

Environmental Law Principles in Practice

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ENVIRONMENTAL LAW PRINCIPLES, THEIR NATURE AND THE LAW OF THE SEA : A CHALLENGE FOR LEGISLATORS

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INTRODUCTION

Since 1992 there has been an expansion in the codification of environmental law principles in conventions, decisions of international organisations and national legislation (1). Most of these principles are not new and have already been accepted before in "soft law" instruments, such as declarations and recommendations of international organisations, and in regional conventions. The Rio Declaration (1992) upgraded those principles to a global level. For a national legislator wishing to implement environmental principles, it is important to know what the exact meaning of those principles is and to know if internationally-accepted principles have to be considered as principles of law or principles of policy, and whether of specific or of a general application. Related questions are : do those principles have direct application, or do they require additional action on the part of the legislator to

(1) In Belgium : Flemish Decree on Principles of Environmental Policy of 5 April 1995, *BOJ*, 3 June 1995; Law on the Protection of the Marine Environment in the Marine Areas under Belgian Jurisdiction of 20 January 1999, *BOJ*, 12 March 1999; see for the Flemish Decree : BOCKEN, H. & RYCKBOST, D. (eds.), *Codification of Environmental Law. Draft Decree on Environmental Policy*, London/The Hague/Boston, Kluwer Law International, 1996, 3-4; see also de SADELEER, N., *Les principes du pollueur-payeur, de prévention et de précaution*, Bruxelles, Bruylant, 1999, 53-64, 107-114, 138-166.

make them operative, through perhaps more specific rules of law?

This chapter is not intended to supply clear-cut answers. From the international law perspective any evaluation here depends on what one considers international law is. Different schools of thought have different doctrinal views on "international law", and, more fundamentally, its quality as a legal system and the interdependence with power and behaviour at a given period (2). Those different views can, for simplicity's sake, be divided into the "rule orientated approach" and the "process orientated approach", the former drawing a clear distinction between *lex lata* and *lex ferenda*, while for the latter this difference is irrelevant (3). No one doubts that international law is a continuous process, creating rules, principles and expectations of behaviour to realise an effective management in the relations between members of the international community, mainly states but also including international organisations and individuals.

CHAPTER I. — SOURCES OF INTERNATIONAL LAW

The main starting point to identify international law applicable in the relations between states, is the intention of states. A state can not be bound in international law without its consent (4). The consent does not have to be stated explicitly. A non-reaction in a certain situation applicable to a state may be interpreted as an implicit consent to be bound (5).

(2) See for an overview and references : VAN HOOF, G.J.H., *Rethinking the Sources of International Law*, Deventer, Kluwer, 1983, 17-56; HIGGINS, R., *Problems and Process. International Law and how we use it*, Oxford, Clarendon Press, 1994, 1-16; STEINER, H.J., "International Law, Doctrine and Schools of Thought in the Twentieth Century", in BERNHARDT, R. (ed.), *Encyclopedia of Public International Law (EPIL)*, Vol. II, Amsterdam, Elsevier, 1995, 1216-1227; see for a discussion : CASSESE, A., WEILER, J. (eds.), *Change and Stability in International Law-Making*, Berlin, Walter de Gruyter, 1988.

(3) See Bin CHENG, "Epilogue on the Nature and Sources of International Law", in Bin CHENG (ed.), *International Law : Teaching and Practice*, London, Stevens & Sons, 1982, 204-209.

(4) Lotus Case (1927), *Permanent Court of International Justice (PCIJ)*, Ser. A, No. 10, 18; Barcelona Traction Case, *International Court of Justice (ICJ) Reports*, 1970, 47; Nicaragua Case, *ICJ Reports*, 1986, 135.

(5) MULLER, J.P. and COTTIER, T., *Acquiescence*, in Bernhardt, R. (ed.), *EPIL*, Vol I (1992), 14.

The legal value of principles of international law, in the sense that they generate legal effects and can be enforced, depends on various factors which relate mainly to the sources of international law and the language used. It is first necessary to check the source in which the principle is stated. According to article 38 (1) of the Statute of the International Court of Justice (ICJ), there are three main sources : international treaties, international custom as evidence of a generally accepted practice and the general principles of law recognised by "civilised nations". Since de-colonialisation all members of the United Nations are to be considered civilised nations. A fourth source is judicial decisions and the teachings of the most highly qualified publicists of various nations. The fourth source is subsidiary to the other three. Although article 38 (1) is only binding for the ICJ, the first three primary sources have generally become the point of departure for doctrinal discussions about international law and can be considered as the best definition of norms of international law (6).

While treaties create law between the parties, customary international law and international law principles may apply to all states. There is no hierarchy between these sources, except in the case of *jus cogens* (7). *Jus cogens* is a basic rule or principle of international law which does not allow any derogation (8). It is an obligation binding on all states towards the international community, such as for example the obliga-

(6) MOSLER, H., *General Principles of Law*, in BERNHARDT, R. (ed.), *EPIL*, Vol. II (1995), 515.

(7) Nicaragua Case, *ICJ Reports*, 1986, 94-95-96, para. 175, 177, 178 and 179; see also AKHURST, M., "The Hierarchy of the Sources of International Law", 47 *British Yearbook of International Law (BYIL)* 273-279 (1974-1975); VILLIGER, M., *Customary International Law and Treaties*, Dordrecht, Martinus Nijhoff, 1985, 35; American Law Institute, *Restatement of the Foreign Relations Law of the United States*, Vol 1., St. Paul, Minn., 1987, § 102 (j); DANILENKO, G.M., *Law-Making in the International Community*, Dordrecht, Martinus Nijhoff, 1993, 130; WOLFKE, K., *Custom in Present International Law*, Dordrecht, Martinus Nijhoff, 1993, 110-115.

(8) Art. 53, Vienna Convention on the Law of Treaties, 23 May 1969 : "A treaty is void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law. For the purpose of the present Convention, a peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character". The uncertainty about potential implication of *jus cogens* for treaty law and its potential effects, has been one of the main reasons why it took 23 years for Belgium to ratify the Vienna Convention on the Law of Treaties : Law of 10 June 1992, *BOJ*, 25 December 1992.

tion not to permit slavery, piracy, genocide (9). *Jus cogens* can be found in treaty law, international customary law or principles of international law. It seems logical that the ICJ and scholars will first rely on treaties, in which the intention of the parties and their obligations are generally more clearly stated (10). The existence of an environmental law principle as customary international law or a (general) principle of international law is more difficult to prove, except when proof has been attested to by an international court or tribunal or the principle has been explicitly accepted as such by states themselves.

To prove the existence of such a customary international law rule in other cases, one has to find sufficient support for environmental law principles in state practice (*usus*) and *opinio juris*. State practice is evidence of the actual conduct and practice of states, including any act or statement by a state from which views about customary law can be inferred, such as physical acts, claims, declarations *in abstracto*, national laws, national judgments and omissions (11). State practice has to be uniform and continuous (12). *Opinio juris* is the conviction that the practice reflects binding legal obligations and so distinguishes norms thus accepted as binding from other rules of behaviour. Customary international law establishes obligations for all states, except those that have persistently objected to a practice and its legal consequence (13). A persistent objector cannot avoid the develop-

(9) See FROWEIN, J.A., *Jus cogens*, in BERNHARDT, R. (ed.), *EPIL*, Vol. III (1997), 65-69; KOLB, R., "The Formal Source of Ius Cogens in Public International Law", *Australian Journal of Public and International Law*, 69-106 (1998).

(10) AKEHURST, M., *l.c.*, 274 (1974-1975); see, for example : Gabcikovo-Nagymaros Project (Hungary/Slovakia) where the Court mainly relied on the original project agreement of 1977, Judgment, *ICJ Reports*, 1997.

(11) AKEHURST, M., "Custom as a Source of International Law", 47 *BYIL* 53 (1974-1975).

(12) Asylum Case, *ICJ Reports*, 1950, 277; North Sea Continental Shelf Case, *ICJ Reports*, 1969, 44; Continental Shelf Case (Libyan Arab Jamarihiya/Malta), *ICJ Reports*, 1985, 29-30, para. 27; Nicaragua Case, *ICJ Reports*, 1986, 97 and para. 183-184, 108-109, 207; THIRLWAY, H.W.A., *International Customary Law and Codification*, Leiden, A.W. Sijthoff, 1972, 145-146; MOSLER, H., *The International Society as a Legal Community*, Alphen aan den Rijn, Sijthoff & Noordhoff, 1980, 107-115; BROWNLIE, I., *Principles of Public International Law*, Oxford, Clarendon Press, 1977, 6-10; VAN HOOF, G.J.H., *o.c.*, 87; DANILENKO, G.M., *o.c.*, 81; WOLFKE, K., *o.c.*, 40-51 (51); HIGGINS, R., *o.c.*, 18-19.

(13) See CHARNEY, J.I., "The Persistent Objector Rule and the Development of Customary International Law", 56 *BYIL* 1-24 (1985).

ment of a rule into a rule of customary international law, but will not be bound by it (14). Where a rule of customary international law develops into a rule of *jus cogens*, persistent objectors are bound by this rule due to the very nature of *jus cogens*. Since the acceptance and recognition of a rule of *jus cogens* takes place by the international community as a whole, the international community rarely recognises a rule of *jus cogens* as such.

In the doctrine there is no firm agreement on the meaning of the elements of state practice and *opinio juris* constituting customary international law, or if they can be clearly separated (15). For Rijpkema : "The Nicaragua Case shows that these requirements [state practice and *opinio juris*] will not have to be met in all cases, but only when the existence of a rule of customary international law is disputed by one of the parties in the case" (16). Where there is a dispute as to a rule of customary international law between states, the state seeking to rely on the rule has to prove its existence. In addition to customary international law, there is also regional customary international law binding states in a particular region (17). In the preamble to the Convention for the Protection of the Marine Environment of the North East Atlantic (Paris, 1992) (18), the Parties :

Recall the relevant provisions of customary law reflected in Part XII of the United Nations Law of the Sea Convention and, in particular

(14) AKEHURST, M., *A Modern Introduction to International Law*, London, George Allen and Unwin, 1977, 53; BROWNLIE, I., *o.c.*, 10-11; American Law Institute, *o.c.*, § 102 (d); SZASZ, P.C., International Norm-Making, in *Environmental Change and International Law*. BROWN WEISS, E. (ed.), Tokyo, United Nations University Press, 1992, 67; DANILENKO, G.M., *o.c.*, 106, 109-113; WOLFKE, K., *o.c.*, 66.

(15) See Bin CHENG, "United Nations Resolutions on Outer Space : 'Instant' International Customary Law", 5 *Indian Journal of International Law (IJIL)* 46 (1965); D'AMATO, A., *The Concept of Custom in International Law*, Ithaca and London, Cornell University Press, 1971, 74-87; Bin CHENG, in Bin CHENG (ed.), *o.c.*, 223 (1982); Bos, M., "The Identification of Custom in International Law", 25 *German Yearbook of International Law (GYIL)* 9 (1982); WOLFKE, K., "Some Persistent Controversies Regarding Customary International Law", 24 *Netherlands Yearbook of International Law (NYIL)* 1 (1993); ELIAS, O., "The Nature of the Subjective Element in Customary International Law", in 44 *International and Comparative Law Quarterly (ICLQ)* 501 (1995).

(16) RIJPKEMA, P.P., "Customary International Law in the Nicaragua Case", 20 *NYIL* 98 (1989).

(17) Asylum Case, *ICJ Reports*, 1950, 276; Right of Passage over Indian Territory Case, *ICJ Reports*, 1960, 39.

(18) Convention for the Protection of the Marine Environment of the North East Atlantic, Paris, 22 September 1992, 32 *International Legal Materials (ILM)* 1069 (1993).

article 197 on global and regional co-operation for the protection and preservation of the marine environment.

This statement is at least regionally significant. However, it is unclear if other states in other regions share the same opinion. Recent regional conventions to protect the marine environment of the Baltic Sea (1992), the Mediterranean Sea (1976, as amended in 1995) and the Black Sea (1992) do not mention "customary law" as reflected in Part XII of the United Nations Law of the Sea Convention (19).

To prove the existence of a principle of international law, mainly the same techniques are used as for proving rules of customary international law, although this is not imperative. The concept of "general principles of law" bears several meanings (20). One refers only to principles applied in national law. Another extends the concept to principles having their origin directly in international legal relations, and indicating principles which are applied generally in all cases of the same kind which arise in international law (e.g. the principle of non-intervention). A third covers principles of law recognised in all kinds of relations, regardless of the legal order they may belong to, be it municipal, international law, the internal order of international organisations, or any autonomous legal system. These principles are indispensable to the well-functioning of legal relations (e.g. good faith, *pacta sunt servanda*). Finally, there are principles of legal logic, which determine the legal consequence resulting from the inter-relation of two legal situations (e.g. *lex specialis derogat legi generali* and *lex posterior derogat legi priori*) (21). In this chapter, environmental law principles are considered under the second meaning,

(19) United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, 21 *ILM* 1261 (1982).

(20) See for an overview in doctrinal writings: PARRY, C., *The Sources and Evidences of International Law*, Manchester, Manchester University Press, 1965, 83-91; LAMMERS, J.G., "General Principles of Law Recognised by Civilised Nations", in KALSHOVEN, F. a.o. (eds.), *Essays on the Development of the International Legal Order, in Memory of Haro T. van Panhuys*, Alphen a/d Rijn, Sijthof & Noordhoff, 1980, 53-75; VITANYI, B., "Les positions doctrinales concernant les sens de la notion de 'principes généraux' de droit reconnus par les nations civilisées", 86 *Revue générale de droit international public (RGDIP)* 45-116 (1982); VAN HOOF, G.J.H., *o.c.*, 131-150; DANILENKO, G.M., *o.c.*, 173-189.

(21) MOSLER, H., *o.c.*, 69-74, 71-72; MOSLER, H., "General Principles of Law", in BERNHARDT, R. (ed.), *EPIL*, Vol. II (1995), 511-512.

namely, as principles arising/originating directly in international law.

Besides the sources mentioned in the statute of the ICJ, there are derivatives of the main sources of international law. Within this grouping are decisions of international organisations which are legally binding so far as the statute of the organisation provides for this. The United Nations (UN) Security Council, the European Community (EC) and OSPAR-COM (Commission mandated under the 1992 Paris Convention) (22) can all take legally binding decisions since their institutional organs are so empowered to act. Binding acts of international organisations derive their legal authority from a treaty and are part of treaty law.

In addition, in the doctrine one regularly finds reference to "soft law" (23). "Soft law" has two meanings. The first refers to the source, that is, to the fact that one is dealing with a non-legal instrument, such as recommendations and guidelines of international organisations or declarations of heads of states or ministers. The second refers to how authoritative the language used is, that is, to the fact that the principles or rules in a treaty in question are imprecise and do not really lay down a legally binding obligation. In this latter case there is no doubt about the legal binding nature of the source itself. However, the "obligation" is not clearly stated and is soft in expression, for example, by the use of words such as "as appropriate", "if possible". "Soft law" in the first meaning is important for the development of hard law and can be an indication of a principle of law in *status nascendi*. Sometimes reference to "soft law" is used as part of the evidence of state practice that might support proof of the existence of a rule of customary law. A significant part of international environ-

(22) See footnote 17. See also HEY, E., IJLSTRA, T. and NOLLAEMPER, A., "The 1992 Paris Convention for the Protection of the Marine Environment of the North-East Atlantic: A Critical Analysis", 8 *The International Journal of Marine and Coastal Law (IJMCL)* 39-40 (1993).

(23) See on soft law: WEIL, P., "Towards Relative Normativity in International Law", 77 *American Journal of International Law (AJIL)* 413 (1983); GRUCHALLA-WESIERSKI, T., "A Framework for Understanding 'Soft Law'", in 30 *McGill Law Journal* 37 (1984); CHINKIN, C.M., *The Challenge of Soft Law: Development and Change in International Law*, 38 *ICLQ* 850 (1989). DUPUY, P.-M., "Soft Law and the International Law on the Environment", 12 *Michigan Journal of International Law* 420 (1991).

mental law consists of non-legal principles or policy principles, which states observe although no sanctions can be legally applied in the case of non-observance. Instead, political and moral pressure can be brought to bear.

CHAPTER II. — HOW USEFUL ARE PRINCIPLES OF INTERNATIONAL LAW ?

In general, principles of international law can give rise to specific rules or can be the product of induction of specific rules (24). For Schwarzenberger (25) fundamental principles are :

[N]on-binding abstractions from groups of more closely related rules of international law, intended to be binding within their normative limits. These rules can be inductively verified by reference to their law-creating process and law-determining agencies. Accordingly, in existing international law, as distinct from international law in the making, "new" principles can be abstracted only from binding rules, and the binding character of rules depends on compliance with the processes and agencies prescribed in the 1945 Statutes of the ICJ.

However, a conclusion that the designation of a rule as "principle" implies its legally binding nature is premature, for the designation of a rule as principle does not define its legal force (26). Due to their more general and more fundamental character, principles have a broader significance, and give rise to a wider variety of applications and execution than a rule of law, which defines duties and rights in a clearer way (27). While rules are either applicable or not, principles of law do not predicate such immediate effect. Principles can explain an argumentation which does not always result in a decision (28).

(24) SCHWARZENBERGER, G., *The Inductive Approach to International Law*, London, Stevens & Sons, 1965, 73-74.

(25) SCHWARZENBERGER, G., "Complexities of the Distinction Between Old and New International Law", in PATHAK, R.S. en DHOKALIA, R.P. (eds.), *International Law in Transition. Essays in Memory of Judge Nagendra Singh*, Dordrecht, Martinus Nijhoff, 1992, 23.

(26) HAFNER, G., "Commentary", in LANG, W., NEUHOLD, H. and ZEMANEK, K. (eds.), *Environmental Protection and International Law*, London, Graham & Trotman, 1991, 143.

(27) MOSLER, H., *o.c.*, 73.

(28) FITZMAURICE, G., "The General Principles of International Law, Considered from the Standpoint of the Rule of Law", 95 *Recueil des Cours de l'Académie de Droit Interna-*

Principles of law can be considered as "aspirational" norms in the development and application of legal rules and can serve as guidelines for the actions of states (29). Although most principles of law must undergo a process of transformation into legal rules (30), this does not mean that principles cannot be directly applied. The latter may arise in the decision-making process of a government (for example, the application of the precautionary principle in the dioxin crisis in Belgium in 1999) or in the judgment of a court in a case of *non liquet* (31).

CHAPTER III. — TOWARDS GLOBAL CODIFICATION OF ENVIRONMENTAL PRINCIPLES

A first universal codification of environmental principles took place at the United Nations Conference on the Human Environment (Stockholm, June 1972), when 113 states adopted the Stockholm Declaration and an Action Plan. The aim of the Stockholm Declaration was to inspire governments to preserve and enhance the human environment. The Declaration contains 26 principles, of which only a few are expressed in an obligatory form. Furthermore, the Declaration cannot be considered as a legal document *prima facie* binding on states. Principle 2 of the Declaration is a first reference to what became later the principle of "sustainable development" :

The natural resources of the earth including the air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

tional (RCADI) 7 (1957/II); VAN HOOF, G.J.H., *o.c.*, 148-149, citing R. DWORKIN and BIN CHENG.

(29) VAN DIJK, P., *Normative Force and Effectiveness of International Norms*, 30 *GYIL* 14-15 (1987).

(30) VIRALLY, M., "Le rôle des 'principes' dans le développement du droit international, in *Recueil d'études de droit international en hommage à Paul Guggenheim*, Genève, 1968, 531-554 (533).

(31) See for *non liquet* in judgments of the International Court of Justice : THIRLWAY, H., "The Law and Procedure of the International Court of Justice", 60 *BYIL* 77-84 (1989); DESAI, B., *Non Liquet and the ICJ Advisory Opinion on the Legality of the Threat of the Use of Nuclear Weapons : Some Reflections*, *Indian Journal of International Law* 201-218 (1997).

Principle 21 can be considered as a re-statement of international law (32) as at the time of its adoption :

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.

No agreement could be reached on the inclusion of the principles of notification and consultation in the case of transboundary risks from proposed activities (33), what later became the transboundary environmental impact assessment procedure.

Principle 7 relates to the definition of marine pollution and has been worked out in more detail in Part XII of the Law of the Sea Convention (1982) (34). According to Principle 7 :

States shall take all possible measures to prevent pollution of the seas by substances that are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.

Twenty years after Stockholm, the UN organised a further Conference in this area. The UN Conference on Environment and Development (UNCED) took place in June 1992 in Rio de Janeiro. At the end of the Conference 176 states adopted the Rio Declaration by consensus (35). In addition, the Conference adopted an action plan in "Agenda 21", the Convention on Biological Diversity, the Convention on Climate Change and the non-binding Statement of Consensus on Forest Principles (36). In December 1992, United Nations General

(32) For example : Trail Smelter Arbitration (US v. Canada), III *United Nations Reports of International Arbitral Awards (UNRIAA)* 1905 (1949) and Lake Lanoux Case (Spain v. France), XII *UNRIAA*, 301 (1957).

(33) BIRNIE, P.W. and BOYLE, A., *Basic Documents on International Law and the Environment*, Oxford, Clarendon Press, 1995, 1.

(34) See footnote 19.

(35) Rio Declaration on Environment and Development, Rio de Janeiro, 13 June 1992, 31 *ILM* 876 (1992).

(36) Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, 31 *ILM* 818 (1992); Framework Convention on Climate Change, Rio de Janeiro, New York, 9 May 1992, 31 *ILM* 849 (1992); Non-Legally Binding Authoritative Statement on Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, 31 *ILM* 881 (1992); ROBINSON, N.A. (ed.), *Agenda 21 : Earth's Action Plan*, New York, Oceana Publications, 1993.

Assembly (UNGA) Resolution 47/191 established the UN Commission on Sustainable Development (37). The task of this new agency is to collect data on environmental and development activities and to monitor implementation of the Rio Declaration and Agenda 21 through the national action plans of participating states. UNGA Resolution 48/190 (1993) urges governments to promote the dissemination of the principles of the Rio Declaration in the public and private sector and requests the UN to incorporate the principles into the programmes and processes of the UN system (38).

Although the Rio Declaration is not formally binding and has to be regarded as a "soft law" instrument, the adoption by consensus and the normative character of the words used (e.g. "shall" and "should") give the newly-introduced principles in the Declaration an authoritative status for their further development as legal principles. In the Declaration, the content of prior-existing principles has been modified and reaffirmed (e.g. principle 2) (39) and new principles introduced.

The Rio Principles are inter alia public participation and access to environmental information (principle 10), the prevention against the relocation and transfer of harmful activities and substances to other states (principle 14), the precautionary approach (principle 15), the polluter pays principle (principle 16), a national environmental impact assessment (principle 17), notification of emergencies (principle 18) and prior notification and consultation in the event of adverse or harmful effects to the environment of other states (principle 19).

Except for the principle of common but differentiated responsibilities (principle 7) (40), most of those principles were not really new. Even the principle of sustainable development

(37) 32 *ILM* 254 (1993).

(38) BIRNIE, P.W. and BOYLE, A., *o.c.*, 1995, 9.

(39) Principle 2, which is Principle 21 of the Stockholm Declaration, modified by referring to the developmental policy of states, in addition to their environmental policy.

(40) "... In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressure their societies place on the global environment and of the technologies and financial resources they command." (Principle 7, Rio Declaration).

(principle 3) (41) has its roots in Principle 2 of the Stockholm Declaration, which was limited to the environmental context. Before Rio most principles had already been accepted in regional treaties, recommendations of regional organisations, and in regional Ministerial declarations, albeit with a different content or with restricted application to certain regions of the world or to certain parts of the environment (e.g. air pollution, sea pollution) or a particular activity. Some environmental principles such as the principle to prevent significant harm (42) to the environment of other states or beyond the national jurisdiction of states and the principle of co-operation between states in cases of transboundary pollution, date back to the 1960s and 1970s, when those principles inspired the parties to accept more specific obligations in regional conventions for the protection of the marine environment and in regional conventions concerning the protection of international watercourses (43). The polluter pays principle, introduced by the Organisation for Economical Co-operation and Development in a Recommendation of 1972 (44), acquired a first European Community treaty law status in article 25 of the Single European Act (1986) (45) and later convention status in marine regional treaties concluded in 1992, such as the Paris Convention for the Protection of the Marine Environment of the North-East Atlantic and the Helsinki Convention on the

(41) "The right to development must be fulfilled so as to equitably meet developmental and environmental needs of the present and future generations." (Principle 3, Rio Declaration).

(42) See for the difference between the qualification significant/substantial/appreciable harm : SACHARIEW, K., "The Definition of Thresholds of Tolerance for Transboundary Environmental Injury under International Law : Development and Present Status", XXXVII *Netherlands International Law Review (NILR)* 193-206 (1990); NOLLKAEMPER, A., *The Legal Regime of Transboundary Pollution : Between Discretion and Constraint*, Dordrecht/Boston/London, Martinus Nijhoff/Graham & Trotman, 1993, 35-40.

(43) See : Experts Group of the World Commission on Environment and Development, *Environmental Protection and Sustainable Development. Legal Principles and Recommendations*, London/Dordrecht/Boston, Graham & Trotman/Martinus Nijhoff, 1987, 91-92; see for an overview of state practice in Mc CAFFREY, S., "Third Report on the Law of the Non-Navigational Uses of International Watercourses", *Yearbook International Law Commission* 43-58 (1987/II).

(44) OECD Recommendation on Guiding Principles concerning Environmental Policies, May 1972, 11 *ILM* 1172 (1972).

(45) Introducing the polluter pays principle, amongst others, in article 130R of the EC Treaty The polluter pays principle was incorporated in earlier EEC Directives, eg. Dir. 75/442/EEC. Article 130R(2), last sentence (the "integration" factor in EC environmental policy) later became article 6 EC Treaty (Amsterdam Treaty, 1997).

Protection of the Marine Environment of the Baltic Sea Area (46).

Principle 14 of the Rio Declaration (against the relocation and transfer of harmful activities and substances to other states) had already partly been given effect in the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989) and the Bamako Convention on the Ban on the Import into Africa and the Control of Transboundary Movement (1991) (47). The "precautionary approach" was introduced explicitly in the 1987 North Sea Declaration, although the approach can be traced back implicitly to UN Resolutions and in some conventions concluded before that period (48). In PARCOM Recommendation 89/1 of 22 June 1989 the "approach" became the "principle of precautionary action" and in the Paris Convention for the Protection of the Marine Environment of the North-East Atlantic (1992) the approach became the "precautionary principle" (art. 2 (2)(a)). In the Bamako Convention (1991) the "precautionary approach" and the "precautionary principle" are used in the same article 4 (3)(f). The Treaty of Maastricht (1992) added the precautionary principle to the EC environmental principles, without giving any definition of the principle (art. 130 R, para 2).

During the preparation of UNCED 1992 various regional initiatives took place which resulted in new regional conventions. The Convention on Environmental Impact Assessment

(46) Art. 2 (2)(b), Convention for the Protection of the Marine Environment of the North East Atlantic, Paris, 22 September 1992, 32 *ILM* 1069 (1993); Art. 3 (4), Convention on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, 9 April 1992, 8 *IJMCL* 215 (1993); see SANDS, P., *Principles of International Environmental Law I: Frameworks, Standards and Implementation*, Manchester and New York, Manchester University Press, 1995, 216.

(47) Basel Convention, 22 March 1989, 28 *ILM* 649 (1989); Bamako Convention, 29 January 1991, 30 *ILM* 773 (1991).

(48) E.g. art. 11 (b), UNGA Resolution 7 (XXXVII), World Charter for Nature, 28 October 1982; see: FREESTONE, D., "The Precautionary Principle", in CHURCHILL, R.R. and FREESTONE, D. (eds.), *International Law and Global Climate Change*, London, Graham & Trotman, 1991, 21-30; HEY, E., "The Precautionary Concept in Environmental Policy and Law: Institutionalising Caution", 4 *Geo. Int'l Envtl. L. Review* 311 (1992); FREESTONE, D. and HEY, E., "Origins and Development of the Precautionary Principle", in FREESTONE, D. and HEY, E. (eds.), *The Precautionary Principle and International Law. The Challenge of Implementation*, The Hague, Kluwer, 1996, 3-15; See for a differentiation between "principle" and "approach" on the precautionary principle below footnote 87.

in a Transboundary Context, concluded in Espoo on 25 February 1991, is the first convention to lay down detailed rules, procedures and practices for transboundary impact assessment (49). The Convention on the Transboundary Effects of Industrial Accidents, concluded at Helsinki on 7 March 1992, is the first convention to set out principles for the prevention of, preparedness for and response to the effects of industrial accidents or activities involving hazardous substances capable of causing transboundary effects (50).

The concept of sustainable development, as a principle of law, is more problematic. Although some scholars argue that the concept dates back to conventions to protect nature (51) and natural resources (52), especially the Pacific Fur Seal Arbitration (1893) (53), there is still some doubt about the status of sustainable development as a principle of international law and its reflection in state practice. The ICJ in the *Gabcikovo-Nagymaros Case* (1997) referred to the "concept" of sustainable development as expressing a need to reconcile economic development with protection of the environment. The Court did not mention sustainable development as a principle of international law, nor as a legal concept or a concept

(49) 30 *ILM* 800 (1991). This convention is open for member states of the UN Economic Commission for Europe and the EC, and was inspired by EC Directive 85/337/EEC on Environmental Impact Assessment.

(50) 31 *ILM* 1330 (1992).

(51) See Legality of the Threat or Use of Nuclear Weapons, Dissenting Opinion of Judge Weeramantry, *ICJ Reports*, 1996, 455-456.

(52) Philippe SANDS concludes: "Where it [sustainable development] has been used it appears to refer to at least four separate but related objectives that, taken together, might comprise the legal elements of the concept of 'sustainable development' ... First, as invoked in some agreements, it refers to the commitment to preserve natural resources for the benefit of present and future generations. Second, in other agreements sustainable development refers to appropriate standards for the exploitation of natural resources based upon harvest or use; ... Third, yet other agreements require an 'equitable' use of natural resources, suggesting that the use by any state must take into account the needs of other states and people. A fourth category of agreements require that environmental considerations be integrated into economic and other development plans, programs, and projects, and that development needs are taken into account in applying environmental objectives: SANDS, Ph., "Environmental Protection in the Twenty-first Century: Sustainable Development and International Law", in VIG, N.J. & AXELROD, R.S. (Ed.), *The Global Environment. Institutions, Law and Policy*, Earthscan, London, 1999, 128-129.

(53) SANDS, Ph., "International Law in the Field of Sustainable Development: Emerging Legal Principles", in LANG, W. (ed.), *Sustainable Development and International Law*, London/Dordrecht, Graham & Trotman, 1995, 58; SANDS, Ph., in VIG, N.J. & AXELROD, R.S. (Ed.), *o.c.*, 127.

of international law (54). Judge Weeramantry in his separate opinion to this judgment argues that the principle of sustainable development has become part of modern international law and state practice. For him it is more than a concept and has to be considered as a principle with normative value (55).

Nevertheless, the introduction or reiteration of environmental law principles in the Rio Declaration in one globally accepted instrument with a universal application is a novelty. This means that UN organisations cannot ignore these principles in their decision-making process. The principles can be said in fact to have become general in the sense that they are potentially applicable to all members of the international community across the range of activities that they carry out or permit to be carried out and that they address the protection of all aspects of the environment. Although the Rio Principles have to be considered as legally non-binding, most of them have been introduced in new environmental treaties and have become part of treaty law. As these principles have to be balanced against other principles, there is scope for potential conflict.

CHAPTER IV. — ENVIRONMENTAL LAW PRINCIPLES AND THE LAW OF THE SEA

The main principles and rules concerning the use of oceans and seas have been codified in the United Nations Convention on the Law of the Sea (1982), which can be considered as the constitution of the oceans (56). It took the negotiators fourteen years to come up with a compromise text and it took another twelve years before the Convention came into force on 16 November 1994, after an Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea had been reached to adjust some parts

(54) Gabcikovo-Nagymaros Project (Hungary/Slovakia), Judgment, *ICJ Reports*, 1997, 78, para 140.

(55) Separate Opinion of Vice-President Weeramantry, *ICJ Reports*, 1997, 85, 92.

(56) See footnote 19.

of the deep seabed regime (57). There are now 137 states party to the Convention and 103 to the Agreement. Between 1982 and 1994 some new principles and rules in the Law of the Sea Convention had already acquired a customary law status, such as for example the territorial sea limit of twelve nautical miles and the right for coastal states to proclaim an exclusive economic zone of 200 nautical miles. From the environmental perspective, Part XII on the "Protection and preservation of the marine environment" is one of most important global attempts to balance the exploitation rights of states and their obligation to protect the marine environment.

According to article 194 (2) :

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.

By using the words "states" instead of "parties", article 194 (2) is a general obligation for all states and is not restricted to the parties to the Law of the Sea Convention. For the ICJ in its advisory opinion in the Nuclear Weapons Case (1996), this general obligation has become part of the corpus of international law relating to the environment (58). Nevertheless, balanced against other principles of international law such as the right of self-defence, the Court was of the opinion that this environmental obligation is not intended to be an obligation of total restraint during military conflict. Recalling Principle 24 of the Rio Declaration (59), the Court was of the opinion that : (60)

... States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate

(57) Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, New York, 28 July 1982, 33 *ILM* 1309 (1994). In force since 28 July 1996.

(58) Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons on request of the United Nations General Assembly, *ICJ Reports*, 1996, para. 29.

(59) "Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and co-operate in its further development, as necessary" (Principle 24, Rio Declaration).

(60) Footnote 58, para 30.

military objectives. Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.

States have a clear obligation ("shall") to protect and preserve the marine environment (art. 192), but also the right to exploit their natural resources pursuant to their own environmental policies (art. 193). According to article 193 : "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." Again, this obligation and this right is not limited to contracting parties but apply to all states and to the whole marine environment. These two fundamental principles of international law, the duty to protect the (marine) environment and the right of states to exploit their natural resources, the latter as a corollary right of permanent sovereignty and the right to development of states, balance global interests with national interests (61). The roots of article 193 go back to Principle 21 of the Stockholm Declaration and the position of developing states. Environmental policies of developed states should not weaken the trade position and development of developing states. Reference to the "environmental policies" of individual states introduces a "double standard", one stricter environmental standard for developed states, the other less strict for developing states (62). This position is best reflected in Principle 11 of the Stockholm Declaration (63) :

(61) See also UNGA Resolution 3133 (XXVIII) Protection of the marine environment (13 december 1973), 13 *ILM* 234 (1974); UNGA Resolution 3281 (XXXIX) Charter of Economic Rights and Duties of States (12 December 1974), 14 *ILM* 254 en 206-261 (1975); UNGA Resolution 3016 (XXVII) Permanent sovereignty over natural resources of developing countries (18 December 1972), 12 *ILM* 226 (1973); UNGA Resolution 3171 (XXVIII) Permanent sovereignty over natural resources (17 December 1973), 13 *ILM* 238 (1974); UNGA Resolution 2894 (XXVI) Development and Environment (20 december 1971), 11 *ILM* 422 (1972); Principle 21, Stockholm Declaration; Principle 2, Rio Declaration; SCHRIJVER, N., *Sovereignty over Natural Resources. Balancing Rights and Duties*, Cambridge, Cambridge University Press, 1997, 35-142.

(62) HAKAPAA, K., *Marine Pollution in International Law*, Helsinki, Suomalainen Tiedekatemia, 1981, 60-62.

(63) See also Principle 11, Rio Declaration : "States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries".

The environmental policies of all States should enhance and not adversely affect the present and future development potential of developing countries, nor should they hamper the attainment of better living conditions for all, and appropriate steps should be taken by States and international organisations with a view to reaching agreement on meeting the possible national and international economic consequences resulting from the application of environmental measures.

This double standard has been introduced into article II of the London Dumping Convention (1972) and more clearly in article 194 (1) of the Law of the Sea Convention (64) :

States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce or control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonise the policies in this connection. (article 194 (1))

The reference to the best practical means and capabilities became later, in article 3 (1) of the Climate Change Convention, the *principle of common but differentiated responsibility*, that take into account the special needs of developing countries (65). In the Kyoto Protocol (1997) to the Climate Change Convention developed states accepted quantified emission reductions for six greenhouse gases, while developing states have no such obligation (66). The principle of common but differentiated responsibility implies that while every state has responsibility to protect the earth against global environmental threats, developed countries have a greater responsibility due to their greater contribution to environmental problems and so should take more stringent steps. The principle leads to different commitments for states to protect the environment (67). Furthermore, under the Law of the Sea Convention developing countries are granted a preferential treatment by international organisations in (a) the allocation of appropriate funds and technical assistance; and (b) the utilisation of the specialised services (art. 203). States have to grant scientific

(64) See HAKAPAA, K., *o.c.*, 63-65.

(65) See also Principle 7, Rio Declaration and the Preamble to the Biodiversity Convention.

(66) Protocol to the United Nations Framework Convention on Climate Change, Kyoto, 10 December 1997, 37 *ILM* 22 (1998).

(67) SANDS, P., in LANG, W. (ed), *o.c.*, 63-64; SANDS, P., in VIG, N.J., Axelrod, R. (eds.), *o.c.* 129.

educational, technical and other assistance to developing states for *inter alia* minimising the effects of major incidents causing serious pollution and in the preparation of environmental impact assessments (art. 202).

To protect the marine environment and to implement article 192 and article 194(1) and (2), measures have to be taken to prevent, reduce and control pollution of the seas from all sources (land-based, vessels, installations at sea) (*principle of prevention*). According to the Law of the Sea Convention, states "shall" adopt laws and regulations and co-operate on a global or regional level to endeavour to harmonise the establishment of rules, standards, recommended practices and procedures to prevent, reduce and control all main sources of marine pollution, such as land-based pollution (art. 207), pollution from seabed activities (art. 208), dumping at sea (art. 210), pollution from vessels (art. 211), and atmospheric pollution (art. 212). When states become aware of imminent or actual damage to the marine environment due to pollution, they shall immediately notify other states which they deem likely to be affected (art. 198). Special attention shall be given to protect and preserve rare or fragile ecosystems, as well as the habitat of depleted, threatened or endangered species (art. 194(5)). Various conventions to set up protected areas for the protection of the habitat of species had been concluded before the Law of the Sea Convention was open for signature (68).

Three articles in the Law of the Sea Convention deserve special attention, because at the time the Convention was opened for signature these articles were legitimately to be considered as innovations.

Article 195 introduces the duty *not to transfer*, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another. States have a

(68) 1940 Washington Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere; 1950 Paris Convention for the Protection of Birds; 1968 African Convention on the Conservation of Nature and Natural Resources; 1971 Ramsar Convention on Wetlands of International Importance, Especially as Water Fowl Habitats; 1972 London Convention for the Conservation of Antarctic Seals; 1972 Paris Convention concerning the Protection of World Cultural and Natural Heritage; 1976 Apia Convention on Conservation of Nature in the South Pacific; 1979 Berne Convention on the Conservation of European Wildlife and Natural Habitats.

clear obligation here, they "shall act so as not to transfer". This obligation has been repeated in article 3(3) of the 1996 Protocol to the London Dumping Convention (69). This means for example that measures to prevent the dumping of industrial waste at sea (which is prohibited in inter alia article 4 of the 1996 Protocol to the London Dumping Convention) may not result in additional air pollution; or the prohibition on dumping in the territorial sea may not result in dumping on the high seas.

A second innovation is article 196 on the *introduction of alien or new species*. States are obliged to take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new. The implementation of this article has been taken very seriously by the Belgian government in the law on the protection of the marine areas under Belgian jurisdiction (1999) (70). In this law the introduction of alien species requires a permit after it has been proven that the introduction will have no effect on the endemic fauna and flora (that is, the *precautionary principle*).

A third environmental law innovation in the Law of the Sea Convention was the introduction of an *environmental impact assessment* process to assess the potential effects of planned activities which might cause substantial pollution or significant and harmful changes to the marine environment (art. 206). Article 206 may be considered a soft obligation for states, since an environmental impact assessment is required "when states have reasonable grounds for believing" that those activities may cause those effects. Furthermore an assessment is obligatory only "as far as practicable" and leaves quite some discretion for states to use or not to use environmental impact assessments for planned activities. The Belgian Law of 1999 requires an environmental impact assessment for every activity at sea for which a governmental per-

(69) 1996 Protocol to the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 7 November 1996, 36 *ILM* 1 (1997).

(70) See footnote 1; See CLIQUET, A. & MAES, F., "The New Belgian Law on the Protection of the Marine Environment", 1 *Journal of International Wildlife Law & Policy* 395-402 (1998).

mit or authorisation is required, except for fishing activities (art. 28, Law (1999)).

The Law of the Sea Convention does not mention the precautionary principle, the polluter pays principle or sustainable development (71). Those principles were introduced after the Convention was concluded. Nevertheless, the definition of marine pollution in the Law of the Sea Convention, by using the word "likely", is not an obstacle to applying the precautionary principle, although its application is worded so that it appears to be limited to the introduction of substances and energy into the marine environment. Pollution of the marine environment means (art. 1 (4)) :

The introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate use of the sea, impairment of quality for use of sea water and reduction of amenities.

Besides measures to be taken by individual states, states have accepted the obligation to co-operate on a global and regional level to implement Part XII of the Convention (72). The principle of *co-operation* between states to protect the environment is expressed in almost every environmental treaty, in resolutions and decisions of international organisations, in Principle 27 of the Stockholm Declaration and in Principle 7 of the Rio Declaration. The principle of co-operation to protect the environment is more a procedural obligation, and now considered as customary international law (73). In the event of pollution from ships, the parties to the Law

(71) See, too, the provisional measures ordered in the SBT Cases by the International Tribunal for the Law of the Sea, where they were not based on the precautionary principle, despite requests to that effect : Southern Bluefin Tuna Cases (New Zealand/ Japan, Australia/Japan), Order, 38 *ILM* 1624 (1999). In his separate opinion Judge Laing argues that the provisional measures ordered by the Tribunal are based on the precautionary approach : 38 *ILM* 1642, para 19.

(72) In particular articles 197, 199, 200, 202, 207 (4), 208 (5), 209 (1), 210 (4), 212 (3), 226 (2), 235 (3) and 242 (2), Law of the Sea Convention ; see PINTO, M.C.W., The Duty of Co-operation and the United Nations Convention on the Law of the Sea, in BOS, A. and SIBLESZ, H. (eds.), *Realism in Law-Making. Essays on International Law in Honour of W. Ripphagen*, Dordrecht, Martinus Nijhoff, 1986, 135.

(73) FRANCONI, F., International Co-operation for the Protection of the Environment : The Procedural Dimension, in LANG, W., NEUHOLD, H. and ZEMANEK, K. (eds.), *o.c.*, 204.

of the Sea Convention have accepted the obligation to co-operate with each other on a global level within the framework of the International Maritime Organisation of the United Nations, without excluding regional co-operation (74). In Europe there is provision for regional co-operation concerning contingency plans for responding to pollution incidents at sea and the organisation of airborne surveillance to detect discharge violations at sea (e.g. Bonn Agreement for the Co-operation in dealing with Pollution of the North Sea (75)) and regional co-operation on port state control (Paris Memorandum of Understanding (76)). At the global level there are agreements on dumping of waste at sea (London Dumping Convention 1972 (77)), the protection of the environment during salvage operations (Salvage Convention (78)) and the Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC (79)). However, there is no global agreement to protect the oceans against land-based pollution, which accounts for more than 70 % of the pollution load into the seas and oceans.

CHAPTER V. — THE PROTECTION
OF THE MARINE ENVIRONMENT ON A REGIONAL LEVEL
AND THE BELGIAN LEVEL

In Western Europe, regional co-operation to protect the marine environment was already a fact before the Law of the Sea Convention was open for signature. Various regional agreements were concluded during the 1970s to prevent, con-

(74) See for the law-making process within IMO : BIRNIE, P., "The Status of Environmental 'Soft-Law' : Trends and Examples with Special Focus on IMO Norms", in RINGBOM, H., *Competing Norms in the Law of Marine Environmental Protection*, Lond/The Hague/Boston, Kluwer Law International, 1997, 31.

(75) Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil and Other Harmful Substances, Bonn, 13 September 1983, *OJ L 188/9*, 16 July 1984.

(76) Memorandum of Understanding on Port State Control, Paris, 26 January 1982, 21 *ILM* 1 (1982); see also Council Directive 95/21/EC of 19 June 1995 concerning port state control, *OJ L 157/1*, 7 July 1995.

(77) Convention on the Dumping of Wastes at Sea, London, 13 November 1972, 11 *ILM* 1294 (1972).

(78) International Convention on Salvage, London, 28 April 1989, in *Lloyd's Maritime and Commercial Law Quarterly* 54 (1990).

(79) International Convention on Oil Pollution Preparedness, Response and Co-operation, London, 30 November 1990, 30 *ILM* 733 (1991).

trol and reduce marine pollution in the Baltic Sea (80), the North-East Atlantic (81) and the Mediterranean Sea (82). Other regional marine conventions worldwide were inspired by the Regional Seas Programme of UNEP, which was initiated in 1974 and includes thirteen sea regions with the participation of more than 140 coastal states (83). The conventions to protect the Baltic Sea and the North-East Atlantic were substantially revised in 1992 and are the first marine conventions which explicitly introduce environmental principles among the general obligations in the convention texts. The contracting parties to the 1992 Paris Convention have a duty to prevent and eliminate pollution, but also a duty to protect the Convention area *against adverse effects of human activities*, and when practicable *to restore* marine areas which have been adversely affected (article 2 (a)(1)). To give effect to the latter the Ministers of Environment accepted a new Annex V to the 1992 Paris Convention during the Ministerial meeting in Sintra on 22-23 July 1998. Annex V repeats the objective of restoration and mandates the Commission (OSPARCOM), *inter alia*, to develop means, consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites or related to particular species or habitats, excluding fisheries (84). The principle of ecological restoration is also mentioned in the 1992 Helsinki Convention (art. 3 (1)).

In both conventions the parties have to apply the *precautionary principle* (85) :

(80) Convention on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, 22 March 1974, 13 *ILM* 546 (1974).

(81) Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, Oslo, 15 February 1972, 11 *ILM* 262 (1972); Convention for the Prevention of Marine Pollution from Land-Based Sources, Paris, 4 June 1974, 13 *ILM* 352 (1974).

(82) Convention for the Protection of the Mediterranean Sea against Pollution, Barcelona, 16 February 1976, 15 *ILM* 290 (1976).

(83) In accordance with Resolution 2997(XXVII) of the UNGA, the United Nations Environment Programme (UNEP) was established as a focal point for environmental action and co-ordination within the United Nations System. See for details : <http://www.unep.org/unep/program/natres/water/regseas/>.

(84) Article 3 (1)(b)(ii), Annex V On the Protection and Conservation of the Ecosystems and Biological Diversity of the Marine Area, in 28 *Environmental Policy and Law (EPL)* 286 (1998).

(85) Art. 2, 2 (a), 1992 Paris Convention; see also art. 3 (2), 1992 Helsinki Convention.

The precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects

Both conventions use an almost identical definition of the precautionary principle, since Sweden, Denmark, Germany and Finland negotiated the 1992 Paris Convention and the 1992 Helsinki Convention during the same period. These definitions are different from the Rio definition (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 for postponing cost-effective measures to prevent environmental degradation.

In the Rio Declaration the precautionary principle is called the precautionary approach and the threshold to apply the principle is higher than in the 1992 Paris and Helsinki Conventions, due to the reference to "serious or irreversible damage" (86). Once it is known that damage is irreversible, the measures to be taken do not differ from preventive measures as a result of the application of the classical principle of prevention, since the qualification of "serious or irreversible damage" depends on a clear scientific assessment, which the precautionary principle tries to overrule in part. Further, "full scientific certainty" is very rare and in most cases there will in any event be a lack of full scientific certainty, so it is preferable to refer to "no conclusive evidence".

That there is here a different definition of the precautionary principle can be explained due to the fact that the Rio Declaration makes the precautionary principle operational for the whole environment (water, land, air, ...), while the 1992 Paris and Helsinki Conventions are limited to the marine environment. Further, whilst the Barcelona Convention to protect the Mediterranean, as amended in 1995, follows in article 4(3)(a) the definition from the Rio Declaration and the "approach" is called "principle", in the 1996 Protocol to the London Dump-

(86) See for an analysis : DE SADELEER, N., *o.c.*, 173-184.

ing Convention the definition is similar to that in the 1992 Paris Convention and is also called an "approach". In other words there is not always an inherent difference between definitions depending on whether one is dealing with a "precautionary principle" or a "precautionary approach" (87). In the French Law of 1995 the precautionary principle is not limited to protection of the seas, and means (88) :

Selon lequel l'absence de certitudes, compte tenu des connaissances scientifiques et techniques du moment, ne doit pas retarder l'adoption des mesures effectives et proportionnées visant à prévenir un risque de dommage grave et irréversible à l'environnement à un coût économique acceptable.

The Belgian Law of 1999 to protect the marine environment follows the definition of the 1992 Paris Convention, adding also the introduction of materials into the sea (89) :

Le principe de précaution signifie que des mesures de prévention doivent être prises lorsqu'il y a des motifs raisonnables de s'inquiéter d'une pollution des espaces marins, même s'il n'existe pas de preuve concluante d'un lien causal entre l'introduction de substances, d'énergie ou de matériaux dans les espaces marins et les effets nuisibles.

The precautionary principle inspired the Belgian legislator to prohibit the deliberate introduction of genetically modified organisms into the sea (art. 11, § 4). Any person proposing to introduce alien species into the marine environment has to prove that this introduction will have no effect on the endemic fauna and flora, before a permit can be granted. Shipowners, or the operators, are obliged to remove sunken ships and/or cargoes at sea, if there are potential risks of pollution arising therefrom. Derelict/abandonment of shipwrecks or cargoes is only possible after a permit has been granted by the Belgian authorities, which permit is based on an environmental impact assessment made by the person proposing abandonment (art. 75).

(87) See for a differentiation between "principle" and "approach" on the precautionary principle, the separate opinion of Judge Laing in the SBT Cases : "... adopting an approach, rather than a principle, appropriately imports a certain degree of flexibility and tends, though not dispositively, to underscore reticence about making premature pronouncements about desirable normative structures", 38 *ILM* 1642, para 19.

(88) Article 1, Loi n° 95-101 relative au renforcement de la protection de l'environnement du 2 février 1995, *JO*, 3 février 1995.

(89) Article 4, § 3, Law on the Protection of the Marine Environment in the Marine Areas under Belgian Jurisdiction of 20 January 1999.

The parties to the 1992 Paris and Helsinki Conventions shall apply the *polluter pays principle*, but only the Paris Convention gives a definition : "by virtue of which the costs of pollution prevention, control and reduction measures are to be borne by the polluter" (art. 2 (2)(b)) (90). To overcome the problem of content and meaning, the parties to the Paris Convention have defined the polluter pays principle in the text of the Convention. This definition differs from Principle 16 in the Rio Declaration, which balances the polluter pays principle against the obligation not to distort international trade and investment and is only applicable in a national context by reference to national authorities :

National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Although reference is made to the same principle, the conditions for applying the principle are different. Again the reason seems clear. Application of the polluter pays principle in the 1992 Paris Convention is an obligation on all the contracting states ("shall apply"), but it is geographically restricted to pollution of the North-East Atlantic (91). This application of the polluter pays principle is significant in external relations, for example in a claim by one party against another. The polluter pays principle in the Rio Declaration is meant for internal purposes, and is directed towards polluters within a state (92), but is not geographically restricted and has a broader potential pollution scope. In the 1992 Helsinki Convention the parties did not define the polluter pays principle. Either the negotiators did not agree on a definition or they were convinced that by giving a particular definition they would narrow the potential application of the principle. Here, the application of the principle lies more in the discretion of each individual party.

(90) See also a comparable definition in article 4 (3)(b), Barcelona Convention, as amended (1995).

(91) The same approach has been taken in article 4 (2)(b) of the Barcelona Convention, as amended in 1995.

(92) See also article 3 (2), 1996 Protocol to the London Dumping Convention.

The principle that prevention, reduction and control of pollution *shall not increase pollution of the sea outside the convention area or in other parts of the environment*, became a general obligation in the 1992 Paris and Helsinki Conventions. The Helsinki Convention is even more explicit in stating (art. 3(6)) :

Furthermore, the relevant measures shall not lead either to unacceptable environmental strains on air quality and the atmosphere or on waters, soil and groundwater, to unacceptable harmful or increasing waste disposal, or to increased risks to human health.

The 1992 Paris and Helsinki Conventions do not refer to sustainable development as a principle of environmental law. During the negotiations of the Paris Convention there was a considerable debate about the concept and its place in the Convention. Most of the delegations were of the opinion that the meaning of sustainable development was unclear and perhaps too broad to find its way into the text of the convention. In other words, they did not want to open a Pandora's box . A compromise was found by referring to *sustainable management* in the preamble to the Convention (93). Sustainable management in this context means that :

THE CONTRACTING PARTIES, ... RECOGNISE that concerted action at national, regional and global level is essential to prevent and eliminate pollution and to achieve sustainable management of the maritime area, that is, the management of human activities in such a manner that the marine ecosystem will continue to sustain the legitimate uses of the sea and will continue to meet the needs of present and future generations.

In the Belgian Law on protection of the marine environment (art. 4, § 4), the principle of sustainable management has to be taken into account by the government and users of the sea. Their actions should protect the ecosystems and ecological processes in the marine environment, conserve biodiversity and stimulate nature conservation :

L'application du principe de gestion durable dans les espaces marins implique que les ressources naturelles sont tenues dans une mesure suffisante à la disposition des générations futures et que les effets des interventions de l'homme ne dépassent pas les capacités d'absorption de l'en-

(93) See for comments : HEY, E., IJLSTRA, T., NOLLKAEMPER, A., 8 *IJMCL* 8-10 (1993).

vironnement des espaces marins. A cette fin, les écosystèmes et les processus écologiques nécessaires pour le bon fonctionnement du milieu marin seront protégés, la diversité biologique sera préservée et la conservation de la nature sera stimulée.

Sustainable management at sea involves a whole spectrum of environmental protection and conservation measures to be reached, which are spelled out in more detail in the Belgian law, e.g. the possibility of establishing small nature reserves at sea (articles 7, 8 and 9, Law). To achieve sustainable development other principles and rules have to be balanced, such as historical rights to fish for fishing vessels of other countries or the right to fish as agreed in fishery agreements, the principle of innocent passage for foreign ships in the territorial sea of coastal states (Section 3, Law of the Sea Convention), the principle of sovereign immunity for foreign state-owned vessels while engaged in governmental non-commercial services (art. 236, Law of the Sea Convention). In the Belgian Law of 1999 those Law of the Sea principles have been taken into account, either as exceptions or in a special procedure for balancing environmental principles with Law of the Sea principles on a national (between the Ministry of Environment and the Ministry of Agriculture) or an international level (within the International Maritime Organisation (IMO)).

CHAPTER VI. — CONFLICTS BETWEEN DIFFERENT PRINCIPLES OF INTERNATIONAL LAW

Potential conflicts are to be expected between environmental principles, such as the precautionary principle or the protection of species, and the principles of free trade (e.g. the principle of non-discrimination) laid down in the General Agreement on Tariffs and Trade (GATT), the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) (see the hormones case between EC and US/Canada) or principles of European Community Law (94).

(94) See REINSTEIN, R., "Trade and Environment : The Case for and against Unilateral Actions", in LANG, W. (ed.), *o.c.*, 223-231; STEVENS, C., *Trade and Environment : The PPMs Debate*, in LANG, W. (ed.), *o.c.*, 239-247; SCHERER, J., "Regional Perspectives on Trade and Environment : The European Union", in LANG, W. (ed.), *o.c.*, 253-247-266.

In the hormones case between the EC and Canada/US, the Dispute Settlement Body (DSB) of the WTO adopted, on 23 February 1998, the Appellate Body Report. The EC ban on the import of beef from animals which have been treated with six hormone growth promoters was considered inconsistent with the Sanitary and Phytosanitary Agreement (SPS), because the EC was unable to prove the particular kind of risk it said was at stake — that is, the carcinogenic or genotoxic potential of the hormones' residues. The general studies available do show the existence of a general risk of cancer for five of the six hormones, but are not sufficiently specific. It seems that the precautionary principle was not able to be applied as a principle of international law in this case, as the EC had to prove that the import prohibition was based on a risk assessment within the meaning of the SPS Agreement. Given the wording in that text, only when the risks are clearly scientifically proven might the EC be able to continue legitimately its import ban in compliance with the SPS Agreement. In the meantime, the US and Canada are allowed to take commercial counter-measures to the value equivalent to their economic losses due to the import ban (95).

In the Tuna-Dolphin conflict between the United States and Mexico (96), the GATT Panel decided that GATT rules do not allow one country to adopt trade measures for the purpose of attempting to enforce its own domestic laws in another country — even if the objective is to protect animal health or exhaustible natural resources.

The WTO-Panel concluded in the shrimp case, in which an import ban on shrimp and shrimp products was applied by the United States to protect turtles during trawler fishing opera-

(95) See : <http://www.wto.org/wto/dispute/bulletin.htm> ; <http://europa.eu.int/comm/trade/miti/dispute/hormones>.

(96) In eastern tropical waters of the Pacific Ocean schools of yellowfin tuna swim beneath schools of dolphins. When tuna is harvested with pure seine nets, dolphins are trapped in the nets and they often die if they are not released in time. The US Marine Mammal Protection Act sets dolphin protection standards for the domestic American fishing fleet and for countries whose fishing boats catch yellowfin tuna in that part of the Pacific Ocean. If a country exporting tuna to the US cannot prove to the US authorities that it meets the dolphin protection standards set out in US laws, the US government must embargo all imports of fish from that country. In this dispute Mexico was the exporting country concerned and its exports of tuna to the US were banned. In 1991 Mexico complained under the GATT dispute settlement procedure.

tions, that the import ban was inconsistent with certain GATT rules. The Panel concluded (97) :

We consider that the best way for the parties to this dispute to contribute effectively to the protection of sea turtles in a manner consistent with WTO-objectives, including sustainable development, would be to reach co-operative agreements on integrated conservation strategies, covering *inter alia*, the design, implementation and use of TEDs [turtle excluding devices] while taking into account the specific conditions in the different geographical areas.

The WTO-Appellate Body came to the same conclusion, emphasising that (98) :

... WTO Members are free to adopt their own policies aimed at protection of the environment as long as, in doing so, they fulfil their obligations and respect the rights of other Members under the WTO Agreement.

Environmental protection principles cannot therefore be seen as an absolute imperative. Environmental law principles and free trade principles are part of sustainable development, the former to maintain our environment in a state which does not jeopardise the well-being of this and future generations, the latter to achieve the economic well-being of a large number of people. This balance is reflected in Principle 12, Rio Declaration :

States should co-operate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problem of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

CONCLUSION

Environmental law principles have played an important role in the development of rules of international environmen-

(97) WTO : Report of the Panel on the United States — Import Prohibition of Certain Shrimp and Shrimp Products, 15 May 1998, 37 *ILM* 832 (857)(1998).

(98) WTO : Report of the Appellate Body on the United States — Import Prohibition of Certain Shrimp and Shrimp Products, 12 October 1998, 38 *ILM* 121 (175) (1999).

tal law and have given rise to more specific rules. Since more and more rules and clear targets (prohibitions and emission reductions) have been accepted in treaties, the search for a customary law status of environmental law principles has become less essential. Instead of searching for new principles, international environmental law has reached a momentum for stability and the implementation of its principles and legal rules (99). However several obstacles have to be overcome. First, the meaning of environmental law principles can vary from instrument to instrument, depending on a global or a regional application. Secondly, most of the time environmental law principles will have to be balanced against other fundamental principles and rules of international law. This balancing act has become a continuous exercise for legislators seeking to implement environmental law principles and rules, especially where long-established principles of international law are involved (for example, innocent passage in the law of the sea, or non-discrimination in trade agreements). The Belgian Act of 20 January 1999 for the protection of the marine environment in the maritime areas under the jurisdiction of Belgium is one step forward in a continuous process to implement environmental law principles through rules and to balance them with the traditional uses of the sea.

(99) See also HANDL, G., Sustainable Development : General Rules versus Specific Obligations, in LANG, W. (ed.), *o.c.*, 43.