

Addressing Environmental Crimes and Marine Pollution in the EU

Droit au Droit Right to Law

Compendium of International and EU Law Instruments



Acknowledgments

The purpose of this CD Rom is to provide to judges, prosecutors, forensic officers and other legal practitioners, an overview of the existing international and EU legal instruments and rules aimed at tackling environmental crimes and in particular marine pollution.

This publication draws upon the materials of a training course for legal professionals from selected EU Member States as well as countries on the road to EU membership, geographically located along the coast of the Adriatic sea (namely Italy, Bulgaria, Albania, Montenegro, Croatia), which was organised by the Department of Legal Studies of the University of Salento, in partnership with The Center for the Study of Democracy and Droit au Droit. The purpose of the training sessions, held in Lecce, Italy, and Sofia, Bulgaria, was to train legal professionals on the EU legislation and jurisprudence on environmental crimes in order to strengthen their knowledge and competence in the sector as well as their capacity to contribute to their effective enforcement.

It contains a presentation of the most relevant international treaties and conventions related to the matter as well as of the comprehensive legal framework established by the EU to ensure the implementation of its environmental protection policy.

This publication is a part of the "Judicial Training and Research on European crimes against the environment and maritime pollution" project, supported by the European Commission's Directorate-General for Justice.

For more information and recent updates (including case studies and relevant domestic legislation in the target countries) on the Project please visit http://www.judt.unisalento.it/.

Authors: Nicola Giovannini, Scientific Coordinator Luigi Melica, Scientific Coordinator Marco Giannotta, Researcher Malena Zingoni, Researcher



Special thanks to institutions and persons who gave support, information, comments.



This publication has been produced with the financial assistance of the European Commission. The information expressed therein reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information.

© 2013, Droit au Droit 25 avenue Molière, B-1190 Brussels tel.: (+32) 2 548 39 15, fax: (+32) 2 511 81 00 www.dadinternational.org

Contents

1. Inter	rnational Law on environmental and marine pollution	1
1.1.	Environmental (marine) pollution as an international phenomenon	1
1.2.	Protecting environment through international law	5
1.3.	The second generation of international conventions and the United Nations Convention on the Law of the Sea (UNCLOS)	Э
1.4.	The responsibility of States in the fight against pollution and various forms of pollution covered by UNCLOS10)
1.5.	International Agreements of a universal character13	3
1.6.	International Regional Agreements	7
2. EU E	Environmental Law	9
2.1.	The evolution of the European environmental law19	9
2.2.	Guiding principles of EU environmental policies23	3
2.3.	"The polluter pays" principle. The criteria of environmental responsibility	5
2.4.	The 2004/35/CE Directive on environmental liability with regard to the prevention	5
2.5.	The 2008/99/CE Directive and the protection of the environment through criminal law	3
2.6.	The EU Strategy for the protection of the marine environment	9
2.7.	EU response to the Erika oil tanker incident	1
2.8.	Directive 2008/56/EC as a framework for Community action in the field	3
2.9.	The protection of the sea through criminal law	1
List of	Annexes	7

1. International Law on environmental and marine pollution

1.1. Environmental (marine) pollution as an international phenomenon.

Since the early seventies, as a result of the growing process of industrialization that invests much of the globe, the issue of pollution and protection of the (marine) environment is at the heart of the international debate. States launched a real race towards the codification of universal rules which, under the form of international conventions, universal agreements and regional treaties, represent today the basis of an "international environmental law"¹.

The origin of the international legislation in the field of environmental protection lies in the arbitral sentence made in 1941 between the United States and Canada in the Trail Smelter case².

In the Arbitration Agreement related to the case, Canada expressly recognized that it breached the general principle of customary international law³, according to which each State, in the use of its own territory, has the obligation not to cause damage to the territory of another State (prohibition of transboundary pollution)⁴.

Another relevant customary international regulation is the one concerning the obligation of cooperation among States. On the topic: Lake Lanoux Arbitration (France v. Spain), Arbitral Tribunal, 16 November 1957: "Consultations and negotiations between the two States must be genuine, must comply with the rules of good faith and must not be mere formalities"- Annex 2; North Sea continental shelf cases (Federal Republic of Germany–Denmark; Federal Republic of Germany – Netherlands), Judgment of 20 February 1969, International Court of Justice: "[the Parties] are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it" - Annex 3; Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972): "International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit by all countries [...] Co-operation through multilateral or bilateral agreements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interest of all States (Principle 24)" - Annex 4; Environmental law guidelines and principles on shared natural resource (United Nations Environment Programme (UNEP), 1978: "It is necessary for States to co-operate in the field of the environment concerning the conservation and harmonious utilization of natural resources shared by two or more States (...) (Principle 1) Exchange of information, notification, consultations and other forms of co-operation regarding shared natural resources are carried out on the basis of the principle of good faith and in the spirit of good neighbourliness and in such a way as to avoid any unreasonable delays either in the forms of cooperation or in carrying out development or conservation projects (Principle 7)" - Annex 5; United Nations Convention on the Law of the Sea (Montego Bay, 1982): "States shall cooperate with each other in the conservation and management of living resources in the areas of the high seas. States whose nationals exploit identical living resources, or different living resources in the same area, shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned (...) (art. 118)" - Annex 6; Convention on environmental impact assessment in a transboundary context, Espoo (Finland), 25 February 1991 - Annex 7; Convention on the transboundary effects of industrial accidents (Helsinki, 1992) – Annex 8; The Rio Declaration on Environmental and Development (Rio de Janeiro, 1992): "States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem (...) (Principle 7) Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority (Principle 17) States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith (Principle 19)" - Annex 9; Gabcikovo-Nagymaros Project Case (Hungary-Slovakia), Judgment of 25 September 1997, International Court of Justice: "Czechoslovakia, by unilaterally assuming control of a shared resource, and thereby depriving Hungary of its right to an equitable and reasonable share of the natural resources of the Danube (...) failed to respect the proportionality which is required by international law (par. 85)" - Annex 10; Convention on the Law of the Non-navigational Uses of International Watercourses (General Assembly of the United Nations, 1997): "Factors relevant to equitable and reasonable utilization 1.Utilization of an international watercourse in an equitable and reasonable manner (...) requires taking into account all relevant factors and circumstances, including: (a) Geographic, hydrographical, hydrological, climatic, ecological and other factors of a natural character; (b) The social and economic needs of the watercourse States concerned; (c) The population dependent on the watercourse in each watercourse State; (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States; (e) Existing and potential uses of the watercourse; (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect; (g) The availability of alternatives, of comparable value, to a particular planned or existing use. 2. In the application of article 5 or paragraph 1 of this article, watercourse States concerned shall, when the need arises, enter into consultations in a spirit of cooperation. 3. The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole (art. 6) - Annex 11; Prevention of Transboundary Harm from Hazardous Activities (International Law Commission, United Nations, 2001) – Annex 12; The Mox plant case (Ireland v. United Kingdom), Judgment of 3 December 2001, International Tribunal for the law of the sea – Annex 13; Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore), Decision of 1 September 2005, UN Reports of International Arbitral Awards - Annex 14.

On the topic of transboundary pollution see: Island of Palmas case (Netherland v. USA), 4 April 1928, UN Reports of International Arbitral Awards: "territorial sovereignty (...) has as corollary a duty: the obligation to protect within the territory the rights of other States, in

¹ Cfr. B. Caravita, "Diritto dell'ambiente", Bologna - 2001, p. 79.

² Trail smelter case (United States, Canada), 16 April 1938 and 11 March 1941: "No State has the right to use or permit to use of its territory in such a manner as to cause Injury by fumes in or to territory of another or the properties of persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence" – Annex 1.
³ Another relevant customary international regulation is the one concerning the obligation of cooperation among States. On the tonic: Lake

An important distinction is being made between "transnational pollution"⁵ (the harmful event occurs within a state, but also produces harmful consequences beyond its borders) and "cross-border pollution" (the dangerous or polluting substance extending across the national borders).

Special case of transboundary pollution is the marine pollution by hydrocarbons. There is, in this case, an international regulation based on the principle of *channelling liability*⁶, principle enshrined in various international conventions, in order to facilitate the exercise of industrial and scientific activities⁷. According to this principle, a higher standard of responsibility is allocated to whom exercises the activity (through, for example, the presumption of liability, or the assertion of absolute liability), limiting at the same time the economic terms of responsibility.

Other phenomena of transboundary pollution to be considered are mainly those that occur in the atmosphere (toxic emissions, acid rain, radiation from nuclear power plants) and in international watercourses (polluting discharges or extraordinary events).

Still on the subject of transboundary pollution, it is worth to mention the Convention on the Transboundary Effects of Industrial Accidents, stipulated at Helsinki on 17 March 1992⁸, that defines such accidents as "an event resulting from an uncontrolled development in the course of any activity involving hazardous substances either: i) in an installation, for example during manufacture, use, storage, handling, or disposal; ii) during transportation, in so far as it is covered by paragraph 2 (d) of Article 2". This convention is meant to address the need to "promote active international cooperation among the States concerned before, during and after an accident, to enhance appropriate policies and to reinforce and coordinate action at all appropriate levels for promoting the prevention of, preparedness for and response to the transboundary effects of industrial accidents"⁹. Taking into account of the

particular their right to integrity and inviolability" - Annex 15; The Corfu Channel Case, Judgment of 9 April 1949, International Court of Justice: "(...) every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States" - Annex 16. See also the following declarations and conventions: Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972), Principle 21: "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction" - Annex 4; United Nations Convention on the Law of the Sea (Montego Bay, 1982): "States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment (art. 193). States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention (art. 194, par. 2)" - Annex 6; The Rio Declaration on Environmental and Development (Rio De Janeiro, 1992): "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national (Principle 2)" - Annex 9; Nuclear tests case (New Zealand v. France), Judgment of 20 December 1974, International Court of Justice: "[the Court's conclusion was] without prejudice to the obligations of States to respect and protect the natural environment" (parag.64)" - Annex 17; Legality of the Threat or use of nuclear weapons, Advisory Opinion of 8 July 1996, International Court of Justice, Report of Judgments, advisory opinions and orders, pp. 241-242, par. 29: "The Court recognizes that the environment is under daily threat and that the use of nuclear weapons could constitute a catastrophe for the environment. The Court also recognizes that the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment" - Annex 18.

⁵ Examples of the transnational pollution are incidents that occurred in Seveso and Bhopal. The Seveso accident, represented by the unexpected formation and emission of dioxins from an industrial activity, showed the existence of unforeseen and accidental industrial risks, not covered by any legislation. In the legal case arising from the Bhopal disaster, which caused the death of 2500 people and tens of thousands of people injured, the Supreme Court of India condemned the Union Carbide Company, which owned the plant, to pay 470 million\$ to the victims.

⁶ International Convention on Civil Liability for Oil Pollution Damage (CLC), Brussels, 1969 – Annex 19. On the topic see also The civil liability for damages of oil marine pollution – Annex 20.

⁷ This is the case for nuclear activities, where the liability is allocated to the operator of the installation or of the nuclear ship (Convention on Third Party Liability in the Field of Nuclear Energy (OECD, Paris, 1960) - *Annex 21*). See also Vienna Convention on Civil Liability for Nuclear Damage, as amended by the protocol of 12 September 1997 – *Annex 22*; Brussels Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters, 1968 – *Annex 23*. On the topic: *Civil liability resulting from transfrontier environmental damage: a case for the Hague Conference? – Annex 24*.

⁸ Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki, 1992) – Annex 26.

⁹ The Convention applies to: prevention of and response to industrial accidents capable of causing transboundary effects, including the effects of such accidents caused by natural disasters; international cooperation concerning mutual assistance, research and development, exchange of information and exchange of technology in the area of prevention of, preparedness for and response to industrial accidents. This Convention does not apply to: nuclear accidents and radiological emergencies; accidents at military installations; dam failures, with the exception of the effects of industrial accidents caused by such failures; land-based transport accidents; accidental release of genetically modified organisms; accidents caused by activities in the marine environment, including seabed exploration or exploitation; spills of oil or other harmful substances at sea.

polluter-pays principle as a general principle of international environmental law, it also expressly underlines principles of international law and custom, such as the principles of good-neighbourliness, reciprocity, non-discrimination and good faith.

1.2. Protecting environment through international law

The Seventies are, in the international arena, the period during which the attention and the concern towards environmental problems moved to the political field, contributing to the realization of a series of projects and interventions never seen before. The main stages through which the United Nations Organisation consolidated an environmental policy are: the Stockholm Conference on the Human Environment in 1972¹⁰, the establishment of UNEP in 1973, the Brundtland report in 1987¹¹, the Conference on Environment and Development in Rio de Janeiro in 1992¹².

At the international level and in the field of environmental (marine) protection, it is usual to consider the conventions

¹² The Rio Declaration on Environmental and Development (Rio De Janeiro, 1992) – *Annex* 9. The transition from a formal level of cooperation to a substantial and programmatic implementation of an environmental policy is carried out with the convening of the United Nations Conference on Environment and Development, held in Rio de Janeiro, on 3-14 June 1992. Considering the complexity of the negotiations that took place, the UNCED represented an unprecedented step towards the affirmation of a concrete commitment by the international community to the cause of environmental protection.

The objectives of the Conference were supposed to include: the approval of a declaration of fundamental rights of the environment (the Earth Charter) identifying the rights and responsibilities of States and social actors, three international conventions (on forests, climate and biodiversity), a joint program of joint commitments called "Agenda 21" as well as precise technical and financial commitments in the field of international cooperation.

The main document is undoubtedly the so-called "Agenda 21". In fact, it expresses the most mature synthesis of environmental culture by proposing innovative programs, focused on the idea of "sustainable development". However, the importance of Agenda 21 could also be considerably questioned, considering its non-existent legal status and the lack of financial coverage of its programs.

The UNCED also adopted the two conventions on climate and biodiversity. While, due to the strong opposition of tropical countries affected in their major economic interests, the planned convention on forest is replaced by a declaration of non-binding principles.

The rejection of the Earth Charter is the main evidence of the reluctance of states, especially industrialized countries, to implement a real environmental policy capable to direct the entire production system towards the integration between environmental protection and economic development needs. On the other hand, especially in comparison with the Stockholm Conference of 1972, the outcomes of UNCED may also be valued positively. Not only because of the participation of over a hundred heads of state and government, but for having pointed out the links between environmental and socio-economic policies, and thus overcoming the idea that the solution of environmental problems was exclusively linked to technological procedures.

The years following the Summit of Rio de Janeiro are characterized by an economic downturn, causing a general tendency to the reduction of resources for the implementation of programs in the fields of environment and development.

The Conferences on Climate, held in Berlin in 1995, and in Kyoto in 1997, represented further steps towards the development of a global policy of the United Nations aimed at reducing emissions of greenhouse gases responsible for the planet warming. The achievement of this goal is recognized by all governments, but none of them successively adopted significant national policies, due to the strong opposition of domestic economic interests that also affected the pace of negotiations. The "spirit of Rio", therefore, failed to promote the much desired mobilisation of consciences. The current policy of the United Nations Environment and Development is in a total stalemate.

¹⁰ Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972) - Annex 4. The declaration represents the formal start of UN action in the environmental field. Its closing statement lays down a set of fundamental principles whose relevance should be stressed. In fact the first one recognizes as a human fundamental right, along with the rights to freedom and equality, the right "adequate conditions of life, in an environment of a quality" and also affirms the human responsibility to "protect and improve the environment for present and future generations". The second principle states the need to safeguard through careful planning or management the "natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems ". The following principles (third to seventh) concern: the need to maintain and to improve the capacity of the earth to produce vital renewable resources, conservation of wild species and their habitats, the management of renewable resources to prevent their exhaustion, and prevention of pollution of the seas by discharge of toxic substances or of other hazardous substances. Principles fourteen to twenty are dedicated through sustainable development compatible with the need to protect and improve environmental quality, recommending to undertake appropriate processes of rational planning for human settlements and urbanization, demographic policies, resource management, scientific research and education. Finally, principle twenty-first reaffirms, as already stated in the UN charter, the sovereign right of States to exploit their own resources pursuant to their own environmental policies and, at the same time, their responsibility to ensure that activities within their jurisdiction or control "do not damage the environment of other States or of areas beyond the limits of national jurisdiction".

Report of the World Commission on Environment and Development, Growth Harlem Brundtland, Oslo, 20 March 1997 – Annex 27. In 1973, the UN established the international agency for the environment, UNEP, headquartered in Nairobi. According to the initial intention of the General Assembly, UNEP should have represented a focal point for coordination within the UN system and not merely an executive agency. However, the work of UNEP faced a number of difficulties, the most critical one being a reduced availability of funds. Despite this, the contribution of UNEP to the definition of international and regional environmental policies proved to be significant in some areas. Indeed, by using the tools of education, information, research and promotion of negotiations, UNEP imposed to the agenda of the United Nations the issues of desertification, marine pollution, hazardous wastes and biodiversity. A further turning point in the international debate on environment occurred with the establishment of the United Nations World Commission on Environment and Development. The Commission submitted a report in 1987 entitled "Our Common Future", also known as the Brundtland report. The importance of this report derives from the definition of the concept of "sustainable development" and the main environmental issues at the global level, while its limitations lie in the lack of identification of action plans to achieve the objectives set out herein.

adopted in the 1950s and the 1960s as "first generation" agreements, characterized by the sole expectation of reciprocal rights and obligations between the Contracting States, without tackling the issue of channelling of objective liability to the individual operator alone, in case of damage resulting from pollution incidents.

The expedient used at this stage is, therefore, to transfer the State responsibility to the operator, since it is not always easy to channel to a State the liability for damage caused by pollution.

The London Convention of 12 May 1954¹³ and the Brussels Convention on Civil Liability of operators of nuclear ships of 25 May 1962 pertain to this category of "first generation" agreements.

Other agreements, established at regional level, were then stipulated into the late 1960s with a reference to certain areas of the sea, such as the Bonn Agreement of 9 June 1969¹⁴ concerning cooperation in fighting pollution by hydrocarbons in the waters of the North Sea. Regional agreements of this kind proliferated, including in particular the Copenhagen Agreement Concerning Cooperation in Taking Measures Against Pollution of the Sea by Oil of 16 September 1971, the Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft of 15 February 1972 and, also, the Paris Convention for the Prevention of Marine Pollution from Land-based Sources of 4 June 1975 as well as different other bilateral agreements.

In the early 1970s, the occurrence of catastrophic maritime accidents as those involving the supertankers Torrey Canyon (1967)¹⁵ and Amoco Cadiz (1978)¹⁶, triggered a stronger interest of the international community to the preservation of the environmental marine environment, with a specific reference to the principle of liability for pollution. This increased attention derived in the signing of international conventions in the field of responsibility of States, also called "second generation" agreements.

At this stage, the understanding and prediction of responsability is defined, according to Anglo-Saxon doctrine and practice, as a duty of supervision and control imposed to States parties, through their internal juridical systems, in order to ensure the protection, both by preventive and repressive means, of the marine environment from pollution. However we still lack the prediction of a real and true responsibility, which means the obligation to compensate the damage caused, the so-called "liability"¹⁷.

We should therefore bear in mind this limitation when considering the following instruments: the Declaration of Principles adopted by the Conference on the Human Environment in Stockholm in 1972, in which the environment (including the marine one) is qualified as "a common heritage of humanity"¹⁸; Article 30 of the Resolution n. 3281 adopted by the General Assembly of the United Nations on 12 December 1974 containing the Charter of Economic Rights and Duties of States¹⁹; the Resolution n. 3133 - adopted by the same assembly on 13 December 1973 - relating to the protection of the marine environment²⁰; and - most importantly - the Declaration on Environment and Development, adopted at the United Nations Conference on Environment and Development, held in Rio de Janeiro on 3-14 June 1992²¹.

¹³ International Convention for the prevention of pollution of the sea by oil (London, 1954) – Annex 28. Successively substituted by the International Convention for the Prevention of Pollution from Ships (1973), as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) – Annex 29.

¹⁴ Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances (Bonn, 1969) – Annex 30. On the topic, see also: Angela Carpenter, "Bonn Agreement Aerial Surveillance programme Trends in North sea oil pollution 1986-2004" – Annex 31.

¹⁵ The wreck of the supertanker SS Torrey Canyon affected hundreds of miles of coastline in the UK, France, Guernsey, and Spain. The Torrey Canyon oil spill is one of the world's most serious oil spills which left an international legal and environmental legacy that lasted decades.
¹⁶ Amoco Cadiz was a very large crude carrier under the Liberian flag of convenience owned by Amoco that ran arround on Portsall Pocks.

¹⁶ Amoco Cadiz was a very large crude carrier under the Liberian flag of convenience owned by Amoco, that ran aground on Portsall Rocks, 5 km from the coast of Brittany, France, on 16 March 1978, and ultimately split in three and sank, all together resulting in the largest oil spill of its kind in history to that date.

¹⁷ In addition to the international liability of the State, the UNCLOS Convention also generically provides for the responsibility of the operator, creating, in this way, a shift of responsability from the State level to the shipowner one, or in any case, to the shipping company which has caused the damage.

¹⁸ Another fundamental principle is Principle 21, which states that States have "to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".

¹⁹ "Charter of Economic Rights and Duties of States", UN General Assembly Resolution 3281 (1974) – Annex 32.

²⁰ Resolution on the protection of the marine Environment, UN General Assembly Resolution 3133 (1973) – Annex 33.

²¹ The Conference also led to the adoption of the United Nations Framework Convention on Climate Change (UNFCCC or FCCC). One of the first tasks set by the UNFCCC was for signatory nations to establish national greenhouse gas inventories of greenhouse gas (GHG)

These documents are acts deprived of immediate legally-binding character, but - as a result of long and complex negotiation processes carried out at a global scale - able to direct the activities of the Member States and the relationships between them²².

In relation to marine environment protection, the international conventions can be divided into:

- Conventions introducing the prohibition to discharge hydrocarbons (or their mixtures) from ships or platforms (either fixed or mobile), used for the exploration and exploitation of hydrocarbons in the seabed. In case of non-compliance, these agreements refer to national legal systems, which means that the punishment measures should be defined according to the law of the State of registration. These are the conventions of London of 1954 and the Convention for the Prevention of Pollution from Ships (MARPOL 1973-1978).
- Conventions providing for the coastal state "duty to take all appropriate measures for the protection of living resources in the sea from harmful agents", sanctioning, in case of default, the international liability for damage caused by third parties within scope of their jurisdiction. In this category, we should also mention conventions that allow the states to adopt also, on the high seas, measures deemed necessary to prevent, mitigate or eliminate serious and imminent risks that may arise in their coasts as a result of oil spills caused by maritime incidents. These are the Brussels Convention of 29 November 1969 and the Convention on the Law of the Sea of Montego Bay in 1981.
- Conventions ruling the disposal in sea of wastes and other harmful substances from ships, airplanes, platforms or other man-made/artificial structures, as well as pollution from land-based sources. These are the London Convention of 1972 and the Paris Convention of 1974.
- International Convention on Oil Pollution Preparedness, Response and Cooperation, signed in 1990 at IMO, which predisposes a complex system of technical cooperation between States parties in the fight against pollution. Various regional agreements should also be mentioned, in particular the Convention of 26 February 1976 relating to the protection of the Mediterranean Sea and that also includes the internal waters and marshes communicating with the sea. The pollution of the Mediterranean area (regardless of the polluting substance as well as the forms and modalities of pollution) is addressed in this agreement with the requirement of a cooperation between States parties at a scientific, technological and interventional level in various critical situations according to common programs.
- Conventions on civil liability: The International Convention on Civil Liability for Oil Pollution Damage (Brussels, 29 November 1969)²³, renewed in 1992 and often referred to as the CLC Convention, is an international maritime treaty that was adopted to ensure that adequate compensation would be available where oil pollution damage was caused by maritime casualties involving oil tankers (i.e. ships that carry oil as cargo). The 1969 CLC entered into force in 1975 and lays down the principle of strict liability (i.e. liability even in the absence of fault) for tanker owners and creates a system of compulsory liability insurance. Claims for compensation for oil pollution damage (including clean-up costs) may be brought against the owner of the tanker which caused the damage or directly against the owner's P&I insurer. The tanker owner is normally entitled to limit his liability to an amount which is linked to the tonnage of the tanker causing the pollution. The 1971 Fund Convention²⁴ provided for the payment of supplementary compensation to those who could not obtain full compensation for oil pollution damage under the 1969 CLC. The International Oil Pollution Compensation Fund (1971 IOPC Fund) was set up for the purpose of administering the regime of compensation created by the Fund Convention when it entered into force in 1978. In 1992, a Diplomatic Conference adopted two protocols amending the 1969 CLC and 1971 Fund Convention, which became the 1992 CLC and 1992 Fund Convention. These 1992 Conventions, which provide higher limits

emissions and removals. The parties to the convention have met annually from 1995 in Conferences of the Parties (COP) to assess progress in dealing with climate change. In 1997, the Kyoto Protocol was concluded and established legally binding obligations for developed countries to reduce their greenhouse gas emissions.

²² B. Caravita, "Diritto dell'ambiente", Bologna - 2001, p. 81 ; P. Fois, "Ambiente (tutela dell') nel diritto internazionale", in "Dig. Disc. Pubb.", Torino – 1989, vol. III, p. 219.

²³ International Convention on Civil Liability for Oil Pollution Damage (Brussels, 1969) - Annex 19. See also the Convention of on Civil Liability for Oil Pollution Damage resulting from Exploration for and exploitation of Seabed Mineral Resources (17 December 1976), introducing a case of strict liability for operators of oil installations located in areas under the jurisdiction of the Contracting States.

²⁴ International Convention on the establishment of an international fund for compensation for oil pollution damage (1971) – Annex 34.

of compensation and a wider scope of application than the original conventions, entered into force on 30th May 1996.

- Conventions on hazardous and Noxious Substances (HNS)²⁵. The Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol) follows the principles of the OPRC Convention and was formally adopted by States already Party to the OPRC Convention at a Diplomatic Conference held at IMO headquarters in London in March 2000. This Protocol regulates the transportation of hazardous and potentially noxious substances, not necessarily related to hydrocarbons, in relation to the danger that their movement is for the marine environment. The Wreck Removal Convention (WRC)²⁶ is the convention that aims to remove the wreckage of transport associated with hydrocarbons, whose abandonment is a source of pollution.

1.3. The second generation of international conventions and the United Nations Convention on the Law of the Sea (UNCLOS)

A changing trend in the evaluation of issues related to the safeguarding and protection of the sea led to the birth of a "second generation" of international conventions²⁷, such as - for example - the CLC Convention of 29 November 1969 on the intervention in territorial sea in case of accidents that cause or may cause an oil pollution and the Convention of 18 December 1971 - also signed in Brussels - establishing an International Fund for Compensation for Oil Pollution Damage, whose innovative character was to address the delicate issue of the responsibility of States.

However, it was not addressed through the provision of a real obligation to compensate the damage caused to marine environment, but - rather - in terms of a duty, for each participating State, of supervision and control - according to the forms and modalities of individual legal systems - in order to ensure the effective and full protection of the sea through preventive and repressive action. Among the agreements to take into account, the most important one is without any doubt the United Nations Convention on the Law of the Sea, opened for signature at Montego Bay on 30 April 1982²⁸, which dedicates to the theme of protection and preservation of the sea the entire Part XII, comprised of 46 articles (192-237) and divided into eleven sections. Article 192 imposes on the States parties²⁹ the fundamental "obligation to protect and to preserve the marine environment from any kind of pollution". Pollution is clearly defined as a direct or indirect introduction by man of substances or energy into the marine environment when this creates adverse effects on the biological resources, dangerous risks to the human health, interference with other legitimate uses of the sea, including fishing, degradation of the quality of the sea.

According to certain authors, this "framework" or "umbrella"³⁰ Convention only contains provisions amounting to mere declarations of principle. According to others³¹, and perhaps more appropriately, it represents the source of real and true rules, of universal character, binding the content of national legislations and meant to be completed by various regional and sectorial agreements.

The first four sections (out of the eleven aforementioned) provide for the obligations that are imposed on all signatory states and, among these, the obligation to take appropriate measures to prevent, reduce or control pollution and the duty to inform the States that can be affected by episodes of marine pollution³².

²⁵ Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol), IMO, 2000 – *Annex 35*.

²⁶ International convention on the removal of Wrecks (Nairobi, 2007) – Annex 36.

²⁷ J. Passmore, "La nostra responsabilità per la natura", Milano – 1991.

²⁸ The UNCLOS (or Montego Bay) Convention entered into force on 16 November 1994, twelve months after the deposit of the sixtieth instrument of ratification by Guyana, together with the supplementary Agreement relating to the Implementation of Part XI of the Convention - Annex 6.

²⁹ The fundamental "obligation to protect and preserve the marine environment" from pollution.

³⁰ Starace, "La protezione dell'ambiente marino nella Convenzione delle N. U. sul diritto del mare." in "Diritto internazionale e protezione dell'ambiente marino", Milano – 1983, p. 804.

³¹ Treves, "La Convenzione delle Nazioni Unite sul diritto del mare del 10.12.1992", Milano – 1983, p. 48.

³² C. Angelone, "Ambiente marino e disciplina delle risorse" in Riv. Giur. Ambiente – 2000, Vol. I, p. 159; M. Angeloni – A. Senese, "Principi applicativi dei principali istituti del nuovo diritto del mare", Bari – 1998, pp. 59/75.

The Fifth section further regulates the different obligations imposed on the coastal State in relation to the various forms of pollution.

As a general rule, the jurisdiction and powers of this one are exclusive, at the exception of the concurrent jurisdiction of the flag State and of the International Seabed Authority (ISA) ³³ in relation to international waters.

On the issue of pollution caused by shipping, the flag State has the obligation to adopt a set of rules having at least the same degree of effectiveness as the one developed by the International Maritime Organisation (IMO). This means that beyond territorial waters³⁴ the only rule applicable is the international one.

The Convention also regulates the measures to facilitate the exercise of police powers and control (section seven), the rights of coastal States over ice floe (section eight), the profiles of responsibility (section nine), the exclusion from the scope of application of warships or other State-owned ships used for not commercial purposes (section ten).

Finally, the eleventh section examines the obligations arising from other international instruments in a perspective of harmonisation with the objectives and general principles belonging to the Convention.

1.4. The responsibility of States in the fight against pollution and various forms of pollution covered by UNCLOS³⁵

In addition to the international liability of the State, UNCLOS also generically provides for the responsibility of the operator, creating, in this way, a shift of responsability from the State level to the ship-owner one, or in any case, to the shipping company which has caused the damage³⁶.

More specifically, Article 235, in dealing with the international responsibility of States, merely states that they have an obligation to ensure the respect of their own obligations in the field of prevention and protection of the marine environment, pursuant to their responsibility under international law.

The peculiarity of this provision needs to be properly recognised. On one hand, it imposes a primary rule implying a positive obligation and, on the other hand, it invokes a secondary rule which is deprived of a real and stable content, by referring to a general principle of international law which by nature is "evolutive" and subject to modifications. The article in question does not provide for a real prejudice repair obligation, or rather the hypothesis of objective liability for damage caused to the marine environment, by virtue of which any damage connected with the activity carried out by a State creates its obligation to repair.

Nevertheless, it should be stressed that Article 235, in highlighting that the marine environment is an indivisible and limited good, has laid the legal foundations of a liability towards the entire international Community in case of violation of the rules protecting the marine environment.

In particular when we consider the new relevance attributed to the protection of the marine environment, which is no longer limited to the interest of the individual coastal state, but extended to all States - maritime or not - and led to the establishment, in the Convention under review, of two new principles: the power of the coastal State to intervene in international waters in cases of "massive pollution" and the power to be exercised by the port State in respect of vessels requiring entry after having caused a "serious pollution" of the marine environment, independently of the

³³ The "International Seabed Area" is the seabed and ocean floor, located beyond the limits of national jurisdiction (territorial waters and continental shelf). The task of administering and controlling the exploitation of its resources is entrusted exclusively to the International Seabed Authority, an intergovernmental body established by the Law of the Sea Convention and based in Kingston, Jamaica.

Article 2 of the United Nations Convention on the Law of the Sea (UNCLOS) (Annex 6) states that the sovereighty of a coastal state extends to an adjacent belt of sea, described as the "territorial sea". Pursuant to Article 3 of the Convention, the breadth of this area may be extended up to a limit not exceeding 12 nautical miles. The coastal State has also the exclusive right to exploit all the resources of the continental shelf (Article 77), an area comprising 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.

³⁵ United Nations Convention on the Law of the Sea (UNCLOS), also called Montego Bay Convention – Annex 6.

³⁶ S. Nespor, "Rapporto mondiale sul diritto dell'ambiente", Milano – 1996.

fact that the waters polluted are subject or not to the jurisdiction of that State.

After long negotiations, the following causes of sea pollution were identified and defined:

a) Pollution from land-based sources³⁷, due – in particular – to the discharge of rivers, to coastal or industrial outfalls, and to other sources within the territories of the states, which gives rise to extremely complex technical and legal issues, especially with regard to the regulation of discharge sources and in light of the different conditions of economic development of individual countries.

Article 207 of the Convention imposes an obligation of each State to enact appropriate regulations to prevent, to reduce and to control this form of pollution, also taking into account regional specificities as well as economic potential and needs of developing countries.

b) Pollution caused by seabed activities subject to national jurisdiction, or resulting from exploration and exploitation of marine mineral resources in the marine subsoil or in the continental shelf.

In particular, these activities can lead either to a voluntary and "physiological" pollution, connected to normal plant operations, such as the discharge into the sea of debris and oily sludge, or to accidental and "pathological "pollution, resulting from extraordinary and not predictable events, such as an explosion on a tanker platform³⁸.

In this regard, Article 208 of the UNCLOS Convention provides for coastal States to adopt legislative and administrative regulations and procedures aimed at preventing, reducing and monitoring pollution of the seabed areas under their exclusive jurisdiction; provisions which shall be no less effective than those laid down at an international level.

At regional level, it is also worth mentioning the Protocol aimed at addressing pollution resulting from exploration and exploitation of the continental shelf and the seabed and subsoil³⁹, signed in 1994 in Madrid. This instrument contains a rule that allows the control and the prevention of any harmful actions resulting from exploitation activities, and that obliges the States Parties (only) to take the necessary measures for the elimination of the causes of pollution.

c) Pollution arising from activities conducted in the "Marine Area", as established by the Article 136 of the UNCLOS Convention. No State shall claim or exercise sovereignty or sovereign rights over any part of this Area or its resource, which are proclaimed as "common heritage of mankind".

In particular, such activities related to the exploration and the exploitation of the international seabed, raise particular problems as the mineral resources consist primarily of polymetallic nodules⁴⁰ found on abyssal plains in the deep ocean between 4,000 and 6,000 meters. Nodules lie on the seabed sediment, often partly or completely buried, and cover in some cases more than 70% of the sea floor. Nodules of economic interest have been found in many ocean areas of the Pacific, the Atlantic and the Indian Ocean.

The UNCLOS Convention provides for the establishment of a specific international organisation - the International Seabed Authority – whose mandate is to organize and control all mineral-related activities in the international seabed area beyond the limits of national jurisdiction and to adopt appropriate regulatory measures to prevent that these activities cause harmful effects on the marine environment. Moreover, pursuant to the Article 209, States shall also adopt laws and regulations to prevent, reduce and control pollution of the marine environment from activities in the Area undertaken by vessels, installations, structures and other devices flying their flag or of their registry or operating under their authority.

³⁷ This form of pollution is undoubtedly very pronounced with regard to the Mediterranean Sea, which is the main outlet of several large rivers (Rhone, Po and Nile). The main land-based discharges of wastes are - in particular - produced by industries and urban centres and are located mostly within the northwest Mediterranean, mainly in the area of Barcelona, the Fos-Lavera-Berre port and industrial complex, near Marseille, the area of Genoa and the northern Adriatic Sea and, to a limited extent, the Athens area and the coast of Israel and Lebanon.

³⁸ I. Caracciolo, "La responsabilità dello Stato per l'inquinamento dovuto all'esplorazione ed allo sfruttamento dei fondali marini", in *Diritto marittimo*, 1991, p. 616; Sull'argomento: Treves, "La pollution resultant de l'exploration et de l'exploitation des fonds marins en droit international", in *Annuaire français de droit international*, 1987, p. 828.

³⁹ 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 (Madrid, 1994) – *Annex* 37.

⁴⁰ These resources contain varying amounts of manganese, cobalt, copper and nickel.

d) Pollution by dumping, due to deliberate disposal at sea of wastes or other matter, other than that incidental to the normal operation of vessels, aircraft, and platforms.

This form of pollution is governed - at a global level - by the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972), and - at the regional level – by the Convention for the protection of the Mediterranean Sea against pollution⁴¹ and the Protocol for the prevention of the pollution of the Mediterranean Sea by dumping from ships and aircraft, adopted in Barcelona on 16 February 1976⁴². Both instruments set up a distinction of harmful substances into three categories. A complete ban is imposed on the dumping of the first category of wastes⁴³, while discharge of substances included in the second category (the so-called "grey list") require special permits from the competent national authority, and a generic authorisation is sufficient for the third category.

Article 210 of the UNCLOS Convention expressly provides that each signatory State should adopt laws and regulations to prevent, reduce and control pollution of the marine environment by dumping, in order to ensure, in particular, to ensure that wastes discharges are not carried out without the permission of the competent national authorities. National laws, regulations and measures shall be no less effective than the global rules and standards. Finally, dumping within the territorial sea and the exclusive economic zone or onto the continental shelf shall not be carried out without the express prior approval of the coastal State.

e) Pollution from vessels, resulting from spilling into the sea - unintentionally or as the outcome of accidents - of harmful substances in connection with the shipping activity, which can cause significant devastating effects in the case of merchant ships carrying harmful materials, such as hydrocarbons or chemicals.

The control and prevention of this form of pollution finds is ruled out by the London Convention for the prevention of marine pollution by hydrocarbons (1954), as amended by the Convention on the Prevention of Pollution from Ships (MARPOL 1973/1978)⁴⁴.

In this regard, we should highlight that the rules on structural characteristics of oil tankers and ships over a certain tonnage, which provide that the same must ensure that the appropriate structures are suitable for the storage of oil residues on board.

In particular, for oil tankers of new construction, MARPOL⁴⁵ 1973/1978 provided for the creation of protectively located segregated ballast tanks, which allowed a reduced environmental impact of operations related to loading and unloading of cargo oil, cleaning of cargo oil tanks, and disposal of cargo tank residues⁴⁶.

Subsequently, following the IMO decision of 6 March 1992, MARPOL was amended to make it mandatory for tankers of 5,000 dwt and more ordered after 6 July 1993 to be fitted with double hulls, or an alternative design approved by IMO (regulation 19 in Annex I of MARPOL), while adopting a precise phase-out schedule for single hull tankers ordered prior to that date.

⁴¹ Convention for the protection of the Mediterranean Sea against pollution (Barcelona, 16 February 1976) – Annex 38. Signed 16 February 1976, in force 12 February 1978 (revised in Barcelona, Spain, on 10 June 1995, as the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean).

⁴² Protocol for the prevention of the pollution of the Mediterranean Sea by dumping from ships and aircraft, adopted in Barcelona on 16 February 1976 – Annex 39.

⁴³ The materials listed on the black list, considered as highly potent and hazardous, include mercury, cadmium, plastic, oil products, radioactive waste, and anything that is solely made for biological and chemical warfare.

⁴⁴ Convention on the Prevention of Pollution from Ships (MARPOL 1973/1978) - Annex 29. The MARPOL Convention was adopted on 2 November 1973 at IMO. The Protocol of 1978 was adopted 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 entered into force on 2 October 1983. In 1997, a Protocol was adopted to amend the Convention and a new Annex VI was added which entered into force on 19 May 2005. MARPOL has been updated by amendments through the years.

⁴⁵ During the 37th session of the Marine Environment Protection Committee, held in London, in 1995, new amendments were brought to Part V of MARPOL. These amendments came into force, at international level, on 1 July 1997, and include: the obligation for all vessels of 400 gross tonnes and above, or ships certified to carry 15 or more persons, as well as offshore installations, to prepare Waste Management Plan and maintain Garbage Record Books, according to the Guidelines prepared by the IMO.

⁴⁶ A. Xerri, "Tutela dell'ambiente marino", in "Novissimo Digesto italiano", Torino – 1987, App. VII.

Progressively, more and more stringent measures were introduced, through amendments to MARPOL 1973/1978, such as in 2002, as a result of EC Regulation no. 417/2002 of 18 February 2002, which established a new schedule of compliance for single-hull tankers which, regardless of their flag, are entering into a port or offshore terminal under the jurisdiction of a Member State.

In light of the described detailed regulation on technical standards aimed at the prevention, reduction and control of ship pollution operated by MARPOL, Article 211 of the UNCLOS Convention was limited to impose an obligation for each State to adopt laws and regulations to prevent pollution by ships flying its flag or of its registry, the effectiveness of which should not (once again) be lower than the internationally accepted standards. In addition to this requirement, the Convention provides for the power of the coastal state to enact anti-pollution standards as conditions for access to their harbours and inland waters, as well as - again - rules for the prevention of ships pollution, applicable within the limits of the territorial sea, which must not, however, impede the right to innocent passage of foreign vessels.

The coastal State has, finally, the power to adopt rules for the Prevention of pollution in their own exclusive economic zone⁴⁷, as long as they comply with and implement the international principles and provisions generally accepted.

f) Pollution from or through the atmosphere.

With reference to this particular kind of pollution, the relevant - both customary and covenantal – norms find their origin in the famous arbitral judgment in the Trail Smelter case⁴⁸.

At a global level, the rules assessing and controlling air pollution derive – even if indirectly - from the international agreements on the regime applying to extra-atmospheric space, as well as the conventions on pollution by radioactivity.

Article 212 of the UNCLOS Convention stipulates that States shall adopt laws and regulations as well as take any necessary measures to "prevent, reduce and control pollution of the marine environment from or through the atmosphere, applicable to the air space under their sovereignty and to vessels flying their flag or vessels or aircraft of their registry, taking into account internationally agreed rules, standards and recommended practices and procedures and the safety of air navigation".

1.5. International agreements of a universal character

Three groups of such agreements can be distinguished. Among the first group, we can mention the International Convention for the Regulation of Whaling, signed in Washington on 2 December 1946⁴⁹ and the Convention on the Conservation of Migratory Species of Wild Animals, adopted in Bonn on 2 June 1979⁵⁰.

The first⁵¹ one governs the exploitation of "whale stocks", taking into account the overhunting undergone by this species since the nineteenth century. Initially conceived as a management-driven agreement of the species, it has now taken on the characteristics of a safeguarding agreement, especially thanks to the modifications brought to the "Schedule" of the States Parties meeting at the International Whaling Commission - IWC. The "Schedule", which forms an integral part of the Convention, gathers all the technical rules relating to capture, hunting seasons, exploitable quotas, and may be amended also to proclaim "open and closed areas, including the designation of sanctuaries" (Article 5, paragraph 1).

⁴⁷ The exclusive economic zone (EEZ), as defined in Articles 55 *et seq* of the UNCLOS Convention, is an area beyond and adjacent to the territorial sea, which shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured. In the EEZ, the coastal State has sovereign rights for the purpose of exploring and exploiting, conserving and managing all natural resources, of the waters superjacent to the seabed and of the seabed and its subsoil.

⁴⁸ Dispute between the United States and Canada on the Trail smelter, judgment of the arbitration tribunal of 11 March 1941, in UNRIAA, III, p. 1965: "(...) under the principles of international law (...) no State has the right to use or permit the use of its territory in a manner longer available as to cause injury by fumes in or to the territory of another or the property of persons therein, When the case is of serious Consequence and the injury is established by clear and convincing evidence".

⁴⁹ International Convention for the Regulation of Whaling (Washington, 2 December 1946) – Annex 40.

⁵⁰ Convention on the Conservation of Migratory Species of Wild animals (Bonn, 1979) – Annex 41.

⁵¹ LYSTER, "International Wildlife Law", Cambridge - 1985, pp. 17-38; BIRNIE-BOYLE, "International Law and the Environment", Oxford - 1992, pp. 454-456.

The Parties have provided the establishment of two marine sanctuaries, one in the Indian Ocean (1979) and the other in the waters surrounding the Antarctic continent (1994). The practical result is, however, unsatisfactory since marine sanctuaries, as they have been realized in practice, can hardly be classified as marine protected areas, given that the protection for these sites only consists in banning "commercial whale hunting". As a consequence, these sanctuaries are no more than areas of management of fishery resources.

The Bonn agreement – which only includes indirect reference to specific marine sites - mentions, among the species to be protected, also typically marine animals (such as the monk seal of the Mediterranean) and its provisions also bind Member States whose vessels are operating samples of these species outside the limits of their national jurisdiction.

According to its Article 2, "the Parties ... shall take, individually or in cooperation, appropriate and necessary steps to conserve such species and their habitat" and the subsequent Article 3 provides, in paragraph 4, that "Parties that are Range States of a migratory species⁵² listed in Appendix I shall endeavour: a) to conserve (...) and restore those habitats of the species which are of importance in removing the species from danger of extinction".

These are fully established obligations that require an organic protection of the concerned sites. However, given the absence of any mechanism for objective and international assessment and control, the application of these provisions is left to the discretion of the States, which shall identify the areas worthy of protection and individually determine the relevant protective measures. This gap seriously limits the effectiveness of such agreement, especially as it is designed to protect migratory species, which - disrespectful of national borders - obviously require a common and shared protection, also with reference to the secondary aspects.

The second group of agreements includes the aforementioned United Nations Convention on the Law of the Sea (UNCLOS) and the Convention on Biological Diversity, signed in Rio de Janeiro on 5 June 1992.

With reference to the first one, Article 194, paragraph 5, provides that "the measures taken in accordance with this Part (*i.e.* Part XII on the protection and preservation of the marine environment) 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".

Even in this case, however, the selection of relevant sites as well as the protective measures to be taken is left to the discretionary judgment of the individual state; which means - therefore – that there is no international procedure to assess the significance of the sites and, above all, no preventive mechanism to avoid disputes between the States as to the validity of the measures taken to protect these sites.

A notable exception, however, is that provided for in Article 211, paragraph 6, with reference to the Exclusive Economic Zone, which states that "where the international rules and standards referred to in paragraph 1 are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic, the coastal States after appropriate consultations through the competent international organization with any other States concerned, may, for that area, direct a communication to that organization, submitting scientific and technical evidence in support and information on necessary reception facilities. Within 12 months after receiving such a communication, the organization shall determine whether the conditions in that area correspond to the requirements set out above. If the organization so determines, the coastal States may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for special areas. These laws and regulations shall not become applicable to foreign

⁵² "Range" means all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route (Article 1, F). "Range State" in relation to a particular migratory species means any State (and where appropriate any other Party referred to under subparagraph (k) of this paragraph) that exercises jurisdiction over any part of the range of that migratory species, or a State, flag vessels of which are engaged outside national jurisdictional limits in taking that migratory species (Article 1, H).

vessels until 15 months after the submission of the communication to the organization".

Significantly important is therefore the value attributed to the assessment by the competent international organization (i.e. the IMO), which, in case of a negative result, has the effect to impede that the coastal State may lawfully adopt specific measures for the protection of their EEZ⁵³.

The second Treaty represents, instead, the norms of reference for all national and international initiatives aimed at protecting biological diversity.

Pursuant to Article 8, in fact, "each Contracting Party shall, as far as possible and as appropriate: (a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity; (b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity; (...) (d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings; (e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas".

Nevertheless, the commitments endorsed under this Convention allow – once again – for a strong discretionary role of States Parties, leaving to them the right to determine the procedures for the application of the principles embodied in it.

The third group of agreements dealt with in this section include the Convention on Wetlands of International Importance, signed in Ramsar, on 2 February 1971⁵⁴ and the Convention for the Protection of the World Cultural and Natural Heritage, signed in Paris on 16 November 1972⁵⁵.

The first agreement⁵⁶ relates to the protection of wetlands or damp areas⁵⁷, considered as such and not in terms of safeguarding animal species existing in it: the provisions contained herein also apply to marine areas to the extent that these latter are classified as damp areas⁵⁸.

In particular, each State has the obligation to design at least one damp land set on their territory (at the moment of ratification or accession to the Agreement) to be included in the list referred to in Article 2, and - consequently - may establish new zones or to enlarge those already included (as it may also restrict or eliminate those included in the list, but only for urgent national interests).

According to Article 4, Paragraph 1, "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 not⁵⁹, and provide adequately for their wardening".

Once included into the list, the site has a *status* of special protection, to which all States Parties are required to contribute, including those where the site is not located.

⁵⁶ See BOWMAN, "The Ramsar Convention Comes of Age", in Netherlands International Law Review, 1995, vol. XLII, pp. 1-52.

LEANZA, "Diritto internazionale e diritto interno nella protezione dell'ambiente marino, in "Studi marittimi", n. 24 - 1985, p. 24. On the same topic: REENEN, "Rules of Reference in the New Convention on the Law of the Sea", in "Netherlands Yearbook of International Law" - 1981, p. 9.

⁵⁴ The Convention on Wetlands (Ramsar, Iran, 1971), p. 91 – Annex 42.

⁵⁵ **Convention for the Protection of the World Cultural and Natural Heritage**, adopted by the General Conference at its seventeenth session in Paris, on 16 November 1972 – *Annex 43*.

⁵⁷ A wetland is a land area that is saturated with water, either permanently or seasonally, such that it takes on the characteristics of a distinct ecosystem. Primarily, the factor that distinguishes wetlands from other land forms or water bodies is the characteristic vegetation that is adapted to its unique soil conditions: Wetlands consist primarily of hydric soil, which supports aquatic plants. Main wetland types include swamps, marshes, bogs and fens, including areas of marine water the depth of which during the low tide does not exceed six meters. Subtypes include mangrove, carr, pocosin, and varzea.

⁵⁸ Among the wetlands classified as marine - that were included in the list (see below) - can be mentioned the Banc d'Arguin, designated by Mauritania in 1982, and the Dutch section of the Wadden Sea (North Sea), designated in 1984.

⁵⁹ The inclusion of an area in the list, despite having to meet objective criteria, is made on a unilateral basis without the other parties having a say.

The Ramsar Convention also provided in 1992 for the institution of a Small Grants Fund (SGF)⁶⁰, as a mechanism to assist developing countries and countries with economies in transition to implement the Convention and to support the conservation and wise use of wetland resources, with a strong human and social dimension.

The Paris Convention of 1972 is dedicated to the protection of those sites that are classified as world cultural and national heritage according to the criteria of "outstanding universal value". Pursuant to Article 1 of the Convention, the following shall be considered as "cultural heritage" sites: "works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view", while Article 2 stipulates that shall be considered as "natural heritage": "natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty".

These definitions are general enough to also allow the inclusion of marine areas. In 1981, the World Heritage Committee (WHC) included in the List the Great Barrier Reef of Australia as an area which can be considered as part of both the "natural heritage" and the "cultural one"⁶¹.

The identification of the relevant sites appertains primarily to the States Parties in whose territory the same are located, but - contrarily to the provisions of the Ramsar Convention - the final decision is reserved to the "Intergovernmental Committee for the protection of the world cultural and natural heritage" (WHC), which is called to include⁶² the areas designated by each State party in the "World Heritage List".

More specifically, the Article 5 prescribes that in order "to ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavour, in so far as possible, and as appropriate for each country: (a) to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes; (b) to set up within its territories, where such services do not exist, one or more services for the protection, conservation and presentation of the cultural and natural heritage (...); (...); (d) to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage". Pursuant to Article 4, "each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation of the cultural and natural heritage (...) situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation (...)".

Although, in light of the language used (and particularly the words "will do all it can"), it may seem that the rules mentioned do not impose particularly binding constraints to the signatory States, the binding nature of these provisions has been clearly affirmed in the case *Commonwealth of Australia against the State of Tasmania*⁶³. It should be also noted that according to Article 6, "each State Party to this Convention undertakes not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage referred to in Articles 1 and 2 situated on the territory of other States Parties to this Convention Each".

⁶⁰ This fund consists essentially of voluntary contributions.

⁶¹ According to the data of the report on marine protected areas prepared on the initiative of the World Bank, IUCN and the GBRMPA Authority (the Great Barrier Reef Marine Park), fourteen "World Natural Heritage Sites" with a marine component were designated as of 1995: the Aldabra Atoll (Seychelles), the national Park Banc d'Arguin (Mauritania); Cape Girolata, Cape Porto and Scandola Nature Reserve (France - Corsica), the Galapagos Islands (Ecuador), the Hawaii Volcanoes National Park (United States - Hawaii), the Kakadu National Park (Australia), Kotor (Yugoslavia - Montenegro), the archipelago of Lord Howe (Australia), the Shark Bay (Australia), the Sian Ka'an Biosphere Reserve (Mexico), the Sundarbans National Park (India - West Bengal), the Tubbataha Reefs National Marine Park (Philippines), the Ujung National Park (Indonesia).

⁶² According to the guidelines established by the WHC.

⁸³ Commonwealth v Tasmania (1983) 158 CLR 1, (popularly known as the Tasmanian Dam Case) was a significant Australian court case, decided in the High Court of Australia on 1 July 1983. The case centred around the proposed construction of a hydro-electric dam on the Gordon River in Tasmania, which was supported by the Tasmanian government, but opposed by the Australian federal government and environmental groups. The High Court held (amongst other matters) that the Commonwealth had power under section 51(xxix) of the Australian Constitution to stop the dam based on Australia's international obligations under the World Heritage Convention.

Finally, Article 15 provides for the creation of a "World Heritage Fund", which is managed by the WHC and directed towards the achievement of the objectives of the Convention. The resources of this trust fund consist of compulsory and voluntary contributions from States Parties, in proportion to their contribution to the regular budget of the UNESCO⁶⁴.

In this way, the richer countries provide for a higher contribution than the poorer and developing countries, creating a system of financial aids for those countries with minor financial resources but extremely rich in terms of cultural and natural heritage65.

1.6. International Regional Agreements

Finally, the regional agreements establishing and ruling specific regional areas, which can be classified according to various criteria, are also of significant importance.

In some of these agreements, marine protected areas represent one of the many instruments used for the protection of nature, such as - for example - in the case of the African Convention for the Conservation of Nature and Natural Resources (Algiers, 15 September 1968)⁶⁶, the Convention for the conservation of Nature in the South Pacific (Apia, 12 June 1976)⁶⁷ and the ASEAN Convention on the Conservation of Natural Resources (Kuala Lumpur, 9 July 1985)⁶⁸. In other cases, marine protected areas are the specific and exclusive object of the agreement. We can include in this typology of agreements the Protocol Concerning Mediterranean Specially Protected Areas (Geneva, 3 April 1982)⁶⁹, The Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region (Nairobi, 21 June 1985), the Protocol for the Conservation and Management of Protected Marine and Coastal Areas of the South-East Pacific (Paipa, 21 September 1989)⁷⁰, the Protocol Concerning Specially Protected Areas and Wildlife of the Wider Caribbean Region (SPAW Protocol, Kingston, 18 January 1990) and, finally, the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 10 June 1995)⁷¹.

Another important distinction to be made is between agreements that impose real and true obligations, those that, on the contrary, proclaim mere statements of principle without any immediate binding effect, and, finally, regional treaties that have been processed or not within UNEP⁷².

The first category (including those conceived within UNEP) - generally more significant in terms of content as well as of level of control - are characterized by a common commitment, made by the Contracting States, to "take all appropriate measures with a view to protecting those marine areas which are important for the safeguard of the natural resources and natural sites of the Mediterranean Sea Area⁷³".

However, the language used in these agreements is such that it grants to the Parties a highly discretionary power in relation to the decision to establish whether or not marine protected areas, so that we could say that they only prescribe "soft obligations" without any immediate binding effect.

According to Article 2 of the SPAW Protocol - but the same provision is present in all other UNEP agreements such areas shall be established in order to "conserve, maintain and restore, in particular: (a) representative types of coastal and marine ecosystems of adequate size to ensure their long-term viability and to maintain biological and genetic diversity; (b) habitats and their associated ecosystems critical to the survival and recovery of endangered,

⁶⁴ In no case shall the compulsory contribution of States Parties to the Convention exceed 1% of the contribution to the regular budget of the UNESCO.

⁶⁵ This is the main reason for the large number of ratifications of the Convention, including among developing countries.

⁶⁶ African Convention for the Conservation of Nature and Natural Resources (Algiers, 1968) - Annex 44. 67

Convention on Conservation of Nature in the South Pacific (Apia, 1976) - Annex 45.

⁶⁸ Agreement on the Conservation of Nature and Natural Resources (Kuala Lumpur, 1985) - Annex 46. 69

Protocol Concerning Mediterranean Specially Protected Areas (Geneva, 1982) - Annex 47. 70

Protocol for the Protection of the South-East Pacific against Radioactive Pollution (Paipa, 1989) - Annex 48. 71

Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995) - Annex 49. 72

United Nations Environment Programme (UNEP) - Annex 50.

⁷³ Protocol Concerning Mediterranean Specially Protected Areas (Geneva, 1982), Article 1 - Annex 51. See also Article 3 of the Protocol of Barcelona according to which "Each Party shall take the necessary measures to: (a) 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".

threatened or endemic species of flora or fauna; (...) and (d) areas of special biological, ecological, educational, scientific, historic, cultural, recreational, archaeological, aesthetic, or economic value, including in particular, areas whose ecological and biological processes are essential to the functioning of the Wider Caribbean ecosystems".

As far as the identification of the related territorial areas is concerned, we should highlight the shift from the possibility to establish such areas only in the territorial waters of the Parties, to the possibility (as provided by Article 9 of the Barcelona Agreement) of establishing protected areas⁷⁴ not only in "the marine and coastal zones subject to the sovereignty or jurisdiction of the Parties," but also in "zones partly or wholly in the high seas".

The protection regime is ultimately left to the discretion of each individual State Party, as highlighted, for example, by Article 10 of the Nairobi Protocol, according to which "the Contracting Parties, taking into account the characteristics of each protected area, shall take, in conformity with international law, the measures required to achieve the objectives of protecting the area".

⁷⁴ Specially protected areas of Mediterranean importance (SPAMIs).

2. EU Environmental Law

2.1. The evolution of the European environmental law

The evolutionary process of the European Union environmental policy is characterized by three phases: from the institution of the Economic European Union (today EU) in 1957 to the proposal of the first Action Programme for the protection of the environment in 1973, from 1973 to the Single European Act of 1987, from the Treaty of Maastricht of 1993 until today.

a. The institution of the EEC⁷⁵.

The Treaty instituting the European Economic Community, signed in Rome in 1957, did not attribute any express competence over environmental matters, which will only be introduced in 1986 by the Single European Act⁷⁶.

However, even in the absence of such specific competence, the Community started to develop an environmental policy with a marked external dimension, which found its juridical base in the articles 100 and 235 of the Treaty.

The necessity to elaborate an environmental policy was grounded on the fact that pursuant to the Article 2 of the Treaty, the task assigned to the EEC is *"to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an accelerated raising of the standard of living".*

After the Paris Convention⁷⁷ and the first United Nations Conference on the Environment in Stockholm⁷⁸, both held in 1972, and in light of growing public and scientific concerns on the limits to growth, the Commission became active in initiating an original Community policy. On the basis of the European Council commitments, in 1972, to establish a Community environmental policy, the first Environmental Action Programme⁷⁹ was decided upon in November 1973. This contained many elements of today's ideas on "Sustainable Development", giving environmental policy a sound political and intellectual platform from which to develop.

This programme, launched for the period 1973-1976⁸⁰, already established the argument that economic development, prosperity and the protection of the environment are mutually interdependent, arguing that economic growth was not an end in itself but a means of attaining a more environmentally sustainable and equitable form of social development. In other words, "its first aim should be to enable disparities in living conditions to be reduced. It must take place with the participation of all the social partners. It should result in an improvement in the quality of life as well as in standards of living. As befits the genius of Europe, particular attention will be given to intangible values and to protecting the environment so that progress may really be put at the service of mankind"⁸¹.

This programme also recognised as cornerstone principles of the Community environment policy the principles of "the polluter pays", preventive action and prior rectification of environmental damage at source. It was followed by the adoption of a series of Directives related to protection of natural resources (air, water), noise emissions or management of residues.

Having said that, in this initial phase, environmental policies were mostly achieved through instruments of public law, as they were considered to be more suitable to prevent damages and to offer a high level of protection for the environment. Afterwards, from the 1980s, emerged the legislative trend focusing on problems relating to civil liability

⁷⁵ The Treaty of Rome establishing the European Economic Community (1957) - Annex 52.

⁷⁶ The Single European Act amending the Treaty establishing the EEC (1986) - *Annex* 53.

⁷⁷ Convention concerning the protection of the world cultural and natural heritage (UNESCO, Paris Convention, 1972) – Annex 43.

⁷⁸ Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972) - Annex 4.

⁷⁹ Since 1973, six Environmental Action Programmes have been adopted. These are medium-term programmes and strategic policy documents which reflect the fundamental elements of contemporary environmental thinking and problem perceptions, as well as strategic policy orientation. But they are not binding programmes for action - even if they contain lists of planned activities.

⁸⁰ Declaration of the Council of the European Communities of 22 November 1973 "The Programme of action of the European Communities on the environment" - *Annex 54.*

⁸¹ *Op. Cit. - Annex 54.* See also Declaration of the Heads of State or Government, First Summit Conference of the Enlarged Community, 19-21 October 1972, Paris, Bulletin of the European Communities, No. 10, 1972.

for damage deriving from activities potentially harmful to human health and environment.

The European Court of Justice also played a pivotal role in recognising environmental protection as one of the essential objectives of the Community, which justifies Community acts resulting in restrictions on the principles of free trade, free movement of goods and freedom of competition⁸².

b. Single European Act⁸³

Environmental protection objectives and principles were finally given their own chapter in 1987, in the Treaty establishing the European Union⁸⁴.

In fact, competences on environmental matters become part of the Treaty of Rome with the Single European Act (SEA), which includes a new Title VII, dedicated to the environment, made up by three articles: 130R, 130S and 130T. From then on, the Community measures had a legal basis explicitly defining the objectives and guiding principles for action by the European Community relating to the environment. And provision was made for environmental protection requirements to become a component of the Community's other policies. Since then, the Community has increasingly engaged in shaping and applying international environmental regimes in a variety of ways and at different levels. Today the vast majority of national environmental policies and laws have their origins in EU law.

The Article 130R, in its first paragraph, assigns to the Community law the role "to preserve, protect and improve the quality of the environment" and introduces three basic principles on which action by the Community relating to the environment shall be based: "the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay". In accordance with the principle of subsidiarity, the Community shall take action relating to the environment to the extern to which the objectives can be attained better at Community level than at the level of the individual Member States.

In addition, it predicts that the environmental policy should be integrated with the industrial, agricultural and energetic policy, pushing the European Community to adopt all the measures needed to guarantee an efficient development and a prompt execution⁸⁵.

Finally, the Article 130T introduces the rule that the environmental protective measures adopted at Community level are only the minimum standard required for the Member States, leaving them the possibility to maintain or introduce more stringent measures compatible with this Treaty.

On 1 September 1989, the Commission submitted to the Council of the Ministers of the European Economic Community, a Directive proposal on civil liability for damages caused by waste⁸⁶, where, for the first time in the EEC, was discussed the issue on how to define a specific regime of liability for damages caused to the environment, in addition to the traditional regime of liability for damages caused to persons and material goods.

Following the discussions of the 15th Conference of European Ministers of Justice (Oslo, 1986), the Committee of Ministers of the Council of Europe, on a proposal of the European Committee on legal co-operation (CDCJ), set up a Committee of experts in 1987 to propose measures for compensation for damage caused to the environment. This led to the adoption in 1993 of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment⁸⁷. The fundamental idea which guided this document is that even if damages cannot be totally

⁸³ The Single European Act - *Annex* 53.

⁸² Judgment of the Court of 7 February 1985 in Case 240/83 on the interpretation and the validity of Council Directive No 75/439/EEC of 16 June 1975 on the disposal of waste oils (Official Journal 1975 L 194, p. 23) - Annex 55.

⁸⁴ The Single European Act, Part II, Title VII" Environment"- Annex 53. Successively modified by the Treaty of Maastricht (Title XVI of EC Treaty) and by the Treaty of Amsterdam (Title XIX, art.174-176).

⁸⁵ Article 100A - now Article 95.

⁸⁶ Proposal for a Council Directive on Civil Liability for Damage Caused by Waste, COM (89) 282, p.3 - Annex 56.

⁸⁷ The Council of Europe's Convention of 21 June 1993 on Civil Liability for Damage resulting from Activities Dangerous to the Environment (Lugano Convention) – Annex 57.

The Council of Europe's Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment, signed at Lugano on 21 June 1993, "aims at ensuring adequate compensation for damage resulting from activities dangerous to the environment" (Art. 1). The three key terms of this description are damage, dangerous activities and environment. Now, it must be admitted that these three terms are given very broad definitions, thus endowing the Convention with a considerable substantive scope of application.

prevented, they should be repaired in an appropriate way. It implies the establishment of a regime based on strict liability as well as on the imposition of "measures of reinstatement" aiming to reinstate or restore damaged or destroyed components of the environment.

Successively the Green Paper on remedying environmental damage issued by the European Commission⁸⁸, stressed the necessity to reach a higher level of uniformity on provisions related to environmental matters among Member States. Furthermore, it examined the possibility to use the instrument of civil liability as a suitable mean to enhance protection of the environment and fulfil the principle of "the polluter pays".

c. Treaty of Maastricht

By formally establishing the protection of environment as one of the tasks of the EU⁸⁹, the Treaty of Maastricht, which entered into force in November 1993, marked a further step forward, both through the introduction of the concept of "sustainable growth respecting the environment⁹⁰", reaffirming the importance of preventive action and "the polluter pays" principles, and through the establishment of the "precautionary principle" as a fundamental principle of environmental policy⁹¹. Among its main objectives, the Community policy should also promote "measures at international level to deal with regional or worldwide environmental problems"⁹².

The EU Treaty upgraded action on the environment to the status of a "policy" in its own right and established a more efficient decision-making procedure for environment policy (however still based on the cooperation procedure), replacing unanimity in the Council by qualified majority voting as the general rule. The only exceptions are matters such as environmental taxes, town and country planning and land use, where unanimity remains the norm. As for the codecision procedure, this was confined to general action programmes concerning the internal market.

In the same period, the Fifth Environmental Action Programme (1993-2006)⁹³, proposed, for the first time, alongside the consolidated traditional command and control solutions to pollution problems, the use of economic and marketbased instruments (co-audit end ecolabel) in order to correct, in the environmental field, the inefficiencies of the market.

In this framework, the instrument of civil liability also starts to play a more complex role compared to its original function of prevention and compensation of the damage. It takes on a deterrence function that comes to be much more efficient than administrative or criminal law measures, as demonstrated in the "White Paper on environmental liability" ⁹⁴, presented by the European Commission in 2000.

The topics dealt by the Commission are related to the regime of strict liability, the problems related to reconstruction of the causal link, the hypothesis of environmental damage caused by a multiplicity of operators, and in the end the application of the principle of liability.

 ⁸⁸ Commission of the European Communities, Communication from the Commission to the Council and Parliament and the economic and social committee: Green Paper on remedying environmental damage – COM (93) 47 final Brussels, 14 May 1993 – *Annex 58.* ⁸⁹ The Treaty of Maastricht on European Union or TEU (1993), Article 3 (k) – *Annex 59.*

⁹⁰ This concept is mentioned, for the first time, in the report issued in 1987 by the United Nations World Commission on Environment and Development (WCED). The report, entitled "Our Common Future", is also known as the Brundtland Report. It is also mentioned in Principle 16 of the Rio Declaration on Environment and Development. – *Annex 27*.

⁹¹ Maastricht Treaty, Title XVI "Environment", Article 130r: "2. Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay. Environmental protection requirements must be integrated into the definition and implementation of other Community policies. In this context, harmonization measures answering these requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a Community inspection procedure. – Annex 59.

Maastricht Treaty, Title XVI "Environment", Article 130r: "1. 1. Community policy on the environment shall contribute to pursuit of the following objectives: - preserving, protecting and improving the quality of the environment; - protecting human health; - prudent and rational utilization of natural resources; - promoting measures at international level to deal with regional or world-wide environmental problems – Annex 59.

Fifth Environmental Action Programme: "Towards Sustainability. The European Community Programme of policy and action in relation to the environment and sustainable development" – *Annex 60.*

⁹⁴ White Paper on environmental liability, COM (2000) 66 final? 9 February 2000, p. 37/ "Environmental liability systems work best where there is clear causation, for example in accidental damage or where a single polluter affects a single victim" – Annex 61.

The study conducted by the Commission assessed that the level of efficiency of the system of civil liability applied to the environmental sphere was directly proportional to the level of identification and certification of the "cause". In fact, in cases of environmental crime whose "cause" is known (when damages are caused by specific incidents, or when a single polluter or a single victim is identified), the efficiency of the system of civil liability reaches very high levels. Differently, in cases where the "cause" is uncertain because the damage is difficult to evaluate or we are dealing with a plurality of damages (increasing thus the complexity to assess the "causal link"), or the offender is not easy to identify (such as with ecological damages caused by diffuse pollution, in particular in relation to air and water)⁹⁵, or in case of several alleged offenders, the efficiency of the system of civil liability registers very low levels of efficiency.

d. Treaty of Amsterdam

The Treaty of Amsterdam⁹⁶, which entered into force on 1 may 1999, consolidated the principle of environmental integration as a guiding policy principle of the European Community, stating that the environmental protection requirements must be integrated into the definition and implementation of all Community policies in order to promote sustainable development (Article 6).

This principle of sustainable development is now enshrined in the preamble and in the objectives of the EU Treaty. It also features in Article 2 of the EC Treaty, which lays down the tasks of the Community. Article 2, taken in its renewed formulation, expressly includes among the objectives of the Community the task "to promote a high level of protection and improvement of the quality of the environment", while the following article 3, the letter I, provides for the establishment and implementation of a "policy on the environment."

The legal basis for environmental legislation that is adopted to facilitate the functioning of the internal market is set out in Article 95. This legislation establishes a harmonised level for environmental protection in the EU that only permits individual countries to introduce stricter requirements in certain exceptional cases. The Treaty of Amsterdam further strengthens this framework.

The EC Treaty now requires all proposals by the Commission to be based on a high level of environmental protection. Previously, after a harmonisation measure had been adopted by the Council, any Member State could still apply different national provisions if warranted by major environmental protection requirements. The Member State in question had to notify the Commission, which then verified that the provisions involved were not a means of arbitrary discrimination or a disguised restriction on trade between the member states.

This mechanism has now been extended, drawing a distinction between two separate cases (Article 95, ex Article 100a). After a Community harmonisation measure has been adopted, Member States may: either maintain existing national provisions to protect the environment; or introduce new national provisions to protect the environment, provided notification to the Commission of the reasons to do so. Moreover, those measures must be based on new scientific evidence and must be in response to a problem that specifically affects the Member State in question and that arose after the harmonisation measure was adopted.

The entry into force of the Treaty of Amsterdam also simplified the decision-making procedure for environment policy, replacing the cooperation procedure by the co-decision procedure. This reorganisation has the advantage of reducing the number of procedures to two (the member states still wished to retain unanimity for for measures concerning taxation, town and country planning, land use, or energy supply).

⁹⁵ White Paper on environmental liability, p. 37: "Environmental liability systems can be efficient due to their flexibility, since they allow the polluter to choose the least cost actions (32), but these choices may be made more difficult due to the uncertainty of the potential size of liability". Uncertainty will be greatest where causation is unclear and the size and value of damage is difficult to assess, for example ecological damage from diffuse pollution" – Annex 61.

⁹⁶ Treaty of Amsterdam amending European Union, the Treaties establishing the European Communities and certain related acts (1999) - Annex 62.

e. Treaty of Lisbon

With the Treaty of Lisbon⁹⁷, which entered into force in December 2009, environmental protection and sustainable development figure prominently among the key objectives of the EU's external action, which include a commitment to help in developing international measures to preserve and improve the quality of the environment and the sustainable management of natural resources, foster the sustainable, environmental development of developing countries with the primary aim of eradicating poverty; and promote an international system based on stronger multilateral environmental cooperation and good global environmental governance.

The Lisbon Treaty also gives legally binding force to the Charter of Fundamental Rights of the European Union, recognising "a high level of environmental protection" as a fundamental right of EU citizens.

In addition, the EU is under a general obligation to "promote multilateral solutions to common problems, in particular in the framework of the United Nations", including multilateral solutions to common environmental problems devised through relevant UN environmental initiatives and instruments. In many respects, these provisions reflect the long-standing and ever-increasing practice of the Union in the international environmental scene.

The Sixth Environmental Action Programme⁹⁸, aimed at designing the main guidelines for the action of the European Community until 2012, mainly focused on four priority areas such as climate change, biological diversity, environment and health, and sustainable management of resources.

2.2. Guiding principles of EU environmental policies

Pursuant to the article 174 of TEU (second paragraph), the policy of the Community in the environmental field "shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay"⁹⁹.

The **precautionary principle** has been introduced by the Treaty of Maastricht in 1993, and finds its origin in the international context. In particular, it should be noted that the article 15 of the Rio Declaration¹⁰⁰, signed in 1992 during the Conference of the United Nations on Environment and development, stated that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".

The content of this principle has been successively specified in other Community acts, in particular in the Communication of the Commission on the precautionary principle in 2000¹⁰¹.

This Communication underlines that the precautionary principle constitutes an element of evaluation in the analysis and in the management of the risk, finding its application, above all, in cases where scientific feedbacks are insufficient, not conclusive or uncertain and the preliminary scientific evaluation indicates that there are clever reason to think that the effects potentially harmful to the environment, human, animal or vegetable health, can result incompatible with the high level of protection chosen by the UE.

⁹⁷ The Lisbon Treaty amends the Maastricht Treaty (also known as the Treaty on European Union) and the Treaty establishing the European Community (TEC; also known as the Treaty of Rome). In this process, the Rome Treaty was renamed to the Treaty on the Functioning of the European Union (TFEU) – Annex 63.

⁹⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Sociale Committee and the Committee of the Regions "The Sixth Community Environment Action Programme" – Final Assessment Brussels, 31.8.2011 COM (2011) 531 final - Annex 25.

⁹⁹ Consolidated versions of the Treaty on European Union and of the Treaty establishing the European Community, Title XIX ENVIRONMENT, Article 174 (2): "Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay" – Annex 64.

¹⁰⁰ The Declaration on Environmental and Development (Rio De Janeiro, 1992), Principle 15: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" – Annex 9.

¹⁰¹ Communication from the Commission on the precautionary principle, Brussels, 02.02.2000 COM (2000) 1 – Annex 65.

The **principle of preventive action** became soon part of the Community conceptual framework in the field of environment protection.

In particular, the principle of prevention, together with that of participation/information, was already formulated in the First Environmental Action Programme, before being specified in the Second Environmental Action Programme.

The First Seveso Directive 82/501/EC¹⁰², already, specifically recalls the principle of prevention, even before it appeared in the Treaty.

The principle of prevention found an explicit recognition in the article 1 of this Directive, which had as prior aim "the prevention of relevant incidents that could be caused by determined industrial activities, as well as the limitation of their consequences for the man and for the environment¹⁰³.

With the Single European Act, the principle of prevention became part of the EC Treaty and, with the successive introduction of the precautionary principle, resulted to be greatly reinforced.

This principle can find its application in every measure or action aiming to prevent every negative effect for the environment. It can be measures designed to evaluate in advance the risks that determined installation can cause to the environment and the human health, as it happened in the case of the Seveso Directive. As stated by article 5 of the 2004/35 EC Directive on environmental liability with regard to the prevention and remedying of environmental damage¹⁰⁴, "where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures".

However, the Community legislation also recognises to sanctions a deterrent and thus preventive effect. In particular, civil liability is conceived as an instrument to impose standards of behaviour, and therefore, as a preventive instrument in the management of environmental damages. This framework, already present in the aforementioned Green Paper of 1993¹⁰⁵, and after in the White Paper of 2000¹⁰⁶, can be also found in 2004/35 EC Directive of the European Parliament and of the Council of 21 April 2004.

Considering that the costs of prevention and remediation of environmental damage should be borne by the polluter¹⁰⁷, the principle of preventive action, as defined by the Community law, appears to be a valid instrument of joint application of the three other principles characterizing the Community policies in the environmental field.

The **principle according to which environmental damage should as a priority be rectified at source**, already foreseen in the First Environmental Action Program of 1973, and later reaffirmed in the Fourth Environmental Action Program of 1987 as well as in the Single European Act of 1987, must be understood in connection with the other mentioned principles. The specific aim of this principle is to address the negative effects on the environment in order to avoid the extension of their impact.

The **polluter-pays principle** has gradually commanded recognition as one of the pillars of the EU's environment policy. The procedures for applying the principle were specified in Recommendation 75/436/Euratom, ECSC, EEC of 3 March 1975 regarding cost allocation and action by public authorities on environmental matters¹⁰⁸, which broadly takes up the rules elaborated by the OECD. Subsequent to the Recommendation of 3 March 1975, the polluter-pays principle recurred in all subsequent Environmental Action Programmes and in the EC Guidelines relating to state aids for the protection of the environment. This principle was integrated into the EC Treaty with the adoption of the Single European Act (SEA).

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (Seveso Directive) – Annex 66.
 Seveso Directive 96/82 EC - Article 1: "Whereas Council Directive 82/501/EEC of 24 June 1982 on the major-accident hazards of certain industrial activities (4) is concerned with the prevention of major accidents which might result from certain industrial activities and with the limitation of their consequences for man and the environment"

¹⁰⁴ Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage – *Annex* 67.

¹⁰⁵ Green Paper on remedying environmental damage, COM 93 47 final Brussels, 14 May 1993 – Annex 58.

¹⁰⁶ White Paper on environmental liability, COM (2000) 66 final 9 February 2000 – Annex 61.

¹⁰⁷ **Directive 2004/35/CE – Article 8 "Prevention and remediation costs"**: "The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive" – Annex 67.

¹⁰⁸ Council Recommendation of 3 March 1975 regarding cost allocation and action by public Authorities on environment matters - *Annex 68.*

Environmental liability has been considered as a way of implementing the polluter-pays principle, whose first objective is making the polluter liable for the damage he has caused.

2.3. "The polluter pays" principle. The criteria of environmental responsibility at the Community level

In environmental law, the polluter pays principle is enacted to make the party responsible for producing pollution responsible for paying for the damage done to the natural environment. It states that whoever is responsible for damage to the environment should bear the costs associated with it. This principle is regarded as a regional custom because of the strong support it has received in most Organisation for Economic Co-operation and Development (OECD) and European Community (EC) countries. Polluter pays is also known as extended producer responsibility (EPR). This is a concept that was probably first described by Thomas Lindhqvist for the Swedish government in 1990. EPR seeks to shift the responsibility dealing with waste from governments (and thus, taxpayers and society at large) to the entities producing it.

The polluter pays principle, with regard to civil liability in the environmental field, is often justified on the grounds of "economic efficiency", based on the internalization of environmental costs via the use of economic instruments. That is, using market based incentives to accomplish environmental goals is assumed to be more efficient than traditional command and control policies. Polluters are those who "damage" or impose "costs" on the environment. The costs of preventing, controlling, and reducing potential or actual harm to the environment should therefore be borne by their originator.

The principle aims at correcting market failure: the costs of pollution should be reflected in the price of services and products and be borne by the polluters and not the society at large. Moreover, this would create an incentive for producers to take into account environment issues, encourage them to a more rational and efficient use of its resources and place on the market environmentally friendly products.

To make the polluter be in charge of all social costs borne by the public authorities for pollution prevention and control, appeared at once the best choice, both because it is a category of actors more easy to control, and because the polluter is also the one that could contribute, in the most efficient way, to the improvement of the environment and of the international exchanges.

However, despite these envisaged advantages, the "polluter pays" principle still finds a limited application at the community level, considering the numerous exceptions and derogations foreseen as well as the consistent financial aids that the economic operators can receive from the State, which have paradoxically increased since the integration of this principle within the Treaty on the European Union¹⁰⁹".

2.4. The 2004/35/CE Directive on environmental liability with regard to the prevention and remedying of environmental damage¹¹⁰

The need for a European environmental liability regime became apparent through a number of environmental disasters, starting with the accident at the industrial site Seveso in Italy in July 1976. First proposals for a European liability regime were made in 1989, followed by a Commission Green paper in 1993, a White Paper in 2000¹¹¹ and the weaker than expected Commission proposal in January 2002.

¹⁰⁹ Consolidated versions of the Treaty on European Union and of the Treaty establishing the European Community – Annex 64. Article 174 states "Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay". The polluter pays-principle is set out in the Treaty on the Functioning of the European Union (Article 191(2) TFEU).

¹¹⁰ Directive 2004/35 CE – Annex 67.

¹¹¹ White Paper on environmental liability, COM(2000) 66 final 9 February 2000 - Annex 61.

On 21 April 2004, the Council of Ministers and the European Parliament adopted the European Directive (2004/35/ CE) on Environmental Liability with regard to the Prevention and Remedying of Environmental Damage¹¹². It entered into force at EU level on 30 April 2004. The EU Member States had three years to transpose the Directive in domestic law. The transposition of ELD was completed by July 2010¹¹³.

The Directive 2004/35/EC has two fundamental goals: the prevention and remedying of environmental damage. Pursuant to Article 1, it aims to achieve these by applying the "polluter pays principle" and making businesses that damage the environment legally and financially accountable for that damage. The fundamental principle of this Directive should therefore be that an operator whose activity has caused the environmental damage or the imminent threat of such damage is to be held financially liable, in order to induce operators to adopt measures and develop practices to minimise the risks of environmental damage so that their exposure to financial liabilities is reduced.

As distinct from a civil liability system for "traditional damage" (damage to property, economic loss, personal injury), the Directive deals with "environmental damage", qualified as damage to biodiversity (protected species and natural habitats), damage to water and damage to soil.

The rules on when operators are liable for the specific types of damage are complex. The Directive applies if an "operator" of an "occupational activity" causes or gives rise to an immediate threat of causing environmental damage. In such a case, the operator must prevent or remedy the environmental damage, as appropriate and/or bear the costs of the relevant preventive or remedial actions taken (Article 8) – subject to certain exceptions.

Operators carrying out specified dangerous occupational activities listed in Annex III of the Directive fall under strict liability (they are liable irrespective of whether or not they are at fault). Operators carrying out other occupational activities than those listed in Annex III are liable for fault-based damage to protected species or natural habitats.

As explicitly highlighted in the Directive, not all forms of environmental damage can be remedied by means of the liability mechanism. For the latter to be effective, there need to be one or more identifiable polluters, the damage should be concrete and quantifiable, and a causal link should be established between the damage and the identified activity/polluter(s). Liability is therefore not a suitable instrument for dealing with pollution of a widespread, diffuse character, where it is impossible to link the negative environmental effects with acts or failure to act of certain individual actors.

The adoption of the Directive marks the end of a long process, due to the sensitivity and the potential economic impacts of its subject matter, the need to balance environmental protection requirements with specific interests of operators and public administrations, as well as the consistent disparities among various national legal frameworks, some of which do not pursue as a priority objective the restoration of areas affected by pollution.

2.5. The 2008/99/CE Directive and the protection of the environment through criminal law

Environmental crime covers acts that breach environmental legislation and cause significant harm or risk to the environment and human health. The most known areas of environmental crime are the illegal emission or discharge of substances into air, water or soil, the illegal trade in wildlife, illegal trade in ozone-depleting substances and the illegal shipment or dumping of waste. Very often, environmental crimes have a cross border aspect and need to be tackled at international level.

The problem of environmental crime has been discussed in many international and European fora for many years.

¹¹² Directive 2004/35 CE – *Annex* 67.

¹¹³ The Directive 2004/35/EC was amended twice through Directive 2006/21/EC on the management of waste from extractive industries and through Directive 2009/31/EC on the geological storage of carbon dioxide and amending several directives. The amendments broadened the scope of strict liability by adding the "management of extractive waste" and the "operation of storage sites pursuant to Directive 2009/31/EC" to the list of dangerous occupational activities in Annex III of the Directive 2004/35/EC. The Offshore Safety Directive, containing an amendment to the Directive 2004/35/EC (extension of the scope of damage to marine waters), is supposed to be adopted in May 2013.

Building on this work, the European Commission presented a Proposal for a Directive on the protection of the environment through criminal law in March 2001. According to the Commission, environmental crime comes within the remit of the Community and there was therefore no call to adopt a Framework Decision on the basis of Title VI of the Treaty on European Union. In 2003, the Council adopted Framework Decision 2003/80/JHA based on the provisions of the EU Treaty on cooperation between Member States in terms of criminal law. The Council has incorporated into its Framework Decision several provisions from the Commission's proposal. However, the amended proposal for a Directive, presented in October 2002, was not incorporated.

This Framework Decision was annulled in 2005 by the European Court of Justice, on the grounds that it should have been adopted on the basis of the EC Treaty and not the Treaty on European Union (EU Treaty). The measures contained in the Framework Decision could have been taken by the Community under its environmental protection policy¹¹⁴. The Court thus found in favour of the Commission, explaining that the latter may take measures that relate to the criminal law of the Member States in cases where the application of criminal penalties is an essential measure for combating serious environmental offences.

The Commission then presented a new Proposal on 12 February 2007, which led to the adoption of the Directive 2008/99/CE on the protection of the environment through criminal law¹¹⁵.

The Directive defines a minimum number of serious environment-related offences and requires Member States to provide for more dissuasive criminal penalties for this type of offence when committed intentionally or as a result of gross negligence. This minimum threshold for harmonisation will allow environmental legislation to be better applied¹¹⁶, in line with the objective for the protection of the environment laid down in Article 174 of the Treaty establishing the European Community (EC Treaty). The idea is that appropriate criminal sanctions would guarantee a greater deterrence against harmful actions to the environment, compared to administrative sanctions or to compensation mechanisms of civil law.

The Directive, which provides for *minimum standards or rules* of criminal prosecution¹¹⁷, requires nevertheless the member States sanction with "effective, proportionate and dissuasive criminal sanctions" (Article 5) ¹¹⁸, a series of unlawful environment-related offences based on the typology of aggression (i.e. dangerous substances or ionising radiation, disposal of wastes), its object (i.e. protected wild fauna or flora species, natural habitats), and its consequences (i.e. death, serious injury to any person, substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants). The Directive does not create a list of new illegal acts. The existing law already provides for these prohibitions. The Member States, by transposing this directive, will only have to attach criminal sanctions to these existing prohibitions.

Particular attention has been given to its article 3(a), requiring Member States to class the following behaviour as a criminal offence, if a Community regulation in the area of environmental protection is infringed and if the behaviour is committed intentionally or through serious negligence: "the discharge, emission or introduction of a quantity of materials or ionising radiation into air, soil or water, which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants"¹¹⁹.

Judgment of the Court of Justice of the European Communities (Grand Chamber) of 13 September 2005 in Case C-176/03 (Commission of the European Communities v. Council of the European Union) – Annex 69.
 Directive 2008/09/EC on the protection of the environment through criminal law – Annex 70.

⁵ Directive 2008/99/EC on the protection of the environment through criminal law – Annex 70.

¹¹⁶ On the issue of disparities between Member States in the definition of environmental crimes and sanctions, see the reference link: http:// ec.europa.eu/environment/legal/crime/studies_en.htm.

 ¹¹⁷ Directive 2008/99EC, whereas (12): "As this Directive provides for minimum rules, Member States are free to adopt or maintain more stringent measures regarding the effective criminal law protection of the environment. Such measures must be compatible with the Treaty".
 ¹¹⁸ Directive 2008/99, Article 5 – Penalties: "Member States shall take the necessary measures to ensure that the offences referred to in Articles 3 and 4 are punishable by effective, proportionate and dissuasive criminal penalties".

¹¹⁹ **Directive 2008/99, Article 3 – Offences**: "Member States shall ensure that the following conduct constitutes a criminal offence, when unlawful and committed intentionally or with at least serious negligence:

⁽a) the discharge, emission or introduction of a quantity of materials or ionising radiation into air, soil or water, which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;

⁽b) the collection, transport, recovery or disposal of waste, including the supervision of such operations and the aftercare of disposal sites,

Similarly, Member States should also ensure that inciting, aiding and abetting the commission of these environmental offences is also punishable as a criminal offence as well (Article 4)¹²⁰.

Article 6¹²¹ of the Directive requires EU Member States to ensure that legal persons can be held liable for offences referred to in Articles 3 and 4 where such offences have been committed for their benefit by any person who has a leading position within the legal person, acting either individually or as part of an organ of the legal person.

Member States shall also ensure that Legal persons may also be held liable where the lack of supervision or control, by a person referred to in paragraph 1, has made possible the commission of an offence referred to in Articles 3 and 4 for the benefit of the legal person by a person under its authority (paragraph 2)¹²². As stated in paragraph 3¹²³, liability of legal persons under paragraphs 1 and 2 does not exclude criminal proceedings to be carried out against natural persons who are perpetrators, inciters or accessories in the offences referred to in Articles 3 and 4.

Finally, the Directive includes two annexes: Annex A containing a list of of 69 Community legislation adopted pursuant to the EC Treaty, the infringement of which constitutes unlawful conduct pursuant to Article 2(a)(i) of this Directive; and Annex B containing a list of Community Legislation adopted pursuant to the Euratom Treaty, the infringement of which constitutes unlawful conduct pursuant to the Euratom Treaty, the infringement of which constitutes 2(a)(ii) of this Directive;

The Directive is a concrete application of the principles reiterated in two sentences of the European Court of Justice¹²⁴ according to which the competency of the European Community to effect the policies and the common actions of which the art. 2 and 3 of the Treaty EC also includes the power to request the Member States the application of appropriate criminal sanctions.

In both sentences, the Court has claimed that, even if "as a general rule, neither criminal law nor the rules of criminal procedure fall within the Community's competence, this does not, however, prevent the Community legislature, when the application of effective, proportionate and dissuasive criminal penalties by the competent national authorities

(g) trading in specimens of protected wild fauna or flora species or parts or derivatives thereof, except for cases where the conduct concerns a negligible quantity of such specimens and has a negligible impact on the conservation status of the species;

(h) any conduct which causes the significant deterioration of a habitat within a protected site;

and including action taken as a dealer or a broker (waste management), which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;

⁽c) the shipment of waste, where this activity falls within the scope of Article 2(35) of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste (1) and is undertaken in a non-negligible quantity, whether executed in a single shipment or in several shipments which appear to be linked;

⁽d) the operation of a plant in which a dangerous activity is carried out or in which dangerous substances or preparations are stored or used and which, outside the plant, causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;

⁽e) the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;

⁽f) the killing, destruction, possession or taking of specimens of protected wild fauna or flora species, except for cases where the conduct concerns a negligible quantity of such specimens and has a negligible impact on the conservation status of the species;

⁽i) the production, importation, exportation, placing on the market or use of ozone-depleting substances.

¹²⁰ **Directive 2008/99, Article 4 - Inciting, aiding and abetting**: "Member States shall ensure that inciting, aiding and abetting the intentional conduct referred to in Article 3 is punishable as a criminal offence".

¹²¹ Directive 2008/99, Article 6 - Liability of legal persons: "1. Member States shall ensure that legal persons can be held liable for offences referred to in Articles 3 and 4 where such offences have been committed for their benefit by any person who has a leading position within the legal person, acting either individually or as part of an organ of the legal person, based on: (a) a power of representation of the legal person; (b) an authority to take decisions on behalf of the legal person; or (c) an authority to exercise control within the legal person.

¹²² **Directive 2008/99, Article 6 - Liability of legal persons:** "2. Member States shall also ensure that legal persons can be held liable where the lack of supervision or control, by a person referred to in paragraph 1, has made possible the commission of an offence referred to in Articles 3 and 4 for the benefit of the legal person by a person under its authority".

¹²³ **Directive 2008/99, Article 6 - Liability of legal persons**: "3. Liability of legal persons under paragraphs 1 and 2 shall not exclude criminal proceedings against natural persons who are perpetrators, inciters or accessories in the offences referred to in Articles 3 and 4".

¹²⁴ Judgment of the Court of Justice of the European Communities (Grand Chamber) of 13 September 2005 in Case C-176/03 (Commission of the European Communities v. Council of the European Union), by which the ECJ annulled the Council Framework Decision 2003/80/ JHA on the protection of the environment through criminal law, stating that the Community, even if it does not have "general" legislative competence in criminal matters, may adopt measures aimed at harmonization of national criminal law on the environment, where this is necessary to ensure full effectiveness of Community law - Annex 69. Judgment of the Court of Justice of the European Communities (Grand Chamber) of 23 October 2007 in Case C-440/05 (Commission of the European Communities v. Council of the European Union), by which the ECJ annulled the Council Framework Decision 2005/667/JHA on enforcement of the law against ship-source pollution - Annex 71.

is an essential measure for combating serious environmental offences, from taking measures which relate to the criminal law of the Member States which it considers necessary in order to ensure that the rules which it lays down on environmental protection are fully effective. That competence of the Community legislature in relation to the implementation of environmental policy cannot be called into question by the fact that Articles 135 EC and 280(4) EC reserve to the Member States, in the spheres of customs cooperation and the protection of the Community's financial interests respectively, the application of national criminal law and the administration of justice".

2.6. The European Union Strategy for the protection of the marine environment

Since 1978, the EU has played a vital role in the response to marine pollution, when an action programme of the European Communities on the control and reduction of pollution caused by hydrocarbons released at sea was set up. This was later expanded to also deal with other harmful substances.

Preparedness and response mechanisms in the field of marine pollution were reinforced in 2000 with the Community framework for cooperation in the field of accidental or deliberate marine pollution which ran until 2006. Its aim was to support and supplement Member States' efforts and to contribute to improving their capabilities for response in case of incidents.

In terms of preparedness and response mechanisms in the field of marine pollution, the following initiatives should be mentioned:

- a. The **resolution of the Council of European Communities of 26 June 1978**¹²⁵ setting up an Action Programme of the European Communities on the control and reduction of pollution caused by hydrocarbons discharged at sea.
- b. The **establishment of the Advisory Committee for the control and reduction of the marine pollution by oil** and other harmful substances discharged into the sea, whose members, in addition to formulate opinions on the proposals of the Commission¹²⁶, are government experts acting as an interface between the Commission and the national administrations¹²⁷.
- c. The **Community Information System** (CIS) for the control and reduction of pollution caused by hydrocarbons discharged at sea, established by Council Decision 81/971/EEC of 3 December 1981¹²⁸.
- d. The **Third Environmental Action Programme** (1983) for the protection of the Mediterranean and for a new global policy focused on prevention¹²⁹.

The main instruments of the European action in preparedness and response mechanisms in the field of marine pollution are three: 1) the information system, 2) the training program and 3) the pilot projects.

Response intervention to marine pollution incidents is the responsability of individual Member States and not the European Union. However, the EU plays a key role in facilitating the access of each State to any information that might be particularly useful in case of accident. The Community information system (CIS) has been established

¹²⁵ The purpose of this Action Programme was to support the efforts of Member States in improving their capacity to respond to incidents of pollution by oil or other hazardous substances and in creating the conditions for enhanced mutual assistance and cooperation. It also highlighted that - among the various forms of pollution - sea pollution is one of the most dangerous forms, considering its consequences on the ecological and biological balance.

¹²⁶ The Commission of the European Community, and in particular the Civil Protection and environmental emergencies Unit of the Directorate-General Environment, is responsible for the Community action in the field of marine pollution.

¹²⁷ Advisory Committee on the control and reduction of Pollution by Hydrocarbons and other harmful substances discharged at sea (ACPH) -Communication from the Commission concerning the implementation of Council Decision 86/85/EEC of 6 March 1986 establishing a Community information System for the control and reduction of pollution caused by the spillage of hydrocarbons and other harmful substances – Annex 72.

¹²⁸ The first preliminary version of the Community Information System was prepared in October 1983 and the first operational version was completed in June 1985. The latter was limited to information related to the spillage of hydrocarbons, operational data and information about expertise and equipment available in each Member State. Since then, Council Decision 86/85/EEC of 6 March 1986 has repealed Decision 81/971/EEC and extended the Community Information System to other harmful substances. The CIS is currently under revision and will be closely integrated with the Common Emergency Communication and Information System (CECIS) under the Civil Protection Mechanism.

¹²⁹ The Fourth and the Fifth Environmental Action Programme will attach primary importance to marine pollution, which is reported to be in continuous and exponential growth, requiring, therefore, a proper strategy for intervention and prevention.

to provide a modern operational tool of statistics information and to facilitate the effective cooperation between Member States directly involved in responding to accidental marine pollution.

At the beginning, the system was only limited to information related to oil spills in the sea, but since 1986 it also collects data related to pollution incidents due to other dangerous substances.

The system is structured in three parts. The first contains a detailed list of all operational information and resources available in Europe to facilitate a Member State response to a pollution incident. The second part provides chemical and physical information on the different types of oil and hydrocarbons, which may have an impact on the fauna and the flora. The third part consists in providing mathematical models in use in each Member State, aimed at predicting the development of a pollution episode and contains a wide and selected bibliography of scientific works in the field of marine pollution.

Training is the second key element in Community action to ensure efficient and coordinated response to any incident of marine pollution. The Community target is not only to improve the response capacity of the national authorities, but also to stimulate the spirit of cooperation between the Member States. For this reason, the European Union organizes general courses for new employees in the sector and specialized courses for staff with specific skills already acquired. In addition, the Commission has organised a system for the exchange of experts that allows a fruitful interchange between the leading national experts in the field.

The "pilot projects" aims at stimulating scientific knowledge and technological progress in tackling marine pollution incidents.

The EU capacity of intervention in case of marine pollution incidents has further been strengthened following the decision of the Council of 23 October 2001¹³⁰ to establish a Civil Protection Mechanism, whose aim is to facilitate a reinforced cooperation in civil protection assistance interventions. The use of this "tool" serves both in cases of civil protection, and in cases of emergency related to marine pollution. The general purpose of the mechanism is to provide support in case of emergency and to simplify a better coordination of assistance interventions provided by the Member States and the Community. It should also be stressed that this mechanism allows to address any disaster that might occurred both inside and outside the EU, coordinating requests and offers of assistance from 30 participating States: the EU-27 and the three countries of the European Economic Area (Norway, Iceland and Liechtenstein).

The mechanism consists of a series of elements aimed at enhancing capacity of emergencies prevention, preparedness and response:

- a. The creation and management of a Monitoring and Information Centre (MIC);
- b. The creation and management of a Common Emergency Communication and Information System (CESIS);
- c. The identification of intervention teams and other support interventions available in Member States for assistance in the case of emergency.

If an episode of pollution is sufficiently serious, the Member State concerned may require the deployment of one or more government experts who have direct experience of emergency situations and are therefore especially qualified to provide an effective help. All costs associated with the activities of the experts will be supported by the Commission.

¹³⁰ Council Decision of 23 October 2001establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions (2001/792/EC, Euratom) – *Annex 73.*

Since 1987, the Commission has provided operational support to Member States faced with major pollution incidents through an "Urgent Pollution Alert Section" set up in Brussels when needed and operational on a 24 hour basis. This also covered marine pollution. Since 1987, the following marine pollution interventions have been carried out through this task force:

- 1987: incident of the CASON go stuck on the northwest coast of Spain;
- 1989: incident of the tanker MARAO in Portugal;
- 1989: incident of the tanker KHARK V in the Spanish and Moroccan seas KHARK V;
- 1990: incident of the tanker ARAGON in Spain;
- 1990: PORTO SANTO ISLAND incident near the archipelago of Madeira (Portugal);
- 1991: Pollution of oil in the Persian Gulf;
- 1991: incident HAVEN in Italy;
- 1992: incident of "AEGAN SEA" (Spain)
- 1993: incident of the tanker Braer in the Shetland Islands (United Kingdom);
- 1994: oil pollution in the North of Russia;
- 1996: SEA EMPRESS incident off the coast of Wales (United Kingdom);
- 1999: Erika incident off the coast of Brittany (France)¹³¹.
- 2000: incident "IEVOLI SUN" (France)¹³²
- 2000: incident "PETER" (Gabon)¹³³
- 2001: Incident "JESSICA" (Galapagos)134
- 2001: Incident "Baltic Carrier" (Denmark)¹³⁵
- 2002: incident "PRESTIGE" (Spain / France)
- 2006: incident Ivory Coast toxic spill
- 2006: incident Philippines toxic spill¹³⁶
- 2007: incident Black Sea toxic spill¹³⁷
- 2007: incident South Korea toxic spill¹³⁸.

2.7. EU response to the Erika oil tanker incident

On 12 December 1999 the Maltese registered oil tanker Erika broke in two in the Bay of Biscay, some 60 nautical miles off the coast of Brittany, France. All members of the crew were rescued by the French marine rescue services. The tanker was carrying a cargo of 31 000 tonnes of heavy fuel oil of which some 19 800 tonnes was spilled at the time of the incident. The bow section floated vertically for several hours before sinking during the night of 12 December in about 100 metres of water.

A French salvage company succeeded in attaching a line to the stern section and attempted to tow it further off shore. However, during the morning of 13 December the stern section sank to a depth of 130 metres about 10 nautical miles from the bow section. Some 6400 tonnes of cargo remained in the bow section and a further 4 700 tonnes in the stern section.

Response operations at sea were coordinated by the French Naval Command in Brest, in accordance with the French National Contingency Plan in case of marine pollution¹³⁹. Response vessels were mobilised on 14 December, but attempts at skimming ultimately met with little success owing to the adverse weather conditions and widespread fragmentation of the slick.

¹³¹ Report on the accident of Erika (2000) – *Annex 74.*

¹³² Report on the accident of the chemical tanker "levoli Sun", European Commission (2000) – Annex 75.

¹³³ Report on « Peter » Casualty – Libreville, Gabon, European Commission (2000) – Annex 76.

¹³⁴ Report on the accident of the oil tanker "Jessica" off the Galapagos Islands, Ecuador, European Commission (2001) – Annex 77.

 ¹³⁵ Report on the accident of the oil tanker "Baltic carrier" off the Danish coastline, European Task Force in Denmark (2001) – *Annex 78*.
 ¹³⁶ Final report on bioremediation in Guimaras oil spill in Philippines. Dekonta (2006) – *Annex 79*.

Final report on bioremediation in Guimaras oil spill in Philippines, Dekonta (2006) – Annex 79.
 Penort on the Oil Spill in Kerch Strait, Black Sea, Ukraine, European Commission (2007) – Annex 79.

 ¹³⁷ Report on the Oil Spill in Kerch Strait, Black Sea, Ukraine, European Commission (2007) – *Annex 80.* ¹³⁸ Report on the "Hebei Spirit" Oil Spill in Republic of Korea, UN / European Commission (2007) – *Annex 81.*

¹³⁹ "Polmar Plan" - <u>http://www.polmar.com/sommaire.htm</u>.

In 15 days of operations 1,100 tonnes of oil/water mixture were collected, mainly during a 24-hour period of relatively calm weather and reduced swell. It has been estimated that less than 3% of the total spill volume was collected during the response operations at sea.

Owing to the influence of strong winds and currents, shoreline oiling did not occur as quickly as expected or in the locations originally forecast. After first moving south-east from the spill site toward La Rochelle, then turning north, the oil finally began stranding around the mouth of the River Loire on Christmas Day 1999.

Intermittent oiling subsequently occurred over some 400km of shoreline between Finistère and Charente-Maritime. Due to the long time that the oil spent at sea, much of it formed a water-in-oil emulsion, which increased its volume and viscosity. The huge amount of wastes also made particularly difficult the recovery and disposal operations¹⁴⁰. The main environmental impact of the spill was on sea birds. Almost 65,000 oiled birds were collected from beaches, of which almost 50,000 were dead. A major cleaning operation was mounted for the 15,000 oiled survivors and 2,000 were ultimately released.

Oil also affected several important oyster and mussel fisheries. As a result of the monitoring programme put in place by the French authorities and the guidelines issued by the Agence Française de Sécurité Sanitaire des Aliments (AFSSA), cultivated and natural stocks of shellfish in numerous areas were found to have accumulated hydrocarbons exceeding acceptable limits, and the marketing of produce in these areas was banned.

Obviously, the magnitude of the spill and the length of coastline affected resulted in a large number of compensation claims. It is also to be noted that provisions of international law allowed the possibility for the damaged State to claim – under determined circumstances and conditions and in addition to the compensation to be received from the insurance company of the ship – for an equivalent economic compensation, through a special international fund¹⁴¹.

As a State party to the International Convention on Civil Liability for oil Pollution Damage of 1992 as well as to the Convention establishing an International Fund of the same year¹⁴², France has obtained, in addition to approximately 11.7 million dollars perceived from the ship insurance company¹⁴³, a financial compensation through the Fund of \$ 173 million dollars.

The wreckage of the Erika aroused much public concern about the safety of maritime transport. It blatantly demonstrated that a modern nation like France is not able to respond by itself to the challenge of an environmental disaster of such significant size. It also highlighted the risk presented by old, poorly maintained ships and the need to reinforce and harmonise European rules on maritime safety and the control of ships in ports in particular, going further, where necessary, than International Maritime Organisation guidelines and standards.

This incident, therefore, prompted the EU to pass a series of measures designed to increase maritime safety off its coastlines substantially - and particularly in the field of prevention of marine pollution, with the adoption of several Community directives and regulations, also including the so-called Erika legislative packages.

The Erika packages comprise modifications of the existing legislation (Erika I), innovations in the EU law (Erika II), and integrate international standards with the Community legislation (Erika III).

The Erika I package, adopted on 21 March 2000, provides an immediate response to certain shortcomings highlighted by the Erika accident. It increases levels of control of ships in EU ports, imposes more stringent criteria on the classification societies that inspect ship quality on behalf of EU member states and speeds up the timetable for the replacement of single-hull oil tankers with double-hull designs, which are less likely to leak.

¹⁴⁰ In the "ERIKA" incident approximately 250,000 tons of wastes were recovered.

¹⁴¹ Judgment of the Court of Justice of the European Communities (Grand Chamber) of 24 June 2008 in Case C-188/07, Commune de Mesquer v. Total France SA and Total International Ltd. - *Annex 82.*

¹⁴² International Convention on Civil Liability for oil Pollution Damage, 1992 – Annex 83. See also The International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage adopted at Brussels on 18 December 1971, as amended by the Protocol signed in London on 27 November 1992 (OJ 2004 L 78, p. 40) ('the Fund Convention') complements the Liability Convention by establishing a system for compensating victims – Annex 34.

¹⁴³ Steamship Mutual P & I Club.

The Erika II package, adopted in December 2000, contains measures such as the establishment of a Community fund to compensate the victims of oil spills up to €1 billion, closer monitoring of traffic in European waters (a maritime-vessel monitoring, control, and information system), and creation of a European maritime safety agency (EMSA). The goal of the Agency is to provide technical and scientific assistance to the European Commission and Member States on matters relating to the proper implementation of European Union legislation on maritime safety and pollution by ships. EMSA tasks also cover oil pollution response. EMSA maintains at-sea oil spill recovery services from vessels based in all the regional seas of Europe. These are normal commercial vessels which carry out day-to-day operations in a restricted area but are under contract with EMSA for emergencies. Upon request, the vessels cease their commercial operation and move to the scene of the spill. Other important services that EMSA can provide include satellite imagery for detection and monitoring of oil spills at sea, pollution response experts to give operational and technical assistance and information service for chemical spills at sea.

The third and final maritime safety package addressed civil liability and flag states¹⁴⁴. The adoption of this third package was spurred in part by the 2002 sinking of the oil tanker Prestige off the coasts of Spain and France. That accident, the largest environmental disaster in Spain's history, was caused in part because Spanish authorities denied the distressed vessel entry to a safe harbour. The Prestige oil spill also showed that the existing regulations were inadequate, and in particular that action on maritime safety under the auspices of the International Maritime Organisation (IMO) fell short of what was needed to tackle the causes of such disasters effectively¹⁴⁵. Given the absence of adequate control mechanisms, IMO regulations are not applied everywhere with the same rigour. Moreover, the emergence of "flags of convenience" (registration of vessels in foreign countries), some of which fail to live up to their obligations under the international conventions, contribute to aggravate this phenomenon.

2.8. Directive 2008/56/EC as a framework for Community action in the field of marine environmental policy

The marine environment is a precious heritage that must be protected, preserved and, where practicable, restored with the ultimate aim of maintaining biodiversity and providing diverse and dynamic oceans and seas which are clean, healthy and productive. The implementation of an efficient strategy for the conservation of the marine ecosystems should include the establishment of marine protected areas and address all human activities which have an impact on marine environment status.

In order to achieve those objectives, a transparent and coherent legislative framework is required. This framework should contribute to coherence between different policies and foster the integration of environmental concerns into other Community policies (such as the Common Fisheries Policy). The legislative framework should provide an overall framework for action and enable the action taken to be coordinated, consistent and properly integrated with action under other Community legislation and international agreements.

The diverse conditions, problems and needs of the various marine regions or sub-regions making up the marine environment in the Community require different and specific solutions. That diversity should be taken into account at all stages of the preparation of marine strategies, but especially during the preparation, planning and execution of measures to achieve good environmental status in the Community's marine environment at the level of marine regions or sub-regions. Each Member State should therefore develop a marine strategy for its marine waters which, while being specific to its own waters, reflects the overall perspective of the marine region or sub-region concerned.

These principles guided the development and implementation of the Marine Strategy Framework Directive of 17 June 2008¹⁴⁶. The need to prepare a "thematic strategy for the protection and conservation of the marine environment ¹⁴⁷"

¹⁴⁴ Directive 2005/35/EC on ship-source pollution and the introduction of penalties for infringements – Annex 84.

¹⁴⁵ International Convention on Civil Liability for Oil Pollution Damage (Brussels, 1969) – Annex 19; Convention for the protection of the Mediterranean Sea against pollution (Barcelona, 1976) – Annex 85; Marpol consolidated edition 2006 - International Convention for the Prevention of pollution from ship 1973 as modified by the protocol of 1978 relating thereto – Annex 86; United Nations Convention on the Law of the Sea (Montego Bay, 1982) – Annex 6.

¹⁴⁶ Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) – *Annex* 87.

¹⁴⁷ Sixth Environment Action Programme of the European Community, "Environment 2010: Our future, Our choice" – Annex 25.

was already stressed in Sixth Environment Action Programme adopted in 2001.

By applying an ecosystem-based approach to the management of human activities, the aim of this Directive is to promote a sustainable use of marine goods and services, in order to ensure protection and preservation of the Community's marine environment, and to prevent its subsequent deterioration.

As stated in its Article 1, this Directive establishes a framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest. To this end, strategies should be developed and implemented in order to:

- a) protect and preserve the marine environment, prevent its deterioration or, where practicable, restore marine ecosystems in areas where they have been adversely affected;
- b) prevent and reduce inputs in the marine environment, with a view to phasing out pollution so as to ensure that there are no significant impacts on or risks to marine biodiversity, marine ecosystems, human health or legitimate uses of the sea.

Each Member State shall, in respect of each marine region or sub-region concerned, develop a marine strategy for its marine waters in accordance with the plan of action 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, the biological features and the hydromorphology. It also implies an analysis of the predominant pressures and impacts, including human activity, on the environmental status of those waters, as well as an economic and social analysis of the use of those waters and of the cost of degradation of the marine environment.

On the basis of these assessments, Member States are required, in respect of each marine region or sub-region, to establish a comprehensive set of environmental targets and associated indicators for their marine waters, taking into account the principle of sustainable development and the socio-economic impacts of the proposed measures, which should be cost-effective and technically feasible.

The Commission shall assess whether, in the case of each Member State, the programs notified constitute an appropriate framework to meet the requirements of the Directive concerned and may ask the Member State concerned to provide any additional information that is available and necessary. In making those assessments, the Commission shall consider the coherence of programs of measures within the different marine regions or sub-regions and across the Community and, within six months of receipt of such notification, inform Member States concerned whether, in its opinion, the programs of measures notified are consistent with the Directive and provides guidance on any amendments it considers necessary ¹⁴⁸.

2.9. The protection of the sea through criminal law

"Voluntary" marine pollution such as oil pollution caused by ships is mainly due to the practice of so-called "operational plumbing", which include the cleaning of the tanks and the disposal of oil residue discharge.

This practice is encouraged by the absence of adequate infrastructures for the collection and the disposal of wastes in the harbour areas, as well as by the non-homogeneous observance of the technical-operational procedures set by the international rules and provisions.

Moreover, it is not always easy to address in a timely manner such operations and it is rarely possible to prosecute them.

In addition to the objective and often insurmountable difficulties faced with the burden of proof, national judicial systems often provide for negligible penalties and in many cases only applicable to the master of the ship and not the ship-owner, which is to say the one that gives concrete instructions of which the first is a mere executor.

¹⁴⁸ Within six months of receipt of the data and information resulting from the initial assessment made pursuant to Article 8 and from the monitoring programs established under Article 11, such data and information shall also be made available to the European Environment Agency, for the performance of its functions.

Although, therefore, the MARPOL 1973/1978 provides for specific and strict rules for the disposal in the sea of wastes and residues, especially in the so-called "special areas¹⁴⁹", the frequency with which such incidents occur is due to an obvious regulation gap and - at the same time - to a poor applicability of the existing regulations.

Consequently, in its communication on a common policy on safe seas¹⁵⁰, issued in 1993, the European Commission underlined that it was necessary to improve compliance with the provisions of MARPOL, to which all Member States are signatories, through initiatives and measures "aimed to improve the implementation of the international rules and standards".

In this context, the following measures, among others, were adopted:

- Directive 95/21/EC on port State control¹⁵¹, whose purpose is to help drastically to reduce substandard shipping in the waters under the jurisdiction of Member States by: a) increasing compliance with international and relevant Community legislation on maritime safety, protection of the marine environment and living and working conditions on board ships of all flags, b) establishing common criteria for control of ships by the port State and harmonizing procedures on inspection and detention.
- 2. Directive 2000/59/EC¹⁵² on port reception facilities for ship-generated waste and cargo residue, whose purpose is to reduce the discharges of ship-generated waste and cargo residues into the sea, especially illegal discharges, from ships using ports in the Community, by improving the availability and use of port reception facilities for ship-generated waste and cargo residues.
- 3. Directive 2002/59/EC¹⁵³ establishing a Community vessel traffic monitoring and information system, whose purpose is to enhance the safety and efficiency of maritime traffic, improving the response of authorities to incidents, accidents or potentially dangerous situations at sea, including search and rescue operations, and contributing to a better prevention and detection of pollution by ships.

In addition to these preventive and control measures aimed at increasing maritime safety, particularly in the field of prevention of marine pollution, efforts at EU level have also been made to ensure that infringements are subject to effective and more rigorous sanctions, including, in serious cases, criminal sanctions. These efforts were based on the growing awareness that enforcement of criminal law measures was needed to enhance effectiveness of EU and Member States policies for the protection of the marine environment.

In the aftermath of the accident of the Prestige tanker, the Commission, on 7 March 2003, transmitted to the Council a proposal, with a view to ensuring that any person who is involved in a pollution incident, acting with intent, recklessly or by serious negligence, should be subject to appropriate sanctions. The Council adopted its common position on the text of the proposal on 7 October 2004 which was than submitted to the European Parliament.

This led to the adoption on 1 October 2005 of the Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements. The directive was supplemented by detailed rules on criminal offences and penalties set out in Council Framework Decision 2005/667/JHA¹⁵⁴, which was annulled by the European Court of Justice (ECJ) in October 2007 on the ground that it had not been adopted on the correct legal basis. To fill the resulting legal vacuum, the Directive 2005/35/EC was amended by the Directive 2009/123/EC.

¹⁵⁰ Communication from the Commission COM (93) 66 final, 24 February 1993 – *Annex 88*.

¹⁴⁹ Such as the Baltic Sea, the Mediterranean Sea and the North Sea.

¹⁵¹ Council Directive 95/21/EC of 19 June 1995 concerning the enforcement, in respect of shipping using Community ports and sailing in the waters under the jurisdiction of the Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (port State control) – *Annex 89*.

¹⁵² Directive 2000/59/EC of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues – Annex 90.

¹⁵³ Directive 2002/59/EC of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC - Annex 91.

¹⁵⁴ Council Framework Decision 2005/667/JHA of 12 July 2005 to strengthen the criminal-law framework for the enforcement of the law against ship-source pollution – *Annex 92*.

Directive 2005/35 as amended by Directive 2009/12¹⁵⁵, contains the EU applicable requirements on ship source pollution and on the introduction of penalties, including criminal penalties for pollution offences, if committed with intent, recklessly or by serious negligence. The text of the amending directive is similar to the annulled decision, but leaves the nature and level of penalties at the Member States' discretion. The entry into force of Directive 2009/123/ EC, amending Directive 2005/35/EC, makes the system of criminal penalties mandatory¹⁵⁶.

Its purpose and scope¹⁵⁷ is to incorporate international standards on ship-source pollution into EU law, underlining the need for harmonisation between international and EU relevant rules and provisions.

As stated in the preamble of the Directive 2005/35/EC, the material standards in all Member States for discharges of polluting substances from ships are based upon the Marpol 73/78 Convention. However, the rules contained in this Convention "are being ignored on a daily basis by a very large number of ships sailing in Community waters, without corrective action being taken" and considering the significant discrepancies among Member States practices, in particular "relating to the imposition of penalties for discharges of polluting substances from ships", there "is a need to harmonise its implementation at Community level".

Moreover, the European Parliament and the Council noted that "neither the international regime on liability and compensation for oil pollution nor that relating to pollution by other dangerous or noxious substances have sufficient dissuasive effects to discourage the parties involved in the transport of dangerous cargo by sea from practices that do not comply with the standards". Consequently, "the required dissuasive effects can only be achieved with the introduction of penalties applying to any person who causes or contributes to marine pollution; sanctions should be applicable not only to the owner or master of the ship, but also the owner of the cargo, the classification society or any other person involved".

¹⁵⁵ Directive 2009/123/EC of 21 October 2009 amending Directive 2005/35EC on ship-source pollution and on the introduction of penalties for infringements – *Annex* 93.

¹⁵⁶ The Directive entered into force on 16 November 2009 and the deadline for its implementation by Member States, according to Article 2, was 16 November 2010. Deadline by which Member States had to adopt and publish the national laws and regulations transposing the provisions of the revised Directive into national law. Those national provisions shall be communicated to the Commission.

¹⁵⁷ Articles 1 – 3 of the 2009/123/EC Directive.

Addressing Environmental Crimes and Marine Pollution in the EU

Compendium of International and EU Law Instruments

List of Annexes

Trail Smelter Case (United States v. Canada), 16 April 1938 and 11 March 1941, UN Reports of Annex 1 International Arbitral Awards Annex 2 Lake Lanoux Arbitration (France v. Spain), Arbitral Tribunal, 16 November 1957 Annex 3 North Sea continental shelf cases (Federal Republic of Germany-Denmark; Federal Republic of Germany – Netherlands), Judgment of 20 February 1969, International Court of Justice Annex 4 Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972) Annex 5 Environmental law guidelines and principles on shared natural resource (United Nations Environment Programme (UNEP), 1978 Annex 6 United Nations Convention on the Law of the Sea (Montego Bay, 1982) Annex 7 Convention on environmental impact assessment in a transboundary context, (Espoo, 1991) Annex 8 Convention on the transboundary effects of industrial accidents (Helsinki, 1992) Annex 9 The Rio Declaration on Environmental and Development (Rio de Janeiro, 1992) Annex 10 Gabcikovo-Nagymaros Project Case (Hungary-Slovakia), Judgment of 25 September 1997, International Court of Justice Annex 11 Convention on the Law of the Non-navigational Uses of International Watercourses (General Assembly of the United Nations, 1997) Annex 12 Prevention of Transboundary Harm from Hazardous Activities (International Law Commission, United Nations, 2001) Annex 13 The Mox plant case (Ireland v. United Kingdom), Judgment of 3 December 2001, International Tribunal for the law of the sea Annex 14 Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore), Decision of 1 September 2005, UN Reports of International Arbitral Awards Island of Palmas case (Netherland v. USA), 4 April 1928, UN Reports of International Arbitral Awards Annex 15 The Corfu Channel Case, Judgment of 9 April 1949, International Court of Justice, Reports of Annex 16 Judgments, Advisory opinions and orders Annex 17 Nuclear tests case (New Zealand v. France), Judgment of 20 December 1974, International Court of Justice Annex 18 Legality of the Threat or use of nuclear weapons, Advisory Opinion of 8 July 1996, International Court of Justice, Report of Judgments, advisory opinions and orders Annex 19 International Convention on Civil Liability for Oil Pollution Damage (Brussels, 1969)

Annex 20	Sergio Maria Carbone, «La responsabilità civile per danni da inquinamento marino da idrocarburi», Enciclopedia degli idrocarburi, Volume IV / Economia, politica, diritto degli idrocarburi
Annex 21	Convention on Third Party Liability in the Field of Nuclear Energy (OECD, Paris, 1960)
Annex 22	Convention on Civil Liability for Nuclear Damage (Vienna, 1997)
Annex 23	Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters (Brussels, 1968)
Annex 24	Christophe Bernasconi, "Civil liability resulting from transfrontier environmental damage: a case for the Hague Conference?"
Annex 25	Sixth Community Environment Action Programme (2002-2012), Brussels, 31.8.2011 COM (2011) 531
Annex 26	Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention, 1992)
Annex 27	Report of the World Commission on Environment and Development, Growth Harlem Brundtland (Oslo, 1997)
Annex 28	International Convention for the prevention of pollution of the sea by oil (London, 1954)
Annex 29	International Convention for the Prevention of Pollution from Ships (1973), as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)
Annex 30	Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances (Bonn Agreement, 1969)
Annex 31	Angela Carpenter, "Bonn Agreement Aerial Surveillance programme Trends in North sea oil pollution 1986-2004", Marine Pollution Bulletin 54 (2007) 149–163
Annex 32	"Charter of Economic Rights and Duties of States", UN General Assembly Resolution 3281 (1974)
Annex 33	Resolution on the protection of the marine Environment, UN General Assembly Resolution 3133 (1973)
Annex 34	International Convention on the establishment of an international fund for compensation for oil pollution damage (1971)
Annex 35	Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol), IMO, 2000
Annex 36	Nairobi international convention on the removal of Wrecks (2007)
Annex 37	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 (Madrid, 1994)
Annex 38	Convention for the protection of the Mediterranean Sea against pollution (Barcelona, 1976)
Annex 39	Protocol for the prevention of the pollution of the Mediterranean Sea by dumping from ships and aircraft (Barcelona, 1976)
Annex 40	International Convention for the Regulation of Whaling (Washington, 1946)
Annex 41	Convention on the Conservation of Migratory Species of Wild animals (Bonn, 1979)
Annex 42	The Convention on Wetlands (Ramsar, Iran, 1971)
Annex 43	Convention for the Protection of the World Cultural and Natural Heritage (Paris, 1972)
Annex 44	African Convention for the Conservation of Nature and Natural Resources (Algiers, 1968)
Annex 45	Convention on Conservation of Nature in the South Pacific (Apia, 1976)

- Annex 46 Agreement on the Conservation of Nature and Natural Resources (Kuala Lumpur, 1985)
- Annex 47 Protocol Concerning Mediterranean Specially Protected Areas (Geneva, 1982)
- Annex 48 Protocol for the Protection of the South-East Pacific against Radioactive Pollution (Paipa, 1989)
- Annex 49 Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995)
- Annex 50 United Nations Environment Programme (UNEP)
- Annex 51 Protocol Concerning Mediterranean Specially Protected Areas (Geneva, 1982, as revised in Barcelona, Spain in 1995)
- Annex 52 The Treaty of Rome establishing the European Economic Community (1957)
- Annex 53 The Single European Act amending the Treaty establishing the EEC (1986)
- Annex 54 Declaration of the Council of the European Communities of 22 November 1973 on "The Programme of action of the European Communities on the environment"
- Annex 55 Judgment of the Court of 7 February 1985 in Case 240/83 on the interpretation and the validity of Council Directive No 75/439/EEC of 16 June 1975 on the disposal of waste oils
- Annex 56 Proposal for a Council Directive on Civil Liability for Damage Caused by Waste, COM (89) 282
- Annex 57 Council of Europe's Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (Lugano, 1993)
- Annex 58 Commission of the European Communities, Green Paper on remedying environmental damage COM (93) 47 final Brussels, 14 May 1993
- Annex 59 The Treaty of Maastricht on European Union or TEU (1993)
- Annex 60 Fifth Environmental Action Programme (1992-2000): "Towards Sustainability. The European Community Programme of policy and action in relation to the environment and sustainable development"
- Annex 61 White Paper on environmental liability, COM (2000) 66 final, 9 February 2000
- Annex 62 The Treaty of Amsterdam amending European Union, the Treaties establishing the European Communities and certain related acts (1999)
- Annex 63 The Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community (2007)
- Annex 64 Consolidated versions of the Treaty on European Union and of the Treaty establishing the European Community
- Annex 65 Communication from the Commission on the precautionary principle, Brussels, 02.02.2000 COM (2000) 1
- Annex 66 Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (Seveso Directive)
- Annex 67 Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage
- Annex 68 Council Recommendation of 3 March 1975 regarding cost allocation and action by public Authorities on environment matters

- Annex 69 Judgment of the Court of Justice of the European Communities (Grand Chamber) of 13 September 2005 in Case C-176/03 (Commission of the European Communities v. Council of the European Union)
- Annex 70 Directive 2008/99/EC on the protection of the environment through criminal law
- Annex 71 Judgment of the Court of Justice of the European Communities (Grand Chamber) of 23 October 2007 in Case C-440/05 (Commission of the European Communities v. Council of the European Union)
- Annex 72 Communication from the Commission concerning the implementation of Council Decision 86/85/ EEC of 6 March 1986 establishing a Community information System for the control and reduction of pollution caused by the spillage of hydrocarbons and other harmful substances
- Annex 73 Council Decision (2001/792/EC, Euratom) establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions
- Annex 74 Report on the accident of Erika (2000)
- Annex 75 Report on the accident of the chemical tanker "levoli Sun", European Commission (2000)
- Annex 76 Report on « Peter » Casualty Libreville, Gabon, European Commission (2000)
- Annex 77 Report on the accident of the oil tanker "Jessica" off the Galapagos Islands, Ecuador, European Commission (2001)
- Annex 78 Report on the accident of the oil tanker "Baltic carrier" off the Danish coastline, European Task Force in Denmark (2001)
- Annex 79 Final report on bioremediation in Guimaras oil spill in Philippines, Dekonta (2006)
- Annex 80 Report on the Oil Spill in Kerch Strait, Black Sea, Ukraine, European Commission (2007)
- Annex 81 Report on the "Hebei Spirit" Oil Spill in Republic of Korea, UN / European Commission (2007)
- Annex 82 Judgment of the Court of Justice of the European Communities (Grand Chamber) of 24 June 2008 in Case C-188/07, Commune de Mesquer v. Total France SA and Total International Ltd.
- Annex 83 International Convention on Civil Liability for oil Pollution Damage, 1992
- Annex 84 Directive 2005/35/EC on ship-source pollution and the introduction of penalties for infringements
- Annex 85 Convention for the protection of the Mediterranean Sea against pollution (Barcelona Convention, 1976)
- Annex 86 Marpol consolidated edition 2006. International Convention for the Prevention of pollution from ship 1973 as modified by the protocol of 1978
- Annex 87 Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
- Annex 88 Communication from the Commission COM (93) 66 final, 24 February 1993
- Annex 89 Council Directive 95/21/EC on port State control
- Annex 90 Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues
- Annex 91 Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC
- Annex 92 Council Framework Decision 2005/667/JHA to strengthen the criminal-law framework for the enforcement of the law against ship-source pollution
- Annex 93 Directive 2009/123/EC amending Directive 2005/35EC on ship-source pollution and on the introduction of penalties for infringements