Act 1995 & Marine and Coastal Access Act 2009 (England) & Marine (Scotland) Act 2010 (Scotland)</p> <p>Salmon and Freshwater Fisheries Act 1975</p> <p>Fishery Limits Act 1976 as amended by: Fishery Limits Order 1997 & 1999</p> <p>Fisheries Act 1981</p>	<p>Inshore: Defra through Inshore Fisheries Conservation Authorities (IFCA) from HWM to 6 nm</p> <p>Offshore: Defra through MMO (6nm to UKCS)</p> <p>http://www.legislation.gov.uk/ukpga/1968/77/contents</p> <p>http://www.legislation.gov.uk/ukpga/1966/38/contents</p> <p>http://www.legislation.gov.uk/ukpga/1995/25/contents</p> <p>http://www.legislation.gov.uk/ukpga/1967/83/contents</p> <p>http://www.legislation.gov.uk/ukpga/1967/84/contents</p> <p>http://www.legislation.gov.uk/ukpga/1992/36/contents</p> <p>http://www.legislation.gov.uk/ukpga/1975/51/contents</p> <p>http://www.legislation.gov.uk/ukpga/1976/86/contents</p> <p>http://www.legislation.gov.uk/ukpga/1981/29/contents</p>
		<p><u>Scotland</u></p> <p>Inshore Fishing (Scotland) Act 1984 as amended by Environment Act 1995 & Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003</p> <p>Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Scotland) Order 2004</p> <p>Aquaculture and Fisheries (Scotland) Act 2007</p>	<p>Inshore: Scottish Government through Marine Scotland & Inshore Fisheries Groups (IFGs) from HWM to 12 nm</p> <p>Offshore: Scottish Government & Defra (12nm to UKCS)</p> <p>http://www.legislation.gov.uk/ukpga/1984/26/contents</p> <p>http://www.legislation.gov.uk/asp/2003/15/contents</p> <p>http://www.legislation.gov.uk/ssi/2004/276/contents/</p> <p>http://www.legislation.gov.uk/asp/2007/12/contents</p>
Energy and Climate change	<p>EU Climate Change Policy</p> <p>European Renewable Energy Directive 2009/28/EC which amends and subsequently repeals Directives 2001/77/EC and 2003/30/EC</p>	<p><u>England & Scotland</u> (unless listed separately below)</p> <p>Climate Change Act 2008</p> <p>Climate Change and Sustainable Energy Act 2006</p> <p>Petroleum Act 1998</p> <p>Energy Act 2004 as amended by Energy Act 2008 & 2010</p> <p>Electricity Act 1989</p>	<p>Department of Energy and Climate Change (DECC), Defra and the Crown Estate</p> <p>http://www.legislation.gov.uk/ukpga/2008/27/contents</p> <p>http://www.legislation.gov.uk/ukpga/2006/19/contents</p> <p>http://www.legislation.gov.uk/ukpga/1998/17/contents</p>

TOPIC	EUROPEAN REGULATORY FRAMEWORK	ENGLISH & SCOTTISH REGULATORY FRAMEWORK	REGULATORY AUTHORITIES
		<p>Planning Act 2008</p> <p>Marine and Coastal Access Act 2009</p> <p>Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2000 as amended in 2007</p> <p>Strategy Documents:</p> <p>National Renewable Energy Action Plan for the United Kingdom</p>	<p>http://www.legislation.gov.uk/ukpga/2008/32/contents</p> <p>http://www.legislation.gov.uk/ukpga/1989/29/contents</p> <p>http://www.legislation.gov.uk/ukpga/2008/29/contents</p> <p>http://www.legislation.gov.uk/uksi/2000/1927/contents/made</p> <p>http://www.decc.gov.uk/assets/decc/what%20we%20do/uk%20energy%20supply/energy%20mix/ren-ewable%20energy/ored/25-national-renewable-energy-action-plan.pdf</p>
		<p><u>Scotland</u></p> <p>Climate Change (Scotland) Act 2009</p> <p>Marine (Scotland) Act 2010</p> <p>The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 as amended in 2008</p>	<p>Marine Scotland & Crown Estate</p> <p>http://www.legislation.gov.uk/asp/2009/12/contents</p> <p>http://www.legislation.gov.uk/ssi/2000/320/contents/made</p>