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# ENFORCEMENT OF INTERNATIONAL ENVIRONMENTAL LAW

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A Thesis in partially fulfilment of the Master Degree in
International Human Rights Law

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## List of Abbreviations

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|---|---|
| **AJIL** | American Journal of International Law |
| **African YIL** | African Yearbook of International Law |
| **ASIL Proc.** | Proceedings of the American Society of International Law |
| **AYIL** | Australian Year Book of International Law |
| **Cmnd.** | British Command Papers |
| **Colorado JIELP** | Colorado Journal of International Environmental Law and Policy |
| **ECE** | United Nations Economic Commission for Europe |
| **EEC** | European Economic Community |
| **EJIL** | European Journal of International Law |
| **EJIR** | European Journal of International Relations |
| **EPL** | Environmental Policy and Law |
| **ETS** | European Treaty Series |
| **Fordham ILJ** | Fordham International Law Journal |
| **Fordham Univ. ELJ** | Fordham University Environmental Law Journal |
| **GAO/RCED** | United States General Accounting Office Report |
| **GEF** | Global Environment Facility |
| **GYIL** | German Yearbook of International Law |
| **Harvard ILJ** | Harvard International Law Journal |
| **HRLJ** | Human Rights Law Journal |
| **HRQ** | Human Rights Quarterly |
| **IA** | International Affairs |
| **ICJ Rep.** | International Court of Justice Reports of Judgements, Advisory Opinions and Orders |
| **ICLQ** | International and Comparative Law Quarterly |
| **ILCYb** | Yearbook of the International Law Commission |
| **ILM** | International Legal Materials |
| **ILO** | International Labour Organization |
| **IO** | International Organization |
| **IRLE** | International Review of Law and Economics |
| **JEL** | Journal of Environmental Law |
| **Michigan JIL** | Michigan Journal of International Law |
| **NGOs** | Non-governmental organizations |
| **Nordic JIL** | Nordic Journal of International Law |
| **NuR** | Natur und Recht |
| **NYIL** | Netherlands Yearbook of International Law |
| **OAU** | Organization of African Unity |
| **PCIJ Series A** | Permanent Court of International Justice, Collection of Judgements (1922 - 1930) |
| **RdC** | Recueil des Cours |
| **RECIEL** | Review of European Community and International Environmental Law |
| **RGDIP** | Revue Générale de Droit International Public |
| **RIAA** | Reports of International Arbitral Awards (United Nations) |
| **Stanford JIL** | Stanford Journal of International Law |
| **UN** | United Nations |

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|---|---|
| **UNDP** | United Nations Development Programme |
| **UNESCO** | United Nations Educational, Scientific and Cultural Organisation |
| **UNEP** | United Nations Environment Programme |
| **UNITAR** | United Nations Institute for Training and Research |
| **UNTS** | United Nations Treaties Series |
| **Virginia JIL** | Virginia Journal of International Law |
| **Yale JIL** | Yale Journal of International Law |
| **YIEL** | Yearbook of International Environmental Law |
| **ZaöRV** | Zeitschrift für ausländisches öffentliches Recht und Völkerrecht |

# A. Introduction

## I. Background

The development of international environmental law marks an important turning point in the history of modern international law.[1] In face of frequent wide-ranging environmental disasters and global problems such as air and sea pollution, as well as destruction of the ozone layer, which can not be solved on the national level, the need for international protection of the environment became obvious. International protection of the environment means restrictions to the sovereignty of individual States, by way of transferring certain components of environmental legislation and jurisdiction from State level to international level. Starting with the Stockholm United Nations (UN) Environmental Conference in 1972, international environmental law has developed rapidly in the past twenty-five years.[2] Treaties, customary law and soft law in this field obligate States to take steps to prevent environmental harm. At least since the Rio UN Conference for Environment and Development in 1992, States are under a political obligation to consider environment and development as integral, equally important components of a comprehensive policy, and to take both equally into account in the measures they take.[3] Today a considerable network of treaties and customary international law obligates States with immediate legal binding force to protect the environment.

Although the progress in developing environmental protecting rules on the international political and legal plane is obvious, in practice a great deficiency still exists in the implementation and enforcement of these rules. Most of the international environmental norms are not self-executing. Thus the application and implementation of international environmental law depends on national measures.[4] All to often international environmental law is not transformed or not transformed with the intended content into domestic law, or is not implemented by the responsible national authorities.[5] However the success of international regulations depends on compliance, in the sense of conformity of States behaviour to international rules.[6] Therefore the development of rules of international environmental law is of little significance unless accompanied by effective means for controlling compliance and ensuring enforcement.

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[1] *R. Wolfrum*, Purposes and Principles of International Environmental Law, GYIL, vol. 33, 1990, 308; *J. Brunnée*, „Common Interest" - Echoes from an Empty Shell?, Some Thoughts on Common Interest and International Environmental Law, ZaöRV, vol. 49, 1989, 791, 792.

[2] *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 241; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 297; *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 98.

[3] Compare: Rio Declaration on Environment and Development, 14. June 1992, ILM, vol. 31, 1992, 874; Agenda 21, 14. June 1992, UN Doc. A/CONF.151/26 Volumes I - III.

[4] *D. S. Ardia*, Does the Emperor Have No Clothes? Enforcement of International Laws Protecting the Marine Environment, Michigan JIL, vol. 19, 1998, 497, 512; *A. S. Timoshenko*, Control Machinery in the Ecological Security System, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 51, 53; *United States General Accounting Office*, International Environment - International Agreements are Not Well Monitored, GAO/RCED-92-43, January 1992, 10 et seq.

[5] *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 4.

[6] For a similar definition of compliance, compare: *R. B. Mitchell*, Compliance Theory: An Overview, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 3, 5; *R. Fisher*, Improving Compliance with International Law, 1981, 20.

## II. Purpose and concept

Against this background the purpose of this thesis is to investigate the problem of enforcement of international environmental law against States. Enforcement is defined widely, as including all methods and measures which help to foster compliance with international law and help to make the rules of international law effective in practice.
The main objective of this study is not to create a totally new enforcement conception for international environmental law, but rather to analyse and evaluate the current available enforcement mechanisms of international environmental law. It is intended to show how to create a more effective enforcement conception through weighting the existing enforcement means and through extending, as well as improving the promising enforcement mechanisms.

The thesis is divided into a basic part which investigates the foundations of international environmental law enforcement, and a main part which deals with the different methods of international environmental law enforcement. It is concludes with final recommendations.
The basic part is firstly intended to give an overview of modern international environmental law which consists mainly of treaties and is completed by customary law and soft law (B. I.). In the next step several problems of enforcement of this modern international law are demonstrated (B. II. 1.). In general these problems can be categorized into the enforcement plight of international environmental obligations against States resulting from the nature of international law as law of co-ordination and co-operation connected with a still relatively limited degree of institutionalisation on the one hand, and problems with implementation and enforcement of international obligations on the national level, such as lack of capacity, on the other hand. Against this background an attempt is made to determine important elements of an effective enforcement mechanism (B. II. 2). In this respect there are introduced four basically strategies which suggest themselves to counteract the described deficits and problems and promise a more effective enforcement conception in the field of international environmental law: preventive rather than reactive or repressive enforcement, collective rather than unilateral enforcement, co-operative enforcement in place of confrontation, and compliance assistance in case of lack of capacity. This theoretical enforcement conception is used as a guideline for the following analysis and evaluation of the enforcement mechanisms, available in current international environmental law.
At the moment law-enforcement appears to be undergoing a period of far reaching change. Traditionally international law has primarily made available unilateral and repressive instruments for its enforcement, especially the concept of State responsibility as well as the unilateral mechanism of countermeasures, the few traditional institutionalized means of enforcement available, such as UN sanctions and various means of dispute settlement, are confrontational and repressive rather than co-operative and preventive. Nowadays the international community of States appears to use less the traditional enforcement methods than new methods based on partnership and co-operation, this trend is particularly obvious in the field of international human rights law, but compliance control and compliance assistance can also be found at least partially in international environmental treaties. As shown from the suggestions for a more effective enforcement conception, these alternative enforcement methods may have the better chance of progressing. Therefore the main part concentrates on an analysis of the partnership methods of compliance control (C. II. 1.) and compliance assistance (C. II. 2). However, as the use of certain repressive enforcement mechanisms will not be completely obsolete as a last resort, a critical analysis of the existing traditional enforcement mechanisms of international environmental law will be brought to the fore. In this context especially sanctions as well as the settlement of disputes through

courts and quasi-legal forums, which are recently recovered in the discussion about international environmental law enforcement, will be considered (C. I).
The final remarks will show some general development perspectives and make some concluding recommendations as to how to improve the existing enforcement mechanism.

## III. Methodology

The method used in this thesis, to investigate the problem of enforcement of international environmental law, is a legal approach in the tradition of the „managerial school of compliance"[7], in a modified form. Characteristic for the managerial school is the assumption, that States generally undertake environmental treaty obligations to fulfil them, as they have brought their own interests to bear upon the negotiation over the treaty. Consequently most treaty violations are not premeditated or deliberate but are instead caused by the ambiguity and indeterminacy of the treaty language, as well as the domestic limitations of the Parties' abilities to carry out their treaty obligations. Therefore, the best way to ensure compliance is not the threat of punishment but a process of interaction and co-operation among the parties which contributes to an increasing transparency. This active treaty management includes supervision in form of routine review and assessment of the conduct of State parties by international bodies, non-compliance procedures, improved dispute settlement and avoidance procedures, as well as compliance assistance, apart from that public participation plays an important role. According to the managerial theory traditional enforcement mechanisms, such as sanctions, are superfluous.
But even if wilful non- compliance with international environmental agreements may be rare, one should have traditional enforcement mechanisms in the back of ones mind, in case the proposed active treaty management does not lead to a solution. Because of that, the here chosen and developed „modified approach" relies on traditional enforcement mechanisms as a last resort. In this respect it reacts on the critique of the „political economy school of enforcement"[8] on the managerial school of compliance.
For this purpose, mainly a number of international environmental treaties, as the main source of international environmental law, and literature concerned with international law have been surveyed, while contributions from other related disciplines such as political science and economics have been included to a lesser extent.

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[7] The main representatives of the managerial school are: *A. Chayes/ A. Chayes*, The New Sovereignty, 1995; *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development in International Law, 1995, 75 - 89; *A. Chayes/ A. Chayes*, On Compliance, IO, vol. 47, 1993, 175 - 205; for a critical analysis and description of this school, see: *G. W. Downs*, Enforcement and the Evolution of Cooperation, Michigan JIL, vol. 19, 1998, 319, 328 - 335; *K. Danish*, The New Sovereignty: Compliance with International Regulatory Agreements, Virginia JIL, vol. 37, 1997, 789 - 810.

[8] For descriptions of the game theoretical orientated political economy school of enforcement, which is assuming that enforcement generally refers to the overall strategy that a state adopts in the expectations about the nature of the negative consequences that will follow non-compliance, see: *K. W. Abbott*, Modern International Relations Theory: A Prospectus for International Lawyers, Yale JIL, vol. 14, 1989, 335 - 411; *G. W. Downs*, Enforcement and the Evolution of Cooperation, Michigan JIL, vol. 19, 1998, 319 - 344; *J. K. Setear*, An Interactive Perspective on Treaties: A Synthesis of International Relations Theory and International Law, Harvard ILJ, vol. 37, 1996, 139 - 229; *A.- M. Slaughter Burley*, International Law and International Relations Theory: A Dual Agenda, AJIL, vol. 87, 1993, 205 - 239; *D. Snidal*, Political Economy and International Institutions, International Review of Law and Economics, vol. 16, 1996, 121 - 137; *C. Jönsson/ J. Tallberg*, Compliance and Post-Agreement Bargaining, EJIR, vol. 4, 1998, 371 - 408.

# B. Basics of international environmental law enforcement

## I. International environmental law

International environmental law is today considered as the youngest separate field of international law.[9] It is characterized by close interaction of the sources of international law laid out in Article 38 (1) of the Statute of the International Court of Justice[10], namely treaties and customary law. Treaties and customary law have immediate binding force and equal ranking. In case of conflict the later and more special rule prevails, in most cases that may be the treaty rule.[11] In addition to these traditional sources of law, soft-law plays an important role in the field of international environmental law.[12] Soft-law is not legally binding but establishes politically-morally binding principles for behaviour which will probably have an influence on the further development of international environmental protection.[13]
The existing international environmental law contains regulations in respect of transfrontier damage to components of the environment, protection of those natural resources which are commonly shared by several States, use and protection of areas beyond domestic jurisdiction such as high seas, Antarctica, outer space and celestial bodies, as well as the managing of environmental problems of global relevance.[14]

### 1. Treaties

Treaties are the most frequent method of creating international environmental rules, binding to the contracting states.[15] Since the Stockholm UN Environmental Conference in 1972 the number of multilateral treaties, dealing with global environmental problems has increased significantly. Especially the number of agreements which give the environmental interests of the international community more weight than the environmental utilisation interests of

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[9] *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 98; *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 241; *K. Ipsen*, Völkerrecht, 1990, 806.
[10] Statute of the International Court of Justice, 26. June 1945, in: *I. Brownlie*, Basic Documents of International Law, 1995, 438.
[11] *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 56; *I. Brownlie*, Principles of Public International Law, 1998, 1- 30.
[12] *P. W. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 10, 17; *R. Malcolm*, A Guidebook to Environmental Law, 1994, 62; *M. Bothe*, The Role of International Environmental Law, in: *O. Höll*, Environmental Cooperation in Europe, 1994, 127; *P. H. Sand*, International Environmental Law after Rio, EJIL, vol. 4, 1993, 377, 379 et seq.
[13] *R. Malcolm*, A Guidebook to Environmental Law, 1994, 61, *U. Beyerlin*, Rio-Konferenz 1992: Beginn einer neuen globalen Umweltrechtsordnung?, ZaöRV, vol. 54, 1994, 124, 129; *V. P. Nanda*, Environment, in: *O. Schachter/ C. C. Joyner*, United Nations Legal Order, vol. 2, 1995, 631, 653.
[14] *R. Wolfrum*, Purposes and Principles of International Environmental Law, GYIL, vol. 33, 1990, 308 et seq.; *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 98.
[15] *P. W. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 11; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 295; *A. O. Adede*, Towards New Approaches to Treaty-Making in the Field of Environment, African YIL, vol. 1, 1993, 81 - 121; *M. A. Fitzmaurice*, International Environmental Law as a Special Field, NYIL, vol. 25, 1994, 181, 191 et seq.

individual States grew markedly.[16] We now have for example treaties protecting the nature and conserve species[17], dealing with biological diversity[18], regulating the international transport and disposal of hazardous wastes[19], preventing air pollution[20], protecting the ozone layer[21], dealing with pollution of the seas[22], protecting the marine environment[23] as well as rivers and lakes[24]. In addition to these multilateral treaties, numerous regional and bilateral treaties have been negotiated.

In theory treaties appear to be best suited to solve environmental problems effectively.[25] Necessary State obligations with the aim to protect the environment can be formulated in a sufficiently clear manner. In signing and ratifying a treaty the Parties mutually commit themselves to reach its aims by taking specific and possibly detailed measures and by submitting themselves to compliance control and supervisory procedures.

Nevertheless, the treaty system shows a number of problems in practice. Because treaties are specific, detailed and require affirmative consent, States may resist signing them, even on issues of vital importance for the whole international community. This fact is especially problematic in the context of international environmental law, because most agreements will require a high level of participation if they are to accomplish their purpose.[26] Therefore treaties commonly have a number of features designed to entice States to join them, tough often with the cost of creating an effective regime.[27] For example numerous environmental

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[16] *U. Beyerlin*, State Community Interests and Institution-Building in International Environmental Law, ZaöRV, vol. 56, 1996, 602, 605 et seq.

[17] Convention on Wetlands of International Importance, 3. February 1971, ILM, vol. 11, 1972, 969; UNESCO Convention for the Protection of the World Cultural and Natural Heritage, 16. November 1972, ILM, vol. 11, 1972, 1358; Convention on International Trade in Endangered Species of Wild Fauna and Flora, 3. March 1973, ILM, vol. 12, 1973, 1085; Convention on the Conservation of Migratory Species of Wild Animals, 23. June 1979, ILM, vol. 19, 1980, 15; Convention on the Conservation of European Wildlife and Natural Habitats, 19. September 1979, British Command Papers, Cmnd. 8738; for further information, see: *M. C. Maffei*, Evolving Trends in the International Protection of Species, GYIL, vol. 36, 1993, 131 - 186.

[18] Convention on Biological Diversity, 5. June 1992, ILM, vol. 31, 1992, 818.

[19] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 22. March 1989, ILM, vol. 28, 1989, 649; OAU Convention on the Ban of the Import into Africa and Management of Hazardous Wastes within Africa, 30. January 1991, ILM, vol. 30, 1991, 1460; for further information see: *M. Bothe*, International Regulation of Transboundary Movement of Hazardous Waste, GYIL, vol. 33, 1990, 422 - 431; *S. D. Murphy*, Prospective Liability Regimes for the Transboundary Movement of Hazardous Wastes, AJIL, vol. 88, 1994, 24 - 75; *K. Kummer*, The Basel Convention and Related Legal Rules, 1995.

[20] Geneva Convention on Long-Range Transboundary Air Pollution, 13. November 1979, ILM, vol. 18, 1979, 1442; for further information see: *A. Kiss*, Air Pollution, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 1, 1992, 72 - 74.

[21] Vienna Convention for the Protection of the Ozone Layer, 22. March 1985, ILM, vol. 26, 1987, 1529; Montreal Protocol on Substances that Deplete the Ozone Layer, 16. September 1987, ILM, vol. 26, 1987, 1541; Framework Convention on Climate Change, 9. May 1992, ILM, vol. 31, 1992, 849.

[22] International Convention on Civil Liability for Oil Pollution Damage, 29. November 1969, ILM, vol. 9, 1970, 45; International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 29. November 1969, ILM, vol. 9, 1970, 25; International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 18. December 1971, British Command Papers, Cmnd. 7383; Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 29. December 1972, ILM, vol. 11, 1972, 1294; International Convention for the Prevention of Pollution from Ships, 2. November 1973, ILM, vol. 12, 1973, 1319.

[23] United Nations Convention on the Law of the Sea, 10. December 1982, ILM, vol. 21, 1982, 1261.

[24] Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 17. March 1992, ILM, vol. 31, 1992, 1313.

[25] *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 99; *O. Schachter*, International Law in Theory and Practice, 1991, 370.

[26] *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 301; *P. C. Szasz*, Administrative and Expert Monitoring of International Treaties, 1999, 4.

[27] *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 301.

treaties have reservation or withdrawal provisions.[28] Many treaties do not have binding dispute resolution clauses or enforcement provisions.
Although numerous single treaties are dealing with specific environmental problems, the treaty system is still fragmentary and unsystematic.[29] This raises the problem that in the current treaty system the linkages between different areas of environmental protection are not sufficiently considered, for example the interconnections between water pollution control and waste disposal.[30] When new environmental problems arise new treaties are needed immediately because few general treaty rules exist to respond to the problem. But the contemporary legislative system does not lend itself to quick development of new treaty regulations.[31]

## 2. Customary law

Customary law forms an important pillar of international environmental law, due to the fact that its rules can be applied in cases of lacunae in treaty regulations, as well as in relation to states which are not bound by treaty law.[32] Customary law is constituted by two elements, the objective one of a general State practice over a certain period of time, and the subjective one of acceptance as law, the so-called *opinio juris* of States.[33] Although a closer specification of the single elements is disputed[34], there are some rules whose customary law validity in environmental relations between States can not be contested.[35] A fundamental rule of customary international law is the obligation of States not to damage or endanger significantly the environment beyond their borders.[36] Another central principle recognized in

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[28] E.g. Convention on International Trade in Endangered Species of Wild Fauna and Flora, 3. March 1973, Art. XXIII, ILM, vol. 12, 1973, 1085; Convention on Biological Diversity, 5. June 1992, Art. 38, ILM, vol. 31, 1992, 818; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 22. March 1989, Art. 27, ILM, vol. 28, 1989, 649; Framework Convention on Climate Change, 9. May 1992, Art. 25, ILM, vol. 31, 1992, 849.

[29] *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 99; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 299.

[30] In practice these interconnections are made, to an increasing degree, by Memoranda of Understanding between the responsible treaty organs.

[31] *P. W. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 12.

[32] *R. Bernhardt*, Customary International Law, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 1, 1992, 898, 899; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 303; *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 102.

[33] *North Sea Continental Shelf Cases*, Federal Republic of Germany versus Denmark/ Netherlands, ICJ Rep. 1969, 3, 44; *Continental Shelf Case*, Libya versus Malta, ICJ Rep. 1985, 29; *Advisory Opinion on the Legality of the Treat and Use of Nuclear Weapons*, ILM, vol. 35, 1996, 809, 826.

[34] For more detail, see: *R. Bernhardt*, Customary International Law, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 1, 1992, 898, 900.

[35] *A. Rest*, New Legal Instruments for Environmental Prevention, Control and Restoration in Public International Law, Environmental Policy and Law, 23/6, 1993, 260, 260 et seq.; *L. Gündling*, Environment, International Protection, in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 96, 101 et seq.; *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 245 et seq.; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 304 et seq.; *U. Beyerlin*, Grenzüberschreitender Umweltschutz und allgemeines Völkerrecht , in: *K. Hailbronner*, Staat und Völkerrechtsordnung - Festschrift für Karl Döring, 1989, 37 - 61.

[36] For recognition of this principle, see: *Trail Smelter Case*, U.S. versus Canada, RIAA, vol. 3, 1938/ 1941, 1905, 1962 et seq.; *Lac Lanoux Case*, RIAA, vol. 12, 1963, 281; *Gut Dam Case*, U.S. versus Canada, ILM, vol. 8, 1969, 118; *Advisory Opinion on the Legality of the Treat or Use of Nuclear Weapons*, ILM, vol. 35, 1996, 809, 821; Stockholm Declaration on the Human Environment, 16. June 1972, Principle 21, ILM, vol. 11, 1972, 1416.

customary law is the principle of equitable utilization of the environment which means that States have to use the environment in such a manner that other States may enjoy equally its use. Moreover, a number of general principles have been applied to deal with transboundary damage, such as the principle of good neighbourliness, the *sic utere tuo ut alienum non laedas* principle (use your own so as not to injure another) and the principle of territorial integrity. These substantial principles of customary law are completed by a mutual obligation to inform, to warn and to consult.
Customary law rules are usually abstract and general. Therefore they can be characterized as flexible. They will fit new environmental problems and new scientific information as they are uncovered.[37] On the other hand customary law rules normally only have limited substantive force, because of their general character they may be imprecise and difficult to apply in particular situations. [38] This leads to problems in trying to enforce customary law and shows the necessity to codify customary rules.

### 3. Soft-law

Soft-law in the sense of guidelines of conduct which are not legally binding but politically-morally binding and operate in a grey zone between law and politics, is considered a special characteristic of international environmental law.[39] Such rules can be found in treaties not yet in force, extra-legal arrangements, joint declarations, Memoranda of Understanding, as well as in resolutions, declarations or recommendations of international organizations or conferences.
The practical meaning of soft-law for international environmental relations is hard to estimate, because the single extra-legal instruments differ substantially in respect of provenance, form and function. The practical relevance of soft-law depends above all on the function its originators intended for it in that particular case. Environmental soft-law instruments appear to have for example the following functions:

- Designation of a framework for forward-looking political action in respect of global environmental protection targets;[40]
- Adoption of environmental political action programmes and catalogues and measures by large international conferences;[41]
- Establishment of a global environmental protection framework, addressing present-day problems;[42]
- Postulation of concrete environmental rules of conduct for States, which are not yet part of international law;[43]

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[37] *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 303.
[38] *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 308.
[39] Compare: *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 54; *M. A. Fitzmaurice*, International Environmental Law as a special field, NYIL, vol. 25, 1994, 181, 199 et seq; *P.-M. Dupuy*, Soft Law and the International Law of the Environment, Michigan JIL, vol. 12, 1991, 420 - 435.
[40] E.g. UN General Assembly Resolution 42/186, 1987, „Environmental Perspectives to the Year 2000 and beyond"; UN General Assembly Resolution 42/187, 1987, „Our Common Future".
[41] E.g. Stockholm UN Conference of 1972, Action Plan; Rio UN Conference of 1992, Agenda 21.
[42] E.g. UNEP Montevideo Programme for the Development and Periodic Review of Environmental Law, UNEP/GC. 1O/S/Add.2, 1981.
[43] E.g. UN General Assembly Resolution 3/77, 1982, „World Charter for Nature"; UNEP Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-Based Sources, UNEP/GC.13/18/II, 1985; UNEP Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes, UNEP/GC.14/30, 1987; ECE Code of Conduct on Accidental Pollution of Transboundary Inland Waters, Decision C (45), 1990.

- Political consensus on a code of conduct for States, containing rules which are not yet recognized in international law;[44]
- Declaratory confirmation of already recognized rules of conduct in customary law;[45]
- Political consensus on joint preliminary measures towards the implementation of an international environmental treaty[46].

This shows that soft-law can make a substantial contribution to the norm-setting process in international environmental relations. It is often the basis for a subsequent solution which is legally binding, in that it paves the way for it and has an influence on it as a catalyst.[47] In the absence of an appropriate treaty or customary law rule, it is a non-enforceable substitute.

## II. Enforcement of international environmental law

The success of international regulations depends on compliance. Therefore the development of rules of international environmental law is of little significance unless accompanied by effective means for controlling compliance and ensuring enforcement.[48] In this context several problems arise.

### 1. Problems of international environmental law enforcement

In general one can distinguish between two categories of problems. The first category is the enforcement plight of international environmental obligations against States, resulting from the nature of international law. The other category reflects several problems with implementation and enforcement of international environmental obligations on the national level.[49]

#### a) Problem of enforcing international environmental law against States, resulting from the nature of international law

Starting point for an enforcement deficit in international environmental law is the general accepted recognition that in contrast to modern national law, international law lacks a

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[44] E.g. a number of principles laid down in the Stockholm Declaration of 1972 and the Rio Declaration of 1992.

[45] E.g. principles 2, 18 and 19 of the Rio Declaration of 1992.

[46] E.g. Interim Guidelines for the Implementation of paragraphs 8 and 9 of Annex 1 to the London Dumping Convention, 1972; for further examples, see: *A. O. Adede*, Towards new Approaches to Treaty-Making in the Field of Environment, African Yearbook of International Law, vol. 1, 1993, 81, 103 footnote 62.

[47] *U. Beyerlin*, Rio-Konferenz 1992: Beginn einer neuen globalen Umweltrechtsordnung?, ZaöRV, vol. 54, 1994, 124, 129; *V. P. Nanda*, Environment, in: *O. Schachter/ C. C. Joyner*, United Nations Legal Order, vol. 2, 1995, 631, 653; *G. Handl*, Environmental Security and Global Change: The Challenge to International Law, YIEL, vol. 1, 1990, 1, 7 et seq.

[48] *P. W. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 136; *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 4; *A. W. Samaan*, Enforcement of International Environmental Treaties: An Analysis, Fordham Univ. ELJ, vol. 5, 1993, 261 - 283; *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/ RCED-99-148, May 1999, 22 et seq; *I. Brownlie*, Principles of Public International Law, 1998, 287.

[49] *G. Zimmer*, Internationale Sicherheit und völkerrechtlicher Umweltschutz, 1998, 47; *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 71.

central enforcement power.[50] Even the United Nations Environment Programme (UNEP) as the primary international organization to oversee environmental protection, has no extensive enforcement power.[51] Most UNEP Secretariats of international environmental treaties, which are in the logical position to enforce compliance with treaty obligations, do not have enforcement authority or capacity.[52] Those Secretariats that do have enforcement authority, may be limited in their enforcement ability for mainly two reasons. First, because their funding is limited and unstable, they often lack the institutional capacity to fulfil all of their responsibilities. Second, the Secretariats lack the international jurisdiction that is needed to carry out enforcement. This reflects the nature of international law as law of co-ordination and co-operation[53] connected with a still relatively limited degree of institutionalization[54]. Today, States have to fend in the first instance for themselves to enforce the international law they have made.[55] The functioning of such a decentralized law enforcement is not seriously in question in *do ut des* relations. In this case the States are acting out of their own interest. Whether this is also true for the enforcement of international obligations of common interest for the State community as a whole, such as regularly the case in international environmental law, is more doubtful.[56]

**b) Problem of implementing international environmental law on the national level**

The enforcement of international environmental rules is not in deficit only because of features inherent in international law. This becomes clear from an analysis of national

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[50] *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 294; *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 17; *M. Bothe*, The Role of International Environmental Law, in: *O. Höll*, Environmental Cooperation in Europe, 1994, 123; *A. Verdross/ B. Simma*, Universelles Völkerrecht, 1984, 33.

[51] *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 302; *D. S. Ardia*, Does the Emperor Have No Clothes? Enforcement of International Laws Protecting the Marine Environment, Michigan JIL, vol. 19, 1998, 512; *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 23 et seq.

[52] *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 25; *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 23 et seq.

[53] *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 7; *A. Verdross/ B. Simma*, Universelles Völkerrecht, 1984, 34, 41 et seq.; *P.- T. Stoll*, The International Environmental Law of Cooperation, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 39 et seq.

[54] *S. Hoffmann*, International Law and the Control of Force, in: *K. Deutsch/ S. Hoffmann*, The Relevance of International Law - Essays in Honor of Leo Gross, 1968, 21, 24; *W. Lang*, Compliance Control in International Environmental Law: Institutional Necessities, ZaöRV, vol. 56, 1996, 685, 685 et seq; *C. Tomuschat*, Obligations Arising for States Without or Against their Will, RdC, vol. 241, 1993, 199, 365.

[55] *A. Verdross/ B. Simma*, Universelles Völkerrecht, 1984, 901; *P.-M. Dupuy*, International Control and State Responsibility, in: *K. Ginther/ G. Hafner/ W. Lang/ H. Neuhold/ L. Sucharipa-Behrmann*, Völkerrecht zwischen normativem Anspruch und politischer Realität, 1994, 307.

[56] *R. Wolfrum*, Purposes and Principles of International Environmental Law, GYIL, vol. 33, 1990, 308, 325; *U. Beyerlin*, State Community Interests and Institution Building in International Environmental Law, ZaöRV, vol. 56, 1996, 602 et seq.

environmental law, where the problem of inadequate implementation and enforcement is obvious.[57]

### aa) Lack of ability to control conduct harming the environment

The implementation deficit reflects the problem that the capacity of States to control human behaviour, having an impact on the environment, is limited.[58] Most of the polluting activities are private activities and not State activities, and the ability of the State to control private activities is limited. Excessive control may even be economically and practically inefficient and thus counterproductive. Therefore the preferred relationship between the State and the addressee of the law can be described as one of co-operation rather than command and control.[59] But the direct involvement of the polluting industry in the process of implementing and enforcing environmental law has the effect that the substantive standards may diverge from the statutory provisions.[60]

### bb) Lack of capacity

An other important cause for inadequate compliance with international environmental law lies in the deficits of the administrative, economic and technical infrastructure of the State.[61] Compliance requires active measures on national level, such as monitoring and controlling private and State conduct.[62] Administrative deficits in monitoring conduct are often caused by the problem of inadequate human resources of the responsible authorities and insufficient training of the personnel responsible for monitoring. Economic deficits are often due to the fact that fulfilling the environmental obligations may necessitate changes of the socio-economic structure of a State, which cannot be accomplished immediately. Many States, in particular developing countries do not have the financial means for technical infrastructure needed for monitoring, such as computers for electronic data-search, apart from that, the major technological apparatus is in some cases missing.

### cc) Lack of will

Wilful non-compliance with environmental obligations may be rare, because States accept international obligations mainly when they consider them to be in their interest or at least

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[57] *R. Mayntz*, Vollzugsprobleme der Umweltpolitik, 1978; *J. Hucke/ H. Wollmann*, Vollzug des Umweltrechts, in: *O. Krimminich/ H. Freiherr von Lersner/ P.-C. Storm*, Handwörterbuch des Umweltrechts, vol. 2, 1994, 2694 et seq.

[58] *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 17.

[59] *G. Lübbe-Wolff*, Modernisierung des Umweltordnungsrechts, 1996, 158 et seq.

[60] *J. Hucke/ H. Wollmann*, Vollzug des Umweltrechts, in: *O. Kimmich/ H. Freiherr von Lersner/ P.- C. Storm*, Handwörterbuch des Umweltrechts, vol. 2, 1994, 2694, 2696.

[61] *A. H. Chayes/ A. Chayes/ R. B Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 80; *A. Chayes/ A. H. Chayes*, The New Sovereignty, 1995, 13 et seq.; *A. W. Samaan*, Enforcement of International Environmental Treaties: An Analysis, Fordham University Environmental Law Journal, vol. 5, 1993, 261, 273; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 17.

[62] *United States General Accounting Office*, International Environment - International Agreements are Not Well Monitored, GAO/RCED-92-43, January 1992, 10 et seq.; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 17.

not contrary to their interest.[63] States generally undertake for example environmental treaty obligations with the intent to fulfil them, as they have already brought their own interests to bear upon the negotiations over the treaty. Once a treaty regime is up and running, compliance with the treaty obligations is usually the choice which suggests itself for the State.[64] Therefore the assumption that States are constantly identifying and pursuing alternative, more cost effective paths is a false one. Rather than expend scarce State resources on the continuous recalculation of the costs and benefits of a range of courses of action, States are likely to adhere to the path identified by the treaty regime. This is demonstrated by studies on bureaucracies: complex organizations tend to authoritatively established routines, they are put through even when the routines are demonstrably less cost-effective than alternative courses of action.[65] On the other hand, a political and diplomatic pressure to sign multilateral treaties is observable.[66] In this context doubts arise whether the signature and ratification is actually a sign for the interest of each participating State. A treaty signed under these circumstances may only have a low priority for the State and indicates lack of will. The priority given to a specific issue is determined by a number of factors, an important factor in this context is public opinion.[67] A collision of economic interests or sovereignty interests with environmental interests can also lead to an interest in not enforcing certain environmental protection measures.[68]

## 2. Theoretical conception of an effective enforcement

### a) Improving enforcement on the law-making level

Typical problems and conflicts of enforcement of international environmental law should be already anticipated on the law-making stage.

Qualitative sound and practicable rules are easier to enforce. Sound law is more a matter of the widest possible consensus among States on the content of normative standards, than a matter of agreeing on higher environmental standards. Within the process of treaty negotiation it is important to take into account the differing ideas of negotiating States on the treaty objectives, not just based on the existing-power structure in their relations, but in the sense of a comprehensive balancing of interests.[69] This counteracts for example enforcement deficits resulting from lack of will.

Apart from that, the flexible adjustment of treaties to changed economic, technological, scientific, and political circumstances should be considered to improve the compliance

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[63] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 78 et seq.; *A. Chayes/ A.. Chayes*, On Compliance, International Organization, vol. 47, 1993, 175, 177 et seq.; *L. Henkin*, How Nations Behave, 1979, 47; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 17; *H. K. Jacobson/ E. Brown Weiss*, Strengthening Compliance with International Environmental Accords: Preliminary Observations from a Collaborative Project, Global Governance, vol. 1, 1995, 119, 122.

[64] *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 4.

[65] *J. G. March/ H. A. Simon*, Organizations, 1958, 140 et seq.

[66] *H. K. Jacobson/ E. Brown Weiss*, Strengthening Compliance with International Environmental Accords: Preliminary Observations from a Collaborative Project, Global Governance, vol. 1, 1995, 119, 122 .

[67] On the importance of interest groups and public opinion for politics, compare: *R. D. Putnam*, Diplomacy and Domestic Politics: The Logic of Two-Level Games, IO, vol. 42, 1988, 427, 432 et seq.

[68] *M. Bothe*, The Role of International Environmental Law, in: *O. Höll*, Environmental Cooperation in Europe, 1994, 123, 125, 132; *O. Schachter*, International Law in Theory and Practice, 1991, 362, 368.

[69] *T. Marauhn*, Beyond Pollution Control: Energy Efficiency Instruments in a Liberalised International Energy Market, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 301, 327 et seq.; *P. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 162.

capabilities of States.[70] Therefore it is desirable that treaties can be rapidly adapted to changed circumstances. This may be achieved by development of the treaty regime through decisions of the Conference of the Parties, simplified treaty amendment procedures, as well as through framework treaty and protocol approaches.[71]
According to Article 39 of the Vienna Convention on the Law of Treaties, treaty amendments follow the same procedures as treaty conclusions. They must be signed and ratified by the States before they become legally binding. Nevertheless, it seems more advisable that certain changes could be brought about in treaties without necessarily obtaining the formal consent of every State party to the treaty. This could be reached by adoption of a double system for modifying provisions in the treaty itself. Technical provisions, such as the composition of lists of protected species or of substances the discharge of which is regulated, could be amended by a simplified procedure requesting the approval of the majority of contracting States, while traditional rules which need the agreement of all contracting States apply to the main provisions.
In framework treaties[72] parties usually agree on certain treaty aims, but the negotiating States define their mutual obligations to act, in particular the substantive ones, only rudimentarily. The initial treaty which leaves all details on which there is no consensus unregulated, has because of its abstract stipulations little practical effect. Its legal and practical value however lies in the fact that it establishes a legally binding framework of action, which the State parties to the treaty will have to fill in due course. Therefore the framework treaty and protocol approach promises the creation of a satisfactory environmental treaty regime[73] if the relevant framework convention, by means of clear obligation clauses makes procedural provisions to ensure that the State parties make a serious commitment to negotiations towards the conclusion of the necessary detailed implementation protocols. In this way clear and detailed standards can be established on the protocol level which are more easy to comply with and review than general provisions.
Besides, it is important to integrate into the international environmental agreements, for example into the protocols of framework treaties, effective control mechanisms to supervise if the Parties are in compliance with their treaty obligations.

**b) Conception of an effective enforcement mechanism**

To determine a conception of an effective enforcement mechanism it is helpful to have the reasons for the enforcement deficits of international environmental law in the back of ones mind. In the light of this there are offered four fundamental strategies which suggest themselves to counteract these deficits and promise an effective enforcement conception: preventive rather than reactive or repressive enforcement, collective rather than unilateral enforcement, co-operative enforcement in place of confrontation, as well as the opportunity of compliance assistance in case of lack of capacity.[74]

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[70] *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 11, 225 et seq.
[71] *A. Kiss*, Compliance with International Environmental Treaty Provisions, UNEP/ Georgetown University Law Center, International Workshop, May 1996, 2; *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 11, 225.
[72] For a description of the concept of framework treaties see: *A. Kiss/ D. Shelton*, International Environmental Law, Supplement, 1994, 53 et seq; *G. Handl*, Environmental Security and Global Change: The Challenge to International Law, YIEL, vol. 1, 1990, 3, 5 et seq.
[73] The Vienna Convention for the Protection of the Ozone Layer, 1985 with its Montreal Protocol on Substances that Deplete the Ozone Layer, 1987 is a positive example for a developing framework treaty.
[74] *U. Beyerlin/ T. Marauhn*, Law-Making and Law Enforcement in International Environmental Law after the 1992 Rio Conference, Unweltbundesamt, Berichte 4/97, 83 et seq.

**aa) Preventive enforcement**

To improve enforcement of international environmental law, prevention must come to the fore. Since environmental damage may be irreversible, international environmental law should regulate and control activities before they cause environmental harm, compensation after damage may be too late.[75]
In the context of enforcement the concept of prevention means the utilisation of preventive procedural measures, which are to ensure that international environmental norms are met, so that the question of a breach of treaty does not arise. This can be reached by active treaty management[76]. The basic components of this concept are the continuous and systematic review and assessment of compliance of the State parties with the treaty obligations, compliance assistance, mechanisms for dispute settlement and avoidance, as well as flexible methods for treaty adaptation[77].
Routine review and assessment of the conduct of the State parties in form of supervision is the first crucial element of active treaty management. The aim of such supervision should not only be the detection of treaty violations, but the identification of problems with performance of treaty obligations and thus developing concepts to overcome these problems and improve future compliance with these treaty obligations. This may be achieved by verification and evaluation of data from self-reporting, assessment of information from various sources, as well as public information and compliance assistance.[78]
Compliance assistance is one of the possible responses to identified or expected compliance problems with the aim to improve the ability of states to keep their treaty obligations.[79] If integrated into the treaty from the outset, compliance assistance coupled with efforts to fulfil the treaty obligations can contribute to the steering of State behaviour towards the aim of the treaty. In this context, compliance assistance has a preventive effect.
Apart from informal mediation procedures, the authoritative interpretation of treaty obligations by treaty bodies can be of significance in the context of dispute settlement. Authoritative interpretation can contribute to the flexible handling of treaty obligations, in that the content of obligations can be amended, within the limits of the wording, to match the capabilities of particular States with the aim to avoid disputes over compliance with treaty obligations. In this way it is an undisputed method for dealing with disputes about the meaning of treaty provisions, moreover it may help to prevent disputes, and in some situations it can stem potentially non-compliance behaviour before a contracting State has committed itself to engage in such an action, because a State is not likely to ignore the answer to a question it has itself submitted.[80]

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[75] *F. Ladenburger*, Durchsethungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber Staaten, 1996, 30; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 306; *A. Rest*, Fortentwicklung des Umwelthaftungsrechts - völkerrechtliche und international-privatrechtliche Aspekte, in: *Gesellschaft für Umweltrecht*, Dokumentation zur 12. wissenschaftlichen Fachtagung, 1988, 104.
[76] For detailed information about the concept of active treaty management see: *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, Part 2, especially 197 - 228; *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 83 et seq.
[77] On the aspect of flexible methods of treaty adaptation, compare: B II. 2. a).
[78] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 84.
[79] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 85 et seq.
[80] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 84 et seq.

**bb) Collective enforcement**

A deciding factor leading to enforcement deficits is the decentralised structure of enforcement in international law.[81] To effect the implementation of obligations of common interest for the State community as a whole, it is advisable to leave the enforcement in the hands of international institutions.[82] The integral structure typical for multilateral environmental treaties demands a procedure disengaged from the level of contracting States, in the interest and for the benefits of the treaty community as a whole. Institutionalisation makes possible a collective enforcement of international environmental law, not limited to the protection of the legal position and interest of individual States, but including areas beyond national jurisdiction, such as Antarctica, the high seas, the deep seabed and the atmosphere.[83] Collective enforcement promises to be more objective, to be structured more impartially, and to reduce the relevance of political considerations of expediency.[84] In addition to this, institutionalisation contributes to the destigmatisation of enforcement in disconnecting it from specific conflicts by making control and supervision procedures a matter of routine. Such international controls may have a precautionary and a confidence building effect as well.

To make use of the described advantages of international control it is advisable to create independent control organs which promise to be objective and are accepted by all Parties to the treaty, such as specialised international bureaucracies or expert committees.[85] Bureaucratic or administrative bodies are for example secretariats, which are composed of international civil servants without financial or other dependence on their home government, and which are playing allegiance to the overall purpose of the respective treaty.[86] Expert committees are composed of highly qualified individuals, serving in their individual capacity and not as State nominees.[87] International bodies of this kind are suitable to concentrate on the above described active treaty management in form of rule-making, compliance control, compliance assistance and authoritative dispute settlement.[88]

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[81] Compare above: B. II. 1.1.

[82] *U. Beyerlin*, State Community Interests and Institution-Building in International Environmental Law, ZaöRV, vol. 56, 1996, 602, 604; *A. E. Boyle*, Saving the World? Implementation and Enforcement of International Environmental Law Through International Institutions, Journal of Environmental Law, vol. 3, 1991, 229, 231 et seq.; *P. W. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 137, 161; *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 31 et seq. *A. Chayes/ A. Chayes*, the New Sovereignty, 1995, 271 - 285.

[83] *A. E. Boyle*, Saving the World? Implementation and Enforcement of International Environmental Law through International Institutions, Journal of International Environmental Law, vol. 3, 1991, 229, 233.

[84] *W. Lang*, Verhinderung von Erfüllungsdefiziten im Völkerrecht, in: *J. Hengstschläger/ H. F. Köck/ K. Korinek/ K. Stern/ A. Truyol y Serra*, Für Staat und Recht, 1994, 817, 818; *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 31; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 323.

[85] *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 31; *R. A. Falk*, The Status of Law in International Society, 1970, 340; *W. Lang*, Compliance Control in International Environmental Law: Institutional Necessities, ZaöRV, vol. 56, 1996, 685, 687.

[86] *W. Lang*, Compliance Control in International Environmental Law: Institutional Necessities, ZaöRV, vol. 56, 1996, 685, 687.

[87] *W. Lang*, Compliance Control in International Environmental Law: Institutional Necessities, ZaöRV, vol. 56, 1996, 685, 687.

[88] *U. Beyerlin*, State Community Interests and Institution-Building in International Environmental Law, ZaöRV, vol. 56, 1996, 602, 613; *A. E. Boyle*, Saving the World? Implementation and Enforcement of International Environmental Law through International Institutions, Journal of International Environmental Law, vol. 3, 1991, 229, 231 et seq.

### cc) Co-operative enforcement

In contrast to traditional enforcement mechanisms which are often an expression of confrontation the new enforcement methods of compliance control and compliance assistance are characterized by co-operation and partnership. One of the advantages of compliance control and compliance assistance through international institutions is the resulting transparency.[89] Transparency has mainly three functions: first it enables States usually acting as independent participants in a treaty regime to co-ordinate their activities among themselves, second it builds confidence in relations between States, apart from this it creates pressure to observe the treaty.[90] Transparency can overcome misperceptions over the extent to which other Parties are adhering to the treaty, and give *bona fide* States the possibility of demonstrating their own compliance. This contributes to overcome the fear of States to damage their national economy through compliance with the treaty, in case they would be the only one to meet the treaty obligations with the consequence of competitive disadvantages.[91] Transparency will also discourage States from violating a treaty, as they must expect their default to be discovered.
Transparency is not only fostered by the exchange of data between states, but also by fact-finding in a more comprehensive sense. This can take place in form of verification procedures of international bodies. Integrating the findings of non-governmental organisations (NGOs) into these procedures might be promising.[92]

### dd) Compliance assistance

Substantive and intrinsic rewards for meeting treaty obligations, and the inclusion of incentives in the treaty are promising methods of guaranteeing adherence to the treaty. If it is obvious or foreseeable that States have not the ability to fulfil their treaty obligations due to lack of capacity, it is advisable to offer compliance assistance.[93] From an analytical perspective administrative and legal assistance, as well as making available financial means can on the one hand be compliance assistance in response to an identified compliance deficit but it could also be a preventive means of steering State behaviour, if integrated into the treaty from the outset. While these two approaches cannot be strictly separated in practice, one must be aware of their different functions - on the one hand the removal of material deficits which impair the ability to comply, and on the other hand the incentives to observe normative standards. In respect of the latter, particularly market-based and other economic mechanisms are in discussion, for example general economic and trading advantages, financial compensation for additional burdens and transfer of technology.[94]

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[89] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *Winfried Lang*, Sustainable Development and International Law, 1995, 75, 81 et seq.
[90] For more details, compare: *A. Chayes/ A. H. Chayes*, The New Sovereignty, 1995, 135 - 153; *M. Olson*, The Logic of Collective Action: Public Goods and the Theory of Groups, 1965, Chapter 1.
[91] *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht „Enforcement" gegenüber den Staaten, 1996, 32; *P. C. Szasz*, Administrative and Expert Monitoring of International Treaties, 1999, 4.
[92] *M. Bothe*, Compliance Control beyond Diplomacy - the Role of Non-Governmental Actors, Environmental Policy and Law, vol. 27, 1997, 293, 296 et seq.; *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 82 et seq.; *J. Cameron*, Compliance, Citizens and NGOs, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 29 - 42.
[93] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 85 et seq.
[94] For an analysis of these steering instruments, see: several articles in *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996.

## C. Methods of international environmental law enforcement

Against the background of the above described fundamental enforcement strategies the means and methods available in current international environmental law to bring its rules to bear effectively in practice will be analysed and evaluated.
At the moment enforcement of international law appears to be undergoing a period of far reaching change. Traditionally international law has primarily made available unilateral and repressive instruments for its enforcement. Especially the concept of State responsibility, as well as the unilateral mechanism of countermeasures have been popular. The few traditional institutionaliszed means of enforcement available, such as sanctions of the United Nations Security Council and dispute settlement have been hardly ever used in the context of international environmental law enforcement. Therefore the international community of States has started to search for new solutions to the problem of international environmental law enforcement. In this respect new methods based on partnership and co-operation, such as compliance control and compliance assistance have been developed.

### I. Traditional methods of international environmental law enforcement

The traditional methods of international law enforcement show some disadvantages and are therefore hardly ever used. The traditional methods of international environmental law enforcement, such as the concept of State responsibility and countermeasures, are mainly unilateral and repressive in nature. The few institutionalised traditional enforcement methods, such as sanctions of the United Nations Security Council and various means of dispute settlement are also confrontational and repressive rather than co-operative or preventive. Against this background the question arises to what extent it is advisable to use and develop these enforcement mechanisms in the field of international environmental law.

#### 1. State responsibility

##### a) Concept of State responsibility

The principle, that States are held responsible for all acts and omissions in breach of an international obligation, is generally recognized in international customary law[95] and particularly reflected in Article 1 and Article 3 of the International Law Commission Draft Articles on State Responsibility[96]. State responsibility results in the obligation of the State

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[95] *A. E. Boyle*, State Responsibility for Breach of Obligations to protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 72; *S. R. Chowdhury*, Common but differentiated State responsibility in international environmental law: from Stockholm (1972) to Rio (1992), in: *K. Ginther/ E. Deuters/ P. de Waart*, Sustainable Development and Good Governance, 1995, 322, 325 et seq.

[96] Part 1 of the Draft Articles on State Responsibility (Articles 1-35), on the general conceptual framework of analysing state responsibility, was adopted by the International Law Commission on the first reading in 1980, ILCYb 1980/ II/2, 30-34; Part 2 on the question of countermeasures and Part 3 on dispute settlement have been provisionally adopted by the International Law Commission on the first reading 1996, UN Doc. A/ CN.4/ L.528/ Add.2, 1996; and an Addendum has been provisionally adopted at the first reading in 1999, UN Doc. A/ CN.4/498, 1999; for more background information, see: *J. Crawford*, Second Report on State Responsibility to the Fifty-first session of the International Law Commission, May/ July 1999, UN Doc. A/CN.4/498, 1999; *A. Rest*, Fortentwicklung des Umwelthaftungsrechts - völkerrechtliche und international privatrechtliche Aspekte,

committing the wrongful act to discontinue its conduct and guarantee non-repetition, to re-establish the *status quo* if possible, or if not, to pay compensation corresponding to the value of re-establishment to the injured State. In addition, the injured State may be entitled to suspend performance of its obligation towards the violating State and to take measures of reprisal.[97]

This concept of State responsibility still shows a number of application problems, which are largely unsolved and are therefore affecting the usefulness of State responsibility as a method of international law enforcement.[98] First of all, one can mention the problem of defining environmental damage which is connected with problems of proof, both of the deleterious effects of pollution and in some cases of its sources.[99] Second, there is uncertainty over the standard of responsibility, in this context the question arises whether and to what extent responsibility is based on failure of due diligence or the sole fact of harm - to fault or risk.[100] Finally, the extent of liability and the determination of reparation to be made are not without problems.

Since the Trail Smelter Arbitration[101] State responsibility has in practice not been used much for the enforcement of international environmental law. In some cases this may have been due to difficulties in establishment of facts. But even in cases where the facts were clear, such as Chernobyl[102] and Sandoz[103], the concept of state responsibility has not been used.
Despite efforts over many years to codify particular rules on State responsibility in international environmental law, a codification has not yet been successful.[104] On the contrary, some environmental treaties expressly emphasize that they do not cover questions of State responsibility.[105] Some Conventions concerning the protection of the environment

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in: *Gesellschaft für Umweltrecht*, Dokumentation zur 12. Wissenschaftlichen Fachtagung, 1988, 104, 115 et seq.

[97] For details see: ILC Draft Articles on State Responsibility, Article 36 et seq.; *Chorzów Factory Case* (Germany vs. Polish Republic), PCIJ Series A, vol. 3, no. 17, 46.

[98] Compare: *P. Sands*, Principles of International Environmental Law - Frameworks, Standards and Implementation, vol. 1, 1995, 632; *A. E. Boyle*, State Responsibility for Breach of Obligations to Protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 72; *M. Koskenniemi*, Breach of Treaty or Non-compliance? Reflections on the Enforcement of the Montreal Protocol, YIEL, vol. 3, 1992, 123, 126 et seq.

[99] *S. Erichsen*, Der ökologische Schaden im internationalen Umwelthaftungsrecht: Völkerrecht und Rechtsvergleichung, 1993; *A. E. Boyle*, State Responsibility for Breach of Obligations to Protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 72; *I. Brownlie*, Principles of Public International Law, 1998, 284 et seq.

[100] *A. Rest*, Fortentwicklung des Umwelthaftungsrechts - Völkerrechtliche undinternational-privatrechtlichhe Aspekte, in: *Gesellschaft für Umweltrecht*, Dokumentation zur 12. Wissenschaftlichen Fachtagung, 1988, 104, 117; *A. E. Boyle*, State Responsibility for Breach of Obligations to Protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 72.

[101] *Trail Smelter Case* (U.S. vs. Canada), RIAA, vol. 3, 1938/ 1941, 1905, 1962 et seq.; *K. Oellers-Frahm*, Trail Smelter Arbitration, in: *R. Bernhardt*, Encycloedia of Public International Law, Instalment 2, 1981, 276 - 280.

[102] See for example: *A. Rest*, Tschernobyl und die internationale Haftung. Völkerrechtliche Aspekte, Versicherungsrecht, vol. 37, 1986, 609 - 620.

[103] See for example: *A. Rest*, The Sandoz Conflagration and the Rhine Pollution: Liability Issues, GYIL, vol. 30, 1987, 160 - 176.

[104] *A. Rest*, Fortentwicklung des Umwelthaftungsrechts - Völkerrechtliche und international-privatrechtliche Aspekte, in: *Gesellschaft für Umweltrecht*, Dokumentation zur 12. Wissenschaftlichen Fachtagung, 1988, 104, 117; *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 254 et seq.

[105] E.g. a footnote to Article 8 of the Geneva Convention on Long-Rage Transboundary Air Pollution, 13. November 1979, ILM, vol. 18, 1979, 142, makes clear that the treaty itself „*does not contain a rule on State liability as to damage*".

of certain regional seas contain a clause whereby the parties undertake to co-operate in order to determine responsibility in case of violations.[106] But so far no additional text has been adopted for this purpose under any of these conventions. In respect of the Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal of 1989, there exists a Draft Protocol on Liability and Compensation[107], and in the Framework of the International Maritime Organization (IMO) a Convention on Liability and Compensation was drafted in 1996[108], but resistance against these documents is still observable.
Instead there is a growing tendency to rely upon the liability of private persons or enterprises performing polluting activities, with only subsidiary State responsibility.[109] This is exemplified by various oil pollution conventions[110], by treaties on liability for damage resulting from the use of nuclear energy[111], and more generally by the Council of Europe Lugano Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment[112]. The approach of civil liability is more promising than the approach of State responsibility, as proved by various Rhine polluting cases, including the Rotterdam harbour case.[113]

### b) Concluding evaluation

The concept of State responsibility as an enforcement mechanism shows several disadvantages. Problems in applying State responsibility as an enforcement mechanism in the context of international environmental law arise out of a limitation of the right of action to the injured State. The establishment of accountability of States for harm to the environment in the areas beyond national jurisdiction, the so called global commons, is therefore almost impossible because no direct injury to any individual State is necessarily

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[106] E.g. Art. 12 Barcelona Convention.
[107] Draft Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal, 28. April 1999, UNEP/CHW.1/WG.1/9/2, 1999; Report of the Ad Hoc Working Group of Legal and Technical Experts to Consider and Develop a Draft Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal, UNEP/ CHW.1/ WG.1/ 10/ 2, 20. September 1999; for some background information on the Draft Protocol see: *P. Lawrence*, Negotiation of a Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal, RECIEL, vol. 7, 1998, 249 - 255.
[108] Draft International Convention on Liability an Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 2. May 1996, LEG/CONF.10/DC.4, 1996.
[109] See for example: *A. Rosas*, State Responsibility and Liability under Civil Liability Regimes, in: *O. Bring/ S. Mahmoudi*, Current International Law Issues: Nordic Perspectives, 1994, 161 - 182; *A. Rosas*, Issues of State Liability for Transboundary Environmental Damage, Nordic Journal of International Law, vol. 60, 1991, 29 - 47; *A. E. Boyle*, State Responsibility for Breach of Obligations to Protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 76; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 28 et seq.
[110] E.g. International Convention on Civil Liability for Oil Pollution Damage, 29. November 1969; International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 18. December 1971.
[111] Convention on Third Party Liability in the Field of Nuclear Energy, 29. July 1960, as amended 16. November 1982, Vienna Convention on Civil Liability for Nuclear Damage, 21. May 1963, as amended 16. November 1982; Convention on the Liability of Operators of Nuclear Ships, 25. May 1962.
[112] Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, 21. June 1993, ILM, vol. 32, 1993, 1230; for an analysis of this Convention see: *H. - J. Friehe*, Der Ersatz ökologischer Schäden nach Konventionsentwurf des Europarates zur Umwelthaftung, Natur und Recht, 1992, Heft 10, 453 - 459.
[113] Compare: *J. M. van Dunné*, Legal Issues Arising from the Rhine Contracts, in: *J. M. van Dunné*, Environmental Contracts and Covenants: New Instruments for a Realistic Environmental Policy?, Proceedings Rotterdam Conference 1992, 1993, 117 - 130.

involved.[114] Apart from that, problems of causality and problems of qualification of environmental damage, as well as uncertainty about the degree of responsibility hinder an effective enforcement.
Even if the principle of State responsibility is applicable, there remains the key problem that the concept of State responsibility focuses on reparation or other remedies for environmental damage which has occurred rather than on the preferable prevention of the environmental damage.[115] Another principle problem is, that State responsibility is based on a formal concept of breach of international obligations which does not and cannot take into account the variety of situations in which this breach of international environmental law takes place. Often the States' failure to meet its environmental obligations results from economic or political difficulties which the concept of State responsibility does not take into account or takes into account insufficiently.[116]

## 2. Countermeasures

Another traditional enforcement mechanism of international law is the principle of countermeasures in form of reprisal and retorsion. Countermeasures are recognized in international customary law. Besides the International Law Commission Draft Articles on State responsibility include provisions on countermeasures in Part 2, Article 11 - Article 14.[117] Such unilateral measures are a form of self-help and are characteristic of the decentralized structure of international law.

### a) Reprisal

#### aa) Concept of reprisal

A reprisal constitutes an act contrary to international law, such as the suspension of treaty obligations by one State, which is only justified by the prior internationally wrongful act of another State together with the intention to induce the violating State to discontinue the wrongful act and provide reparation.[118]

#### bb) Concluding evaluation

The prerequisite of an internationally wrongful act for its legality reduces the reprisal largely to a repressive function. If not contemporaneous with the violation of international law damages occur usually as an immediate consequence of the wrongful act. At that time it is too late to prevent the environmental damage.[119] Further, any intention to cause the violating State to observe its law obligations in future, is in danger of leading to an excessive and

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[114] *A. E. Boyle*, State Responsibility for Breach of Obligations to Protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 69.
[115] *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 20; *A. E. Boyle*, State Responsibility for Breach of Obligations to Protect the Global Environment, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 69, 74.
[116] *M. Koskenniemi*, Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol, YIEL, vol. 3, 1992, 123, 126.
[117] For more details, see: *P. Malanczuk*, Zur Repressalie im Enwurf der International Law Commission zur Staatenverantwortlichkeit, ZaöRV, vol. 45, 1985, 293 - 323.
[118] International Law Commission Draft Articles on State Responsibility, Part 2, Art. 11; *K. J. Partsch*, Reprisals, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 330, 331 et seq.
[119] *F. Ladenburger*, Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 19.

disproportionate reprisal, itself contrary to international environmental law. For example the suspension of treaty obligations of the injured State towards the violating State may be contrary to the purpose of environmental protection itself. In particular, the unilateral nature of the system inevitably lends itself to abuse, and legal restrictions are easily ignored.[120] Since a reprisal requires the direct violation of particular rights of the affected State it is doubtful whether it is suitable for the enforcement of international obligations which are in the interest of the State community as a whole. This is only the case in so far as the environmental norms constitute obligations *erga omnes*.[121] Although it is generally recognized that such *erga omnes* obligations exist in international environmental law, such as for example the prohibition of causing substantial transfrontier environmental damage and the concept of equitable utilisation of shared natural resources[122], it is often controversial whether a norm can be qualified as an obligation *erga omnes*.

### b) Retorsion

#### aa) Concept of retorsion

A retorsion is an internationally lawful but unfriendly act which is generally the response to a similar conduct of another State or of an internationally wrongful act of another State.[123] Examples of retorsion can be found in economic relations, such as economic embargoes, non admission of foreign vessels in national ports, termination of development aid, or in diplomatic intercourse, such as the expulsion of diplomats as a retaliatory measure and limits on the movements of diplomats in the host country.[124]

#### bb) Concluding evaluation

As a retorsion can be applied without a prior violation of international law, it could have a precautionary effect. Therefore it appears to be more appropriate for the enforcement of international environmental law.
However, one should have in the back of ones mind that States will not easily undertake unfriendly acts against each other merely for the sake of environmental protection.[125] In this context it is doubtful whether States are willing to apply a retorsion for the purpose of enforcement of international environmental obligations which are not only in their own interest, but in the interest of the State community as a whole. Further limitations of the application appear due to the character of the retorsion as an unfriendly but lawful act. In the light of the growing number of legal instruments governing international relations, there are only limited means available for acts of retorsion which do not themselves contravene international law.
Thus, a retorsion, like a reprisal, seems to be ultimately largely unsuitable for the enforcement of international environmental law.

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[120] *G. Arangio-Ruiz*, Countermeasures and Amicable Dispute Settlement Means in the Implementation of State Responsibility: A Crucial Issue Before the International Law Commission, EJIL, vol. 5, 1994, 20, 22.
[121] *J. A. Frowein*, Reactions by Not Directly Affected States to Breaches of Public International Law, RdC, vol. 248, 1994, 345 - 437; *P. Malanczuk*, Akehurst's Modern Introduction to International Law 1997, 271.
[122] *J. Brunnée*, „Common Interests" - Echoes from an Empty Shell?, ZaöRV, vol. 49, 1989, 791, 800 et seq.
[123] *K. J. Partsch*, Retorsion, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 335.
[124] For more details, compare: *K. J. Partsch*, Retorsion, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 335, 336.
[125] *G. Zimmer*, Internationale Sicherheit und völkerrechtlicher Umweltschutz, 1998, 48.

## 3. Collective sanction called upon by the United Nations Security Council

### a) Concept of collective sanction

Chapter VII of the United Nations Charter[126] empowers the UN Security Council in Article 39 to *„determine the existence to any treat to the peace, breach of the peace, or act of aggression"* and to *„make recommendations, or decide what measures shall be taken in accordance with Article 41 and 42, to maintain or restore international peace and security"*. According to Article 41 of the United Nations Charter, the Security Council may call upon the Members of the United Nations to apply the following measures: complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.[127] Decisions of the Security Council taken under Article 41 of the United Nations Charter on enforcement measures not involving the use of armed force, such as to apply economic sanctions, are binding for the Member States called upon.[128]

In this context the question arises if the collective enforcement measures which the Security Council can take under Chapter VII of the United Nations Charter could be applied in case of gross violations of international environmental law or if it is advisable to go even a step further and create a new green Security Council[129].

According to the United Nations Charter, the UN Security Council is not directly tasked with the protection of the environment, but is responsible for the maintenance of international peace and security. In recent years, the Security Council has on occasion gone beyond what could be considered central to international security and in doing so, it has always referred to a broad interpretation of treats to international peace and security. In this respect the Member States of the Security Council declared, in January 1992, that *„non-military sources of instability in the economic, social, humanitarian and ecological fields have become treats to peace and security"*[130]. Global environmental change has already been recognized as one of the ecological treats to security.[131] This broad interpretation of treats to peace and security leaves room for the future application of collective sanctions in case of gross violations of international environmental law.

Proposals for the establishment of a new institution charged with the implementation of international environmental law which is comparable to the Security Council, are only rational if such an institution has a competence of comparable strength to the Security Council itself.[132] Giving the new green Security Council such a competence, would necessitate an amendment of the UN Charter, which is only possible with the consent of all

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[126] United Nations Charter, text in: *I. Brownlie*, Basic Documents in International Law, 1995, 1.

[127] On the collective sanctions available to the UN Security Council, see: *M. F. Imber*, Environment, Security and UN Reform, 1994, 140 et seq.

[128] Compare: *J. A. Frowein*, Collective Enforcement of International Obligations, in: ZaöRV, vol. 47, 1987, 67, 69; *U. Beyerlin*, Sanctions, in: *R. Wolfrum*, United Nations: Law, Policies and Practice, vol. 2, 1995, 1111-1128; *J. Combacau*, Sanctions, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 337 -341.

[129] Compare for example: the proposal by New Zealand in the UN General Assembly in 1989, UN Doc. A/ 44/ PV.15, 76 -77; *G. Palmer*, New Ways to Make International Environmental Law, AJIL, vol. 86, 1992, 259, 279. A similar proposal was made by the USSR in the UN General Assembly in 1988, UN Doc. A/ 43/ PV.6, 76; *N. Schrijver*, International Organization for Environmental Security, Bulletin of Peace Proposals, vol. 20, 1989, 115, 188 et seq.

[130] United Nations Security Council, Declaration of January 1992, UN Doc. S/ 23500, 2.

[131] *A. S. Timoshenko*, Control Machinery in the Ecological Security System, in: *W. E. Butler*, Control over Compliance with International Law, 1991, 51, 56.

[132] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 81.

Member States. Apart from the fact, that an amendment of the United Nations Charter would be long-winded and beset with extraordinary problems, at the moment, the political will necessary for states to submit themselves to the jurisdiction of such a green Security Council is not existent.[133] In addition the idea of having two Councils raises concern. Conflicts between them over jurisdiction would have to be expected.
Therefore it is more promising to use collective sanctions called upon by the already existing Security Council for the purpose of international environmental protection.

### b) Concluding evaluation

The prerequisite of a violation of international environmental law or environmental damage for its legality, reduces the collective sanction, like the unilateral reprisal, largely to a repressive function.
But besides this disadvantage, collective sanctions have some advantages for the enforcement of international environmental law. In contrast to the reprisal, sanctions called upon by the Security Council are collective in nature. In this respect they aim to offset the deficits inherent in the unilateral enforcement of international environmental law. Collective sanctions appear to be more objective as well as proportional and reduce the danger of abuse to a minimum. Another essential advantage of collective sanctions is their binding nature. Therefore it is worthy to have collective sanctions in the back of ones mind as a last resort. For instance, collective sanctions called upon by the Security Council should be applied in case of permanent gross violations of international environmental law by States that cannot be stopped by other means.

## 4. Dispute Settlement

### a) Concept of dispute settlement

Nearly all modern international environmental treaties contain provisions on the peaceful settlement of disputes.[134] They follow the pattern found in Article 2 (3) and 33 of the United Nations Charter. According to Article 33 of the United Nations Charter „*the Parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.*" The dispute settlement procedures range from consensus-building diplomatic means which leave control over the outcome primarily in the hands of the parties themselves, such as negotiation, good offices, mediation and conciliation, to legal means which give control of the outcome to an arbitrator or the International Court of Justice. Many international environmental treaties provide for a graduated system which includes many or the entire range of the different means, among which the Parties may choose.[135]

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[133] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 82.

[134] For an overview over the different dispute settlement provisions of modern international environmental treaties, see: Appendix, Table 1.

[135] For general information on dispute settlement in international environmental law, see: *R. B. Bilder*, The Settlement of Disputes in the Field of International law of the Environment, in: RdC, vol. 144, 1975, 139 - 239; *Governing Council of the United Nations Environment Programme*, Study on Dispute Avoidance and Dispute Settlement in International Environmental Law and the Conclusions, UNEP/ GC.20/ INF/ 16, 19. January 1999, 7 - 69.

Practice has shown that **negotiation**[136] is chosen in the majority of cases as a means of resolving environmental disputes.[137] The fact that negotiations do not involve third parties or an international organ, but rest solely among the concerned parties as well as the fact that their outcome is open and the procedure is not public may have contributed to the frequent use of negotiations. The success of negotiations depends to a large extent on how acceptable the demands of the other party are, but also on the tact and the experience of a *bona fide* attitude to reach a solution of the dispute in conformity with the treaty obligations in question.[138] Negotiations are of cardinal significance in a graduated system of dispute settlement mechanisms. Therefore, it is not surprising that negotiations are now a standard component of most modern international environmental treaties.[139]
In instances where negotiation do not lead to an appropriate outcome, the dispute settlement provisions of many international environmental treaties provide for non-binding third party settlement, such as good offices, mediation or conciliation.
**Good offices** may be offered by a third party or the third party may be asked to offer good offices by the parties to the dispute. The third party will then try to persuade the disputing States to enter into negotiations.[140] Another means very similar to good offices is mediation. They both imply the involvement of a third party, who usually has no power to investigate the case and never impose a binding outcome to the parties. The third party rather assists the parties to the dispute to reach an agreement by helping them to maintain a constructive environment for discussions. However, **mediation**[141] goes a step further: The mediator takes part in the negotiations of the disputing parties and suggests possible solutions to the dispute.[142] In case of mediation, much will depend on the confidence the parties have in the mediator and on his ability to find acceptable solutions. As an alternative to negotiation or judicial settlement some international environmental treaties provide for **conciliation**, including the establishment of a conciliation commission to consider disputes.[143] In this respect, conciliation gives more formal powers to the third party than good offices or mediation. The main task of the conciliation commission is to clarify the facts of the dispute, which often involves complex scientific and technical issues. Another essential task of the conciliation commission is to bring together the parties to the dispute in order to reach an

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[136] For general information on negotiation, see: *C. - A. Fleischhauer*, Negotiation, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 1, 1981, 152 - 154.
[137] *P. Sands*, Enforcing Environmental Security, in: *P. Sands*, Greening International Law, 1993, 50, 56; *S. Suikkari*, Consequences of Breaches of Multilateral Environmental Treaty Obligations, in: *Nordic Council of Ministers*, Nordic Research Project on the Effectiveness of Multilateral Environmental Agreements, September 1995, 67, 74; *Governing Council of the United Nations Environment Programme*, Study on Dispute Avoidance and Dispute Settlement in International Environmental Law and the Conclusions, UNEP/ GC.20/ INF/ 16, 19. January 1999, 54.
[138] *B. Murty*, Settlement of Disputes, in: *M. Sorensen*, Manual of Public International Law, 1968, 673, 679.
[139] Compare for example: Article 8 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora; Article 20 of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal; Article 28 of the Convention to Combat Desertification; Article 14 of the Framework Convention on Climate Change; Article 27 of the Convention on Biological Diversity.
[140] For general information on good offices, see: *United Nations*, Handbook on the Peaceful Settlement of Disputes between States, 1992, 33 - 44; *R. L. Bindschedler*, Good Offices, *R. Bernhardt*, Encyclopedia of Public International Law, vol. 2, 1995, 601 - 603.
[141] *R. L. Bindschedler*, Conciliation and Mediation, *R. Bernhardt*, Encyclopedia of Public International Law, vol. 1, 1992, 721 - 725.
[142] *Governing Council of the United Nations Environment Programme*, Study on Dispute Avoidance and Dispute Settlement in International Environmental Law and the Conclusions, UNEP/ GC.20/ INF/ 16, 19. January 1999, 54; *P. Malanszuc*, Akehurst's Modern Introduction to International Law, 1997, 276.
[143] E.g. Article 14 (7) of the Framework Convention on Climate Change; Article 27 (4) of the Convention on Biological Diversity; Article 28 (2) and (6) of the Convention to Combat Desertification.

agreement by suggesting mutually acceptable solutions to the dispute.[144] The proposed solutions of the conciliation commission are usually not binding, but rather recommendations. This is reflected for instance in Article 11 (5) of the Vienna Convention on the Protection of the Ozone Layer which states that „*the Commissions shall render a final and recommendatory award, which the parties shall consider in good faith*".
None of the means of dispute settlement outlined above will result in a legally binding decision. If the parties to the dispute want a binding third party settlement they must rely on arbitration or judicial settlement. It is notable that a lot of the most recent international environmental treaties provide for the possibility to declare the submission to arbitral tribunals or the International Court of Justice (ICJ). For example Article 14 (2) of the Framework Convention on Climate Change reads: „[...] *a Party* [...] *may declare in a written instrument submitted to the Depositary that, in respect of any dispute concerning the interpretation or application of the Convention, it recognizes as compulsory ipso facto and without special agreement, in relation to any party accepting the same obligation: (a) Submission of the dispute to the International Court of Justice and/ or Arbitration* [...]".
The International Law Commission has defined **arbitration** as a procedure for the settlement of disputes between states by a binding award on the basis of law and as a result of an undertaking voluntary accepted. Characteristic of arbitration is, that the main elements, such as the composition of the arbitral tribunal, the applicable law, and the procedural rules, remain within the hands of the parties and are therefore usually dependent on an *ad hoc* consensus among the parties.[145] It is only recently, that relatively detailed procedural rules for arbitration and conciliation are agreed in advance. Procedural norms of this kind were included in Annex II to the Convention on Biological Diversity of 1992, in Article 28 (6) of the Convention to Combat Desertification. Apart from that, Article 14 (2) and (7) of the Framework Convention on Climate Change provides for the adoption of additional procedures relating to conciliation by the Conference of the Parties.[146] In addition, the initiation of the arbitration procedure is usually dependent on a mutual consent, although some treaties provide for arbitration on the application of just one party to the dispute.[147] Characteristic of arbitration is also the fact that arbitration proceedings can be kept confidential.
However, the differences between arbitration and **judicial settlement of disputes** are being blurred on the international level, as can be seen from the Chamber proceedings introduced at the International Court of Justice (ICJ).[148] The actual appeal to the International Court of Justice is, like the initiation of an arbitration procedure, left to the parties. The advantage of the dispute settlement by the ICJ is, that the Court's judgement is binding upon the parties and - in case of non-performance - the decision may be enforced by a recommendation or a decision delivered by the Security Council.[149] Probably in response to demands to create a

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[144] *S. Suikkari*, Consequences of Breaches of Multilateral Environmental Treaty Obligations, in: *Nordic Council of Ministers*, Nordic Research Project on the Effectiveness of Multilateral Environmental Agreements, September 1995, 67, 71.
[145] *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 293.
[146] Compare on this issue further: „Procedures for Conciliation and Arbitration", UN Doc. A/ AC.241/ 51.
[147] E.g. Article 15 of the Convention for the Protection of the Rhine against Chemical Pollution of 3. December 1976, ILM, vol. 16, 1977, 242.
[148] *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 293.
[149] Article 94 (2) of the United Nations Charter.

new international environmental court[150], the ICJ established a seven-member Chamber for Environmental Matters in July 1993, on the basis of Article 26 (1) Statute of the International Court of Justice.
However, States have been reluctant to use arbitration or dispute settlement by the ICJ.[151] In this regard it is noteworthy that none of the major environmental catastrophes of recent years, such as the Chernobyl or Amoco Cadiz incidents, has led to international judicial proceedings.[152] In consequence, only very few cases brought before the ICJ have involved questions of international environmental law nature. Examples of such cases were the *Nauru Case*[153] and the *Gabcíkovo-Nagymaros Case*[154].

**b) Concluding evaluation**

Dispute settlement procedures have some general disadvantages which prevent them to be effective enforcement means.[155] Dispute settlement procedures are bilateral in character. Therefore, it is questionable if they are suitable for disputes about the application of international environmental treaties which are often multilateral in character. Apart from that, dispute settlement is accusatorial in character, it may bring a State to be punished, but does not ensure results that would protect the environment. In addition, dispute settlement procedures are usually expensive, time-consuming and confrontational; these factors particularly hinder developing countries to initiate them. States are in general very cautious in initiating dispute settlement procedures or agreeing on such procedures. This is problematic, because only very few international environmental treaties contain compulsory third-party settlement; third-party settlement depends on mutual agreement. As long as these mechanisms are not compulsory third party dispute settlement, which is more promising for the enforcement of international environmental law than negotiations, is unlike to occur. Third party dispute settlement, in particular the judicial procedures, makes possible an authoritative interpretation of international environmental treaties. This authoritative interpretation can contribute to the flexible handling of treaty obligations, in that the content of obligations can be clarified and amended, within the limits of the wording, to match the capabilities of particular States with the aim to avoid or settle disputes over compliance with treaty obligation. In this way it is a suitable method for dealing with disputes about the meaning of treaty provisions and in some situations it may help to prevent disputes.

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[150] For a general discussion on this issue, see: *A. Postiglione*, A More Efficient International Law on the Environment and Setting Up an International Court For the Environment within the United Nations, Environmental Law, 1990, 321 - 328; *A. Postiglione*, An International Court for the Environment?, EPL, vol. 23, 1993, 73 - 78; *R Jenninger*, Need for and Environmental Court?, EPL, vol. 22, 1992, 312 - 314; *A. Rest*, Need for an International Court for the Environment?, EPL, vol. 14, 1994, 173 - 187.

[151] *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 32.

[152] *P. W. Birnie/ A. E. Boyle*, International Law and the Environment, 1992, 137.

[153] *Case concerning certain Phosphate Lands in Nauru,* Nauru versus Australia, Preliminary Objections, Judgement of 26. June 1992, ICJ Rep. 1992, 240. Before the Court was able to render its judgement on the merits Nauru and Australia reached a friendly settlement of their dispute; with an order dated 13. September 1993, the ICJ placed on record the discontinuance of the proceedings, ICJ Rep. 1993, 322, for detailed information on the case, see: *K. Oellers-Frahm*, Phosphate Lands in Nauru Case (Nauru v. Australia), in: *R. Bernhardt*, Encyclopedia of Public International Law, vol. 3, 1997, 1025 - 1027.

[154] *Case concerning the Gabcíkovo-Nagymaros Project*, Hungary versus Slovakia, Judgement of 25. September 1997, ICJ Rep. 1997.

[155] On the disadvantages of dispute settlement, see: *Governing Council of the United Nations Environment Programme*, Study on Dispute Avoidance and Dispute Settlement in International Environmental Law and the Conclusions, UNEP/ GC.20/ INF/ 16, 19. January 1999, 7, 14.

## II. New partnership methods of international environmental law enforcement

Apart from the deficits outlined above, and the reluctance of States to use traditional enforcement methods, it is especially the stigmatising effect of these instruments, which would appear to make them largely unsuitable for the implementation of international environmental law, based as it is on co-operation. Traditional enforcement methods also take in general too little account of the reasons for non-compliance with international environmental law. In the light of this the need for new partnership methods, such as compliance control and compliance assistance, became obvious. As shown from the suggestions for more effective enforcement strategies, these partnership methods, which are co-operative and preventive in nature, should have the better chance of progressing. Such alternative methods to improve the compliance of States with international law, especially that of compliance control, have already been put into practice in international human rights law, international disarmament law, as well as international financial law and can be found at least partially in modern international environmental treaties. In the environmental field the application of these enforcement measures is still at the initial stage; to become effective, these methods need to be developed and improved in future. Therefore the following analysis and evaluation of compliance control and compliance assistance in the field of international environmental law is amplified by some suggestions for a possible development and improvement of these enforcement methods.

### 1. Compliance control

Compliance control is now a generally accepted strategy[156] to combat compliance deficits in international environmental law through transparency and openness.[157] Its co-operative character is complemented by elements of international control, in a way that the procedure could also be described as partly inquisitorial. In this respect, compliance control can be considered as institutionalized and formal supervision of States' conduct in respect to their treaty obligations by an international body.

#### a) Procedural aspects of compliance control

Two types of compliance control procedures are distinguishable: a continuous, routine supervision procedure and an ad-hoc non-compliance procedure which includes the possibility of fact-finding inspections.[158]

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[156] E.g. Agenda 21, Chapter 39, paragraph 8 (a) exhorts states to „*establish efficient and practical reporting systems on the effective, full and prompt implementation of international legal instruments*" and states that „*Procedures of reporting, monitoring, fact-finding, information and consultation are helpful in any endeavour aimed at dispute avoidance*", UN Doc.E/CN.17/Add. 1, 1992. In a similar vein, the Lucerne ECE Ministerial Declaration, 30. April 1993, Art. 7, paragraph 23.1 urges contracting parties to environmental conventions to adopt non-compliance procedures which (1) aim to avoid complexity; (2) are non-confrontational and transparent; (3) leave the competence for taking decisions to the determination of the contracting parties; (4) leave it to contracting parties to consider what technical and financial assistance may be required within the context of the specific agreement; and (5) include a transparent and revealing reporting system and procedures as agreed to by the parties. On this strategy compare generally: United Nations Economic Commission for Europe, Committee on Environmental Policy, Implementation of and Compliance with Environmental Conventions in the ECE Region, UN Doc. CEP/WG.1/R.4/Add. 1, 1995.

[157] *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 81 et seq.

[158] *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 30; *T. Marauhn*,

**aa) Routine supervision procedure**

There are numerous models for routine supervision, *inter alia*, reporting procedures under human rights treaties[159] and the International Labour Organization (ILO) regime[160]. The experience gained under the well-established human rights instruments can be helpful for the environmental field, because routine supervision becomes more and more a standard component of multilateral environmental treaties, but is yet not well established in practice. Reporting, verification and evaluation are principal means to provide transparency and openness in an environmental treaty and are therefore critical elements of compliance control.[161] The establishing of facts is the first step of an effective compliance control. Uncertainty and dispute over facts bear considerable potential for conflict. Knowledge of the relevant data enables states to get an idea of compliance with treaty obligations of other States, and for this reason creates confidence. Apart from this the verification and evaluation of data by an international body, creates pressure to observe the treaty, as States must expect their default to be uncovered.[162] A reliable and meaningful data base is a necessary basis for data verification in the course of supervision of State conduct in respect to their treaty obligations.[163] The first and most important formal techniques of data collection are reporting obligations.

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Towards a Procedural Law of Compliance Control in International Environmental Relations, ZaöRV, vol. 56, 1996, 696, 698 et seq.

[159] E.g. the International Covenant on Civil and Political Rights, 16. December 1966, Article 40, UNTS, vol. 999, 1966, 171; the International Covenant on Economic Social and Cultural Rights, Article 16 et seq, 16. December 1966, UNTS, vol. 993, 1966, 3; the International Convention on the Elimination of All Forms of Racial Discrimination, 21. December 1965, Article 8, UNTS, vol. 660, 1965, 195; the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment, Article 19, UN General Assembly Resolution 39/46, 10. December 1984, UN Doc. A/39/51; the Convention on the Rights of the Child, 20. November 1989, Article 44, 28 ILM 1989, 1457 provide a system of periodic state reports on measures adopted to comply with the treaty obligations. For general information about the human rights reporting procedures see: *P. Alston*, Report on Effective Implementation of International Instruments on Human Rights, including Reporting Obligations under International Instruments on Human Rights, UN Doc. A/ 44/ 668, 1989, *C. Tomuschat*, Human Rights, State Reports, in: *R. Wolfrum*, United Nations: Law Policies and Practice, 1995, 628 - 637; *K. Wolfram*, Besonderheiten der internationalen Kontrollverfahren zum Schutz der Menschenrechte/ Particular Aspects Concerning International Procedures for the Protection of Human Rights, in: *W. Kälin/ E. Riedel/ K. Wolfran/ B.-O. Bryde/ C. von Bar/ R. Geimer*, Aktuelle Probleme des Menschenrechtsschutzes/ Current Problems of Human Rights Protection, 1994, 83 - 128; *R. A. Painter*, Human Rights Monitoring: Universal and Regional Treaty Bodies, in: *P. C. Szasz*, Administrative and Expert Monitoring of International Treaties, 1999, 49 - 82; *T. Meron*, Norm Making and Supervision in International Human Rights: Reflections on Institutional Order, AJIL, vol. 76, 1982, 754 - 778.

[160] For furter information on the elaborate reporting procedure initiated by the International Labour Organization Constitution, Article 22, 23, see: *C. P. R. Romano*, The ILO System of Supervision and Compliance Control: A Review and Lessons for Multilateral Environmental Agreements, 1996, 4 - 9, 21 et seq., the relevant Articles of the International Labour Organization Constitution are reprinted in Appendix I.

[161] *Organization for Economic Co-operation and Development*, Ensuring Compliance with a Global Climate Change Agreement, ENV/EPPOC(98)5, 1998, 60.

[162] *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 16.

[163] *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *W. Rüdiger*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 23; *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 12.

**(a) Data reporting by States**

Reporting is the periodical provision of verifiable data to an international body, on activities undertaken by the parties to international treaties to implement the norms.[164] The reporting mechanism in the field of international environmental law is prescribed, *inter alia*, in the Vienna Convention for the Protection of the Ozone Layer of 1985. According to Article 5 of the Vienna Convention, contracting States are obliged to communicate „*through the Secretariat, to the Conference of the Parties* [...] *information on the measures adopted by them in implementation of this Convention and of Protocols to which they are Party in such a form and at such intervals as the Meeting of the Parties to the relevant instruments may determine.*" While reporting obligations of this kind are now among the standard provisions of most modern international environmental treaties their details vary significantly. Some treaties only require Parties to submit to the responsible organs reports on the implementation of the treaty without specifying what the reports should contain or without determining time frames for reporting, such as the Convention on Biological Diversity of 1992, while other agreements contain detailed requirements of what the report should cover, for example production, emission and other data, and when the report should be submitted, such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal of 1989 and the Framework Convention on Climate Change of 1992.[165]

In practice several problems arise in the application of reporting procedures under international environmental treaties. States are increasingly having problems in meeting their numerous reporting obligations and therefore reporting has often been late, incomplete or inaccurate and in some cases even missing.[166] While the reporting status for the Montreal Protocol of 1987 is relatively high, it is for example poor for the Convention on International Trade in Endangered Species of Wild Fauna and Flora of 1973, the International Convention for the Prevention of Pollution from Ships of 1973, and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matters of 1972.[167] In general these low reporting rates reflect difficulties in collecting information from disparate sources. The required data is often not in the hands of governments, but in the hands of private persons, for instance production data from private enterprises. In this respect, States must enact and enforce national legislation including reporting obligations for the respective individuals. In addition, it is necessary to establish a corresponding national information system and to use data gathered by other methods. This bears data protection

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[164] For a similar definition, compare: *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 39 et seq.

[165] For an overview of the different reporting obligations of modern international environmental treaties, see: Appendix, Table 2.

[166] On this aspect compare: *United States General Accounting Office*, International Environment - International Agreements are Not Well Monitored, GAO/RCED-92-43, January 1992, 23 et seq.; *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 12 et seq.; Expert Group Meeting on the Identification of Principles of International Law for Sustainable Development, Geneva, September 1995, Report, paragraph 158; in addition see the deliberations of the 4th Session of the Commission of Sustainable Development, UN Doc. Cn.17/1996/17, paragraph 13 and Add. 1, paragraph 23.

[167] For reporting figures, compare: *United States General Accounting Office*, International Environment - International Agreements are Not Well Monitored, GAO/RCED-92-43, January 1992, 24 et seq.; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 23.

problems and hinders States to make serious efforts to improve their reporting quality.[168] An other general reason for inadequate reporting is frequently low priority connected with insufficient personnel devoted to reporting.[169] The ambiguity in the language of international environmental treaties also contributes to incompleteness and inadequacy of reports from developing - as well as developed countries.[170] Among developing countries, poor reporting is more widespread and is part of a larger and more serious problem related to their financial and technical capacity to implement the treaty. Developing countries frequently lack the infrastructure and resources to draft an adequate legislation to implement the treaty, set up an effective administrative system, hire and train enforcement personnel, or purchase pollution abatement equipment. For example, some developing countries have „one-person" wildlife departments to implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora of 1973 as well as perform other tasks. Some countries even lack resources to print the certificates needed to document and control trade in endangered species; government officials in this situation face a choice between reporting about implementation and actually doing something for implementation.[171]

Against this background it becomes clear that reporting on the implementation of environmental treaties might need some streamlining.[172] However, to make a supervision of State conduct in respect to their treaty obligation possible, high quality reports are needed. Particularly important is the submission of high quality reports by developing countries, because in this case the reports are not only the basis for supervision, but also the basis for the provision of financial aid and technical assistance; in this context reporting can strengthen the Party's ability to implement the agreement.[173] The data must meet a number of criteria, including completeness, accuracy, understandability, uniformity and comparability, as well as timeliness, to be useful for verification.[174]
An appropriate streamlining of reporting, in the sense of structuring reporting obligations so that they are meaningful, without at the same time making excessive demands of States, could be reached by a harmonization[175] as well as reduction of the reporting obligations to a

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[168] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 95; *United States General Accounting Office*, International Environment - Strengthening the Implementation of Environmental Agreements, GAO/RCED-92-188, August 1992, 4.

[169] *United States General Accounting Office*, International Environment - Strengthening the Implementation of Environmental Agreements, GAO/RCED-92-188, August 1992, 4; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 23.

[170] *United Nations General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 13.

[171] *United States General Accounting Office*, International Environment - International Agreements are Not Well Monitored, GAO/RCED-92-43, January 1992, 4, 23 et seq.; *United States General Accounting Office*, International Environment - Strengthening the Implementation of Environmental Agreements, GAO/RCED-92-188, August 1992, 4.

[172] *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 24.

[173] *United States General Accounting Office*, International Environment - Strengthening the Implementation of Environmental Agreements, GAO/RCED-92-188, August 1992, 7.

[174] *United States General Accounting Office*, International Environment - Literature on the Effectiveness of International Environmental Agreements, GAO/RCED-99-148, May 1999, 12; *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 44.

[175] On the aspect of harmonization of reporting, compare: C. I. 1. c).

minimum, retaining those with the most informative content for the respective treaty.[176] For example the report of general implementation measures, such as national programs and their progress, as well as legislative measures could be given less weight than the report of administrative measures, such as the issuing of licences or the imposition of fines. If the treaty as such requires special reductions, with precisely defined thresholds, which is a prerequisite for its effectiveness, it is necessary that the State report includes exact data. In addition it is advisable, that the Parties to the international environmental treaty report about their own evaluation of the effectiveness of the specific measures taken by them to implement the treaty and problems encountered in the implementation.[177] The results of such self-evaluation could be useful to counter difficulties in compliance more effectively.
In any case it is essential for any verification and evaluation of the reports on compliance at the next procedural level, to specify what the report should contain. A clearly defined and detailed content of State reports contributes to the uniformity and comparability of data and counteracts insufficient reporting, resulting from ambiguity in treaty language. These specific requirements for reports can best be set up by questionnaires or guidelines which can be flexibly adapted to changed circumstances. An example for such guidelines, comprising a large number of specific questions, can be found in the reporting system of the International Labour Organization (ILO) as well as in the reporting procedure of the International Covenant on Economic, Social and Cultural Rights[178]. In the environmental field the responsible treaty bodies are also starting to establish questionnaires of this kind, the questionnaire of the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal of 1989 is one example.
In respect of the submission of reports it is shown, that it is important to determine an exact date for the submission of reports, for example at the end of the year.[179] Vague terms like „to report regularly" do not stimulate the reporting zeal of States. With regard to the frequency of reports a reduction could contribute to the above mentioned streamlining of reports.[180] This means that, while initial reports should be produced in any case, as a basis for further compliance control, it is not necessary to submit the further reports annually. The experience from the international human rights instruments shows that intervals of between two and five years are practicable, because more than one year is usually needed for the examination.[181]

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[176] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 95; *R. B. Mitchell*, Comment on the Paper by Patrick Széll on the Development of Multilateral Mechanisms for Monitoring Compliance, in: *W. Lang*, Sustainable Development and International Law, 1995, 111, 113.
[177] This provision is for example included in the Framework Convention on Climate Change, 1992, Art. 12 paragraph 2.
[178] „Revised Guidelines", UN Doc. E/C.12/1991/1; for further information, see: *S. Leckie*, An Overview and Appraisal of the Fifth Session of the UN Committee on Economic, Social and Cultural Rights, HRQ, 1991, 545 - 572.
[179] *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 42 et seq.
[180] *U. Beyerlin/ T. Marauhn*, Law- Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 96; *K. J. Partsch*, Reporting Systems in International Relations, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 326, 328 et seq .
[181] *K. J. Partsch*, Reporting Systems in International Relations, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 326, 328.

### (b) Verification and evaluation

As a rule, reports have to be submitted to the Secretariats of international environmental treaties. Their function should not be restricted to merely receiving the reports and transfer them to the Conference of the Parties, but should also include an analysing and processing of information. They are, as independent and permanent administrative bodies which are playing allegiance to the overall purpose of the respective treaty, in the logical position to verify the reports on a state-by-state basis with the aim to monitor how the contracting States are implementing the treaty. A verification function of this kind could particularly contribute to an increasing transparency. Such functions of the Secretariat have theoretically been recognized for example by the Convention on International Trade of Endangered Species of Wild Fauna and Flora of 1973 and by Decisions of the Conference of the Parties to the Basel Convention on the Control of the Transboundary Movements of Hazardous Wastes and their Disposal. Article 12 paragraph 2 (d) of the Convention on International Trade of Endangered Species of Wild Fauna and Flora enables the Secretariat „*to study the reports of Parties*". This empowers the Secretariat to perform more than a switchboard function, including factual evaluation, as a glance to Article 12 paragraph 2 (g) makes clear. According to this provision the Secretariat shall prepare annual reports to the Parties on the implementation of the Convention.[182] In a similar vein, the Decisions I/11, II/17 of the Conference of the Parties to the Basel Convention urge the Secretariat to „*prepare an analytical summary of the reports submitted to it*" and present the summary together with a report on their findings to the Conference of the Parties. These provisions could be taken as the basis for an active verification by the treaty Secretariat.
Verification is defined as an evaluation of the veracity of the State reports, with respect to the collection of evidence relating to compliance with international treaties.[183] For this purpose, information from NGOs or individuals, as well as additional information from States, such as facts from monitoring or information from a dialogue with the respective State, should be taken into account.

#### (1) Information from NGOs

NGOs play an increasingly important role in the prevention of compliance deficits in form of active participation.[184] Most notable among this involvement is the gathering and dissemination of environmental information.

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[182] On the content of the reports, see: *D. S. Favre*, International Trade in Endangered Species, 1989, 287.
[183] For a similar definition of verification, see: *M. Bothe*, Verification of Facts, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 383, 386; *W. Fisher*, The Verification of International Conventions on the Protection of the Environment and Common Resources, Bericht des Forschungszentrums Jülich, No. 2495, July 1991, 4 .
[184] On the role of NGOs in international environmental law, compare: *J. Cameron*, Compliance, Citizens and NGOs, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 29, 36 et seq.; *G. Handl*, Environmental Security and Global Change: The Challenge to International Law, YIEL, vol. 1, 1990, 3, 17 et seq.; *P. J. Sands*, The Environment, Community and International Law, Harvard ILJ, vol. 30, 1989, 393, 412 et seq.; *M. Bothe*, Compliance Control beyond Diplomacy - the Role of Non-Governmental Actors, Environmental Policy and Law, vol. 27, 1997, 293 - 297.

Information originating from environmental as well as industrial NGOs is of particular importance for the verification and evaluation process.[185] First, reports and data from NGOs can fulfil the function of counter-statements which are useful to test the veracity of State reports and second, information from NGOs can serve as an independent data base which could be used as a substitute for data that States have failed to provide. In this respect information from NGOs can help to overcome the subjectivity inherent in self-assessment by States. In addition, the treat by the treaty Secretariat to rely on information from NGOs, if the State does not submit official data, could help to stimulate the reporting activities of States.[186] This is particularly promising in case of reporting deficits of developed countries resulting from low priority.

Modern international environmental law treaties include, following the example of human rights instruments, to an increasing degree provisions on general participation of NGOs as observers. Article 11 (7) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora of 1973, for example, states that NGOs active in fields related to the convention shall be admitted as non-voting observers at their request, unless at least one third of the parties present object. Comparable provisions can be found in Article 11 (7) of the Montreal Protocol; Article 7 (6) of the Framework Convention on Climate Change. But most treaty provisions and rules of procedure, which are dealing with the observer status of NGOs, do not provide explicitly for a specific role of NGOs in the reporting procedure. In general NGOs are admitted to participate in meetings, this may include the right to criticize State reports and present counter statements or additional information.[187] Nevertheless, their role is limited *„as long as their standing with respect to the reporting procedure is not expressly defined"*.[188] An urgent need for a specification of their status and function obviously exists. In general, the contribution of NGOs should be given greater weight in the verification process, in this respect the active and formal integration of NGOs in the human rights supervisory system could serve as an positive example.[189]

An effective participation of NGOs in the verification process requires their access to environmental information at national level. An international legal basis for obtaining such information could be established in form of procedural rights, closely aligned with the

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[185] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 96 et seq.; *P. C. Szasz*, Administrative and Expert Monitoring of International Treaties, 1999, 9; *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 48 et seq.; *E. P. Barratt-Brown*, Building a Monitoring and Compliance Regime Under the Montreal Protocol, Yale JIL, vol. 16, 1991, 519, 547 et seq., 555; *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 164.

[186] *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 43.

[187] Compare for example: Rules of Procedure of the Meeting of the Parties to the Montreal Protocol, Rule 7, paragraph 2, UNEP/ OzL.Pro.1/5, Annex I.

[188] *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 49; *P. Sands*, Enforcing Environmental Security, in: *P. Sands*, Greening International Environmental Law, 1993, 50, 55 et seq.

[189] *P. H. Kooijmans*, The Role of Non-Governmental Organizations in the Promotion and Protection of Human Rights, 16 et seq., P. H. Kooijmans states, that for the 1988 session of the UN Commission on Human Rights, 119 NGOs registered themselves, and *„practically all of them collect, process and publish data on human rights violations"*; compare also: *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 164; *E. P. Barratt-Brown*, Building a Monitoring and Compliance Regime Under the Montreal Protocol, Yale JIL, vol. 16, 1991, 519, 564 et seq.

concept of political participation and informed debate.[190] By building on existing civil and political human rights, such as the right to expression, political participation, association, legal redress, immediate procedural guarantees could be provided to foster an environmentally-friendly political order and to prevent arbitrary action likely to cause environmental harm. Environmental procedural rights of NGOs and individuals to act in the public interest could include:

- a right to information concerning the environment;
- a right to receive and disseminate ideas and information;
- a right to participation in the planning and decision-making process, including prior environmental impact assessment;
- a right to freedom of association for the purpose of protecting the environment or the rights of persons affected by environmental harm;
- a right to effective remedies and redress for environmental harm in administrative and judicial proceedings.[191]

The importance of environmental procedural rights or participatory rights has already been recognized by the Rio Declaration of 1992. Principle 10 of the Rio Declaration provides:
„*Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the international level each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making process. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including information redress and remedy, shall be provided*".[192]

Elements of Principle 10 are also reflected in the World Charter for Nature[193], in the UN Economic Commission for Europe Convention on Environmental Impact Assessment of 1991[194], in the Convention on Biological Diversity of 1992[195], in the Council of Europe Convention on Damage resulting from Activities Dangerous to the Environment of 1993[196], and in European Community Directives. Especially the European Community Directive on freedom of access to information of 1990[197] may foster international standard setting in this

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[190] On the discussion of environmental procedural rights, compare: *A. C. Kiss/ D. Shelton*, International Environmental Law, Supplement, 1994, 7 et seq.; *K. Tomaševski*, Environmental Rights, in: *A. Eide/ C. Krause/ A. Rosas*, Economic, Social and Cultural Rights, 1995, 257, 261 et seq.; *A. E. Boyle*, The Role of International Human Rights Law in the Protection of the Environment, in: *A. E. Boyle/ M. R. Anderson*, Human Rights Approaches to Environmental Protection, 1996, 43, 59 et seq.; *D. Shelton*, Human Rights, Environmental Rights, and the Right to Environment, Stanford JIL, vol. 28, 1991/ 92, 103, 117 et seq.; *J. Cameron*, Compliance, Citizens and NGOs, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 29, 39 et seq.; *J. Cameron/ R. Mackenzie*, Access to Environmental Justice and Procedural Rights in International Institutions, in: *A. E. Boyle/ M. R. Anderson*, Human Rights Approaches to Environmental Protection, 1996, 129 -152.

[191] Proposed environmental procedural rights, in: *UN Commission on Human Rights, Sub Commission of Prevention of Discrimination and Protection of Minorities*, Human Rights and the Environment, Final Report of Special Rapporteur Fatma Ksentini, 6. July 1994, UN Doc.E/CN.4/Sub.2/1994/9.

[192] Rio Declaration on Environment and Development, 14. June 1992, ILM, vol. 31, 1992, 874.

[193] UN General Assembly Resolution 37/ 7 of 1982, „World Charter for Nature", Principle 23, ILM, vol. 22, 1983, 455.

[194] ECE Convention on Environmental Impact Assessment, 25. February 1991, Article 2 (6); Article 3 (8), ILM, vol. 30, 1991, 802.

[195] Convention on Biological Diversity, 5. June 1992, Art. 14, ILM, vol. 31, 1992, 818.

[196] Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, 21. June 1993, International Legal Materials, Volume 32, 1993, 1230.

[197] EEC Directive on Freedom of Access to Information on the Environment, 1990, 90/313/EEC.

area. The adoption of this European Community Directive has prompted inquiries to the application in context of the European Convention on Human Rights, with the conclusion that the European Convention *„can be interpreted as containing such a right"*, and suggesting that this could be tested by the submission of cases.[198] The establishment of such legal binding environmental procedural rights on the international level is essential for an effective participation of NGOs in the verification and evaluation process.

**(2) Information from monitoring**

Monitoring represents the continuous observation, measurement and gathering of largely scientific and technical data on a long term basis, which takes place on the national level. While reporting procedures aim at assessing the implementation of treaty obligations by States, monitoring procedures aim at observing the condition of the given environment and ecosystem and its response to man-made interference.[199] The findings of such monitoring are usually the basis of recommendations adopted by international organisations for further strategies to deal with specific environmental problems. Therefore the data obtained from monitoring serve as criteria for the improvement of existing environmental standards and the establishment of new environmental standards, rather than for the enforcement of these standards.[200] This is not to exclude the possibility that the results from monitoring could also be used in the verification of the reports on compliance, submitted by States. Monitoring performs verification and supervision functions in those cases where the environmental treaty in question contains specific state obligations in form of environmental quality standards, emission limits, black and grey lists of controlled substances, etc..[201] In this context the subject of monitoring is not only the general condition of a given ecosystem, but its response to control and conservation measures already undertaken and the degree of achievement of the objectives set by the treaty. As a verification and supervision technique, monitoring depends on the degree of concentration of substantive duties under the instrument in question, as well as on the existence of an organ competent to receive monitoring data and to review treaty implementation. In this context information systems, and especially international registers, such as the Co-operative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP Programme), should in future play a larger role in the verification process.[202]

**(3) Information from dialogue with States**

Another possibility to find out the degree of veracity of data in reports submitted by States, is the intensive dialogue with governments. An exchange of questions and answers can come about between the international supervisory body and the State under scrutiny. This

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[198] *S. Weber*, Environmental Information and the European Convention on Human Rights, HRLJ, vol. 12, 1991, 177, 185; *K. Tomaševski*, Environmental Rights, in: *A. Eide/ C. Krause/ A. Rosas*, Economic, Social an Cultural Rights, 1995, 257, 262.

[199] *B. Ivars*, Verification of Multilateral Environmental Agreements, in: *Nordic Council of Ministers*, Nordic Research Project on the Effectiveness of Multilateral Environmental Agreements, September 1995, 47, 55; *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 34.

[200] *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 35.

[201] *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms, YIEL, vol. 2, 1991, 31, 35.

[202] Compare: *M. Kilian*, Umweltschutz durch Internationale Organisationen: Die Antwort des Völkerrechts auf die Krise der Umwelt?, 1987, 279 et seq.; *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 185.

dialogue is generally carried out in an informal way. A dialogue technique of this kind has been developed and elaborated under the human rights instruments.[203] The Committee instituted under the Convention on the Elimination of all forms of Racial Discrimination established the practice of inviting State representatives. This practice found the support of the UN General Assembly, was extended to the Human Rights Committee and has been integrated into all later procedures. An elaborate dialogue technique is also included in the ILO supervisory system. In existing environmental treaties, dispositions to this end may be found in provisions which stipulate that the responsible international organ can request further information from the State under scrutiny. In this respect, Article 12, paragraph 2 (d) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora of 1973 empowers the Secretariat „*to request from Parties such further information with respect thereto* [the reports] *as it deems necessary to ensure implementation of the present Convention*". In addition, the Secretariat has the competence to single out special problem areas or countries in which implementation is particularly difficult. This allows the Secretariat to enter into dialogue with States which have compliance problems and to focus the attention of the Parties on particularly sensitive implementation issues. An other positive development in this respect has taken place within the Montreal Protocol with the adoption of the non-compliance procedure. This non-compliance procedure can be initiated by the Secretariat against a Party if concerns regarding its compliance arise during the verification process. Within this non-compliance procedure an intensive dialogue between the Implementation Committee, the Secretariat and the State under scrutiny is intended. Unfortunately, this approach is not widely applied in the environmental sector. When it comes to implementation problems, the adoption of generic and anonymous resolutions is the preferred solution.[204] However, powers like the ones described above should be elaborated, and also put into practice not just as a means of inquiry, but as a constructive dialogue.[205]

**(c) Statement of facts**

The verification and evaluation process should be concluded by a public available statement of facts, which can be included in the annual report of the Secretariat to the Conference of the Parties. This statement of facts should not only be general, but should name dilatory States as well as States with obvious compliance problems expressly. In this respect the effective reporting system of the ILO could serve as an positive example.[206] The ILO Committee of Experts on the Application of Conventions and Recommendations, composed of twenty members who sit in their personal capacity, carries out an independent and technical evaluation of the national reports. In case the Committee of Experts notes any compliance problems it asks the respective government to submit more information or to

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[203] For information on the dialogue technique under human rights instruments, compare: *K. J. Partsch*, Reporting Systems in International Relations, in: *R. Bernhardt*, Encyclopedia of Public International Law, Instalment 9, 1986, 326, 329; *C. Tomuschat*, Human Rights, State Reports, in: *R. Wolfrum*, United Nations: Law, Policies and Practice, vol. 1, 1995, 628, 631 et seq.

[204] *K. Sachariew*, Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and reporting Mechanisms, YIEL, vol. 2, 1991, 31, 47.

[205] On the transferability of the dialogue technique of human rights treaties, see: *L. Boisson de Chazoures*, La mise en oeuvre du droit international dans la domaine de la protection de l'environnement: enjeux et défis, RGDIP, vol. 99, 1995, 37, 61.

[206] *C. P. R. Romano*, The ILO System of Supervision and Compliance Control: A Review and Lessons for Multilateral Environmental Agreements, 1996, 4 et seq., 25 et seq.; *E. P. Barratt-Brown*, Building a Monitoring and Compliance Regime under the Montreal Protocol, Yale JIL, vol. 16, 1991, 519, 556 et seq.

take certain measures. If there is no follow up by the government, the Committee will make observations that, in addition to being sent to the government, are made public in their annual report to the Conference Committee on Application of Conventions and Recommendations.
Unfortunately the annual reports of the Secretariats of international environmental treaties are usually a collection of information from State parties which are presented in a very general, consolidated report to the Conference of the Parties for discussion. The reasons therefore can be found in the insufficient personnel devoted for analysing the State reports. Often the verification of the reports is, due to lack of financial resources, undertaken by mainly one person. However, in principle, the Secretariat, which is staffed by international civil servants with legal, technical, as well as scientific background who are playing allegiance to the overall purpose of the respective treaty, is the appropriate forum to verify and evaluate the State reports.
Positive exceptions from the rule of general statements are the public available reports of the Implementation Committee under the Montreal Protocol submitted to the Meeting of the Parties. The Implementation Committee, established mainly for the implementation of the non-compliance procedure, also concerned itself with the implementation of the reporting procedure. Between 1990 and 1994, the Committee intensively scrutinized and evaluated how the Parties to the treaty complied with their treaty obligations.[207] Dilatory States were expressly named in the public Protocols to the First to Eighth Meetings of the Implementation Committee.

**bb) Non-compliance procedure**

The Non-compliance procedure can be described as an *ad hoc* procedure. Its initiation generally requires that a State encounters difficulties in meeting its treaty obligations. It is also aimed at creating transparency and is co-operative as well as preventive in character. The Parties to the Montreal Protocol were the first to adopt such an international control procedure in 1992, designed to facilitate the identification of solutions for the problems come across by Parties in the fulfilment of their treaty obligations.[208] Given this unique position, its experience is highly relevant to Parties of other international environmental treaties as they are about to design similar procedures. A procedure of this kind is for example under discussion for the United Nations Framework Convention on Climate Change on the basis of Article 13[209], for the Basel Convention on the basis of Article 19[210],

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[207] *D. G. Victor*, The Early Operation and Effectiveness of the Montreal Protocol's Non-compliance Procedure, 1996, 32 et seq.; *P. Széll*, Implementation Control: Non-compliance Procedure and Dispute Settlement in the Ozone Regime, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 43, 47, On the details, see: Protocols of the First to Eighth Meeting of the Implementation Committee, UNEP/Ozl.Pro/ImpCom/1/2-8/3.
[208] The Text and Documentation of the Montreal Protocol non-compliance procedure is available in: *UNEP Ozone Secretariat*, Handbook for the International Treaties for the Protection of the Ozone Layer, 4th edition, 1996, 195.
[209] Compare: *J. Werksman*, Designing a Compliance System for the UN Framework Convention on Climate Change, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 85 - 112; *H. E. Ott*, Elements of the Supervisory Procedure for the Climate Regime, ZaöRV, vol. 56, 1996, 732, 739 et seq.; *P. Széll*, Compliance Regimes for Multilateral Environmental Agreements, EPL, vol. 27/ 4, 1997, 304, 305 et seq.; *Governing Council of the United Nations Environment Programme*, Study on Dispute avoidance and Dispute Settlement in International Environmental Law, UNEP/ GC.20/ INF/ 16, 19. January 1999, 33.
[210] *I. Rummel-Bulska*, Implementation Control: Non-compliance Procedure and Dispute Settlement: From Montreal to Basel, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 51 - 57; *I. Rummel-Bulska*, Compliance with and Enforcement of the Basel

as well as for the United Nations Convention to Combat Desertification[211]. The Second Sulphur Protocol of 1994 has already elaborated a procedure, based on the model of the Montreal Protocol's non-compliance procedure.[212]

### (a) Existing non-compliance procedure under the Montreal Protocol

The non-compliance procedure was adopted on an interim basis at the Second Meeting of the Parties to the Montreal Protocol in London in 1990. This procedure was amended extended and finally adopted at the Fourth Meeting of the Parties, held in Copenhagen in 1992.[213] Finally, the Ad Hoc Working Group of Legal and Technical Experts on Non-Compliance with the Montreal Protocol made at their Eighteenth Meeting in 1998 some suggestions for small changes to put the procedure in more concrete terms.[214]

According to Article 8 Montreal Protocol and the terms of reference for the elaboration of the non-compliance procedure, defined on the Second Meeting of the Parties, the non-compliance procedure is intended to determine situations of non-compliance, to decide on treatment of Parties found to be in non-compliance and to identify solutions. It is based on four fundamental principles: the non-compliance procedure should avoid complexity, should be non-confrontational, should be transparent, and should leave the taking of decisions to the Meeting of the Parties and not to a subordinate body.[215]

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Convention on Control Transboundary Movements of Hazardous Wastes and their Disposal, Fifth International Conference on Environmental Compliance and Enforcement, Monterey, November 1998, 1 - 21; *UNEP*, Workshop on Enforcement of and Compliance with Multilateral Environmental Agreements -Background Paper, Geneva, July 1999, 16 et seq.; *G. Handl*, A System of Compliance Control for the Basel Convention - Outline of a Study, unpublished Document; *Governing Council of the United Nations Environment Programme*, Study on Dispute avoidance and Dispute Settlement in International Environmental Law, UNEP/ GC.20/ INF/ 16, 19. January 1999, 34.

[211] United Nations Convention to Combat Desertification, 17. June 1994, UN Doc. A/AC,241/27; UN Doc. A/AC.241/50, „Procedures to resolve questions on implementation".

[212] On the origins and design of the Non-compliance procedure under the Second Sulphur Emissions Protocol, see: *P. Széll*, The Development of Multilateral Mechanisms for Monitoring Compliance, in: *W. Lang*, Sustainable Development and International Law, 1995, 97, 104 et seq.

[213] For background information on the non-compliance procedure of the Montreal Protocol, see: *H. M. Schally*, The Role and Importance of Implementation Monitoring and Non-Compliance Procedures in International Environmental Regimes, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 82 - 92; *P. Széll*, Implementation Control: Non-Compliance Procedure and Dispute Settlement in the Ozone Regime, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 43 - 50; *P. Széll*, The Development of Multilateral Mechanisms for Monitoring Compliance, in: *W. Lang*, Sustainable Development and International Law, 1995, 97, 99 et seq.; *D. G. Victor*, The Early Operation and Effectiveness of the Montreal Protocol's Non-Compliance Procedure, 1996; *D. G. Victor/ K. Raustiala/ E. B. Skolnikoff*, The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice, 1997; *W. Lang*, Compliance Control in Respect to the Montreal Protocol, ASIL Proceedings of the 89th Annual Meeting, 1995, 206 - 224; *S. Suikkari*, Consequences of Breaches of Multilateral Environmental Treaty Obligations, in: *Nordic Council of Ministers*, Nordic Research Project on the Effectiveness of Multilateral Environmental Agreements, September 1995, 67, 79 et seq.

[214] Report of the Ad Hoc Working Group of Legal and Technical Experts on Non-Compliance with the Montreal Protocol, Eighteenth Meeting in 1998, UNEP/OzL.Pro/WG.4/1/1/3, 18. November 1998.

[215] Compare: Report of the Ad Hoc Working Group on Legal and Technical Experts on Non-Compliance with the Montreal Protocol to the Second Meeting of the Conference of the Parties in 1990, as well as Decision II/5 of the Conference of the Parties.

The procedure may be triggered by the Secretariat of the Convention; by a Party regarding the compliance of another Party with its treaty obligations even if it is not directly victimized; or by a Party that considers itself unable to comply fully with its obligations.

If one or several Parties have reservations about another Party's compliance with the Montreal Protocol, those concerns have to be submitted in writing to the Secretariat together with corroborating information. A similar submission can be made by the Secretariat, if it comes across items of evidence pointing to possible breaches in the course of its daily work. The Secretariat sends a copy of the submission to the Party whose implementation of a particular provision of the Montreal Protocol is at issue, and which then has a „reasonable opportunity" to reply. The reply is sent to the complaining Party and to the Secretariat, which forwards all information from the Parties concerned to the Implementation Committee. The initiation of the non-compliance procedure by the non-complying State itself requires the conclusion of the State to be unable to comply with its obligations, an explanation in writing of the specific circumstances considered to be the cause of its non-compliance, and implicitly, some proof that it has made its best *bona fide* efforts to comply. This has to be submitted to the Implementation Committee.
The Implementation Committee is made up of ten members, who are elected by the Meeting of the Parties, on the basis of equitable geographical distribution, for a term of two years. The members of the Committee serve as State representatives and not in their individual capacity. The Implementation Committee handles questions regarding non-compliance. Its aim is to secure *„an amicable solution of the matter on the basis of respect for the provisions of the protocol"*[216]. For this purpose the Implementation Committee may request further information from the State under consideration and also undertake further information gathering inside the territory of a Party, but only *„upon invitation of the Party concerned"*[217]. While the party under consideration has the rights to participate in the consideration of its case, it is excluded from the process of elaboration and recommendation that the Committee makes to the Meeting of the Parties. NGOs may not participate at this stage of the non-compliance procedure.
Finally the Implementation Committee reports to the Meeting of the Parties recommending the adoption of any measures it deems necessary, this report is also made public. The Meeting of the Parties may decide upon the report of the Implementation Committee and call for action to bring about full compliance with the Montreal Protocol. The Report of the Fourth Meeting of the Parties contains in Annex V an Indicative List of Measures that might be taken in case of non-compliance with the Protocol. These are, *inter alia*: providing appropriate assistance; issuing cautions; and suspension of specific rights and privileges under the Protocol.

The non-compliance procedure has been characterized as a mixture of the functions of a technical advisory body and a *„quasi-judicial determinator of a breach"*.[218] It makes it possible to tackle specific compliance problems faced by particular States.[219] Such focused

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[216] Report of the Second Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/Doc.OzL.Pro. 2/3, 20. June 1990, Annex III, paragraph 7.
[217] Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/Doc.OzL.Pro. 4/15, 25. November 1992, Annex IV; Article 7 (d).
[218] *M. Koskenniemi*, Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol, YIEL, vol. 3, 1992, 123, 155.
[219] *D. G. Victor*, The Montreal Protocol's Non-compliance Procedure: Lessons for Making Other International Environmental Agreements More Effective, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 58, 62.

deliberation puts direct pressure on the States to comply, and they allow the Implementation Committee to consider the special circumstances attendant in any particular case. Although the procedure provides for the possibility to use sanctions, the emphasis is on advice and conciliation, seeking to find amicable solutions to compliance problems and assisting Parties in achieving compliance. In this respect the regime works in a constructive way with Parties, rather than against Parties for the sake of environmental protection. This is reflected in the recommendations and decisions to the first cases concerned with the imminent failure to comply with the treaty obligations, namely requests by individual Parties for guidance and help regarding steps they are thinking of taking in order to meet their obligations.[220] In this way the primary focus of the contemporary non-compliance procedure is not on the dispute settlement but on the dispute avoidance and therefore on prevention.

### (b) Prospectus for further development of the non-compliance procedure

The non-compliance procedure is of recent origin. Therefore the procedure is still in the developmental stage. A comparison of the non-compliance procedure with the well established human rights instruments shows, that its development potential lays in particular in the right to initiate the non-compliance procedure, in the composition of the control body[221], as well as in the range of consequences of non-compliance, especially the use of pressure from NGOs in case of non-compliance.

#### (1) A right to bring complaints for individuals or NGOs

The existing system under the Montreal Protocol can be initiated by another contracting State (Paragraph 1 of the Non-compliance Procedure), comparable to an inter-State complaint in human rights instruments, or by the Secretariat of the treaty (Paragraph 3 of the Non-compliance Procedure). Apart from that, the non-complying Parties themselves may initiate the proceedings, which emphazises the non-confrontational character of the procedure. On the other hand, individuals or NGOs do not have the right to bring complaints.

Almost all of the non-compliance issues handled by the Implementation Committee so far have taken the form of Parties raising compliance concerns about themselves, rather than another Party or the Secretariat bringing complaints. If the pattern continues, which is likely, Parties will probably raise only those issues where they find the level of conflict acceptable.[222]

Against this background, the question arises, if it would not be advisable to guarantee individuals or NGOs the right to bring complaints concerning an alleged violation of an international environmental treaty. In contrast to the State approach, which is hardly ever

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[220] See in this regard: Decisions VII/15 - VII/19, adopted by the Seventh Meeting of the Conference of the Parties in Vienna on the 7. December 1995, concerning Poland, Bulgaria, Belarus, the Russian Federation and Ukraine; for an analysis of the first cases, see: *D. G. Victor*, The Early Operation and Effectiveness of the Montreal Protocol's Non-Compliance Procedure, 1996, 28 et seq. For the recommendations of the Implementation Committee to the latest cases, see: Report of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol, Twenty-first Meeting in Cairo on the 16. November 1998, UNEP/OzL.Pro/ImpCom/21/3, 1998.

[221] On the aspect of an appropriate institutional framework for compliance control, compare: C. II. 1. b).

[222] *D. G. Victor*, The Montreal Protocol's Non-compliance Procedure: Lessons for Making Other International Environmental Regimes More Effective, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 58, 69.

used, a system which allows individuals or NGOs to initiate proceedings would probably be more free of political or trade considerations and would be more frequently used.[223]

**(i) Lessons from individual complaints procedures under human rights instruments**

It is worth considering whether such individual compliance procedures as provided in various human rights treaties could be of use in the field of international environmental law. The First Optional Protocol to the International Covenant on Civil and Political Rights provides for an individual complaints procedure to enable the Human Rights Committee, which is composed of eighteen independent experts, to supervise the obligations of contracting States. Article 34 of the European Convention on Human Rights[224] provides for a similar complaints procedure which can result in the guarantee of compensation to the victim.
According to Article 2 International Covenant on Civil and Political Rights and Article 34, European Convention on Human Rights, individuals who claim that any of their rights set forth in the Convention have been violated by a State may submit a communication to the UN Human Rights Committee or the European Court of Human Rights for consideration. The UN Human Rights Committee or the European Court of Human Rights may only deal with the matter after all available domestic remedies have been exhausted and if it does not consider the communication incompatible with the provisions of the Convention or an abuse of the right of submission. A further requirement for admissibility is, that the communication must not be anonymous, Article 3 International Covenant on Civil and Political Rights or Article 35 of the European Convention on Human Rights.
Once a complaint has been declared admissible under the First Optional Protocol to the International Covenant on Civil and Political Rights, the UN Human Rights Committee asks the State concerned to explain or clarify the problem and to indicate whether anything has been done to settle it. A time limit of six months is set for the State party's reply. Then the author of the complaint has an opportunity to comment on the States' reply. After that, the UN Human Rights Committee expresses its final views and sends them to the State concerned and to the author. The final view is reproduced in the Committee's annual report to the General Assembly and is always made public. According to Article 38 to 44 European Convention on Human Rights the examination of the case by the European Court of Human Rights follows a comparable procedure. The final judgement of the Grand Chamber shall also be published, Article 44. Apart from that, both systems offer the possibility to guarantee just satisfaction to the victim, which may take the form of compensation.

The Practice has shown that a large part of the work of the UN Human Rights Committee and the European Court of Human Rights (or in former times, the work of the European Commission of Human Rights) has been devoted to the examination of individual complaints. In fact inter-State complaints procedures under these treaties have turned to be used much more seldom than individual complaints procedures.

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[223] On positive aspects of the initiation of proceedings by NGOs or individuals, compare: *S. Suikkari*, Consequences of Breaches of Multilateral Environmental Treaty Obligations, in: *Nordic Council of Ministers*, Nordic Research Project on the Effectiveness of Multilateral Environmental Agreements, September 1995, 67, 87; *P. J. Sands*, The Environment, Community and International Law, Harvard International Law Journal, vol. 30, 1989, 393, 415 et seq.
[224] European Convention for Protection of Human Rights and Fundamental Freedoms, 4. November 1950, ETS No. 5, as amended by Protocol No. 11, 11, May 1994, ETS No. 155.

*Excursion:*

***The application of the individual complaints procedure under human rights treaties for the purpose of environmental protection***

A relative new phenomenon is the attempt to combat environmental problems through the assertion of existing human rights.[225] Individuals may bring complaints to international human rights bodies alleging violations of guaranteed civil and political rights as a result of environmental damage. International human rights tribunals have accepted, in particular, that environmental harm may violate the right to life and the right to be free of interference with one's home and property.

*Right to life:*

According to Article 6 International Covenant on Civil and Political Rights and Article 2 of the European Convention on Human Rights everybody has the right to life. The right involves at least the prohibition not to take life intentionally or negligently.[226] Therefore in extreme cases, the right might be invoked where death results from environmental disaster, like Bhopal or Chernobyl, in so far as the State is responsible.[227] More disputed is whether the right to life also includes some positive State obligations to promote life expectancy, for example by the provision of better drinking water or less polluted air. The Human Rights Committee has taken the view that the right to life in the International Covenant of Civil and Political Rights does obligate States to take all positive measures and that it would in particular be desirable for States to take all positive measures to reduce infant mortality and to raise life expectancy. Under the State reporting procedure the Human Rights Committee has consistently sought information on such measures and on specific measures in the public health and environmental fields, including the registration of the transportation and dumping of nuclear waste.[228] The European Commission on Human Rights has taken a more cautious approach, although one going beyond purely negative State obligations, it has suggested that according to Article 2 European Convention on Human Rights the State has an obligation *„not only to refrain from taking life intentionally, but further, to take appropriate steps to safeguard life"*[229], and that Article 2 *„may indeed give rise to positive obligations on the part of the State"*[230].
Until now, mainly two individual complaints have been brought to human rights bodies, invoking the right to life in order to improve the environment. First, under the International Covenant on Civil and Political Rights a group of Canadian citizens alleged that the storage of radioactive waste near their homes threatened the right to life of present and future generations in the area. The Human Rights Committee, while acknowledging that the case raises *„serious issues with regard to the obligation of States parties to protect human life"*,

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[225] *J. Cameron*, Compliance, Citizens an NGOs, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 29, 38.
[226] Compare: *L. A. Rehof*, Article 3: Right to life, liberty, security of a person, in. *A. Eide/ G. Alfredsson/ et al.*, The Universal Declaration of Human Rights - A Commentary, 1992, 73 - 85.
[227] *R. R. Churchill*, Environmental Rights in Existing Human Rights Treaties, in: *A. E. Boyle/ M. R. Anderson*, Human Rights Approaches to Environmental Protection, 1996, 89, 90.
[228] *D. McGoldrick*, The Human Rights Committee: Its Role in the Development of the International Covenant on Civil and Political Rights, 1996, 329 et seq.
[229] *European Commission on Human Rights*, Association X versus United Kingdom, Application 7154/75, Decisions and Reports of the European Commission on Human Rights, vol. 14, 1979, 31, 32.
[230] *European Commission on Human Rights*, W versus United Kingdom, Application 9348/81, Decisions and Reports of the European Commission on Human Rights, vol. 32, 1983, 190, 200.

declared the application inadmissible for non-exhaustion of domestic remedies.[231] Second, on the European level it was claimed that nuclear tests and the disposal of radioactive wastes in the sea were contrary to the right to life contained in Article 2 of the European Convention on Human Rights. The European Commission rejected the case as manifestly ill-founded, because no violation of the European Convention appeared in the facts of the case.
Although the right to life has not yet been invoked successfully in the environmental context, the right to life appears to have some potential application to the protection of the environment.

*Right to be free of interference with one's home and property:*

Article 8 of the European Convention on Human Rights states that „*everyone has the right to respect for his private and family life and his home*", while Article 1 of the First Protocol provides that „*every natural or legal person is entitled to the peaceful enjoyment of his possession*". The International Covenant on Civil and Political Rights contains in Article 17 a right to freedom from „*arbitrary or unlawful interference*" with ones home. These provisions could be invoked by an individual whose home or property is affected by various forms of pollution or other environmental degradation, if the individual can call the State to account for this environmental degradation. This does not mean that the State itself must always be the polluter, failure to prevent private enterprises or individuals from polluting might also engage the responsibility of the State.[232]

There have been several individual complaints brought to the European Commission on Human Rights invoking these rights, the majority of them involves noise pollution.[233] An important case in this context is particularly the case of *Lopez-Ostra versus Spain*[234]. Here, for the first time, the European Court of Human Rights found a breach of the European Convention as a consequence of environmental harm. The applicant suffered serious health problems caused by the fumes from a tannery waste treatment plant which had begun operating a few meters away from her home. Therefore the European Court of Human Rights held, that there had been a breach of Article 8 of the European Convention on Human Rights.

This shows, that individual complaints procedures are an appropriate method to improve the enforcement of guaranteed human rights of individuals against the violating States.
However, the experience gained from the human rights regimes in this context, is of limited use for the environmental regimes. Unlike human rights treaties, international environmental

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[231] *Human Rights Committee*, EHP versus Canada, Communication No. 67/1980, Selected Decisions of the Human Rights Committee, vol. 2, 1990, 20.
[232] See: *P. van Dijk/ G. J. H. van Hoof*, Theory and Practice of the European Convention on Human Rights, 1990, 76 et seq.; *D. Shelton*, Human Rights, Environmental Rights, and the Right to Environment, Stanford JIL, vol. 28, 1991/ 92, 103, 123; *D. McGoldrick*, The Human Rights Committee: Its Role in the Development of the International Covenant on Civil and Political Rights, 1996, 168 et seq.
[233] See, e.g.: *European Commission on Human Rights*, Arrondelle versus United Kingdom, Application 7889/77, Decision and Reports of the European Commission on Human Rights, vol. 19, 1980, 186; Baggs versus United Kingdom, Application 9310/81, Decisions and Reports of the European Commission on Human Rights, vol. 44, 1985, 13; Vearncombe et al. Versus United Kingdom and Federal Republic of Germany, Application 12816/87, Decisions and Reports of the European Commission on Human Rights, vol. 59, 1989, 186; *European Court of Human Rights*, Powell and Rayner versus United Kingdom, Series A. No. 172, 1990,18 et seq.
[234] *European Court of Human Rights*, Lopez-Ostra versus Spain, Series A. No. 303 C, 1994.

treaties usually do not contain substantive rights for individuals, they are mainly aimed at the environmental protection as such. The contribution of international environmental law to the well being of individuals is only a side effect. Therefore, it would be almost impossible for the individual to meet the first admissibility requirement, set up by human rights instruments, namely to claim that any of his or her rights enumerated in the respective treaty have been violated by the State. In addition it is doubtful if an individual complaints procedure would be frequently used in the field of international environmental law, since it would not offer a compensation to the individual. The offer of such a compensation to the individual would not meet the aim to protect and maybe repair the victim of an international environmental law violation: the environment as such, and would therefore be inappropriate for most of the environmental treaties. For the purpose of protection and compensation of human victims whose existing human rights, such as the right to life, privacy, property, health, and decent living conditions, are violated by environmental pollution or degradation, the above described human rights instruments offer a more appropriate solution.
Against this background it becomes evident, that a direct transformation of the individual complaints procedure, established under the human rights regimes, is difficult and not useful. New approaches have to be found to improve the enforcement of international environmental law. In this respect, a right to initiate the non-compliance procedure for NGOs, disconnected from a direct violation of their rights, could be a promising approach.

**(ii) A right to initiate the non-compliance procedure for NGOs**

During the negotiations over the Montreal Protocols' non-compliance procedure, the Parties decided against the initiation of the procedure by NGOs or individuals.[235] They feared that the States parties to the Montreal Protocol would be sensitive to the restrictions on sovereignty implicit in this, despite the procedures co-operative nature. On the other hand, the Parties were also convinced that soundly based criticism, of the conduct of an individual State, by NGOs would certainly be taken up by other Parties or the Secretariat, which could then perform a filtering function.
However, practice has shown, that other Parties and the Secretariat are restrained in taking up the criticism by NGOs. On this background the question arises if a formal integration of NGOs into the non-compliance procedure, in form of allowing them to initiate proceedings, would not be of advantage. Non-governmental organisations are in the logical position to appear as an advocate for the environment. Environmental NGOs have an interest in environmental protection as such. In this respect, it is probable that they would bring complaints concerning an alleged violation of an international environmental treaty, even if they are not directly effected by this violation. Therefore, a right to initiate the non-compliance procedure could contribute to a more frequent use of the procedure. Apart from that, NGOs are in the position to initiate the non-compliance procedure. Due to their developed and elaborated information systems, they are usually able to bring the corroborating information necessary to initiate the non-compliance procedure. In this context the standing of NGOs could contribute to a more effective non-compliance procedure. To draw a conclusion one can say, that even if it is not easy to get the consent of the Parties, it is advisable to allow NGOs to initiate the non-compliance procedure.

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[235] Compare: *P. Széll*, The Development of Multilateral Mechanisms for Monitoring Compliance, in: *W. Lang*, Sustainable Development and International Law, 1995, 97, 100.

**(2) Responses to compliance deficits**

First, it is desirable to define the meaning of non-compliance, as the prerequisites for the taking of particular measures could be made specific thereby. A first attempt to define non-compliance was made at the Third Meeting of the Ad Hoc Working Group of Legal and Technical Experts on Non-Compliance with the Montreal Protocol.[236] It was suggested to define the following situations as „non-compliance": (1) failure to meet the control requirements of Article 2 of the Montreal Protocol; (2) failure to comply with restrictions imposed on trade with non-Parties; (3) non-compliance with time schedules and failure to meet reporting obligations; (4) a lack of co-operation, as defined in Article 9 of the Montreal Protocol; (5) non-payment of contributions under Article 10; (6) non-observance of the provisions on the transfer of technology and (7) disregard of the decisions of the Meeting of the Parties. But the Parties could not agree on whether payments in accordance with Article 10 of the Montreal Protocol are voluntary, and to what extent decisions of the Meeting of the Parties are binding. For this reason, the Fourth Meeting of the Parties chose not to adopt the list and it remains unclear whether a second attempt to have it adopted will be made. However, a precise definition of non-compliance would represent an additional procedural safeguard, which would clarify the prerequisites for the taking of particular enforcement measures against the non-complying State.

According to Annex III paragraph 7 of the Report of the Second Meeting of the Parties to the Montreal Protocol, the first step to respond to compliance deficits is the attempt of the Implementation Committee to find a consensual solution to the compliance problem on the basis of respect for the provisions of the Montreal Protocol together with the state in question. Should this prove impossible, the Implementation Committee, may recommend the adoption of any measure it deems necessary to the Meeting of the Parties. The Meeting of the Parties is then empowered „*to decide upon and call for steps to bring about full compliance with the Protocol, and to further the Protocols objective*"[237]. These measures can be positive or negative, in other words: they can be carrots or sticks. They encompass technical and financial support as well as the possibility of suspending certain membership rights and privileges. This is laid down in the non-exhaustive Indicative List of Measures that may be taken by the Meeting of the Parties in respect of non-compliance with the Montreal Protocol[238]:

- Appropriate Assistance, including assistance for the collection and reporting of data, technical assistance, technology transfer and financial assistance, information transfer and training;
- Issuing cautions;
- Suspension, in accordance with the applicable rules of international law concerning the suspension of the treaty, of specific rights and privileges under the Protocol, including those concerned with industrial rationalisation, production, consumption, trade, transfer of technology, financial mechanism and industrial arrangements.

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[236] Report of the Third Meeting of the Ad Hoc Working Group of Legal and Technical Experts on Non-Compliance with the Montreal Protocol, UNEP/ OzL.Pro/WG.3/3/3, Annex II.

[237] Report of the Second Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/Doc.OzL.Pro. 2/3, 20. June 1990, Annex III, paragraph 9.

[238] Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/Doc.OzL.Pro. 4/15, 25. November 1992, Annex V, 48. For more detailed information on this enforcement approaches, see: *Organisation for Economic Co-operation and Development*, Ensuring Compliance with a Global Climate Change Agreement, ENV/EPPOC(98)5, 1998, 60.

The fact that greater importance is attached to the reaching of a consensual solution by the participants than to an authoritative decision by an international organ which focuses on putting matters right rather than pointing the finger on blame, reflects the co-operative character of the non-compliance procedure. The co-operative nature of compliance control is further illustrated by the fact that in the „taking-measure phase", both carrots and sticks are available as alternatives. In this way it is possible to take into account individually the reasons for non-compliance, especially the distinction between an intentional breach of treaty, and an inadequate compliance capability. The listed measures are also an expression of the intrinsic multilateral nature of the interests affected by the non-compliance of the Parties. Rather than focusing on restoring the rights of the individual Party in form of compensating the injured State, the „remedies" listed, aim at protecting the future integrity of the regime by encouraging the non-complying Party to return to good standing, and in consequence at environmental protection as such. Further, the Indicative List of Measures represents the symbolic reaffirmation of the overriding community interest in controlling the sanction process: Unilateral measures, must cede precedence to multilateral, collective responses to non-compliance.
This enforcement approach seems to be suitable for a non-compliance procedure of a treaty which is aimed at the protection of common goods and is intended for regular use.
However, precondition for its effective application in practice is a close working relationship between the Implementation Committee and the Multilateral Fund and the Global Environment Facility.[239] The Implementation Committee and the Multilateral Fund have already helped to forge a link between the continued supply of Multilateral Fund funding and compliance with the requirement to report data. This link does now exist for baseline data[240] and has been threatened by the Implementation Committee for States that fail to submit their reports about implementation of the Montreal Protocol.[241] But an even closer relationship would be desirable. A close working relationship with the Multilateral Fund will give the Implementation Committee and the Meeting of the Parties both carrots and sticks: carrots in form of funding to help eligible States comply with the Protocol, and sticks in the ability to limit funding to Parties that do not spend the money on legitimate projects that yield compliance. This could contribute to put the whole system in a better position to handle the problem of non-compliance by developing countries.

In addition, the participation of NGOs in the enforcement process is a promising means to improve enforcement of international environmental law, particularly in the case of non-compliance by developed countries. NGOs can help to enforce international environmental law in several ways: On the one hand, NGOs can put pressure on the government to implement environmental policy and to comply with international environmental law; on the other hand they may assist governments to enforce environmental protection measures through provision of information or even technical services. Apart from that, the awareness rising activities of NGOs may have an influence on the public opinion. Public opinion is an important and sometimes the only effective means of inducing States to comply with

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[239] For more details on this aspect, see: *D. G. Victor*, The Montreal Protocol's Non-compliance Procedure: Lessons for Making other International Environmental Regimes More Effective, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 58, 77; *Organisation for Economic Co-operation and Development*, Ensuring Compliance with a Global Climate Change Agreement, ENV/EPOC(98)5, 1998, 63.
[240] Report of the Sixth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, Decision VI/5, UNEP/OzLPro. 6/7, 10. October 1994.
[241] Report of the Tenth Meeting of the Implementation Committee, UNEP/OzL.Pro/ImpCom/10/4.

international environmental law.[242] A starting point for an effective participation of NGOs and for the activation of the driving force of public opinion in the enforcement of international environmental law is the publication of the decision as well as background information to the case at the end of the non-compliance procedure. Providing better information on implementation, as well as greater public access to it, is particularly important in creating a „national consensus" to implement international environmental treaties.[243] In this respect the regime of the Montreal Protocol can serve as a positive example because the recommendations of the Implementation Committee on the case as well as the final decision of the Meeting of the Parties must be made public.

### cc) Procedural law

In order to provide a firm foundation of the above described institutionalized compliance control procedures, the procedures should be legally as structured as possible. This does not make the procedures judicial procedures, but it does impart a certain authority.[244] With various actors involved in the procedure, such as States, Secretariats, Conferences of the Parties and NGOs, it is necessary to co-ordinate their respective activities and in particular their input into the system. Apart from that, it is desirable, that any of their interests that might be affected in the course of the compliance control process are given due respect. Such a procedural law could on the one hand deal with procedural steps, for example the initiation of the procedure, the determination of the objectives and the scope of the control, the acquisition of relevant data, verification and evaluation, as well as reactions in the event of non-compliance. On the other hand it could deal with general procedural instruments, such as the principle of equal treatment, the principle of proportionality, and the protection of legitimate confidentiality interests.[245]

## b) Institutional framework of compliance control

Compliance control in respect of international environmental treaties should be entrusted to international bodies, which will ensure that the treaties are implemented at the national level in the interests and to the benefits of the treaty community as a whole.[246] International control and enforcement mechanisms promise to be more objective, to be structured more impartially, and to reduce relevance of political considerations of expediency, if constructed in an appropriate way.[247]

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[242] *M. Bothe*, Compliance Control beyond Diplomacy - the Role of Non-Governmental Actors, EPL, vol. 27/ 4, 1997, 293, 297; *United States General Accounting Office*, International Environment - Strengthening the Implementation of Environmental Agreements, GAO/RCED-92-188, August 1992, 6.

[243] *United States General Accounting Office*, International Environment - Strengthening the Implementation of Environmental Agreements, GAO/RCED-92-188, August 1992, 5.

[244] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 43.

[245] For a detailed description of a procedural law of compliance control, see: *T. Marauhn*, Towards a Procedural Law of Compliance Control in International Environmental Relations, ZaöRV, vol. 56, 1996, 696 - 731.

[246] *A. E. Boyle*, Saving the World? Implementation and Enforcement of International Environmental Law through International Institutions, Journal of International Environmental Law, vol. 3, 1991, 229, 231 et seq.; *N. Blokker/ S. Muller*, Towards More Effective Supervision by International Organizations - Some Concluding Observations, in: *N. Blokker/ S. Muller*, Towards Effective Supervision by International Organizations, vol. 1, 1994, 275; *P. Sands*, Principles of International Environmental Law - Frameworks, Standards and Implementation, vol. 1, 1995, 178.

[247] *W. Lang*, Verhinderung von Erfüllungsdefiziten im Völkerrecht, in: *J. Hengsstschläger/ H. F. Köck/ K. Korinek/ K. Stern/ A. Truyol y Serra*, Für Staat und Recht, 1994, 817, 818; *F. Ladenburger*,

### aa) Categories of international bodies

Of central importance for the design of the international framework for compliance control is the type of international body chosen for its implementation. Basically, one can distinguish between four categories of international institutions: specialised international bureaucracies, expert committees, judicial or quasi-judicial bodies and political bodies.[248]
The most important specialised international bureaucracies in the environmental field are the UNEP treaty Secretariats. Secretariats are composed of international civil servants with legal, economic, technical, as well as scientific background committed to the objectives of the treaty in question. The single staff members are not dependent on the government of their State of origin financially or in any other way. Their impartiality is similar to that of the members of expert committees chosen *ad personam*. Judicial and quasi-judicial bodies are, like expert committees, characterized by their special competence in the respective field. However, in contrast to expert committees, legal questions are at the centre of their task which necessitates the participation of legal experts. Unlike the bodies just mentioned, political plenary bodies, such as Meetings or Conferences of the Parties, are composed of State representatives. Official government positions are presented in them.

The categories of international bodies described above reflect pure models, which means that all kinds of mixtures may exist in practice, such as a body of government experts[249], or an expert committee which fulfils quasi-judicial functions[250]. The different bodies usually do not work in isolation from each other; for example the political body deciding on sanctions or compliance assistance relies on information collected by a Secretariat and evaluated by a scientific committee. Furthermore, international bodies do not act in a vacuum: they need the financial support of States for their very existence, and in many instances they have to base their work on data submitted by the same States they are supposed to control.[251]
However, for the creation of an objective and effective control mechanism it is important to guarantee, as much as possible, neutrality and impartiality of the control organ. This can best be reached in giving Secretariats, expert committees or quasi-judicial bodies the main function in the control or supervision mechanisms.

### bb) Existing institutional framework

The existing institutional framework of compliance control in the field of international environmental law is characterized by the strong role played by political bodies or expert bodies composed of State representatives.

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Durchsetzungsmechanismen im Umweltvölkerrecht - „Enforcement" gegenüber den Staaten, 1996, 31; *M. E. O'Connell*, Enforcing the New International Law of the Environment, GYIL, vol. 35, 1992, 293, 323.

[248] For detailed information on international bodies, see: *W. Lang*, Compliance Control in International Environmental Law: Institutional Necessities, ZaöRV, vol. 56, 1996, 685, 687.

[249] For example: the Subsidiary Body for Implementation of the Framework Convention on Climate Change established on the basis of Article 10 (1) of the Framework Convention on Climate Change of 1992; the Open-ended Ad Hoc Committee for the Implementation of the Basel Convention established by decision II/3 of the Second Meeting of the Conference of the Parties, 25. March 1994; or the Implementation Committee under the non-compliance procedure of the Montreal Protocol.

[250] Quasi-judicial expert committees exist mainly in the human rights field, such as the UN Human Rights Committee under the International Covenant on Civil and Political Rights of 1966.

[251] *W. Lang*, Compliance Control in International Environmental Law: Institutional Necessities, ZaöRV, vol. 56, 1996, 685, 687.

For example under the well elaborated Montreal Protocol the role of the Secretariat is mainly limited to a filtering function vis-à-vis the Meeting of the Parties. It receives information from the States, processes it, and may initiate the non-compliance procedure. The Implementation Committee which consists of State representatives may gather data, may make suggestions and not binding recommendations for the resolution of compliance problems to the plenary organ. The Meeting of the Parties, as the political plenary organ, then decides on reactions in the event of non-compliance, ranging from compliance assistance to sanctions.
The Framework Convention on Climate Change of 1992 is to some extent based on the model of the Ozone Regime, but is still in the developmental stage. The function of the Subsidiary Body of Implementation, which is in fact a plenary organ, differs considerably from the function of the Implementation Committee under the Montreal Protocol[252]: it does not deal with treaty compliance of individual States, but only with collective implementation. It has no inherent investigative powers, but is merely authorised to discuss data and assist the Conference of the Parties. In the final analysis, its task is more one of evaluating the effectiveness of the Convention as a whole, rather than on compliance control of individual States.[253] In consequence, the Conference of the Parties, as a plenary political body, carries the main burden of compliance control. It makes the decision on reactions in the event of non-compliance. The institutional compliance control framework of the Basel Convention is structured in a similar way.
Under the Paris Convention for the Protection of the Marine Environment of the North-East Atlantic of 1992[254], the central compliance control organ is the so-called Commission which is a plenary organ composed of State representatives. It evaluates the reports submitted to it by the States, as well as information from other sources and decides, on this basis, on the measures to be taken.

### cc) Prospectus for further development of the institutional framework

Against this background, doubts arise, if the existing institutional framework of compliance control can contribute to an objective and effective compliance control in the interest and for the sake of the treaty community as a whole. Instead of relying on political plenary bodies or expert bodies, it is more promising to rely on independent control organs.
In this respect Secretariats, staffed with international civil servants with different professional background, which are independent of their countries of origin and are playing allegiance to the overall purpose of the respective treaty seem to be the more appropriate control organs. As an alternative to the utilisation of existing independent bodies, such as Secretariats, the creation of new expert bodies or even a single central institution for compliance control has been suggested. In 1987, a group of legal experts of the World Commission on the Environment and Development proposed the creation of a new centralized organizational structure, in form of a Commission for the Environment, to supervise international environmental treaties and to hear complaints from other states about

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[252] Compare: *W. Lang*, Verhinderung von Erfüllungsdefiziten im Völkerrecht, in: *J. Hengsstschläger/ H. F. Köck/ K. Korinek/ K. Stern/ A. Truyol y Serra*, Für Staat und Recht, 1994, 817, 831 et seq.
[253] Article 10 paragraph 2 (a) of the Framework Convention on Climate Change, charges the Subsidiary Body of Implementation with the analysis of the data submitted by states in accordance with Article 12 (1), in order to evaluate the over-all effectiveness of the measures taken by the State parties.
[254] Convention for the Protection of the Marine Environment of the North-East Atlantic, 22. September 1992, ILM, vol. 32, 1993, 1069.

violations.[255] A United Nations High Commissioner would head the Commission, hear complaints about violations, and issue reports on the violations. This plan for a High Commissioner and a Commission for Environment mirrors the strategy used by the UN in the field of human rights and refugee protection. Although this proposal contains a Draft Convention, as well as General Principles on Environmental Protection and Sustainable Development, the international community has not adopted it.
The Declaration of the Hague on the Environment of 1989[256], issued by an international conference of government policy makers, scientists, and environmentalists focused on climate change, calls also for a „*new institutional authority*" to combat global warming. The authority would be created within the UN system and would have decision-making and enforcement powers. However, the Hague Declaration is not specific on the form and design of the new institutional authority.
Apart from that, a global auditing body which would periodically evaluate the performance of States in complying with their international obligations was suggested.[257] In this context the Secretary General on the United Nations Conference on Environment and Development Maurice Strong proposed to assign this function to a permanent intergovernmental body, such as the United Nations Trusteeship Council.[258]

On the one hand, effective compliance control must be orientated as far as possible on the substantive obligations to be implemented. This necessitates a mainly treaty-specific institutional framework of compliance control, such as treaty Secretariats or separate „tailor-made" expert bodies for every treaty, which can take into account the peculiarity of the respective treaty. The establishment of a new, centralised institution would run counter to these considerations. On the other hand, cost efficiency factors militate against a proliferation of international bodies. Therefore Agenda 21 recommends that States, within the bounds of feasibility, rely on existing institutions.[259]
Against this background it is advisable to use the existing UNEP structures for compliance control, such as the Secretariat of the Ozone Regime, the Secretariat of the Basel Convention and the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. However, today Secretariats often lack the institutional capacity to fulfil control functions. The budgets of the Secretariats, their various Trust Funds and the size of the Secretariats are too small to supervise and monitor the conduct of States in respect to their treaty obligations. For example, the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, as one of the largest UNEP Secretariats, has an annual budget (1998) of approximately $ 5.3 million and a total full-time staff of 24 people to regulate an international trade estimated to be in excess of $ 20 billion per annum.[260] In order to fulfil control functions, it is necessary to guarantee the Secretariats control powers in the framework of the reporting and the non-compliance procedure, as well as a sufficient and stable funding. In addition, the Secretariats should

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[255] *A. W. Samaan*, Enforcement of International Environmental Treaties: An Analysis, Fordham Univ. ELJ, vol. 5, 1993, 261, 274.
[256] Declaration of the Hague on the Environment, 11. March 1989, UN Doc. A/ 44/ 340 E/ 1989/ 120.
[257] *P. H. Sand*, Lessons Learned in Global Environmental Governance, World Resources Institute, 1990, 34; *M. Strong*, The United Nations in an Independent Word, International Affairs, 1989, 11 - 21, 20.
[258] Statement to the World Federation of United Nations Associations, Halifax, 5. June 1988; *M. Strong*, The United Nations in an Independent Word, International Affairs, 1989, 11 - 21, 20.
[259] Agenda 21, Chapter 38.8 (i).
[260] *United Nations Environment Programme*, Policy Effectiveness and Multilateral Environmental Agreements, 1998, 100.

have the possibility to request on an ad hoc basis Special Rapporteurs who could help the Secretariats to fulfil their control functions.

### c) Co-ordination of compliance control

The current negotiations over the introduction of a non-compliance procedure for the Basel Convention and the Framework Convention on Climate Change, give rise to thoughts of co-operation between the international bodies for compliance control established under the respective treaties. In this respect, documents have already been produced, as a basis of discussion, which summarised experience with existing procedures.[261] Henceforth such documents should be collected in an information pool, for the use of international bodies confronted with similar tasks.
Apart from the general exchange of experiences, a co-operation should bring to light facts about comparable compliance problems in individual States. Thus the recognition that a State has implementation problems, in relation to several environmental treaties of which it is a Party, may signify that a targeted support for the improvement of the States' administrative infrastructure is indicated. Beyond this, an exchange of information could lead to a more targeted use of financial support for certain developing countries.
A co-ordinated establishment of facts and a harmonization of reporting requirements could have a positive streamlining and cost efficiency effect. In this context the exchange of certain scientific data would be conceivable, to avoid duplicated monitoring. In addition joint on-site inspections should be considered, to keep the associated cost to a minimum. Finally a harmonization of the reporting requirements would avoid duplicated reporting and could therefore stimulate the reporting zeal of States.

The UN Commission on Sustainable Development[262] could overtake a co-ordinating function and serve as an information pool. Prerequisite for overtaking the co-ordinating function is the reconciliation of such a function with the mandate of the UN Commission on Sustainable Development, which is primary related to Agenda 21.[263] As provided in Agenda 21 itself, the UN Commission on Sustainable Development should „*ensure the effective follow-up of the Rio Conference*" and „*monitor progress in the implementation of Agenda 21*". However, Chapter 38.13 of Agenda 21 also states, that the UN Commission on Sustainable Development should „*consider, where appropriate, information regarding the progress made in the implementation of environmental conventions, which could be made available by the relevant Conferences of the Parties*". This could legitimize a corresponding co-ordinating function for the UN Commission on Sustainable Development. The UN Commission of Sustainable Development can actually only fulfil this co-ordinating task if it is adequately informed. To this end, the introduction of reporting obligations for the international bodies responsible for compliance control to the Commission on Sustainable Development is advisable. This could be organized in form of Memoranda of Understanding between the Conferences of the Parties and the UN Commission on Sustainable Development.

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[261] UN Doc. FCCC/ CP/ 1995/ Misc. 2 and UNEP/ CHW.3/ Int. 5.
[262] The UN Commission on Sustainable Development was established by UN General Assembly Resolution 47/191 of 1992. Compare also the Resolution 48/442 of 1993 for implementing the Resolution 47/191.
[263] On the tasks and mandate of the UN Commission on Sustainable Development, see: *A. Kiss/ D. Shelton*, International Environmental Law, Supplement, 1994, 43 et seq.; *L. Kimball*, Institutional Developments, YIEL, vol. 3, 1992, 180, 181.

### d) Concluding evaluation

The concept of compliance control by international bodies, is suitable for the enforcement of international environmental obligations which are in the interest of the State community as a whole. Compliance control is preventive and co-operative in nature. Its preventive character is particularly reflected in the periodic reporting system which contributes to the disconnection from specific conflicts by making control a matter of routine. Such international control creates transparency; therefore, it may have a precautionary as well as a confidence building effect. It enables the international community to react on compliance problems before the actual environmental damage occurs, and focuses on dispute avoidance, rather than dispute settlement. The co-operative nature of compliance control is mainly reflected in the non-compliance procedure which emphasises on advice and conciliation, seeking to find amicable solutions to compliance problems of individual States and assisting States in achieving compliance. In this respect the regime works in a constructive way with States, rather than against States for the sake of global environmental protection. Apart from that, compliance control and enforcement by an international body promises to be more objective, to be structured more impartially, and to reduce relevance of political considerations of expediency, if constructed in an appropriate way. For the creation of an objective and effective control mechanism it is important to guarantee as much as possible neutrality and impartiality of the control organ. This can best be achieved in giving the permanent Secretariats, staffed with international civil servants with different professional background, which are independent of their countries of origin and are playing allegiance to the overall purpose of the respective treaty, a main function in the compliance control mechanism. Apart from that, it is promising to integrate the findings of NGOs into the non-compliance procedure and to make use of their force and pressure for the enforcement of the final decisions. If it succeeds to structure non-compliance through several amendments in an effective way, it can be qualified as a promising method for the enforcement of international environmental law.

## 2. Compliance assistance

### a) Concept of compliance assistance

The recognition that compliance deficits in international environmental law are usually not the result of deliberate non-compliance, but have other causes, such as the deficits in the administrative, economic or technical infrastructure of the State[264], has led to the development of new stipulations seeking to address these causes. Compliance assistance is such a stipulation, aimed at assisting States in the implementation of and compliance with international environmental obligations they have undertaken.

Although there is at present no general obligation to provide compliance assistance in customary law, commitments to provide compliance assistance are now regular features in international environmental treaties.[265] The major modern international environmental instruments, such as the Montreal Protocol on Substances that Deplete the Ozone Layer of

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[264] Compare: *A. Chayes/ A. Chayes*, The New Sovereignty, 1995, 13 et seq.; *A. Chayes/ A. Chayes/ R. B. Mitchell*, Active Compliance Management in Environmental Treaties, in: *W. Lang*, Sustainable Development and International Law, 1995, 75, 80; *P. H. Sand*, Institution-Building to Assist Compliance with International Environmental Law: Perspectives, ZaöRV, vol. 56, 1996, 774, 775.

[265] For an overview over various commitments, see: *L. Gündler*, Compliance Assistance in International Environmental Law: Capacity-Building Through Financial and Technology Transfer, ZaöRV, vol. 56, 1996, 796, 802 et seq.; *D. Ponce-Nava*, Capacity-Building in Environmental Law and Sustainable Development, in: *W. Lang*, Sustainable Development and International Law, 1995, 131, 132 et seq.

1987, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 1989, the Framework Convention on Climate Change of 1992, the Convention on Biological Diversity of 1992, and the Convention to Combat Desertification of 1994[266] provide for mechanisms of assistance. In addition, in various soft law instruments States committed themselves to render compliance assistance; these commitments are confirmed by the Rio Declaration as well as by the Agenda 21. Furthermore, international organizations provide assistance to capacity-building in environmental management as part of their programmatic activities, reference may be made to the Global Environment Facility (GEF), the Capacity 21 Programme of the United Nations Development Programme (UNDP), as well as the law and institution-building activities of UNEP and of the United Nations Institute for Training and Research (UNITAR)[267].

**aa) Forms of compliance assistance**

The transfer of finance represents only one type of compliance assistance. Environmental training and education, personnel, administrative and legislative support, as well as transfer of technology are of at least equal importance in the elimination of compliance deficits. In the light of limited financial resources, the latter forms of compliance assistance are likely to come to the fore in the future.
Chapter 33 and 34 of Agenda 21 already make clear that compliance assistance is not restricted to financial assistance, but that capacity building is an important component of it.[268] In this respect compliance assistance is understood as assistance towards self-help.

**(a) Assistance to capacity building**

Chapter 37 of Agenda 21 stipulates that „*capacity-building encompasses the countrys' human, scientific, technological, organizational and institutional and resource capabilities*". In the context of compliance with international environmental law capacity may be defined as the availability of governmental institutions to implement international obligations at the national level and to ensure that the measures taken are enforced. This includes a respective environmental administrative structure, an environmental legislation, as well as an effective enforcement mechanism in connection with well-trained and sufficiently equipped personnel for environmental monitoring and environmental management. In this context capacity may also include the availability of resources to comply with international environmental law. This refers to the economic, technical and financial capabilities and means required for environmental management by governments and NGOs.[269] Thus, assistance to capacity building should be as comprehensive as possible

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[266] United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/ or Desertification, Particularly in Africa, 17 June 1994, available at: http://www.unccd.de/conv/ccdeng.htm.
[267] On UNEP's and UNITAR's capacity-building activities, see: YIEL, vol. 4, 1993, 550, 560 et seq.; YIEL, vol. 5, 1994, 546, 551; YIEL, vol. 6, 1995, 633, 638 et seq.; YIEL, vol. 7, 1996, 470 et seq.; vol. 8, 1997, 540, 546 et seq.
[268] Chapter 33 concerns financial resources and the transfer of technology; Chapter 34 contains a programme of action for the transfer of environmentally friendly technology, co-operation and the strengthening of personnel and institutional capacities.
[269] *L. Gündling*, Compliance Assistance in International Environmental Law: Capacity Building Through Financial and Technology Transfer, ZaöRV, vol. 56, 1996, 796, 800.

and should cover environmental training and education, transfer of human, legislative and administrative capabilities, as well as transfer of technology.[270]

Compliance assistance in form of environmental training and education is already contained in existing treaty provisions and is reflected in several UNEP projects. For example, Article 12 of the Convention on Biological Diversity of 1992 includes scientific research and the training of scientific and technical personnel when stipulating: „*The Contracting Parties, taking into account the special needs of developing countries, shall: (a) establish and maintain programmes for scientific and technical education and training* [...]; *(b) Promote and encourage research* [...]; *(c)* [...] *promote and cooperate in the use of scientific advances in research in developing new methods for conservation and sustainable use of biological resources.*" Similar provisions are included in Article 4 (2) of the Vienna Convention of the Protection of the Ozone Layer of 1985 and in Article 6 of the Framework Convention on Climate Change of 1992. In addition, the UNEP Secretariat of the Basel Convention has already established several Regional Centres for Training and Transfer of Technology on the basis of Article 10 (3) and (4) of the Basel Convention, as well as Decision II/19 of the Second Meeting of the Conference of the Parties in 1994.[271]
Furthermore, compliance assistance to capacity building can take the form of providing personnel for advisory, administrative and legislative purposes. This is reflected in several assistance projects in the framework of UNEP. In the same vein, the UNEP Secretariat of the Basel Convention developed, for example, a model legislation for national implementation.[272]

The transfer of technology is another essential part of assistance to capacity building. As concept, the transfer of technology has got its roots in the New International Economic Order programme of the 1970s[273] and in the Third UN Conference on the Law of the Sea[274]. The background of the New International Economic Order programme was the recognition of development assistance as an obligation of the international community and the integration of former colonies, and than developing countries, into the global economic system.[275] Thus the purpose of technology transfer was mainly to enable developing countries to exercise economic self-determination over their natural resources. Technology transfer in the context of the Third UN Conference on the Law of the Sea was aimed at a

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[270] *L. Gündling*, Compliance Assistance in International Environmental Law: Capacity Building Through Financial and Technology Transfer, ZaöRV, vol. 56, 1996, 796, 801; *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 120.

[271] *United Nations Environment Programme*, Policy Effectiveness and Multilateral Environmental Agreements, 1998, 77; For more detailed information on the single projects, see: Open-ended Ad Hoc Committee for the Implementation of the Basel Convention, Fourth session, 21 - 25 June 1999, Compendium of Proposed Assistance Activities to be carried out in the context of Implementation of the Basel Convention, UNEP/ CHW/ C.1/ 4/ Inf.12, 17. June 1999.

[272] See: Model National Legislation on the Management of Hazardous Wastes and other Wastes as well as on Control of Transboundary Movements of Hazardous Wastes and other Wastes and their Disposal, available at: http://www.unep.ch/basel/index.html; *United Nations Environment Programme*, Policy Effectiveness and Multilateral Environmental Agreements, 1998, 77.

[273] *P. - T. Stoll*, Technologietransfer - Internationalisierungs- und Nationalisierungstendenzen, 1994, 368 et seq.; *A. E. Boyle*, Comment on the Paper by Diana Ponce-Nava, in: *W. Lang*, Sustainable Development and International Law, 1995, 137 et seq.

[274] *P. - T. Stoll*, The Entry into Force of the Convention on the Law of the Sea: A Redistribution of Competences in Relation to the Management of the International Commons?, ZaöRV, vol. 55, 1995, 390 - 420.

[275] *P. - T. Stoll*, Technologietransfer - Internationalisierungs- und Nationalisierungstendenzen, 1994, 368.

share in the exploitation of common property resources, such as deep seabed minerals.[276] In both cases the strategy of technology transfer was controversial and encountered strong opposition from industrialized States who objected to the idea that such transfer should be a legal obligation. In addition, difficulties in the establishment of technology transfer arose out of the attempt to reach an agreement on an appropriate international protection of intellectual property rights of the private industry.[277] However, these early attempts at technology transfer did succeed, at least in part, through nationalisation of natural resource industries, and the exploitation by developing countries of their bargaining power with foreign multinationals.[278]

The technology transfer provisions of international environmental treaties generally have more modest aims, but nevertheless they also challenge the economic powers of industrialized States.[279]

In this respect Article 10 A of the Montreal Protocol on Substances that Deplete the Ozone Layer makes provisions for the transfer of technology. Thus, every Party commits itself to take all practical measures to make available to developing countries the best available environmentally sound substitute materials and the relevant technology, as well as ensuring that these transfers take place „*under fair and most favourable conditions*".

According to Article 4 (5) of the Framework Convention of Climate Change industrialized States are obliged to make appropriate technology available to developing countries for the implementation of the Convention. This obligation is however more weakly defined than the technology transfer obligation of the Montreal Protocol. In regard to technology transfer the Montreal Protocol states that the Parties „*shall take every practicable step* [...] *to ensure*", whereas the wording of the Framework Convention on Climate Change is that the Parties „*shall take all practical steps to promote, facilitate and finance, as appropriate*". Apart from that, the industrialized States shall „*support the development and enhancement of endogenous capacities and technologies of developing country Parties*". But there is no mention of fair and most favourable conditions, as in the case of Article 10 A (b) of the Montreal Protocol.

Under the Convention on Biological Diversity, the provisions on the transfer of technology to developing countries are more stringently worded than in the Framework Convention on Climate Change, because the negotiating position of the developing nations was better than in the Framework Convention on Climate Change.[280] In the framework of the Convention on Biological Diversity, the interests of industrialized States to utilize the genetic material available in developing countries are at least as great as their interest in maintaining biological diversity. In consequence, the provisions on the transfer of technology in the Convention on the Protection of Biological Diversity contain different aspects. A distinction has to be made between technology which assists in the preservation and sustainable use of biological diversity, and those dealing with the utilization of the genetic resources to be

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[276] *A. E. Boyle*, Comment on the Paper by Diana Ponce-Nava, in: *W. Lang*, Sustainable Development and International Law, 1995, 137.

[277] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 122; *A. E. Boyle*, Comment on the Paper by Diana Ponce-Nava, in: *W. Lang*, Sustainable Development and International Law, 1995, 137.

[278] *A. E. Boyle*, Comment on the Paper by Diana Ponce-Nava, in: *W. Lang*, Sustainable Development and International Law, 1995, 138.

[279] *A. E. Boyle*, Comment on the Paper by Diana Ponce-Nava, in: *W. Lang*, Sustainable Development and International Law, 1995, 138.

[280] On this aspect, see: *R. Wolfrum*, The Convention on the Protection of Biological Diversity: Using State Jurisdiction as a Means of Enforcing Compliance, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means, 1996, 373 et seq.

found in the developing countries.[281] Article 16 (1) and (2) of the Convention on Biological Diversity are concerned with the transfer of technology from Parties for the benefit of developing countries, with the aim of maintenance and sustainable use of biological diversity. According to Article 16 (2) this „*shall be provided and/ or facilitated under fair and most favourable terms, including on concessional and preferential terms where mutually agreed*". Article 16 (3) of the Convention on Biological Diversity requires the Parties to take legislative, administrative and political measures in favour of developing countries which have genetic resources at their disposal, for the access to and transfer of „*technology which makes use of those resources on mutually agreed terms*". In the course of negotiations, the discussion focused particularly on the protection of intellectual property rights. This discussion lead to the recognition in Article 16 (2) that so far as patents and other intellectual property rights are concerned, access to and transfer of technology must be under conditions which „*recognize and are consistent with the adequate and effective protection of intellectual property rights*". However, the reference to paragraphs 3, 4 and 5 makes clear that the protection of intellectual property rights can not be an obstacle to the transfer of technology.[282]
For the future inclusion of provisions on technology transfer into new international environmental treaties or for amendments of existing treaties in respect of technology transfer, one should have the following suggestions in the back of ones mind: First, it would be of advantage for the developing countries to ensure that the commitments of the industrialized States to transfer technology are worded as stringently as possible, and formulated as legal obligations. Second, it would be advisable to make these obligations specific to the transfer of environmentally sound technology, such as in Article 10 A of the Montreal Protocol. Third, a phrase like „fair and most favourable terms", which commits the industrialized States to an equitable arrangement for the transfer of technology, should be taken into account in future. Apart from that, it is important to find the appropriate level of technology transfer, which recognizes the principle of assistance towards self-help. Otherwise the developing countries would lack the incentive to become active themselves in research and development.

Compliance assistance to capacity-building is suitable to react on treaty specific as well as country specific demands; in addition, substantive compliance problems can be taken into account.[283] Compliance assistance of this type can produce notable results with limited resources, as is demonstrated by experiences under the World Heritage Convention[284] as well as the Ramsar Wetlands Convention[285]. The two relatively small international bodies established under these Conventions have successfully initiated and implemented capacity-building projects.[286]

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[281] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 120.
[282] On this issue, see: *M. Chandler*, The Biodiversity Convention: Selected Issues of Interests to the International Lawyer, Colorado JIELP, vol. 4, 1993, 141, 162 et seq.
[283] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 120.
[284] UNESCO Convention for the Protection of the World's Cultural and Natural Heritage, 16. November 1972, ILM, vol. 11, 1972, 1358.
[285] Convention on Wetlands of International Importance especially as Waterfowl Habitat, 3. February 1971, ILM, vol. 11, 1972, 969.
[286] *D. Navid*, Compliance Assistance in International Environmental Law: Capacity-Building, Transfer of Finance and Technology, ZaöRV, vol. 56, 1996, 810, 811 et seq.

**(b) Financial assistance**

Transfer of finances is usually to the fore in the interest of developing countries, because this type of compliance assistance promises flexibility in the use. Demands for financial compliance assistance are often used by developing countries as a basis for negotiations about their participation in international environmental instruments. In this sense, „*finance can lubricate the process of diplomacy*".[287] Thus, the inclusion of provisions on financial assistance in international environmental treaties arose from the recognition that the implementation of these treaties gives rise to costs for national economies, which some States cannot bear. In order to involve these States in international environmental protection, it is necessary to provide certain financial resources.[288]

Financial assistance is contained in several modern international environmental instruments. For example, a financial mechanism, including a Multilateral Fund, in favour of developing country Parties was created on the basis of Article 10 of the Montreal Protocol. This mechanism „*shall meet all agreed incremental costs of such Parties in order to enable their compliance with the control measures of the Protocol*".[289] Financial obligations are also contained in Article 4 (3) of the Framework Convention on Climate Change, Article 20 and 21 of the Convention on Biological Diversity as well as in Article 20 and 21 of the Convention to Combat Desertification[290].
For reasons of practicability and effectiveness, these commitments for particular Parties to make payments should be established in form of clearly defined legal obligations. In this respect it is important to establish both the financial needs of developing countries and the extent of the obligations of the industrialized States.
In respect of the legally binding character of the commitments for industrialized States, the wording of the Montreal Protocol, the Framework Convention on Climate Change and the Convention on Biological Diversity is clear. Article 10 (6) of the Montreal Protocol states: „*The Multilateral Fund **shall** be financed by contributions from Parties not operating under paragraph 1 of Article 5* [...]". Similarly Article 4 (3) of the Framework Convention on Climate Change, and Article 20 of the Convention on Biological Diversity state: „*the developed country Parties* [...] ***shall** provide*". Article 20 (2) of the Convention to Combat Desertification also imposes a legal obligation on the industrialized States, although this obligation is to mobilize financial resources, rather than to make specific payments.
Article 10 (1) of the Montreal Protocol, Article 4 (3) of the Framework Convention of Climate Change, Article 20 (2) of the Convention on Biological Diversity, and Article 20 paragraph 2 (b) of the Convention of to Combat Desertification define the financial needs of developing countries either as „*agreed full costs*" or as „*agreed incremental costs*". These phrases raise a lot of questions, because it is unclear what is meant by incremental costs which are intended to cover the costs to implement the treaty. In particular, the question arises whether the phrase is intended to include the full costs of specific measures taken („gross incremental costs"), or whether the value of benefits arising solely within the

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[287] *A. Jordan/ J. Werksman*, Financing Global Environmental Protection, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 247, 248.
[288] *A. Jordan/ J. Werksman*, Financing Global Environmental Protection, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 247 et seq.; *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 125.
[289] Article 10 (1) of the Montreal Protocol on Substances that Deplete the Ozone Layer of 1987.
[290] United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/ or Desertification, Particularly in Africa, 17 June 1994, available at: http://www.unccd.de/conv/ccdeng.htm.

developing country is to be deducted from this („net incremental costs").[291] Furthermore, the specification of financial requirements is problematic because, for example the Framework Convention on Climate Change uses the words „*agreed*" and „*full*" in parallel. In order to work with a concept like „incremental costs", one must first achieve unanimity on its meaning. In case of the Montreal Protocol, a pragmatic solution was found to this problem. According to Article 10 (1) the Meeting of the Parties has to agree on an „*indicative list of categories of incremental costs*".[292]

In comparison to capacity building, financial assistance is less oriented on treaty- and country specific situations and particular compliance deficits. Financial assistance is aimed more at economic progress of the developing counties in order to put these States in the position to help to solve environmental problems in future.[293] However, financial assistance is only suitable for the effective battle against compliance deficits, if there are sufficient means to control the use to which the assistance is put.

### bb) „Conditionality" of compliance assistance/ reciprocity between environmental commitments and compliance assistance

A condition for financial transfer could be, that the recipient State ratifies the relevant international environmental treaty before it receives assistance. Another criterion for compliance assistance could be the environmental reasonableness of this assistance. These two conditions for financial transfer have, for example, been set up by the Global Environment Facility.[294] Against such „conditionality" could be argued, that these conditions interfere with the principle of sovereignty and constitute a kind of „eco-imperialism". According to the principle of State sovereignty, the establishment of policies, institutions and legislation are considered internal affairs.[295] On the other hand, it is legitimate, and in the face of assistance to enable compliance with international environmental treaties, even necessary to expect that financial transfers are used to improve environmental management and to foster the implementation of the treaties in the developing country.[296] As long as the specific situation of the recipient State, such as the political, administrative and legal traditions, is respected and inappropriate approaches are avoided in the framework of compliance assistance, one cannot talk of eco-imperialism.

In case of compliance deficits in developing countries caused by inappropriate implementation of financial commitments by industrialized States, the developing countries could be allowed a defence, if being accused of not meeting their environmental commitments. The basis for such an exemption can be derived from the wordings of several

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[291] For more details, see: Approaches to the Determination of Agreed Full Incremental Costs, UN Doc. A/ AC.237/ 50/ Add.1; *A. Jordan/ J. Werksman*, Financing Global Environmental Protection, in: *J. Cameron/ J. Werksman/ P. Roderick*, Improving Compliance with International Environmental Law, 1996, 247, 253.

[292] In 1992, the Conference of the Parties to the Montreal Protocol adopted the „Indicative List of Categories of Incremental Costs", ILM, vol. 32, 1993, 874.

[293] *L. Gündler*, Compliance Assistance in International Environmental Law: Capacity-Building through Financial and Technology Transfer, ZaöRV, vol. 56, 1996, 796, 798.

[294] Compare: GEF/ C.2/ 6/ Rev.2.

[295] On the principle of state sovereignty, see: *P. Malanczuk*, Akehurst's Modern Introduction to International Law, 1997, 17 et seq.; *K. M. Meesen*, Sovereignty, in: *R. Wolfrum*, United Nations: Law, Policies and Practice, vol. 2, 1995, 1193 - 1201.

[296] *L. Gündler*, Compliance Assistance in International Environmental Law: Capacity-Building through Financial and Technology Transfer, ZaöRV, vol. 56, 1996, 796, 808.

international environmental treaties. In this respect, Article 4 (7) of the Framework Convention on Climate Change stipulates, that „*the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology* [...]". Similar wordings are contained in Article 5 (5) of the Montreal Protocol as well as in Article 20 (4) of the Convention on Biological Diversity.
A defence of non-compliance with an international environmental treaty by a developing country should be placed in the framework of a formal non-compliance procedure and accompanied by the requirement that the developing country has actually made an attempt to meet its obligations under the treaty and then failed due to its financial deficits. In this respect, the approach of the existing non-compliance procedure could be taken as a precedent. According to Article 4 of the Montreal Protocols' non-compliance procedure a State can initiate a self-incrimination process after „*having made its best, bona fide efforts* [...] *to comply fully with its obligations under the Protocol*".

In this way, the interests of developing countries in financial compliance assistance would be safeguarded along with the interests of industrialized States to involve the developing countries in the global environmental protection.

### b) Institutional framework of compliance assistance

Compliance assistance in the framework of international environmental law should be institutionalized and multilaterally implemented by global eco-funds.[297] As long as compliance assistance is not based on legal obligations, institutionalization can safeguard that it is only environmental policy which influences the assistance in question. If compliance assistance is based on legal obligations, institutionalization can improve the harmonization of compliance assistance and the co-ordination of projects.

#### aa) Treaty specific institutions

Historically, the first manifestation of this approach was the establishment of the World Heritage Committee under the UNESCO Convention for the Protection of the World Cultural and Natural Heritage of 1972, which is responsible for compliance assistance.[298] The Committee is empowered to develop a procedure for handling requests for compliance assistance. According to Article 21 of the World Heritage Convention, „*the World Heritage Committee shall define the procedure by which requests to it for international assistance shall be considered and shall specify the content of the request, which should define the operation contemplated, the work that is necessary the expected cost thereof, the degree of urgency and the reason why the resources of the State requiring assistance do not allow to meet all the expenses*". In addition, the so-called Operational Guidelines for the Implementation of the Convention specify the criteria for assistance and the procedure to be

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[297] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 131.

[298] *D. Navid*, Compliance Assistance in International Environmental Law: Capacity-Building, Transfer of Finance and Technology, ZaöRV, vol. 56, 1996, 810, 811 et seq.; *P. H. Sand*, Carrots without Sticks? New Financial Mechanisms for Global Environmental Agreements, Paper to the International Workshop on Compliance with and Enforcement of Multilateral Environmental Agreements, Geneva, July 1999, 1, 3; forthcoming in: Max Planck Yearbook of United Nations Law, vol. 3, 1999, 363 - 388.

followed.[299] The financial resources for the assistance projects, in form of studies, provision of experts, training of staff, supply of equipment, loans, or emergency aid, are provided by the World Heritage Fund. This trust fund, established pursuant to Article 15 (2) of the World Heritage Convention with a current annual budget (1998-1999) of approximately US$ 4 million[300], is administered by the World Heritage Committee. It is sustained by fixed voluntary payments from Parties to the Convention. The advantages of compliance assistance by treaty specific institutions are manifested in the framework of the World Heritage Convention in form of rapid availability of resources to the recipient States for the preservation of scientific, gravely threatened „natural sites", and in the targeted utilization of resources.[301]

Another important treaty specific instrument is the Multilateral Fund of the Montreal Protocol.[302] Developing countries may claim from the Fund all agreed incremental costs in order to enable their compliance with the Montreal Protocol. The Multilateral Fund was established provisionally at the Second Meeting of the Parties in 1990 and permanently at the Fourth Meeting of the Parties in 1992 on the basis of Article 10 Montreal Protocol.[303] The budget of the Montreal Protocol Multilateral Fund was initially at US$ 240 million, and is currently at US$ 540 million for 1997 - 1999.[304] An Executive Committee, appointed directly by the Parties is responsible for the Fund.[305] Unusually, while only the industrialized States are obliged to make financial contributions, control over the Funds' financial resources is equally distributed in the hands of industrialized States and developing countries.[306] The advantages of this approach, particularly from the point of view of the developing countries, are the clear obligations of the industrialized States, and the use of the one nation/ one vote - principle in decisions on financial compliance assistance.

An advantage of treaty specific institutions is in particular the specialist knowledge available and the specialized infrastructure of these institutions. This contributes to speedy decisions, and guarantees the targeted support of projects.

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[299] UNESCO - Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, Operational Guidelines for the Implementation of the Convention, Doc. WHC/ 2/ Revised, February 1996, paragraphs 90 - 107.

[300] *P. H. Sand*, Carrots without Sticks? New Financial Mechanisms for Global Environmental Agreements, Paper to the International Workshop on Compliance with and Enforcement of Multilateral Environmental Agreements, Geneva, July 1999, 1, 3; forthcoming in: Max Planck Yearbook of United Nations Law, vol. 3, 1999, 363 - 388.

[301] *D. Navid*, Compliance Assistance in International Environmental Law: Capacity-Building, Transfer of Finance and Technology, ZaöRV, vol. 56, 1996, 810, 813 et seq.

[302] For general information about the Multilateral Fund of the Montreal Protocol, see: *J. M. Patlis*, The Multilateral Fund of the Montreal Protocol: A Prototype for Financial Mechanisms in Protecting the Global Environment, Cornell ILJ, vol. 25, 1992, 181 - 232; *T. Gehring*, Dynamic International Regimes: Institutions for International Environmental Governance, 1994, 287 et seq.

[303] Decision II/ 8 of the Second Meeting of the Parties, London, 29. June 1990, UNEP/OzL.Pro.2/3; Decision IV/ 18 of the Fourth Meeting of the Parties, Copenhagen, 25. November 1992, UNEP/OzL.Pro. 4/15.

[304] *P. H. Sand*, Carrots without Sticks? New Financial Mechanisms for Global Environmental Agreements, Paper to the International Workshop on Compliance with and Enforcement of Multilateral Environmental Agreements, Geneva, July 1999, 1, 4; forthcoming in: Max Planck Yearbook of United Nations Law, vol. 3, 1999, 363 - 388.

[305] Terms of Reference of the Executive Committee, paragraph 2, UNEP/ OzL.Pro.4/15, Annex X.

[306] Terms of Reference of the Executive Committee, paragraph 10, UNEP/ OzL.Pro.4/15, Annex X.

**bb) Global Environment Facility**

As an alternative to the model of treaty specific financial mechanisms or funds, the so-called Global Environment Facility (GEF) was envisaged in the run-up to the Rio Conference on Environment and Development in 1992.[307] This trust fund, initially established on a provisional basis by the World Bank Group, UNEP and UNDP, was conceived by industrialized States as a general financial mechanism for future environmental instruments. Finally, it was a resolution of the Governing Council of the World Bank which established the Global Environment Facility, instituted a global eco-fund, and regulated the condition for contributions to the fund.[308]
However, the institutional structure of the Global Environment Facility was criticized by the developing countries, because it took insufficient into account the special aspects of North-South relations and was more orientated on the traditional relations between donor and recipient States. Apart from that, the Framework Convention on Climate Change[309] and the Convention on Biological Diversity[310] stated that the Global Environment Facility should first be restructured, before finally regulating relations between it and the Conference of the Parties. Agenda 21 also emphasized the necessity for restructuring the Environment Facility to provide for universal participation and greater democracy and transparency in its governance.

In 1994 the Instrument for the restructuring of the Global Environment Facility was adopted.[311] The GEF Instrument represents a compromise between the interests of industrialized States and developing countries.[312] It provides for the creation of a Council with 32 members and headed by an „*elected chairperson*" chosen from the members, a Secretariat whose head is chairperson of the GEF, and an Assembly meeting every three years. The World Bank Group serves as the Trustee of the fund. The interests of the developing countries are reflected in the fact that the participation is no longer tied to financial contributions[313]; the developing countries with 16 voting rights groups equal those of the industrialized States and the States with economies in transition; the Secretariat is independent, at least functionally, from the World Bank and the implementing agencies; the Bank and the implementing agencies are „*accountable to the Council for their GEF-financed activities*"[314]; and amendments to the instrument can in future only be agreed by

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[307] For general information about the Global Environment Facility, see: *R. Dolzer*, The Global Environmental Facility - towards a new concept of the common heritage of mankind, in: *G. Alfredsson*, The Living Law of Nations, 1996, 331 - 338; *M. Ehrmann*, Die Globale Umweltfazilität (GEF), ZaöRV, vol. 57, 1997, 565 - 612; *J. Werksman*, Consolidating Governance of the Global Commons Insights from the Global Environment Facility, YIEL, vol. 6, 1995, 27 -63; *P. H. Sand*, Trusts for the Earth: New International Financial Mechanisms for Sustainable Development, in: *W. Lang*, Sustainable Development and International Law, 1995, 167, 175 et seq.; *P. H. Sand*, The Potential Impact of the Global Environment Facility of the World Bank, UNDP and UNEP, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 479 - 499.

[308] Governing Council of the World Bank, GEF Council Meeting six of 25. July 1995, GEF Doc C.5/10.

[309] Framework Convention of Climate Change, Article 11 with reference to Article 21 (3).

[310] Convention on Biological Diversity of 1992, Article 21 with reference to Article 39.

[311] Instrument for the Establishment of the Restructured Global Environment Facility, 16. March, 1994, ILM, vol. 33, 1994, 1273; for detailed information, see: *M. Ehrmann*, Die Globale Umweltfazilität, ZaöRV, vol. 57, 1997, 565, 585 et seq.; *S. K. Mertens*, Towards Accountability in the Restructured Global Environment Facility, RECIEL, vol. 3, 1994, 105, 108 et seq.

[312] *U. Beyerlin/ T. Marauhn*, Umweltbundesamt, Berichte 4/97, Law-Making and Law-Enforcement of International Environmental Law after the 1992 Rio Conference, 136.

[313] Instrument for the Establishment of the Restructured Global Environment Facility, I. 7.

[314] Instrument for the Establishment of the Restructured Global Environment Facility, III. 22.

consensus in the Assembly upon recommendations of the Council and enter into force with the agreements of the Governing Councils of the three implementing agencies: the World Bank Group, UNDP and UNEP. The interests of industrialized States are also regarded with the new voting system, based on a double weighted majority, where a decision is made when 60% of the countries represented in the Council concur, and this majority simultaneously represents 60% of the contributing States to the trust fund. Industrialized States can no longer be outvoted by the developing countries.[315] Also in the interest of industrialized States is that the Council adopts guidelines for the utilization of resources; the areas of activities of the Global Environment Facility remain unchanged. Therefore the GEF is engaged in the protection of the ozone layer, prevention of climate change, maintenance of biological diversity, protection of inland waters and in measures to combat desertification and deforestation in so far as they are related to the other four activities.[316] Apart from that, no new institution has been established.
The restructuring of the Global Environment Facility represent a step forward for developing as well as developed States and takes into account all the requirements necessary for it to be accepted by Agenda 21 and the Conventions. But there are still many questions unanswered, such as the legal qualification of the instrument and the legal character of Memoranda of Understanding between the Conferences of the Parties of international environmental treaties and the Global Environmental Facility.[317] These questions will need to be answered, if a permanent and constructive relationship between the Global Environment Facility and the Conferences of the Parties to international environmental treaties is to be achieved.

Unlike compliance assistance to capacity building, where the experience of treaty-specific institutions, such as Secretariats and committees, is needed, financial compliance assistance offers a much better opportunity to make use of other specialized institutions, such as the World Bank Group.

**cc) Prototype Carbon Fund as a new type of eco-funding involving the private sector**

The Kyoto Protocol to the Framework Convention on Climate Change opens the way for a new type of eco-funding involving the private sector. Pending further inter-governmental negotiations to specify the provisions on the Protocol on „*joint implementation*" (Article 6) and on a „*clean development mechanism*" (Article 12), the World Bank has announced plans to launch a Prototype Carbon Fund, as a closed-end mutual investment fund of US$ 100 - 120 million, to which industrialized States and the business sector are expected to contribute on the basis of bilateral „participation agreements".[318] The World Bank, in co-operation with the International Financial Corporation and possibly other multilateral financial institutions, is planning to reinvest those funds in developing countries and in Eastern European Countries with economies in transition through projects for carbon emission reduction and carbon offsets which would qualify as global benefits.

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[315] Instrument for the Establishment of the Restructured Global Environment Facility, IV. 25.
[316] Instrument for the Establishment of the Restructured Global Environment Facility, I. 2.
[317] On this aspect, see: *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte, 4/97, 137 et seq.
[318] *World Bank*, Information Document on the Prototype Carbon Fund, February 1999, 5 et seq.; *World Bank*, Environmental Matters: Annual Review 1998, 1 et seq.

The Prototype Carbon Fund could be a first step towards partial privatization of what has been called the historic „environmental debt" of the North.[319]

### c) Concluding evaluation

Compliance assistance is a useful completion of compliance control. In this way it is possible to take into account individually the reasons for non-compliance and react on an inadequate compliance capability. The assistance to capacity building, such as environmental training and education, transfer of human and legislative support and transfer of technology, is of particular importance for the elimination of the deficits in the administrative, personnel and technical infrastructure of a State which lead to deficits in compliance with international environmental law. Financial assistance is less orientated on treaty- and country specific compliance deficits. Financial assistance is primary aimed at economic progress of the developing countries in order to put these States in the position to solve environmental problems in future. Therefore, financial transfer is only suitable for the effective elimination of compliance deficits, if there are sufficient means to control that these assistance is actually used to improve environmental management and to foster the implementation of international environmental law.

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[319] *P. H. Sand*, Carrots without Sticks? New Financial Mechanisms for Global Environmental Agreements, Paper to the International Workshop on Compliance with and Enforcement of Multilateral Environmental Agreements, Geneva, July 1999, 1, 7; forthcoming in: Max Planck Yearbook of United Nations Law, vol. 3, 1999, 363 - 388.

## D. Concluding Recommendations

Four basically strategies promise to improve the enforcement of international environmental law: preventive rather than reactive and repressive enforcement, collective rather than unilateral enforcement, co-operative enforcement instead of confrontation and the possibility of compliance assistance to combat compliance deficits.

Against this background, the traditional methods of international law enforcement, such as State responsibility and unilateral countermeasures, are only of limited efficiency in the field of international environmental law. Because of their primarily repressive effect, they can scarcely contribute to the prevention of irreparable damage. Problems in applying State responsibility, countermeasures and traditional dispute settlement procedures arise out of a limitation of the right of action to the injured State. The establishment of accountability of States for harm to the environment in the areas beyond national jurisdiction is therefore almost impossible, because no direct injury to any individual State is necessary involved. The unilateral countermeasures are in danger to lead to an abuse, and legal restrictions of countermeasures are easily ignored. Apart from these deficits, it is especially the stigmatising effect and their confrontational character, which would appear to make traditional enforcement methods largely unsuitable for the implementation of multilateral environmental treaties, based as they are on co-operation. Traditional enforcement methods take also in general to little account of the reasons for non-compliance with international environmental law. Furthermore, they have been used only very seldom in practice. It would therefore not be advisable to concentrate solely on these enforcement methods in the future.

The creation or improvement of the partnership compliance control mechanisms are more promising for the enforcement of international environmental law, because these procedures are preventive, collective and co-operative in character. If possible, two kinds of procedures should be combined: a routine supervisory procedure and an *ad hoc* non-compliance procedure. The routine reporting procedure should be the starting-point for the supervision of compliance with international environmental law. The reporting obligations do need to be completed by verification measures on the part of independent international bodies, such as Secretariats of international environmental treaties. In addition to information from an intensive dialogue with the State under consideration and information from monitoring, the findings of NGOs should increasingly be used in this verification stage. The supervisory procedure should be concluded by a public available statement of facts naming dilatory States as well as States with obvious compliance problems expressly. As this routine supervisory procedure is carried out on a regular basis, without the need for any indications of a situation of non-compliance, it can have a confidence-building as well as a precautionary effect. The *ad hoc* non-compliance procedure is an important complement to the routine procedure. Its initiation depends on suspected non-compliance with international environmental treaty provisions, and it should be possible to be initiated by any other State party, by the Secretariat, by the non-complying State itself and by NGOs. The co-operative character of compliance control is reflected in this non-compliance procedure which emphasises mainly on advice and conciliation, seeking to find amicable solutions to compliance problems of individual States and assisting States in achieving compliance. The co-operative as well as the collective nature of compliance control is further illustrated by the fact that in the „taking-measure phase" of the non-compliance procedure, both collective

imposed carrots and sticks are available as alternatives. In this way it is possible to take into account individually the reasons for non-compliance. Apart from that, compliance control undertaken by an independent international body promises to be more objective, to be structured more impartially, and to reduce relevance of political considerations of expediency. This can best be achieved in giving the permanent Secretariat, staffed with international civil servants with different professional background, which are independent from their countries of origin and are playing allegiance to the overall purpose of the respective treaty, the main function in the compliance control mechanism.

Compliance assistance is a useful completion of compliance control. It is one of the possible responses to identified or expected compliance problems with the aim to improve the ability of States to keep their treaty obligations. If integrated into the treaty from the outset, compliance assistance coupled with efforts to fulfil the treaty obligations can contribute to the steering of State behaviour towards the aim of the treaty. In this respect, compliance assistance has a preventive effect. It should not be financial assistance, but rather capacity-building which are to the fore in this. In particular, environmental training and education, human resources and the communication of legislative and administrative know-how as well as technology transfer should be extended. In the context of technology transfer, the development of environmentally sound industries should be paid special attention. But, intellectual property rights and related interests of industrialized States must also be given due respect in the course of technology transfer.

However, the new partnership enforcement methods of compliance control and compliance assistance do not make traditional enforcement mechanisms superfluous. These enforcement methods should rather coexist in a graduated relationship, so that the new partnership methods are used initially, and the traditional repressive methods are only resorted to if compliance control and compliance assistance are not successful. In this respect, it is necessary to clarify the relationship between compliance control and authoritative dispute settlement, as well as between compliance control and collective sanctions called upon by the United Nations Security Council.
In the compliance control procedures agreed so far, the relationship between the traditional dispute settlement procedures and the non-compliance procedure remains unresolved, these procedures exist as parallel and unrelated procedures.[320] Thus, for example, the introductory paragraph of the Montreal Protocols' non-compliance procedure states: „[...] *it shall apply without prejudice to the operation of the settlement of disputes procedure laid down in Article 11 of the Vienna Convention*". This parallel existence of dispute settlement and non-compliance is the consequence of a compromise: in the course of the negotiations over the non-compliance procedure of the Montreal Protocol, no agreement was achieved on whether one of the two mechanisms should be given priority.[321] The only link between the two procedures is to be found in paragraph 12 of the non-compliance procedure, according to which Parties with compliance problems are obliged „*to inform* [...] *the Meeting of the*

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[320] On the relationship between compliance control and dispute settlement, see: *M. Koskenniemi*, Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol, YIEL, vol. 3, 1992, 123, 155 et seq.; *H. M. Schally*, The Role and Importance of Implementation Monitoring and Non-compliance Procedures in International Environmental Regimes, in: *W. Lang*, The Ozone Treaties and their Influence on the Building of International Environmental Regimes, 1996, 82, 84; *M. Bothe*, The Evaluation of Enforcement Mechanisms in International Environmental Law, in: *R. Wolfrum*, Enforcing Environmental Standards: Economic Mechanisms as Viable Means?, 1996, 13, 33.

[321] *U. Beyerlin/ T. Marauhn*, Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference, Umweltbundesamt, Berichte 4/97, 113.

*Parties of the results of proceedings taken under Article 11 of the Convention regarding possible non-compliance, about implementation of these results and about implementation of any decision of the Parties* [...]". For the future, a graduate system of enforcement methods is advisable, whereby compliance control is given preference in comparison to traditional dispute settlement.[322]

In the same vein, the relation between compliance control and collective sanctions called upon by the United Nations Security Council should be regulated. Collective sanctions called upon by the Security Council, such as interruption of economic relation, of means of communication, as well as the severance of diplomatic relations, should be applied in case of permanent gross violations of international environmental law which cannot be stopped by other means. Of advantage, for the enforcement of international environmental law, is especially the binding nature of the Security Council sanctions. Therefore, it is advisable to have collective sanctions in the back of ones mind as a last resort.

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[322] *M. Koskenniemi*, Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol, YIEL, vol. 3, 1992, 123, 134.

# Appendix

**Table 1:**

**Dispute Settlement provisions of modern international environmental treaties**

| | **Provisions on Dispute Settlement** |
|---|---|
| **Vienna Convention for the Protection of the Ozone Layer, 1985** | Under the Vienna Convention a Party may declare that for disputes not resolved through negotiation or good offices of a third party or mediation by a third party, it would accept arbitration in accordance with procedures adopted by the Conference of the Parties or submission to the International Court of Justice, or both.<br>If the parties to the dispute have not accepted any or the same mandatory third party settlement, the dispute shall be submitted to a Conciliation Commission created by the parties to the dispute. The Commission shall render a final and recommendatory award, which the parties to the dispute shall consider in good faith.<br><br>**—> Article 11** |
| **Framework Convention on Climate Change, 1992** | The Framework Convention on Climate Change has adopted a three-step mechanism for the settlement of disputes. The first step is negotiation between the Parties or any other peaceful means of their own choice. Second, a Party to the Framework Convention may declare that it recognizes as compulsory submission of the dispute to the International Court of Justice and/ or arbitration in accordance with procedures adopted by the Conference of the Parties. If the parties to the dispute have not accepted any or the same compulsory jurisdiction, the dispute shall be submitted, at the request of ány of the parties to the dispute, to conciliation, The Conciliation Commission shall render a recommendatory award, which the parties to the dispute shall consider in good faith.<br><br>**—> Article 14** |
| **Convention on Biological Diversity, 1992** | The Convention foresees negotiation between the parties to the dispute, and should this fail, the parties may seek the good offices or mediation by a third party. Furthermore, a Party to the Convention may declare that it accepts arbitration or submission of the dispute to the International Court of Justice as compulsory means of dispute settlement. Detailed rules for arbitration are provided in Annex II, Part 1 |

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| | to the Convention.<br>If the parties to the dispute have not accepted any or the same compulsory procedure, the dispute shall be submitted to conciliation. Annex II, Part 2 of the Convention contains detailed rules for the conciliation. The conciliation process is to be concluded by a proposal for resolution of the dispute, which the parties shall consider in good faith.<br><br>**—> Article 27; Annex II** |
| **Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973** | The Convention provides for negotiation between the parties to the dispute. Should the negotiation fail, the Parties may, by mutual consent, submit the dispute to arbitration, in particular that of the Permanent Court of Arbitration at the Hague. The Parties are bound by the arbitral decision.<br><br>**—> Article 18** |

**Table 2:**

**Reporting provisions of modern international environmental treaties**

| | **Reporting provisions** |
|---|---|
| **Montreal Protocol on Substances that Deplete the Ozone Layer, 1987** | Each Party to the Montreal Protocol shall provide an initial report within three month of becoming a Party, statistical data on its production, imports and exports of the substances to be controlled under the Protocol for the year 1986. After this each Party to the Protocol shall provide statistical data to the Secretariat on its annual production, imports and exports to Parties and non-Parties, respectively, of such substances for the year during which it becomes a Party and for each year thereafter. The data is to be forwarded no later than nine months after the end of the year to which the data relate.<br><br>**—> Article 7** |
| **Framework Convention on Climate Change, 1992** | The Framework Convention introduces differentiated reporting obligations for industrialized state Parties and developing country Parties. Each Party is committed to communicate to the Conference of the Parties through the Secretariat: a national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol by using comparable methodologies |

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| | to be agreed upon by the Conference of the Parties; general description of steps taken or envisaged by the Party to implement the Framework Convention, and any other information. The developed state Parties and states with economies in transition shall include a detailed description of the policies and measures adopted to implement the commitment in Article 4 to reduce anthropogenic emissions of greenhouse gases and to enhance the greenhouse sinks and reservoirs.<br><br>**—> Article 4, 12** |
| **Convention on Biological Diversity, 1992** | Each Party to the Convention shall, at intervals to be determined by the Conference of the Parties, present to the Conference of the Parties, reports on measures undertaken for the implementation of the Convention and on the effectiveness in meeting the objectives of the Convention.<br><br>**—> Article 26** |
| **Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973** | Each Party to the Convention shall prepare annual reports on their implementation of the Convention which shall include information on exports/ imports, and a biennial report on legislative, regulatory as well as administrative measures taken to enforce the provisions of the Convention.<br><br>**—> Article 8 (7)** |
| **Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989** | The Parties to the Convention shall submit through the Secretariat to the Conference of the Parties before the end of each calendar year, a report on the previous year containing information on competent authorities and focal points designated by them, information on transboundary movements of hazardous wastes including the amount of hazardous wastes exported and imported, their category, characteristic, destination, origin, etc. And efforts to achieve a reduction of the amount of hazardous wastes or other wastes subject to transboundary movement.<br><br>**—> Article 13** |

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