International Environmental Law and Policy Series

VOLUME 56

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International Environmental Law and Policy Series

The Peaceful Settlement of International Environmental Disputes

A Pragmatic Approach

Cesare P.R. Romano

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Series Editors' Preface

Over the last decade considerable concern has been expressed that environmental disputes may represent a major threat to international peace and security. As we move into the twenty-first century the evidence gives us no reason for complacency. Indeed increasing concerns over access to diminishing natural resources, be it water, fish or even oil, suggest that this is likely to become an important part of the landscape for international environmental lawyers. It may be worth recalling that Principle 26 of the 1992 Rio Declaration on Environment and Development enjoins all states "to resolve all their environmental disputes peacefully, by appropriate means and in accordance with the Charter of the United Nations". Agenda 21 adopted at the same Earth Summit in Rio de Janeiro in June 1992 also calls on states to broaden and make more effective the range of techniques available "in the field of dispute avoidance and settlement". (par 39.1).

In fact international environmental treaty regimes, of which the most noteworthy example is the Montreal Protocol, have been highly innovative in this regard, largely on dispute avoidance. What is interesting however is that although a number of international resource disputes have been taken to international litigation, there has been little, if any, mainstream judicial contribution to the development of international environmental law. Part of the reason for this, as Cesare Romano explains in this important new study, is the difficulty of assessing an international dispute as environmental. It is far more prudent for an advocate before an international tribunal to classify a dispute over the diversion of a major river, or the experimental fishing of a valuable stock, as a matter of treaty interpretation or a breach of an established principle of state responsibility, than to venture into the unknown fields of new general notions of environmental responsibility or emerging norms of eco-system maintenance. It is perhaps for this reason, he suggests, that there has been an exponential growth in the number of new alternative dispute settlement systems in this arena. We are pleased to publish this systematic assessment of the role of peaceful settlement of international environmental disputes, which looks both backwards at significant case law and procedures and forwards at evolving new dispute avoidance and settlement systems. It is clear that this will be a growing preoccupation for international environmental lawyers in the future.

Dan Bodansky
David Freestone
Washington DC

Acknowledgments

This book is a revised and updated version of my doctoral thesis which I defended at the Graduate Institute of International Studies, in Geneva (Switzerland), in 1999. It was a truly transatlantic travail. It was imagined and hatched in Geneva, in 1994, while I was sweating my way through the Diplôme d'Études Supérieures. Then it incubated for two years while I was working as an intern at the interim secretariat of the UN Convention on Climate Change and, later, during my studies at the New York University School of Law. Finally, it came into being between 1997 and 1998, while I was working in New York at the Center on International Cooperation at NYU. As a result, the people to whom I must give credit are numerous and scattered on two continents.

First of all come my teachers and those who have supervised my doctoral work. I would like to thank my supervisor, Professor Lucius Caflisch, for his inspiration, generosity and enthusiasm, and for having showed me how high the standard of academic excellency is. Then I must thank the other members of my jury, Professor Georges Abi-Saab and Professor Pierre-Marie Dupuy, who honored me with a scrupulous review of my work and constructive criticism.

Yet, of all my teachers, the one who has the greatest responsibility for this work is Professor Laurence Boisson de Chazournes. Hers was the first course I took when I arrived at the Graduate Institute of International Studies. Her energy, skill and example lit in me the desire to write this book. She introduced me to the domain of international environmental law and guided me through all my studies. Every time I needed to be heartened, helped and advised, she was there.

Another person who might rightly claim guardianship of this book is Professor Philippe Sands. His seminar on the settlement of environmental disputes, which I took at NYU, was eyes-opening. Many of the ideas contained here stem from those entrancing weeks. He made accessible to me most of the material I used for the chapter on the *Gabcíkovo-Nagymaros* dispute, and kept a vigilant eye on my progress.

I would like to express my gratitude here also to Mr. J.C. Ferrand, Ingénieur général des ponts et chausses of the French Ministère de l'Economie, des Finances et de l'Industrie, and Mr. Basseras, Agence de l'eau (Bassin Adour-Garonne) for the information on Lake Lanoux, and to Mr. Richard H. Fish at Cominco Ltd. in connection with the *Trail Smelter* case. The chapter on non-compliance procedures benefited from the experience I acquired thanks to two generous friends: David Victor, who allowed me to participate to the Implementation and Effectiveness of International Environmental Commitments Project at the International Institute for Applied System Analysis (IIASA), Laxemburg, Vienna, and Jo E. Butler, at the UN Framework Convention on Climate Change Interim Secretariat, who let me work on Article 13 of the Convention.

I am greatly indebted to several Swiss, Italian and American institutions for the grants I received. One after the other they have underwritten the costs of my studying in a relay that brought me to completion. To begin with, my gratitude goes to the Fondation pour des Bourses d'Etudes Italo-Suisses, which generously underwrote my doctoral work. Throughout the years I spent in Geneva and New York I also benefited from scholarships of the Graduate Institute, the Università degli Studi di Milano, and the Università degli Studi di Trento, as well as from the Fulbright and Gallatin scholarships.

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New York, February 4, 2000

Foreword

The study which I have the pleasure to preface seems to be the first to provide a full-fledged and published treatment of the methods for the peaceful settlement on international disputes in environmental matters.

Chapters I and II of Mr Romano's work discuss the definition of international environmental disputes – which category includes disagreements over natural resources –, the various classical methods of settlement available, and the way in which those methods – especially adjudication – have found their way into the scores of older and contemporary treaties dealing with issues of environmental protection.

Chapter III contains case-studies dealing at some length with specific conflicts falling within the concept of environmental disputes, starting with the oldest of them all, the *Bering Sea Fur Seals* arbitration. This is followed, always in connection with natural resources, by the *Icelandic Fisheries* case and the high seas *Fisheries* dispute between Spain and Canada, which had to remain unsettled owing to the World Court's lack of jurisdiction.

Two case-studies pertain to disagreements over international waterways as resources and elements of the international environment: the *Lake Lanoux* arbitration between Spain and France and the much earlier case of the *Diversion of the Waters of the Meuse*, brought before, but not really solved by, the Permanent Court of International Justice. Under the same heading one finds the recent controversy over the *Gabcikovo/Nagymaros* power production scheme, opposing Slovakia to Hungary, which was brought before the International Court of Justice but which has not so far been entirely settled through the latter's first judgment. A further case-study in this category bears on the *fisheries dispute* between Canada and Spain which, for lack of jurisdiction, could not be settled by the Court.

Another group of case-studies relate to air quality issues, namely, those raised in the *Trail Smelter* case (United States v. Canada), the grandfather of all international environmental disputes, and in the *Nuclear Tests* cases, which opposed Australia and New Zealand to France. As far as *Trail Smelter* is concerned, it is surprising how much new information the author has been able to unearth.

There is, finally, a study of the *Phosphates* case, brought by Nauru against Australia, which pertained to land resources and the submission of which to the World Court pushed the parties into an agreed settlement.

In Chapter IV, which is also the last, the author attempts to draw some lessons from the past, especially from the practice examined in his case-studies. Mr Romano suggests three conclusions: first, that international adjudication can facilitate dispute settlement, witness the outcome of the *Phosphates* cases; second, that arbitration is more effective than recourse to the World Court, in the sense that States are more inclined to submit to the former than to the latter; and, third, that the future

role of international adjudication may be limited by factors such as the emergence of non-compliance procedures and of a new category of actors, namely, non-governmental organisations. In addition, the circumstances surrounding given disputes or the attitude of the States parties to them may suggest a more flexible approach, for example recourse to mixed commissions empowered to deal with the management of shared environmental units. The very advantage of these means is, of course, also their main drawback: they produce suggested solutions which, to be implemented, must be accepted by the parties.

Much has been said and written about the verification of States' compliance with their environmental obligations. Non-compliance mechanisms, whatever their content, are not identical with dispute settlement procedures. But they are closely connected with them, since verification of compliance may occur in the framework of a dispute settlement procedure; conversely, a finding that a State has failed to comply with its environmental obligations may well escalate into a dispute with one or several other contracting States.

While non-compliance mechanisms have attracted much attention in recent writings, the subject treated by Mr Romano, though of paramount importance, has not. Therefore the present study clearly fills a gap. It is, moreover, extremely well-researched, clearly structured and entertainingly written. All in all, this work is an interesting attempt at delineating what Michel Virally called the "champ opératoire" of peaceful dispute settlement methods, particularly of adjudication, in the specific field of environmental law[1]. While certainly critical of adjudication as a mode of settlement, the author does not yield to the temptation to follow present fashion by a wholesale rejection of that method. The work prefaced here is a notable contribution to the science of international law. It is also of evident value to those who, in the future, may have to deal with environmental disputes or to write dispute settlement clauses into environmental treaties.

In conclusion, Mr Romano should be commended for both his choice of subject and for the latter's treatment. His work deserves praise and a large audience.

Lucius Caflisch
Geneva, 20 December 1999

1 Virally, M., "Le champ opératoire du règlement judiciaire international", *Revue générale de droit international public*, Vol. 87, 1983, pp. 281-314; *idem*, *Le droit international en devenir: Essais écrits au fil des ans*, Paris, Presses universitaires de France, 1990, at 382.

Abbreviations

A.F.D.I.	Annuaire français de droit international
A.J.I.L.	American Journal of International Law
B.Y.I.L.	British Yearbook of International Law
Can.Y.I.L.	Canadian Yearbook of International Law
CEM	Chamber of the ICJ for Environmental Matters
CFC	Chlorofluorocarbon
CITES	1973 Convention on International Trade of Endangered Species of Wild Fauna and Flora
C.M.L.R.	Common Market Law Reports
CTS	Consolidated Treaty Series
DSP	Dispute Settlement Procedure
E.C.R.	Report of Cases before the Court of Justice of EC
E.P.L.	Environmental Policy and Law
EC	European Communities
ECE	Economic Commission for Europe
ECJ	Court of Justice of the European Communities
EEC	European Economic Community
EEZ	Exclusive Economic Zone
EFP	Experimental Fishing Program
EU	European Union
FAO	Food and Agriculture Organization
GATT	General Agreement on Tariffs and Trade
G.Y.I.L.	German Yearbook of International Law
IAEA	International Atomic Energy Agency
IBRD	International Bank for Reconstruction and Development
ICC	International Chamber of Commerce
ICE	Inventory of Conflict and Environment
ICJ	International Court of Justice
I.C.L.Q.	International and Comparative Law Quarterly
ICSID	International Centre for the Settlement of Investment Disputes
IDA	International Development Association
IDI	Institut du droit international
IFAD	International Fund for Agricultural Development
IJC	International Joint Commission
ILC	International Law Commission
ILM	International Legal Materials
ILO	International Labour Organization
ILR	International Law Reports
IMO	International Maritime Organization

ITLOS	International Tribunal for the Law of the Sea
IUCN	The World Conservation Union
LNTS	League of Nations Treaty Series
LRTAP	1979 Convention on Long-Range Transboundary Air Pollution
MARPOL	1973 International Convention for the Prevention of Pollution from Ships
MET	Multilateral Environmental Treaty
NAFO	North Atlantic Fisheries Organization
NAFTA	North America Free Trade Agreement
NCP	Noncompliance Procedure
NGO	Non Governmental Organization
OSCE	Organization for Cooperation and Security in Europe
OSPAR	1992 Convention for the Protection of the Marine Environment of the North-East Atlantic
PCA	Permanent Court of Arbitration
PCIJ	Permanent Court of International Justice
R.G.D.I.P.	Revue générale de droit international public
RECIEL	Review of European Community and International Environmental Law
RIAA	Reports of International Arbitral Awards
UNCC	United Nations Compensation Commission
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEP	United Nations Environmental Program
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UNSC	United Nations Security Council
UNTCOR	United Nations Trusteeship Council Official Records
UNTS	United Nations Treaty Series
WCED	World Commission on Environment and Development
WBIP	World Bank Inspection Panel
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WTO	World Trade Organization
Y.B.I.L.C.	Yearbook of the International Law Commission
Y.I.E.L.	Yearbook of International Environmental Law
Z.a.ö.R.V.	Zeitschrift für Ausländisches und Öffentliches Recht und Völkerrecht

Treaties

COLLECTIONS OF TREATIES AND OTHER INTERNATIONAL LEGAL DOCUMENTS RESORTED TO

Burhenne, W.E., (ed.), *International Environmental Law: Multilateral Treaties - Droit international de l'environnement: traités multilatéraux - Internationales Umweltrecht: multilaterale Verträge*, 7 vols., Berlin, Erich Schmidt, 1974- (loose-leaf service).

Kiss, A. Ch., (ed.), *Selected Multilateral Treaties in the Field of the Environment*, UNEP, Nairobi, 1983, 2 Vols., Vol. 1.

Martens, G. Fr., *Nouveau recueil général de traités*, 3 Sér. 41 Vols.

Moore, J.B., *History and Digest of the International Arbitrations to which the United States has been a Party, together with Appendices containing the Treaties relating to such Arbitrations, and Historical and Legal Notes*, Washington D.C., Government Printing Office, 1898.

Parry, C., *The Consolidated Treaty Series*, Dobbs Ferry, NY, Oceana, 1969-1981, 231 Vols.

Rummel-Bulska, I./ Osafo, S. (eds.), *Selected Multilateral Treaties in the Field of the Environment*, UNEP, Nairobi, 1991, 2 Vols., 2nd Vol.

Rüster, B./ Simma, B., *International Protection of the Environment: Treaties and Related Documents*, Dobbs Ferry, Oceana, 36 Vols.

Stuyt, A.M., *Survey of International Arbitration (1794-1989)*, Nijhoff, Dordrecht, 3rd ed., 1990.

UNEP, *Register of International Treaties and Other Agreements in the Field of the Environment*, UNEP/ GC.16/Inf. 4, Nairobi, 1991.

United Nations, *Multilateral Treaties Deposited with the Secretary-General*, New York, United Nations, 1999.

United Nations Economic Commission for Europe (UN-ECE), *Environmental Conventions*, New York, United Nations, 1992.

MULTILATERAL ENVIRONMENTAL TREATIES CONTAINING DISPUTE SETTLEMENT PROVISIONS

N.B. Each entry in the following list provides: a progressive number (to which entries in footnotes in this study refer to), the name of the agreement, the date of its adoption, the reference, which, unless indicated otherwise, is made to Burhenne, (ed.), *Multilateral Treaties*, *op.cit.*, and the article(s) containing the dispute settlement provision. When no article is indicated, it means that the whole agreement concerns a dispute settlement procedure.

1868-1921

1 Revised Convention on the Navigation of the Rhine, 17/10/1868, 868:77, 45 and 46.
2 Convention for the Protection of Birds Useful to Agriculture, 19/3/1902, 902:22, 12.
3 Treaty Regulating the Status of the Spitsbergen and Conferring the Sovereignty on Norway, 9/2/20, 920:11, Annex I.
4 Convention and Statute on the Regime of Navigable Waterways of International Concern, 20/4/21, 921:30, 22.

1921-1950

5 International Convention for the Campaign Against Contagious Diseases of Animals, 2/2/35, 935:14, 9.
6 Convention Concerning the Regime of Navigation on the Danube, 18/8/48, 948:61, 45.
7 Agreement for the Establishment of a General Fisheries Council for the Mediterranean, 24/9/49, 949:72, 13.

1951-1955

8 International Plant Protection Convention, 6/12/51, 951:90, 9.
9 International Convention for the High Seas Fisheries of the North Pacific Ocean, 9/5/52, 952:35, Protocol.
10 International Convention on Certain Rules Concerning Civil Jurisdiction in Matters of Collision, 10/5/52, 952:36, 9.
11 International Convention for the Prevention of Pollution of the Sea by Oil (as amended in 1962 and 1969), 12/5/54, 954:36, 13.

1955-1959

12 Plant Project Agreement for South East Asia and the Pacific Region, 27/2/56, 956:15, 2 and 7.
13 Convention on the Canalization of the Mosel, 22/10/56, 956:80, 57 to 61.

14 European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), 30/9/57, 957:72, 11.
15 Convention on the Establishment of a Security Control in the Field of Nuclear Energy, 20/12/57, 957:95, 12 to 15.
16 Optional Protocol of Signature to the 1958 Geneva Convention on the Law of the Sea Concerning the Compulsory Settlement of Disputes, 29/4/58, 958:34.
17 Convention on Fishing and Conservation of the Living Resources of the High Seas, 29/4/58, 958:31, 9 to 12.
18 Agreement Concerning the Regulations of Lake Inari by Means of the Kaitakoski Hydro-Electric Power Station, 29/4/59, 959:33, 7.
19 Agreement Concerning Fishing in the Black Sea, 7/7/59, 959:91, 11.
20 Agreement for the Establishment on a Permanent Basis of a Latin-American Forest Research and Training Institute, 18/11/59, Kiss, A. Ch., (ed.), *Selected Multilateral Treaties in the Field of the Environment*, Nairobi, UNEP, Vol. I, at 143, 19.
21 The Antarctic Treaty, 1/12/59, 959:91, 11.

1960-1964

22 Convention on Third Party Liability in the Field of Nuclear Energy, 29/7/60, 960:57, 17.
23 Indus Basin Development Fund Program, 19/9/60, 960:69, 10.
24 Protocol to the 1956 Convention on the Canalization of the Mosel Concerning the Constitution of an International Commission for the Protection of the Mosel Against Pollution, 20/12/61, 961:94, 11.
25 Convention on Liability of Operators of Nuclear Ships, 25/5/62, 962:40, 20.
26 Convention Supplementary to the Paris Convention of July 29, 1960 on Third Party Liability in the Field of Nuclear Energy as amended in 1964 and 1982, 31/1/63, 963:10, 17.
27 Convention on Civil Liability for Nuclear Damage, 21/5/63, 963:40, 11 and 12.
28 Optional Protocol to the Convention on Civil Liability for Nuclear Damage Concerning the Compulsory Settlement of Disputes, 21/5/63, 963:41, 1 to 9.
29 Nordic Mutual Emergency Assistance Agreement in Connection with Radiation Accidents, 17/10/63, 963:77, 9.
30 Act Regarding Navigation and Economic Cooperation between the States of the River Niger Basin, 26/10/63, 963:80, 7.
31 Agreement for the Establishment of a Commission for Controlling Desert Locust in the Eastern Region of its Distribution Area in South-West Asia, 3/12/63, 963:91, 17.
32 Fisheries Convention, 9/3/64, 964:19, 13.
33 Agreement Concerning the River Niger Commission and the Navigation and Transport on the River Niger, 25/11/64, 964:87, 16.

1965-1969

34 Agreement for the Establishment of a Commission for Controlling Desert Locust in the Near East, 2/7/65, 965:49, 16.

35 Convention Regulating the Withdrawal of Water from Lake Constance, 30/4/66, 966:32, 9 to 12.
36 Treaty for the Prohibition of Nuclear Weapons in Latin America, 14/2/67, 967:13, 24.
37 Convention on Conduct of Fishing Operations in the North Atlantic, 1/6/67, 967:42, 7.
38 African Convention on the Conservation of Nature and Natural Resources, 15/9/68, 968:68, 18.
39 European Convention for the Protection of Animals During International Transport, 13/12/68, 968:92, 47.
40 Procedure Regulating of the Appeal Chamber of the Central Commission for the Navigation of the Rhine (Protocol), 23/10/69, 969:80.
41 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 29/11/69, 969:89, 8.

1970-1974

42 Agreement on Collaboration in the Development and Exploitation of the Gas Centrifuge Process for Producing Enriched Uranium, 4/3/70, 970:18, 8.
43 Benelux Convention on the Hunting and Protection of Birds, 10/6/70, 970:44, 14.
44 Agreement for the establishment a Commission for Controlling the Desert Locust in North-West Africa, 01/12/70, 970:85, 16.
45 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass-destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof, 11/2/71, 971:12, 3.
46 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 18/12/71, 971:94, 18.
47 Convention on International Liability for Damage Caused by Space Objects, 29/3/72, 972:24, 9, 14 and 19.
48 International Convention for Safe Containers, 2/12/72, 972: 89, 13.
49 Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES), 3/3/73, 973:18, 18.
50 International Convention for the Prevention of Pollution from Ships (MARPOL), 2/11/73, 973:84, 10 and Protocol II.
51 Nordic Environmental Protection Convention, 19/2/74, 974:14.
52 Convention on the Protection of the Marine Environment of the Baltic Sea Area, 22/3/74, 974:23, 18.
53 Convention for the Prevention of the Marine Pollution from Land Based Sources, 4/6/74, 974:43, 21.

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54 Convention for the Protection of the Mediterranean Sea Against Pollution, 16/2/76, 976:13, 22.

55 Protocol Amending the Interim Convention on Conservation of North Pacific Fur Seals, 7/5/76, 957:11/c, 12.
56 Convention for the Protection of the Archeological, Historical and Artistic Heritage of the American Nations, 16/6/76, 976:46, 4.
57 Convention for the Protection of the Rhine Against Chemical Pollution, 3/12/76, 976:89, 15.
58 Convention on the Protection of the Rhine from Pollution by Chlorides modified by Exchanges of Letters, 3/12/76, 976:90, 13.
59 Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution, 24/4/78, 978:31, 25.
60 Treaty for Amazonian Cooperation, 3/7/78, 978:49, 24.
61 Amendments to the Convention on the Prevention of Marine Pollution by Dumping Wastes and other Matter Concerning Settlement of Disputes, 12/10/78, 972: 96/B.
62 Convention on the Migratory Species of Wild Animals, 23/6/79, 979:55, 13.
63 Convention on Conservation of European Wildlife and Natural Habitats, 19/9/79, 979:70, 8.
64 Conservation of Physical Protection of Nuclear Material, 26/10/79, 979:80, 17.
65 Convention on Long-Range Transboundary Air Pollution (LRTAP), 13/11/79, 979:84, 13.
66 Agreement Governing the Activities of States on the Moon and other Celestial Bodies, 5/12/79, 979:92, 15.

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67 Convention on the Conservation of Antarctic Marine Living Resources, 20/5/80, 980:39, 25.
68 Convention Creating the Niger Basin Authority, 21/11/80, 980:86, 15.
69 Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, 23/3/81, 981:23, 24.
70 Regional Convention for the Conservation of the Red Sea and of the Gulf of Aden Environment, 14/2/82, 982:13, 24.
71 Benelux Convention on Nature Conservation and Landscape Protection, 8/6/82, 982:43, 8.
72 Agreement Concerning Interim Arrangements relating to Polymetallic Nodules of the Deep Sea-Bed, 2/9/82, 982:65, 7.
73 United Nations Convention on the Law of the Sea, 10/12/82, 982:92, 186-191 and 279-299; Annex V, VI, VII, VIII.
74 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 24/3/83, 983:23, 23.
75 Agreement for Cooperation and Consultation between Central African States for the Conservation of Wild Fauna, 16/4/83, 983:29, 3.
76 International Tropical Timber Agreement, 18/11/83, 983:85, 29.
77 Protocol on the LRTAP on Long-Term Financing of Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP), 28/9/84, 979:84/A, 7.

1985-1989

78 Convention for the Protection of the Ozone Layer, 22/3/85, 985:22, 11.
79 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, 21/6/85, 985:46, 24.
80 Protocol to the 1979 LRTAP on the Reduction of Sulfur Emissions or their Transboundary Fluxes by at Least 30%, 8/7/85, 979:84/B, 8.
81 ASEAN Agreement on the Conservation of Nature and Natural Resources, 9/7/85, 985:51, 30.
82 The South Pacific Nuclear Free Zone Treaty, 6/8/85, 985:58, 8.
83 Convention on Early Notification of Nuclear Accident, 26/9/86, 986:71, 11.
84 Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency, 26/9/86, 986:72, 13.
85 Convention on the Protection of Natural Resources and Environment of the South Pacific Region, 24/11/86, 986:87, 26.
86 South Pacific Fisheries Treaty, 2/4/87, 987:26, 6.
87 Agreement on the Resolution of Practical Problems with Respect to Deep Sea-Bed Mining, 14/8/87, 987:60, 6.
88 Montreal Protocol to the Vienna Convention on Substances that Deplete the Ozone Layer, 16/9/87, 985:22/A, 8.
89 Agreement for the Establishment of the Network of Acquaculture Centers in Asia and the Pacific, 8/1/88, 988:03, 19.
90 Convention on the Regulation of Antarctic Mineral Resources Activities, 2/6/88, 988:42, 55 to 59.
91 Protocol to the Convention on LRTAP Concerning the Control of Emissions of Nitrogen Dioxide or their Transboundary Fluxes, 31/10/88, 979:84/C, 12.
92 Convention on Control of Transboundary Movements of Hazardous Wastes and their Disposal, 22/3/89, 989:22, 20.

1990-1994

93 Agreement on the Conservation of Seals in the Wadden Sea, 16/10/90, 990:77, 13.
94 Convention on the Ban of the Import of Hazardous Wastes into Africa and on the Control of their Transboundary Movements within Africa, 30/1/91, 991:08, 20.
95 Convention on Environmental Impact Assessment in a Transboundary Context, 25/2/91, 991:15, 15.
96 Convention of Fisheries Cooperation among African States Bordering the Atlantic Ocean, 5/7/91, 991:50, 21.
97 Protocol to the Antarctic Treaty on Environmental Protection, 4/10/91, 991:74, 18 to 20.
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"When Kansas and Colorado have a quarrel over the water in the Arkansas River they don't call out the National Guard in each State and go to war over it. They bring a suit in the Supreme Court of the United States and abide by the decision. There isn't a reason in the world why we cannot do that internationally".

U.S. President Harry S Truman,
in a speech in Kansas City, April 1945[1].

"The reason for judicial caution in adjudicating the relative rights of States in such cases is that, while we have jurisdiction of such disputes, they involve the interests of quasi-sovereigns, present complicated and delicate questions, and, due to the possibility of future change of conditions, necessitate expert administration rather than judicial imposition of a hard and fast rule. Such controversies may appropriately be composed by negotiation and agreement, pursuant to the compact clause of the federal constitution. We say of this case, as the court has said of interstate difference of like nature, that such mutual accommodation and agreement should, if possible, be the medium of settlement, instead of invocation of our adjudicatory power"

The U.S. Supreme Court,
Colorado v. Kansas case[2].
(The same case to which President Truman was referring)

"The Maxim of Pragmatism: Consider what effects that might conceivably have practical bearings we conceive the object of our conception to have: then, our conception of those effects is the whole of our conception of the object"

Charles Sanders Peirce (1839-1914)[3]
American Philosopher, best known as the originator of Pragmatism.

"What the true definition of Pragmatism may be, I find it very hard to say; but in my nature it is a sort of instinctive attraction for living facts"

Idem[4]

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1 Quoted from Rodes, B.K./Odell, R., *A Dictionary of Environmental Quotations*, New York, Simon & Schuster, 1992, pp. viii-335. The U.S. President Harry Truman was referring to an enduring dispute between Kansas and Colorado over the Arkansas River. The two States had been enmeshed in recurrent litigation before the U.S. Supreme Court since the beginning of the twentieth century (Kansas v. Colorado, *United States Reports*, Vol. 185, pp. 125-147, (decided on April 7, 1902); Kansas v. Colorado, *idem*, Vol. 206, pp. 46-118, (decided on May 13, 1907); Colorado v. Kansas, *idem*, Vol. 320, pp. 383-400, (decided on December 6, 1943)). On the Arkansas River dispute, see Wagner, M.J., "The Parting of the Waters: The Dispute between Colorado and Kansas over the Arkansas River", *Washburn Law Journal*, Vol. 24, 1984, pp. 99-120.

2 Colorado v. Kansas, *United States Reports*, Vol. 320, pp. 383-400, at 392.

3 "The Maxim of Pragmatism" was originally stated in *Popular Science Monthly*, Vol. XII, at 293. The French version is in *Revue philosophique*, Vol. VII, at 47-48. The Maxim of Pragmatism was further elaborated by Peirce in his first Harvard Lecture on Pragmatism (1903), reprinted in Houser, N., (ed.), *The Essential Peirce*, Bloomington, Indiana University Press, 1998, Vol. 2, pp. 133-144, at 135.

4 Peirce, Second Harvard Lecture (1903), "On Phenomenology", *ibid.*, pp. 145-159, at 158.

Introduction

This study has recourse to the ideas and methods developed by philosophical pragmatism to determine the appropriateness of adjudicative means of dispute settlement, in particular of international arbitration and the International Court of Justice, to settle environmental disputes between sovereign States. The thesis put forth in this work is that international adjudicative means of settlement, which are by their nature bilateral and adversarial, might be beneficial in dealing with environmental disputes only in a rather limited number of circumstances. This limited capability is inherent both in the nature of environmental conflicts and in that of international adjudication. The premise upon which such a thesis has been built is a pragmatic one. It assumes that when States resort to international adjudication to settle environmental disputes, they do not so much aim to get satisfaction on abstract points of law, but rather seek to have the specific problems that precipitated the dispute resolved by means of, directly or indirectly, the adjudicatory process.

During the last two decades, environmental problems have been increasingly pointed to as potential sources of international instability or even downright threats to international peace and security. This phenomenon has been reflected in the growing share of multilateral environmental treaties and dispute settlement clauses within them. At the same time, and even more so since the beginning of the 1990s, international adjudication is going through a renaissance as an increasing number of cases are submitted to an expanding number of international judicial fora.

This study does not intend to downplay the relevance of international justice to the maintenance of an orderly international community, but rather to introduce a strong caveat against any naiveté about its thaumaturgical capacities, particularly in the environmental domain. Excess of confidence in international adjudication as a suitable means to resolve environmental problems might breed disappointment and censure. Because of the wide popularity of environmental issues and their immediate impact on the masses, disenchantment originating in the environmental field might eventually spread to the whole construction of international justice. The aim of this study, therefore, is to determine pragmatically under which conditions international adjudication, as currently structured, can effectively tackle the challenge of environmental degradation and the ensuing international disputes.

The first chapter of this study will delimit the scope of this investigation. Any scholar venturing into this field, with the ambition of producing anything that could resemble an objective notion of international environmental dispute, might easily fall into a methodological pitfall. On the one hand, the ultimate cause of most conflicts, from the stone age to the nuclear age, can be somehow traced to environmental factors, such as control of scarce natural resources. But this could lead to the conclusion that, since every international dispute has some environmental aspects, there does not exist any such thing like as "environmental dispute". On the other hand, one could be lured

into shaping a definition of dispute which, while conceptually rigorous and consistent, nonetheless risks being self-contained and of scarce use outside the particular context in which it was framed. Or worse, the elusiveness of the notion could open the way to arbitrariness, leading to disputes being analyzed by rules of thumb.

Although international law does provide clear definitions of what an international dispute is, when it comes to providing a practicable definition of the term environment it is at loss. Indeed, the idea of environment shifts through time and space. Peoples have conceptualized, and still do, the "everything surrounding" in different ways across ages and cultures. Hence, what could nowadays be interpreted as an "environmental dispute", might have been construed as something else at the time it took place. Different societies might have different notions of what constitutes the environment, or attribute to its preservation different values. The parties to a dispute might perceive the object of their disagreement in widely different ways, and not necessarily agree in characterizing the conflict as an environmental one. States' practice does not shed any light either, for diplomats have carefully avoided being bogged down in endless negotiations over a universal and legally precise definition of the term "environment". Because of the changing nature of the notion of environmental dispute, the definition of "international environmental dispute" put forward in this study does not aspire to having any objective and immanent value. It is simply a road-map to this study. It is, in other words, only a scientific assumption, with no ambition beyond the purview of this research, and which might be and should be put to the test of further research.

Chapter two will analyze, through the prism of multilateral environmental treaties, how dispute settlement procedures are applied to international environmental disputes. This particular focus on multilateral arrangements is justified by three observations. First, multilateral environmental agreements have made an original contribution to the strengthening of the fundamental principle of the peaceful settlement of disputes. The inclusion in several international environmental agreements of dispute settlement clauses once again, underscores the fact that, should there be a need, States are indeed obliged to settle their disputes without resorting to force. At the same time, the large range of measures provided reconfirms the principle of the "free choice of means".

Second, although many innovative procedures for the settlement of environmental disputes have been developed in bilateral frameworks, multilateral treaties are the place where the most intriguing development in the field of dispute settlement of the post-cold-war era has flourished: so-called non-compliance procedures. Finally, because bilateral environmental agreements can nowadays be counted by the thousands, reasons of expediency and practicality suggest focusing on a more manageable and somewhat homogeneous group of the hundreds of multilateral environmental treaties.

The third chapter will examine 10 international environmental disputes settled by adjudication. Only those international environmental disputes which have been subject to an international adjudicative process entailing a binding decision are taken into account. It is true that States relatively seldomly resort to adjudicative means to settle their disputes, and this is even truer in the case of environmental disputes. However, there are signs that international courts and tribunals are increasingly gaining a central role in the life of the international community. The past few years have seen a significant increase in the number of cases being brought to

well-established bodies. The modification of other systems, such as the introduction of the panel system and the Appellate Body of the World Trade Organization, and the creation of new bodies, such as the International Tribunal on the Law of the Sea, provide additional fora for the resolution of international disputes. What is more, the unprecedented growth of the international judiciary has been accompanied by an increased willingness by members of the international community to use these bodies. The dockets of some are more filled than ever.

Nonetheless, a relatively small number of international environmental disputes have been subject to adjudication and only by a few of these fora. The potential of the international judiciary to address environmental issues has not yet been duly explored, either by States or by scholars. This study intends to tap into the knowledge acquired in two particular areas (i.e. the World Court and *ad hoc* arbitration, and, to a lesser extent, the newborn International Tribunal for the Law of the Sea) to draw a few lessons which could eventually shed light on the potentials of others. Specifically, the ultimate aim is to assess the capacity of adjudicative means of settlement to actually resolve international environmental problems. More often than not there is a discrepancy between an environmental problem and the international dispute precipitated by it. Settlement of the latter does not necessarily resolve the former.

Legal scholars are usually more concerned with the process itself rather than with its results. Articles on international environmental cases deal with the origins of a dispute, the proceedings and the judgment. Some venture to asses the judgment's coherence and consistency with international law. Very rarely are the parties followed outside the courtroom to see whether the problem that brought them to litigation in the first place were resolved. What happened to the Pacific Fur Seals after the arbitral award was rendered: did they disappear or were they preserved? What happened to the Columbia River Valley after the Trail Smelter company adopted the measures ordered by the arbitral tribunal? What happened to the water of the Carol River? And to the people of Nauru? And what of the water of the Meuse and the Danube after the judgments rendered by the World Court?

Moreover, whenever environmental issues where successfully addressed, was it so because of the involvement of a third-party, and, in particular, of a judicial body, or because of other extra-judicial factors? In other words, was the dispute between Australia, New Zealand and France over nuclear tests settled because of the involvement of the ICJ? Did noxious fumes stop drifting down the Columbia River Valley because of the award rendered by the arbitral tribunal? Was the judgment rendered by the ICJ in the *Fisheries Jurisdiction* dispute between the United Kingdom, West Germany and Iceland of any relevance to the settlement of the dispute and eventual preservation of herring and cod stocks? Answering these questions is essential to assess the effectiveness of adjudicative means. This is the ultimate benchmark that States will use to determine whether it is worth referring future international environmental disputes to adjudication.

Again, this study is not so much concerned with the principles that have been articulated in those judgments. While some of them have been indeed momentous (e.g. the *Trail Smelter* or the *Lake Lanoux* cases), and are milestones in the history of international environmental law, it is the tangible effects of judgments on each given environmental problem that matters here. This is the reason why, instead of choosing a chronological approach to environmental jurisprudence, which could

highlight the interplay between custom, treaties and judicial reasoning, the ten cases expounded here have been grouped in three clusters. The first group includes disputes concerning marine biological resources (*Bering Sea Fur Seals*, *Icelandic Fisheries Jurisdiction*, *Turbot,* and *Southern Bluefin Tuna*). The second group encompasses disputes relating to international watercourses (*Lake Lanoux*, *Diversion of the Meuse*, *Gabcíkovo-Nagymaros*). The third group comprises disputes originating from environmental degradation and transboundary pollution (*Trail Smelter*, *Nuclear Tests*, *Phosphates of Nauru*). By resorting to this functional approach, it is possible to appreciate how similar problems have been addressed in different ways by arbitration and by the International Court of Justice at different stages of the evolution of international environmental law.

While there is substantial literature on each of these disputes, there are no comparative studies to date reviewing all of them from the same perspective. In order to produce meaningful conclusions, all these cases have been approached using the same methodology. A brief introduction will detail the *dramatis personae* and the scene of the dispute. Then, the subject-matter of the dispute will be presented. After having examined how the dispute has been brought before the adjudicatory body, we will analyze how the parties decided to conceptualize the object of the controversy, how the agents and counsels of the parties characterized it, how the judges and arbitrators interpreted it, and what conclusions they reached. Moreover, we will follow the parties out of the courtroom to determine whether adjudication has been instrumental in the settlement of the dispute and, most of all, whether the environmental problem which precipitated the dispute has in reality been resolved; and if so, whether adjudication has played a significant role. In each case, a summary conclusion will wrap up the main lessons to be learned. Sometimes, as some cases present similarities, there will be cross-references and joint deductions. Many points, however, are withheld until chapter four, which contains the general conclusions of this study.

I. International Environmental Disputes: What are They?

1. INCREASED CONCERN OVER INTERNATIONAL ENVIRONMENTAL DISPUTES

Although it is recognized that the reasons for international disputes usually defy simple and straightforward explanations, during the last decade environmental factors have been acknowledged to be a relevant potential and even actual threat to international peace and security[1]. The first authoritative statement on the importance of environmental concerns to international security was made on January 31, 1992, by the United Nations Security Council, the organ that has "primary responsibility for the maintenance of international peace and security"[2]. On that occasion, the fifteen members of the Council declared that:

> "non-military sources of instability in the economic, social, humanitarian and ecological fields have become threats to international peace and security"[3].

Six months later the United Nations Conference on Environment and Development (UNCED) was convened in Rio de Janeiro (Brazil), having as one of its major objectives:

> "to assess the capacity of the UN system to assist in the prevention and settlement of disputes in the environmental sphere and to recommend measures in this field, while respecting existing bilateral and international agreements that provide for the settlement of such disputes"[4].

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1 Studies that have attempted to verify empirically the causal relationship between environmental variables and conflict have shown that environmental factors, while contributing to the likelihood of conflict, are extremely difficult to isolate as sole causal variables. Environmental factors are deeply interwoven with geographical, historical, socioeconomic and cultural variables. Homer-Dixon, T.F./Percival, V., *Environmental Scarcity and Violent Conflict* (Briefing Book prepared for the Project on Environment, Population and Security), Toronto, American Association for the Advancement of Science and University College, University of Toronto, 1996.

2 UN Charter, art. 24.1.

3 Note by the President of the UN Security Council on the Responsibility of the Security Council in the Maintenance of International Peace and Security, UN Doc. S/23500 (31 January 1992), at 2.

4 UNGA Res. 44/228, (December 20, 1989).

The Final Declaration of the Rio Conference, however, went only part way toward identifying some of the inadequacies in the international arrangements for the maintenance of environmental security[5]. Indeed, quite bashfully the Declaration (a non-binding document) merely called on States to provide "effective access to judicial and administrative proceedings, including redress and remedy"; to "enact effective environmental legislation"; and to "resolve all their environmental disputes peacefully, by appropriate means and in accordance with the Charter of the United Nations"[6].

Agenda 21, however, went further[7]. It recognized the limitations of existing arrangements, including inadequate implementation by States of their obligations, the need to involve multilateral organizations in the implementation process, and the presence of gaps in existing dispute settlement mechanisms[8]. In particular:

> "In the area of avoidance and settlement of disputes, States should further study and consider methods to broaden and make more effective the range of techniques available at present, taking into account, among others, relevant experience under existing international agreements, instruments or institutions and, where appropriate, their implementing mechanisms such as modalities for dispute avoidance and settlement. This may include mechanisms and procedures for the exchange of data and information, notification, and consultation regarding situations that might lead to disputes with other States in the field of sustainable development, and for effective peaceful means of dispute settlement in accordance with the Charter of the United Nations including, where appropriate, recourse to the International Court of Justice, and their inclusion in treaties relating to sustainable development"[9].

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5 Sands, Ph., "Enforcing Environmental Security", Sands, Ph. (ed.), *Greening International Law*, London, Earthscan, 1993, pp. 50–65, at 63.

6 Rio Declaration, Principles 10, 11 and 26. The Rio Declaration was reprinted in Robinson, H.A. (ed.), *Agenda 21 and the UNCED Proceedings*, New York, Oceana, 1992, Vol. 1, at xcvii.

7 Agenda 21 is the document attached to the Final Declaration of the UNCED containing all the desiderata of the international community (States and NGOs) to implement Principle 21 (Sustainable Development) of the Final Declaration of the 1972 Stockholm Conference on the Human Environment.

8 Agenda 21, UN Doc. A/CONF.151/4, (Part IV), para. 39.9. The text of the Agenda 21 has been reproduced in Johnson, S.P. (ed.), "*The Earth Summit: The United Nations Conference on Environment and Development (UNCED)*", London, Graham and Trotman/ Nijhoff, 1993, pp. VI–532, at 502.

9 *Idem*, para. 39.9.

The debate on the links between environmental factors and international peace and security is still heated and unsettled. During the last decade several scholars have written extensively on the issue[10]. Yet besides recognizing that environmental factors might be a direct or indirect cause (e.g. the exacerbation of conflicts of a different nature) of international disputes, there is not yet a consolidated view on which factors underlie the increased concern for the settlement of environmental disputes[11].

However, by roughly schematizing the debate, it might be concluded that four considerations justify the heightened attention granted to the prevention and settlement of environmental disputes. First, the growing demand and consequent need of States for access to natural resources, coupled with a limited or at least shrinking resource base, is creating a breeding ground for international tension and eventually conflict. This applies, for instance, to disputes over marine living resources (three of them – the *Bering Sea Fur Seals* dispute, the *Icelandic Fisheries Jurisdiction* dispute and the *Turbot* dispute – will be analyzed in depth in this study, while the *Southern Bluefin Tuna* dispute will be briefly described[12]). Second, as international

10 Since the mid 1980s social scholars have produced quite a lot of literature on the issue of environment and security. See, *inter alia*, Matthews, J., "Redefining Security", *Foreign Affairs*, Vol. 68, 1989, pp. 162–177; Renner, M., "National Security: The Economic and Environmental Dimensions", *Worldwatch Paper* 8, Worldwatch Institute, 1989; Timoshenko, A., "Ecological Security: Global Change Paradigm", *Colorado Journal of Environmental Law and Policy*, Vol. 2, 1990, pp. 127–145; Vinogradov, S., "International Environmental Security: The Concept and Its Implementation", Carty, A./Danilenko. G. (ed.), *Perestroika and International Law*, New York, St. Martin's Press, 1990, pp. 196–207; Handl, G., "Environmental Security and Global Change: The Challenge to International Law", *Y.I.E.L.*, Vol. 1, 1990, pp. 3–33; Earthscan (ed.), *Environment and Conflict. Links between Ecological Decay, Environmental Bankruptcy and Political and Military Instability*, Earthscan Briefing Document No. 40, London, Earthscan, 1984; Brown, N., "Climate, Ecology and International Security", *Survival*, Vol. 31, 1989, pp. 519–532; Gleick, P. H., "Environment, Resources and International Security and Politics", Arnett, E.H. (ed.), *Science and International Security: Responding to a Changing World*, Washington D.C., American Association for the Advancement of Science, 1990, pp. 501–523; Pirages, D. C., "The Greening of Peace Research", *Journal of Peace Research*, Vol. 28, 1991, pp. 129–133; Brock, L., "Peace through Parks: The Environment on the Peace Resources Agenda", *Journal of Peace Research*, Vol. 28, 1991, pp. 407–422; Molvär, R. K., "Environmentally Induced Conflicts? A Discussion Based on Studies from the Horn of Africa", *Bulletin of Peace Proposals*, Vol. 22, 1991, pp. 135–142; Renner, M./Pianta, M./Franchi, C., "International Conflict and Environmental Degradation", Väyrinen, R. (ed.), *New Directions in Conflict Theory: Conflict Resolution and Conflict Transformation*, London, Sage Publications, 1991, pp. 108–128; Homer-Dixon, T., "On the Threshold: Environmental Changes and Acute Conflict", *International Security*, Vol. 16, 1991, pp. 76–116; Deudney, D., "Environment and Security: Muddled Thinking", *Bulletin of Atomic Scientists*, April 1991, pp. 22–28; Gleick, P. H., "Environment and Security: the Clear Connections", *Bulletin of Atomic Scientists*, April 1991, pp. 17–21; Abdel Rahim, N., *Green War, Environment and Conflict*, London, Panos Institute, 1991, 156 pp.; Barnaby, F. (ed.), *The Gaia Peace Atlas*, New York, Doubleday, 1988, 271 pp.; Thomas, C., *The Environment in International Relations*, London, Royal Institute of International Affairs, 1992, pp. 291; Schmitz, M. (ed.), *Les conflits verts. La détérioriation de l'environnement, source de tensions majeures*, Bruxelles, GRIP, 1992. On environmental diplomacy, see: Carroll, J.E. (ed.), *International Environmental Diplomacy*, Cambridge, Cambridge University Press, 1988; Susskind, L.E., *Environmental Diplomacy*, Oxford, Oxford University Press, 1994; Kjellén, B., "Environmental Diplomacy: What is New?", *Environmental Policy and Law*, Vol. 29, 1999, pp. 171–174.

11 Sands, Ph., "Enforcing Environmental Security: The Challenges of Compliance with International Obligations", *Journal of International Affairs*, Vol. 46, 1993, pp. 367–390, at 368.

12 *Infra*, Ch. III.1–4.

environmental obligations increasingly affect national interests, States that do not comply with their environmental obligations are perceived to gain an unfair competitive economic advantage over other States. Third, the nature and extent of international environmental obligations have been magnified in recent years as States assume larger and deeper environmental commitments. This has increased the likelihood that disputes might arise over a specific interpretation of the scope of these new obligations. Fourth, as business increasingly straddles national boundaries, States are more likely than ever to be dragged into disputes caused by environmentally degrading activities of their nationals (e.g. corporations) or in defense of nationals affected.

2. "INTERNATIONAL ENVIRONMENTAL DISPUTE": AN ELUSIVE NOTION

In 1986, Arthur Westing, an eminent American social scientist who has published a large number of works on the links between environmental problems and international security[13], compiled a list of the twentieth century's major international conflicts which, in his opinion, involved environmental factors[14]. This list included both world wars, some de-colonization conflicts (e.g. Algerian War of Independence [1954–1962]) and some civil and succession wars (e.g. Nigerian Civil War [1967–1970] or the Western Sahara Revolt [1976–]). According to Westing, the common denominator of all these conflicts is that natural resources (e.g. minerals, fuels, fish stocks, agricultural crops and, ultimately, the land itself) were, if not the ultimate objective of the contending parties, at least at stake in the conflict.

Another remarkable attempt to classify international conflicts caused by environmental factors is the "Inventory of Conflict and Environment (ICE)" prepared by James R. Lee for the School of International Service at American University[15]. The ICE includes 81 international conflicts allegedly caused by environmental problems, ranging from patently environmental issues, such as the conflict over the apportionment of water of the Jordan river basin, to much less obvious problems like the pollution of Subic Bay (Philippines) caused by U.S. army and navy facilities, or that in the demilitarized zone between South and North Korea[16]. Other

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13 Westing, A. H., *Threat of Modern Warfare to Man and His Environment*, Paris, UNESCO, 1979; *Idem* (ed.), *Environmental Warfare: A Technical, Legal and Policy Appraisal*, London, Taylor & Francis, 1984; *Idem* (ed.), *Cultural Norms, War and the Environment*, Oxford, Oxford University Press, 1988; *Idem* (ed.) *Environmental Hazards of War: Releasing Dangerous Forces in an Industrial World*, London, SAGE Publ., 1990; *Idem* (ed.), *Disarmament, Environment and Development and their Relevance to the Least Developed Countries*, New York, United Nations, 1991; *Idem* (ed.), *Transfrontier Reserves for Peace and Nature: A Contribution to Human Security*, Nairobi, UNEP, 1993.

14 Westing, A. H., "Environmental Factors in Strategic Policy and Action: An Overview", *Idem* (ed.), *Global Resources and International Conflict: Environmental Factors in Strategic Policy and Action*, Oxford, Oxford University Press, 1986, pp. 3–20 and Appendix II (Wars and Skirmishes Involving Natural Resources).

15 <http://gurukul.ucc.american.edu/ted/ice/ice.htm> (Site last visited on February 4, 1998).

16 Unfortunately the site does not contain a statement listing the criteria adopted to incorporate a given conflict into the compilation. It seems, however, that the authors have decided to be as inclusive as possible.

conflicts included, to cite but a few, are: the Aozou Strip conflict (1973–1990); the Kurile Islands Dispute (1945–); the Gulf War (1990–1991); the Chiapas unrest (1994–); the Falklands War (1982); the Rwanda Civil War (1994); the hostilities in the Ussuri River region (1969); the Boer War (1899–1902) and the Biafra War (1967–1970).

However, while Westing's and Lee's analyses are limited to the late nineteenth and twentieth centuries, it is clear that, the same reasoning could apply to all possible conflicts from the Paleolithic to the Nuclear Age. The siege of Troy (1200 B.C.), once the veil of Homer's epic narration had been lifted, was nothing but a struggle for the control of trade in natural resources between Greece and Asia Minor. Thus, by Westing's and Lee's standards, paradoxically, the Trojan War was an environmental conflict no less so than World War II or the Vietnam War.

Admittedly, while retaining a certain scientific value, such a view of what constitutes an environmental dispute is much too broad for the purpose of this study. Any research on the role of adjudication in the settlement of international environmental disputes resorting to such large compilations would inevitably result in the consideration of almost every international adjudication that has taken place in the last hundred years. Nonetheless, this paradox is useful because it typifies the predicament of every scholar: how to define the scope of the investigation. Obviously this research is no exception, and the present chapter intends to determine what an "international environmental dispute" is, at least for the purpose of this study.

Finding a way out of this quandary is an extremely challenging exercise. In different ages, people have interpreted the world around them, and consequently designated it, in rather diverse ways. It has been called "cosmos", "creation", "nature", "environment", or "ecosystem". Moreover, what could be nowadays interpreted as an "environmental dispute" was, at the time it took place, called something else. For instance, when Great Britain and the United States jarred over the hunting of fur seals in the Pacific towards the end of the nineteen century, none of the parties characterized the dispute as an environmental one[17]. The measures which had been taken by the U.S. Government and which Great Britain had contested were not intended to protect the seals from extinction *per se*, but rather to protect an important source of income. The dispute was, by standards prevailing at the time, an economic one. Nonetheless, by present standards, that dispute is generally regarded as environmental since it was caused by measures taken by one State to protect an endangered species from extinction, regardless of the cause of its depletion. Similarly, what is not commonly regarded nowadays as an environmental dispute, might, in the future, be used in the classroom as a *locus classicus* of international environmental dispute resolution.

Again, the relativity of the notion of "environment" and, *a fortiori*, of "environmental dispute" is not only diachronic but also synchronic. Different societies might have different notions of what constitutes the environment, or attribute to its preservation different values, even if the mass-media are rapidly narrowing this gap. It follows that the parties to a dispute might perceive the object of their disagreement in widely different ways, and not necessarily agree in characterizing the

17 *Infra*, Ch.III.1.

conflict as an environmental one. The *Gabcikovo-Nagymaros* dispute, litigated by Hungary and Slovakia before the ICJ in the 1990s, offers a graphic example[18]. In the proceedings before the World Court, while Hungary stressed the environmental aspects of the dispute, pointing to the deleterious effects of diversion not only on the river's habitat but also on the quality of the drinking water in Budapest, Slovakia rather framed it as an economic issue, stressing the importance of hydroelectric power for the nation's development, and insisted on the principle of respect of treaties and international obligations. Accordingly, the two countries resorted to two different bodies of law to make their case. While the former was mainly appealing to principles of international environmental law as a justification of its non-compliance with the 1977 Treaty, the latter tried to remain aloof of environmental issues, focusing its case on the Law of the Treaties.

Getting to something that could resemble an objective notion of what constitutes an environmental dispute is frustratingly difficult. However, the complexity of the subject should not wrongfully lead to the conclusion that, since every international dispute has some environmental aspects, there does not exist any such thing like as "environmental dispute". States are increasingly looking at environmental problems as a potential, if not actual, source of tension and conflict, and a wide body of literature exists on the topic. This is irrefutable and there is no evidence to suggest that this is a mere "greening" of old concerns.

The changing nature of the notion of environmental dispute should rather warn against any attempt to find an objective definition. The definition of "international environmental dispute" put forward in this study does not aspire at having any objective and immanent value, but merely aims at being used as *vade mecum* both for the author and for the reader. It is, in other words, only a scientific assumption, with no ambition beyond the purview of this research, and which might be and should be put to the test of further research.

Having said this, before defining what constitutes an international environmental dispute only for the purpose of this work, it is necessary to investigate the meaning of the terms "dispute", "international" and "environment". Only after a careful examination of these three terms in different contexts will the reader be endowed with a road-map to this study.

2.1. Defining the Term "Dispute"

The fundamental requisite for the activation of any peaceful dispute resolution mechanism is the determination of the existence of a dispute. Yet, whether a dispute exists cannot be determined in abstract. It depends ultimately on the definition of the term, and different entities will resort to different notions of dispute to establish whether the requirements for their activation are met. The aim of this section is to find a definition of dispute suitable for the purposes of this research. It will not necessarily reflect the definition that is resorted to by international judicial bodies and which other scholars might equally deem appropriate relying on divergent notions.

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18 *Infra*, Ch.III.7.

The exercise is further complicated by the fact that the expression "dispute" does not seem to have a precise connotation. Broadly speaking, it indicates any kind of discord, ranging from a mere verbal controversy or debate to an angry altercation[19]. According to the *American Heritage Dictionary of the English Language*, synonyms of "dispute" are: "argument, fight, row, debate, controversy, quarrel, disagreement, contention, clash, squabble, polemic, spat, altercation, unpleasantness, hassle, run-in, tiff, words, wrangle"[20]. However, though such a definition of "dispute" encompasses both noisy quarrels about a trivial matter and a duel of logical arguments between philosophers, the etymology of the word (From Latin *disputare* [to examine]: *dis* – [apart] + *putare* [to reckon])[21] seems to indicate that a dispute can be distinguished from a mere squabble at least by the existence of a certain dialectic between the parties[22].

This seems to be the notion of "dispute" that the judges of the Permanent Court of International Justice had in mind when, in the *Mavrommatis Palestine Concessions* case, they broadly defined "dispute" as

> "a disagreement on a point of law or fact, a conflict of legal views or of interest between the parties"[23].

This definition of "dispute", given by the PCIJ in 1924, has since become a paradigm for international lawyers. Yet it is by no means more precise than that provided by any dictionary. As a matter of fact, the so-called *Mavrommatis* definition can be applied indifferently to international conflicts and to mere family quarrels over domestic chores. Moreover, it includes not only specific claims or assertions of one party which have been advanced or rebuffed by another, but also differences which may still be inchoate and have not yet been clearly formulated, articulated or advanced as specific claims or contentions. In other words, it includes both mere "situations", which, as article 34 of the UN Charter reads, might simply "...lead to international friction or give rise to a dispute...", and fully articulated disputes.

In order to determine whether and when an international dispute exists, and therefore whether jurisdiction can be exercised, on a number of occasions both the PCIJ and the ICJ have developed the *Mavrommatis* definition, identifying a number of minimum requirements[24]. First, to be suitable for adjudication, a dispute requires a minimum degree of specificity and opposition. In the advisory opinion

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19 "Dispute", *American Heritage Dictionary of the English Language*, 3rd ed., 1992.

20 Ibid.

21 Ibid.

22 "*Dialectic*: The art or practice of arriving at the truth by the exchange of logical arguments". *American Heritage Dictionary of the English Language, op.cit.*

23 *Mavrommatis Palestine Concession,* (Jurisdiction), *PCIJ*, Ser. A, No. 2 (1924), at 11.

24 As Abi Saab noted, in the *Mavrommatis* definition the Court dealt with the nature and the constitutive elements of the dispute, while in the *Chorzow* case, as well as in the *Certain German Interests in Polish Upper Silesia* case, it stressed the evolutionary and dynamic aspects of a dispute, addressing the issue of when a dispute arises and what the circumstances are that determine its existence. Abi Saab, G., *Les exceptions preliminaries dans la procedure de la Cour internationale. Etude des notions fondamentales de procedure et des moyens de leur mise en œuvre*, Paris, Pedone, 1967, 279 pp. , at 121.

on the *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania*, the ICJ, after examining diplomatic exchanges between the States concerned, noted that "...the two sides hold clearly opposite views concerning the question of the performance or non performance of certain treaty obligations..." and concluded that therefore "...international disputes have arisen"[25]. The same was said by the PCIJ in the Chorzow case, where the existence of a dispute was revealed by the fact that the two governments had "shown themselves as holding opposite views"[26], adding also that "...the manifestation of the existence of the dispute in a specific manner, as for instance diplomatic negotiations, is not required"[27].

However, in order to establish the existence of a dispute it is not sufficient for a party to assert that a dispute exists with the other party. In other words, and this leads to a second requirement, to become a dispute, a mere situation must have crystallized into open disagreement. To be more specific, if a mere *difference of opinion* "exists as soon as one of the Governments concerned points out that the attitude adopted by the other conflicts with its own views"[28], to claim the existence of a *dispute* it must be proved that one party's claims are unequivocally opposed by the other party. In the *South West Africa* cases, indeed, the World Court held that:

> "A mere assertion is not sufficient to prove the existence of a dispute any more than a mere denial of the existence of the dispute proves its non-existence. Nor is it adequate to show that the interests of the two parties to such case are in conflict. It must be shown that the claim of one party is positively opposed by the other"[29].

In other words, in the case law of the World Court a dispute may be said to have arisen when a party presents to another a specific claim, based upon an alleged breach of the law, and the latter rejects it[30]. Therefore, according to the World Court, the existence of a dispute is an objective fact[31]. And this remains valid even when the disagreement has not been fully articulated or made explicit. In its

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25 *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania* (First Phase), Advisory Opinion, ICJ Reports 1950, pp. 65–119, at 74. See also *South West Africa* (Ethiopia v. South Africa; Liberia v. South Africa), Preliminary Objections, Judgment, ICJ Reports 1962, pp. 6–505, at 328 and the *Northern Cameroons* (Cameroon v. United Kingdom), Judgment, ICJ Reports 1963, pp. 15–196, at 27; *Applicability of the Obligation to Arbitrate under Section 21 of the United Nations Headquarters Agreement of 26 June 1947*, Advisory Opinion, ICJ Reports 1988, pp. 12–39, at 27, para. 35.

26 *Interpretation of Judgments Nos. 7 and 8 (Factory at Chorzow)*, Judgment, *PCIJ*, Ser. A, No. 11 (1927), at 11.

27 *Ibid.*, at 10.

28 *Certain German Interests in Polish Upper Silesia* (Jurisdiction), *PCIJ*, Ser. A, No. 6 (1925), at 14.

29 *South West Africa* (Ethiopia v. South Africa; Liberia v. South Africa), Preliminary Objections, Judgment, ICJ Reports 1962, pp. 319–662, at 328. See also *Applicability of the Obligation to Arbitrate*, at 27, para. 35, and *Interpretation of Peace Treaties*, at 74.

30 Murty, B.S., "Settlement of Disputes", Sorensen, M. (ed.), *Manual of Public International Law*, New York, St. Martin's Press, 1968, pp. 673–738, at 675; De Visscher, Ch., *Aspects récents du droit prodédural de la Cour internationale de justice*, Paris, Pedone, 1966, 219 pp., at 22. As Abi Saab remarked, this is tantamount to a negative agreement (contrat à l'envers), or, to put it in other words, an agreement to disagree. Abi Saab, *Les exceptions preliminaries*, *op.cit.*, at 125.

31 "Whether there exist an international dispute is a matter of objective determination". *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania*, First Phase, Advisory Opinion, ICJ Reports 1950, at 74.

advisory opinion rendered in 1988 in *Applicability of the Obligation to Arbitrate*, the ICJ held that:

> "where one party to a treaty protests against the behavior or a decision of another party, and claims that such behavior or decision constitutes a breach of that treaty, the mere fact that the party accused does not advance any argument to justify its conduct under international law does not prevent the opposing attitudes of the parties from giving rise to a dispute concerning the interpretation or application of the treaty"[32].

As further evidence, in the case concerning the *United States Diplomatic and Consular Staff in Teheran*, Iran, which refused to participate in the proceedings before the Court, did not try to justify the alleged breach of the Vienna Conventions of 1961 and 1963, nor did the Court see the need to inquire about Iran's attitude in order to establish the existence of a dispute with the United States[33].

Third, if the existence of a dispute needs to be established objectively, it still need not arise from any factual circumstance. Again, in the advisory opinion *Applicability of the Obligation to Arbitrate*, the ICJ stated that:

> "the existence of a dispute does not presuppose a claim arising out of the behavior of or a decision by one of the parties, it in no way requires that any contested decision must already have been carried into effect. What is more, a dispute may arise even if the party in question gives an assurance that no measure of execution will be taken until ordered by decision of the domestic courts"[34].

These are, therefore, the minimum requirements the World Court has determined for the existence of a dispute suitable to be settled by reference to international law[35], or, to use the legal terminology, its justiciability. It follows that a justiciable dispute might become moot, either before being brought to the Court or while pending, simply because these minimum requirements have disappeared. In the *Northern Cameroons* case (1963), the ICJ was faced with a disagreement between Cameroon and the United Kingdom on the interpretation of a United Nations trusteeship agreement that was no longer in force. Moreover, the applicant (Cameroon) had advanced no claim for reparation. In declining to adjudicate the case, the Court affirmed that:

> "The Court's judgment must have some practical consequences in the sense that it can affect existing legal rights or obligations thus removing uncertainty from their legal relations. No judgment on the merits in this case would satisfy these essentials of the judicial function"[36].

Again, in the first phase of the *Nuclear Tests* dispute (1973–1974), the majority of the Court considered the French Government's pledge to discontinue tests a signal

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32 *Applicability of the Obligation to Arbitrate*, at 12.

33 *United States Diplomatic and Consular Staff in Teheran* (United States/Iran), Judgment, ICJ Reports 1980, pp. 3–65.

34 *Applicability of the Obligation to Arbitrate*, at 30, para. 42.

35 Nonetheless, the parties to a dispute may refer a case to the ICJ for a decision *ex aequo et bono*. ICJ Statute, art. 38.2.

36 *Northern Cameroons*, Judgment, at 33–34.

that a dispute between the parties no longer existed[37]. Nonetheless, four dissenting judges noted that the claims advanced by the applicants were rejected by the French Government on legal grounds. And in their opinion:

> "these circumstances in themselves suffice to qualify the present dispute as a dispute in regard to which the parties are in conflict as to their legal rights and as a legal dispute"[38].

This is the way the World Court, for the purpose of the determination of its jurisdiction, has defined a dispute. An applicant's failure to show the existence of a dispute, by meeting the Court's multiple tests, has usually been grounds for rejecting the case[39].

The existence of a dispute is not the only factor that determines whether a certain dispute settlement procedure can be activated, or, in the case of judicial means, its "justiciability". The *nature* of the dispute has also equally important bearing. To illustrate, article 33 of the UN Charter requires the parties to a dispute to seek a solution to it by any peaceful means of their own choice. However, this obligation is not absolute but regards only those disputes "...the continuance of which is likely to endanger the maintenance of international peace and security". In the case of the international judicial bodies, the fundamental divide is between legal and political disputes (or, for that matter, between legal disputes and any other kind of disputes[40]). While the former are justiciable, the latter are generally unsuitable for adjudication. Hence, article 36.2 of the Statute of the ICJ indicates that

> "the States parties to the present Statute may at any time declare that they recognize as compulsory ipso facto and without special agreement the jurisdiction of the Court in all *legal disputes*...[emphasis added]".

In the *Nicaragua* case, the ICJ pointed out that, although it was

> "...aware that political aspects may be present in any legal dispute brought before it [, t]he Court, as a judicial organ, is however only concerned to establish, first, that the dispute before it is a legal dispute, in the sense of a dispute capable of being settled by the application of principles and rules of international law, and secondly, that the Court has jurisdiction to deal with it..."[41].

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37 *Nuclear Tests* (Australia v. France), Judgment, ICJ Reports 1974, at 253, at 270–271.

38 See Joint Dissenting Opinion of Judges Jiménez de Aréchaga, Dillard, Onyeama and Waldock, *ibid.*, at 366.

39 *Electricity Company of Sofia and Bulgaria*, Judgment, *PCIJ*, Ser. A/B, No. 77, (1939), pp. 64, at 83; *Northern Cameroons*, Judgment, at 33–34; *Nuclear Tests* (Australia v. France), at 260 and 270–271.

40 In the *Southern Bluefin Tuna* case, Japan contested the jurisdiction of the ITLOS to prescribe provisional measures because it claimed that the dispute was "scientific" and not "legal". The Tribunal rejected Japan's objection by observing, *inter alia*, that the dispute also concerned points of law, and by citing the ICJ definition of disputes contained in the *Mavrommatis* and *South West Africa* cases. *Southern Bluefin Tuna* cases, (New Zealand v. Japan) (Australia v. Japan), Cases No. 3 and 4, Order of August 27, 1999, para. 42–44.

41 *Border and Transborder Armed Actions* (Nicaragua v. Honduras), Jurisdiction and Admissibility, ICJ Reports 1988, at 91, para. 52.

Nonetheless, when the Court, on the instance of the respondent party, has been called on to determine whether a dispute submitted to it was legal or political, it has invariably found unacceptable the view that, "...because a legal dispute submitted to the Court is only an aspect of a political dispute, the Court should decline to resolve for the parties the legal question at issue between them..."[42], because, "...if the Court were, contrary to its settled jurisprudence, to adopt such a view, it would impose a far-reaching and unwarranted restriction upon the role of the Court in the peaceful solution of international disputes"[43].The fact that a legal dispute is at the same time a political dispute does not preclude a judicial body from taking cognizance of it even when, while the dispute is *sub judice*, attempts are made to settle it by a political institution, such as the UN Security Council[44].

All in all, the distinction between the political and legal elements of a dispute seems to be more of a subjective rather than objective nature[45]. The question of whether a dispute is "legal" arises in limited circumstances; for instance, when a treaty provides that a specific means of settlement shall be employed for legal disputes[46]. Although it is still of some consequential importance in States' practice, it has lost much of its significance in legal theory.

Be that as it may, the notion of what constitutes a dispute, as developed by the World Court through its case law, is of limited use outside the Court's domain. This particular concept has been developed only to determine what is a justiciable dispute. Therefore, while it still maintains a certain value, for the purpose of this study is somewhat too narrow. Indeed, starting from the wider definition provided by the PCIJ in *Mavrommatis* ("a disagreement on a point of law or fact, a conflict of legal views or of interest between the parties"), the ICJ has gradually narrowed the scope of its action, describing a justiciable dispute as a specific disagreement concerning a matter of fact, law or policy in which a claim or assertion of one party is met with refusal, counter-claim or denial by another. In other words, the ICJ has narrowed the description given by the PCIJ that embraced both dispute avoidance and dispute settlement activities, to a definition which suits only the specific issue of dispute settlement.

In other instances disputes might have been defined otherwise and not necessarily with a higher degree of clarity. Just to cite one peculiar example, article 31 of

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42 *Case Concerning United States Diplomatic and Consular Staff in Teheran*, pp. 19–20.

43 *Idem*, at 20, para. 37.

44 Steinberger, H., "Judicial Settlement of International Disputes", in Bernhardt, R. (ed.), *Encyclopedia of Public International Law*, Elzevier, Amsterdam, 1981–, Vol. 3, at 48.

45 As Higgins remarked, a dispute is a "legal dispute" if it is to be resolved by authoritative legal decision, no matter what the component elements of that dispute. In other words, there is little reality in any definition of a political, or legal, question; what is relevant is the distinction between a political *method* and a legal *method* of solving disputes". Higgins, R., "Policy Considerations and the International Judicial Process", *I.C.L.Q.*, Vol. 17, 1968, pp. 58–84, at 74.

46 "La distinction entre les deux catégories de différends correspond en dernière analyse à une preoccupation qui concerne l'opportunité de soumettre les différends à telle méthode de règlement plutôt qu'à telle autre suivant les caractères qu'ils offrent". Basdevant, J., "Règles générales du droit de la paix", *Hague Academy of International Law, Collected Courses*, Vol. 58, 1936–IV, pp. 471–692, at 682, cited in Pazartzis, P., *Les engagements internationaux en matière de règlement pacifique des différends entre états*, Paris, LGDJ, 1992, at 39, note 12.

the 1994 International Tropical Timbers Agreement distinguishes between complaints and disputes. It says:

> "Any complaint that a member has failed to fulfill its obligations under this Agreement and any dispute concerning the interpretation or application of this Agreement shall be referred to the Council for decision. Decision of the Council on these matters shall be final and binding"[47].

This is definitely awkward wording. A distinction between complaints and disputes might have been warranted only if the former had to be submitted to one body and the latter to another. But, given that both have to be referred to the same organ (the Council), it is difficult to see the reason for such fussiness.

For the purpose of this research, a stricter notion of dispute is required. It should be wide enough not to be limited to adjudicative means of settlement, stretching out to encompass both diplomatic means and the newest so-called non-compliance procedures, but at the same time narrow enough to have a scientific meaning. Therefore, starting from the original *Mavrommatis* definition (i.e. "a disagreement on a point of law or fact, a conflict of legal views or of interest between the parties"[48]), the term "dispute" will be used in this work to designate any conflict of view or of interest which takes the form of opposing claims between the parties[49]. As a further requirement, the subject of the dispute will be specific enough to be formulated with sufficient clarity and concreteness for a third party, being either a State or an international body (judicial body or other non judicial dispute settlement mechanism), to form an opinion on it and to try to settle it[50].

Therefore, in this study what is meant by "dispute" is:

> Any conflict of views or of interests, taking the form of opposing claims between the parties, specific enough and formulated with sufficient clarity to allow a third party, being either a State or an international body, to try to settle it.

By this standard, the accident which took place at the Chernobyl nuclear power plant in 1986 and the ensuing worldwide concern about its consequences do not qualify as an international dispute, or even as a cause of an international dispute. While all European States touched by nuclear fall-out from Chernobyl voiced their concern about it, none ever raised the issue of the Soviet Union's liability. There were, in other words, no opposing claims, and thus no dispute.

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47 International Tropical Timber Agreement, (111), art. 31. The number in parenthesis refers to the corresponding entry in the list of "Multilateral Environmental Treaties containing Dispute Settlement Provisions" attached at the beginning of this study. Full reference in footnotes will be provided only for treaties not containing dispute settlement provisions.

48 *Supra*, note 23.

49 This definition has been, by and large, taken from Bailey, S., *Peaceful Settlement of Disputes: Ideas for Proposals and Research*, London, UNITAR, 1970, at 9.

50 Charles De Visscher defined a dispute as "a disagreement between states on a matter sufficiently circumscribed to lend itself to definite claims susceptible of rational examination". De Visscher, C. (trans. Corbett, P.E.), *Theory and Reality in Public International Law*, Princeton, N.J., Princeton University Press, 1968 (Rev. Ed. 1968), pp. XII – 527, at 353.

Similarly, the issue of the proliferation and use of nuclear weapons, which in the early 1990s was the subject of two different requests for an advisory opinion by the ICJ[51], will not be included in this study. While it is possible to identify two different parties (i.e. those States possessing nuclear weapons and those which do not possess them and oppose their use or even the mere threat of use) that do have a conflict of interests, the issue has never been formulated precisely enough to become the subject of legal claims suitable for third-party settlement.

2.2. Defining the Term "International"

The *Merriam Webster's Collegiate Dictionary* defines the adjective "international" as: "Of, relating to, or involving two or more nations" and as "extending across or transcending national boundaries"[52]. This is the layman's notion of the word. Mass-media usually talk indifferently of international organizations, international crime or international pop stars. However, the notion of what is international is quite more narrow in the international (*sic!*) legal discourse. In this case "international" traditionally designates something of, relating to, or involving two or more sovereign States, either directly or indirectly (e.g. as in the case of so-called international organizations). In this sense the term "international" is not wholly correct; the term that should be used is "interstate" (or perhaps more handsomely in French "*interétatique*"). Many contemporary States, indeed, are not national, but rather multi-national, being composed of people of more than one nationality, like Russia or India.

This notion of what is international, and therefore of what lies within the domain of international law, is burdened by the Westphalian tenets. Only States are subjects of international law but, at the time of the Peace of Westphalia (1648), Nation-States were triumphing, hence the terminological misnomer. However, during last hundred years a number of other actors have emerged on the "international scene" which do not correspond to the canons elaborated more than three centuries ago. Nowadays, international organizations, non-governmental organizations, multinational corporations and individuals are, to varying degrees, endowed with their own set of rights and duties under international law. The scope of this particular body of law has gradually expanded to include them.

As international law is presently structured, there exist fora where disputes can be litigated and settled between two or more sovereign States (e.g. the ICJ, the International Tribunal on the Law of the Sea [ITLOS], or the World Trade Organization Dispute Settlement Body); an individual against a sovereign State (e.g. human rights bodies such as the European Court of Human Rights or the Inter-American Court of Human Rights); the international community as a whole against an individual (e.g. in the case of the war crimes tribunals); an international organization against a sovereign State (e.g. in the case of various environmental regime bodies for the control of the implementation of international obligations or

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51 *Legality of the Use by a State on Nuclear Weapons in Armed Conflict*, Advisory Opinion, ICJ Reports 1996, pp. 65–224; *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, *ILM*, Vol. 35, 1996, pp. 809–938.

52 "International", *Merriam Webster's Collegiate Dictionary*, 10th ed., 1997.

the case of the ITLOS for disputes between the Sea Bed Authority and States parties to the 1982 Convention on the Law of the Sea); an individual against an international organization (e.g. the World Bank Inspection Panel); a corporation against a State or, less often, vice-versa (e.g. in the case of International Centre for the Settlement of Investment Disputes); or, finally, a corporation against another corporation (e.g. in the case of arbitration under the auspices of the International Chamber of Commerce or the World Intellectual Property Organization). All these types of disputes are settled according to international law by international bodies.

Nonetheless, whenever disputes are litigated in domestic fora by entities which are not nationals of the same State, international lawyers resort to different terms. In those cases, the term "transnational disputes" (disputes which are not settled above domestic jurisdictions by international bodies, but rather through [*trans*] different domestic jurisdictions), is resorted to in lieu of "international disputes". The *discrimen*, therefore, seems to lie not so much in the actual parties to the dispute (i.e. two or more sovereign States) but rather in the type of jurisdiction which will be used to attempt to settle it (i.e. an international body).

The notion of what constitutes an "international dispute" in this study is somewhat more narrow than the current notion of what falls within the purview of international law. In this study only disputes litigated before international bodies by sovereign States will be taken into consideration. This runs counter to the historical tendency towards the enlargement of the scope of the adjective "international". However, it has the merit of ensuring a consistency of methodology. Disputes between sovereign States are deeply different in origin, dynamics and outcomes from those between other actors in the international scene.

Nonetheless, a caveat should be introduced. The term "disputes between States" in this study means "disputes litigated by States" and not necessarily "disputes caused by States' actions". Indeed, only very rarely do disputes arise out of acts committed directly by States which affect other States. One such example would be activities carried out by a State organ (e.g. the national army, a typical expression of State's sovereign power) that affect the State's territory or the global commons (e.g. the dumping in the sea of spent nuclear fuel or warheads). However, more often disputes arise out of acts committed by natural or legal persons, which are nationals of a given State, that affect either the territory of other States or other natural or legal persons in those countries. For instance, the *Lake Lanoux* dispute between Spain and France, which will be discussed in further detail in this study, arose out of the possibility that an action of a State-owned corporation (i.e. Electricité de France) might ultimately affect Spanish farmers[53]. Similarly, the *Trail Smelter* arbitration case was caused by actions of a Canadian private corporation affecting U.S. nationals[54]. In both cases, the claims of nationals were espoused by State authorities and thereby became State claims[55].

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53 *Infra*, Ch.III.5.

54 *Infra*, Ch.III.8.

55 The Permanent Court of International Justice provided the classical definition of espousal in the *Panevezys-Saldutiskis Railway Case*. In that seminal case, the World Court stated that diplomatic protection is a situation in international law where, "in taking up the case of one of its nationals, by resorting to diplomatic action or international judicial proceedings on his behalf, a State is in reality asserting its own right, the right to ensure in the person of its nationals respect for the rules of international law". *Panevezys-Saldutiskis* Railway, *PCIJ*, Ser. A/B, No. 76, (1939), at 16.

Therefore, if the formal source of the dispute were used as discriminant to distinguish between international disputes and non-international disputes, there would be almost no international environmental disputes. This study will focus on disputes between sovereign States, regardless of their factual cause or origin. Moreover, State's involvement must be genuine. To qualify for this study, conflicting claims upon which the dispute is based must have become State claims after their espousal and States must be fully involved in the final settlement. This is the reason why the *High-Ross Dam* dispute is not included in this study. That dispute arose in the 1970s out of a plan by the city of Seattle, Washington, to elevate an existing hydroelectric dam. By doing so, the new dam would have inundated a relevant share of the Skagit River Valley in British Columbia, Canada, a popular recreational area. Admittedly, the dispute was dealt with by the International Joint Commission, an international body established by the 1909 Canada-USA Boundary Waters Treaty. However, the presence of Canada and the United States before the International Joint Commission during the proceedings was very limited and the agreement that eventually put an end to the controversy was entered into directly between British Columbia and the city of Seattle[56]. The Canadian and the U.S. Governments merely facilitated the settlement playing no major role in the origin, development or disposal of the issue.

Therefore, for the purpose of this study the term "international dispute" means:

> Any conflict of views or of interests, taking the form of opposing claims *between two or more States*, specific enough and formulated with sufficient clarity to allow a third party, being either a State or an international body, to try to settle it.

2.3. Defining the Term "Environment"

Defining the notion of environment is a daunting task, certainly more difficult than defining the terms "dispute" and "international". Indeed, "environment" is like "time". A term that everyone seems to understand but no one is able to define. During the last half century or so, the term "environment", has become a buzz-word, resorted to in all sorts of contexts, resulting, therefore, in imperfect, unclear, even misleading dialogues and in the oversimplified reduction of complex matters to a single code-word[57].

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56 Seattle and British Columbia reached an agreement for a term of 80 years under which Seattle will not raise Ross Dam. Instead, Seattle will purchase from British Columbia an amount of power equivalent to that which would be produced by raising Ross Dam. Seattle will pay an amount equivalent to the cost of raising Ross Dam. British Columbia may generate part of that power by raising its Seven-Mile Dam by 15 feet, flooding a portion of a Washington valley owned by Seattle City Light. Parker, P.M., "High Ross Dam", *Washington Law Review*, Vol. 58, 1983, pp. 444–464, at 457, note 95.

57 Young, G., "Environment: Term and Concept in the Social Sciences", *Social Science Information*, Vol. 25, 1986, pp. 83–84.

Any attempt to define the term presents a number of difficulties which stem both from the lack of any agreed definition and from the multiplicity of interpretations that have been given, through different ages and by different schools of thought, to the universe and the interaction between its elements. Indeed, the environment is a concept and an associated set of cultural values that have been constructed through the way language is used[58]. There is no objective environment in the phenomenal world, no environment separated from the words used to represent it.

The notion of environment has evolved in the course of time. It was first conceptualized and defined by philosophers and natural scientists. Their findings, filtered to the public at large by mass-media, have shaped the cultural notion of environment. Finally, and with a certain time-lag, international law and policy makers have transformed these views into norms, embodying them into domestic and international legal instruments. Accordingly, the following pages will first address the scientific and subsequently the cultural and legal terminology used to designate the "everything surrounding us".

2.3.1. The Scientific Notion of Environment

The problem of getting to a meaningful definition of the term "environment" for the purpose of this study essentially originates from the lack of a single scientific notion. Natural and social sciences, quite obviously, have defined the object of their study differently. As a consequence, dictionaries usually do not carry a single definition but a range of notions. According to the *American Heritage Dictionary of the English Language*, "environment" in general indicates: "The circumstances or conditions that surround one; surroundings". More precisely, it designates:

> "The totality of circumstances surrounding an organism or a group of organisms, especially: a) The combination of external physical conditions that affect and influence the growth, development, and survival of organisms; b) The complex of social and cultural conditions affecting the nature of an individual or a community"[59].

The definition of "environment" as the circumstances, objects, or condition by which one is surrounded, while etymologically correct, is far too broad and is scientifically meaningless[60]. From a narrow biological point of view, it helps to differentiate between an organism and its surroundings (e.g. the human skin or the cellular wall separate different living organisms from their respective external worlds, meaning their "environments"). From a philosophical point of view this

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58 Herndl, C.G/Brown, S.C., "Introduction", *idem*, *Green Culture: Environmental Rhetoric in Contemporary America*, Madison, The University of Wisconsin Press, 1996, XII–315 pp., at 3.

59 *American Heritage Dictionary of the English Language, op.cit.* Other dictionaries provide, with varying degrees of scientific exactitude (e.g. "the complex of physical, chemical and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival"), similar definitions. *Merriam Webster's Collegiate Dictionary*, 10th ed., 1996.

60 The etymology of the word "environment" [in German *Umwelt*, etymologically "the world around". *Um* (around) + *Welt* (World)] derives from the French word *environ*, meaning "around", "round about", "to surround", "to encompass". "*Environ*" originated from the Old French *virer* and *viron* (together with the prefix *en*), which mean "a circle", "around", "the country around", "or circuit".

definition answers the need to differentiate between man and nature, the latter meaning "the material world and its phenomena"[61]. However, the distinction between organism and environment or between man and nature becomes blurred when one considers living beings and the external world not as separate, static entities, but rather as interacting components of complex dynamic systems.

Defining the term "environment" as "the combination of external physical conditions that affect and influence the growth, development, and survival of organisms" or, in substantially the same way, as "the complex of [abiotic] and biotic factors that act upon an [organism or] community and ultimately determine its form and survival"[62], is a step towards a narrower and scientifically meaningful definition. Moreover, it has the merit of closing the gap between the notion of "environment" and that of "ecosystem", another term which has been frequently resorted to. Indeed, "ecology" is the science that studies the web of relationships between living organisms and their living and non-living surroundings[63], *alias* environment. These interdependent living and non-living parts make up "ecosystems" (e.g. a forest, lake or estuary)[64]. Larger ecosystems or combinations of ecosystems are "biomes" (e.g. the Arctic tundra, a desert, a prairie grassland)[65]. Finally, the Earth, with its surrounding envelope of life-giving water and air and all its living things, forms the "biosphere"[66].

However, by merely defining the environment as "the combination of external physical conditions that affect and influence the growth, development, and survival of organisms", one encounters the opposite problem. Indeed, this notion, while suitable for limited natural science purposes, is too narrow because it does not take into consideration the social and cultural factors which directly or indirectly affect the development, life and activities of certain species, the human race foremost, in the short and long terms. Indeed, social and cultural factors, beside varying enormously in quality and influence from group to group, include elements which are immaterial but which have, nonetheless, a bearing on individuals and communities. In certain cases, their influence not only goes well beyond other material factors but may even modify the impact that material factors have on the life and activities of living organisms. To illustrate this point, the global warming phenomenon, which has recently been the object of international cooperative

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61 *American Heritage Dictionary of the English Language, op.cit.*

62 *Merriam Webster's Collegiate Dictionary, op.cit.*

63 "*Ecology* (1873): 1.a. The science of the relationships between organisms and their environments. Also called "bionomics"; b. The relationship between organisms and their environment; 2. The branch of sociology that is concerned with studying the relationships between human groups and their physical and social environments. Also called human ecology; 3. The study of the detrimental effects of modern civilization on the environment, with a view toward prevention or reversal through conservation. Also called human ecology. [German *Ökologie* : Greek *oikos*, (house) + German – *logie*, (study) (from Greek – *logia*, – logy)]". *American Heritage Dictionary of the English Language, op.cit.*

64 "*Ecosystem* (1935): An ecological community together with its environment, functioning as a unit". *Ibid.*

65 "*Biome* (1901). A major regional or global biotic community, such as a grassland or desert, characterized chiefly by the dominant forms of plant life and the prevailing climate". *Ibid.*

66 "*Biosphere* (1899) 1. The part of the Earth and its atmosphere in which living organisms exist or that is capable of supporting life; 2. The living organisms and their environment composing the biosphere". *Ibid.*

efforts[67], is the result of the impact of a cultural factor (i.e. the industrial revolution) on a abiotic factor (i.e. the Earth's climate) through the modification of the effects that solar radiation has on the Earth's atmosphere.

Excluding social and cultural factors from the notion of environment risks downplaying the impact of hundreds of thousands of years of human presence on this planet. However, including social and cultural factors in the notion of environment stretches the boundaries of the notion so far as to incur once again in the risk of being too broad. A definition of environment which encompasses cultural elements[68], or which makes the notion of environment relative to the observer[69], while retaining a certain scientific value, is perhaps too broad and therefore useless for the purposes of this study. We need, therefore, to enlarge the scope of our research to other areas.

2.3.2. The Cultural Notion of "Environment"

What do people mean when they use the word "environment"? It is difficult to give a straightforward answer to this seemingly easy question because the notion is in constant flux[70]. On the one hand, the understanding of the positive and negative feed-back linking all elements of the universe has ceaselessly evolved under the impulse of the progress of scientific knowledge. On the other hand, culture has determined both the direction of scientific research and the interpretation of its findings[71]. The net result has been a constantly changing cosmology[72]. We tried to analyze whether there exists a single scientific notion of "environment". Yet, since international law and international relations are cultural phenomena, to give a meaningful content to the term "environment" for the purpose of this research, it is necessary to look also at how culture has interpreted the "everything surrounding humankind" and how this notion has dynamically evolved.

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67 1992 United Nations Framework Convention on Climate Change, (105).

68 To a bush-man of Australia, the "environment" includes not only all living creatures, the earth on which he walks, the air, the sun, the stars, etc., but also something less material like the spirits of his ancestors.

69 For instance, the "perceptual environment" differs from species to species and indeed, from one organism to another. While infrared waves make a lot of sense to vipers and ultrasound waves to baths, a book makes sense only to human beings, and not necessarily to all of them.

70 The summary of the evolution of the notion of the term "environment" presented in this sub-section is extremely sketchy. It is impossible to present an extremely complex social phenomenon in such a limited space in a satisfactory way. For a more comprehensive discussion of the cultural facets of the term environment and of the various social movements associated with it, see, *inter alia*, Dubos, R. (edited by Eblen, W.R.), "Environment", Eblen, R.A./Eblen W.R., *The Encyclopedia of the Environment*, Boston, Houghton Mifflin, 1994, XVII–846 pp., at 208–211; Dunlap, R.E./Mertig, A.G., "Environmental Movement", *ibid.*; Wall, D. (ed.), *Green History*, London, Routledge, 1994, pp. XI–273; Simmons, I.G., *Interpreting Nature: Cultural Constructions of the Environment*, London, Routledge, 1993, XIII–215 pp.; Deléage, J.P., *Histoire de l'écologie: une science de l'homme et de la nature*, Paris, Découverte, 1992, 330 pp.

71 "Culture: The totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought". *American Heritage Dictionary of the English Language*, *op.cit.*

72 "Cosmology: The study of the physical universe considered as a totality of phenomena in time and space". *Ibid.*

The first concerns for the actual or potential impact of human activity on the "natural" equilibrium are contemporaneous to the beginning of the industrial revolution. Two centuries ago, in 1798, Thomas Malthus came to the conclusion that unchecked population growth would sooner or later clash with the finiteness of natural resources. The "*Principle of Population*", therefore, raised for the first time in history the issue of the sustainability of economic development[73]. Yet, it took some decades before a general consciousness of the potentially devastating effects that a rapidly growing population, coupled with massive industrialization, might have on the planet could filter from a few enlightened philosophers to the public at large.

During the nineteenth century extensive exploration of the planet and ruthless colonization made humankind aware of both the vast potential in natural resources of the planet and their ultimate finiteness. While naturalists were discovering thousands of new species in every recess of the planet, they were also finding out that extensive hunting had led to, as in the case of the Dodo (*Raphus Cucullatus*)[74], and would continue to lead to, the extinction of other species. In other words, from the late nineteenth until the mid-twentieth century, humankind started regarding the surrounding world as an extremely rich, though limited, potential for growth[75]. Accordingly, during this period the focus was on the conservation of natural resources (conservationism), and the most commonly used term to indicate this pool of resources was "nature" (hence the various societies for the protection of nature, wildlife, particular habitats or species, such as the panda, tiger, elephant, whale, etc.). In the eyes of the growing urbanized masses, the world's nature was epitomized by the embalmed specimens which the museums were ferociously competing to collect from every latitude, and by the rapidly shrinking and increasingly remote outdoors[76].

Between the early 1950s and the late 1970s the focus shifted from particular species to the protection of the quality of the world in which human beings live (which became known as environmentalism). In these years "pollution" became a familiar word. Contamination of the planet by harmful substances started receiving world-wide attention, and a number of major industrial catastrophes (e.g. the wrecking of the tanker Torrey Canyon [1967]; the mercury-induced diseases in Minamata, Japan [1950s]; the accident at a chemical facility in Seveso, Italy, [1976]) got wide media coverage. Moreover, the population of the industrialized world increasingly saw its quality of life threatened by those same factors which were making its per-capita income rapidly grow. Crippling pollution, which was geographically dispersed, sometimes with delayed, subtle and indirect effects but nonetheless potentially harmful for human life, became a major

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73 Malthus, T. R., *Essay on the Principle of Population as it Affects the Future Improvement of Society with Remarks on the Speculations of Mr. Godwin, M. Condorcet and Other Writers*, London, J. Johnson, 1798.

74 The Dodo was a large, clumsy, flightless bird formerly on the island of Mauritius in the India Ocean, that has been extinct since the late seventeenth century.

75 Kurlansky, M., *Cod: A Biography of the Fish that Changed the World*, New York, Penguin, 1997, at 121–122.

76 Davis, P., *Museums and the Natural Environment: The Role of Natural History Museums in Biological Conservation*, London, Leicester University Press, 1996, XVII–286 pp.

concern. During these three decades, the term most commonly resorted to was "environment". Despite its origins being relatively remote (1827), the word "environment" became part of everyday language in the 1960s, replacing "nature" as a term to indicate everything surrounding us. And since the first international efforts to address the problems affecting the Earth date from this period[77], it should be no surprise that the term "environment" has become the hallmark, though sometimes abused, of a number of disciplines, international environmental law among them.

Finally, after "conservationism" and "environmentalism", the 1980s and 1990s have been the decades of "ecologism". Although the word "ecosystem" had already been coined in 1935[78], in the past 15 years it has gradually replaced "environment" as a general buzz-word. This substitution was triggered, in the beginning of the 1980s, by an increasing abandonment of anthropocentrism – which is implicit in environmentalism – in favor of an "ecocentric" approach. In the era of ecologism, ecosystems are to protected for the benefit of all species and not only for the human race. The human race, in other words, has been gradually demoted from the position of God's favorite creature to a mere species among the species. From Adam to *Homo Sapiens*. Consequently, the focus has gradually shifted towards extremely diverse phenomena, where the human race is not necessarily at one end of the cause-and-effect chain. These diverse phenomena, such as climate change, often have synergetic effects and are potentially irreversible and harmful, to varying degrees, to all life on Earth.

Over the past two centuries, people have deeply changed the way they look at "everything surrounding them". As challenges mutate (e.g. from local hazards to planetary crisis), human beings try to conceptualize them in different ways. International environmental law is said to have been born in 1968, during the hey-days of environmentalism[79]. This is, to a great extent, the reason why through this study we will use the terms "environment" and "environmental dispute" to designate the object of this research, rather than "ecosystem" and "eco-dispute". Moreover, the majority of cases analyzed in this study took place before the word "ecosystem" became of current use. Resorting to it when neither the parties nor the judges who attempted to settle the dispute did so, would generate confusion. "Environment" is, in other words, an outdated term, but still necessary to keep this study intelligible to a larger audience.

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77 Kiss considers 1968 as the year in which international environmental law started playing a relevant role. Kiss, A. Ch., "The International Protection of the Environment", McDonald, R. St. J./ Johnston, D.M. (eds.) *The Structure and Process of International Law*, The Hague, Nijhoff, 1983, at 1070: "It may be considered that environmental law exists as such since the second half of the sixties and that, in particular, international environmental law appeared about 1968 with the first proclamation of general principles concerning water conservation and air pollution control and the decision of the UN General Assembly to organize a world-wide conference on the protection of the human environment. The result of this decision was the Stockholm Conference convened in June 1972, which can be regarded as a milestone in the short but rather rich history of international environmental law."

78 *Supra*, note 64.

79 *Supra*, note 77.

2.3.3. The Notion of "Environment" under International Law

It goes without saying that the lack of a generally accepted definition of the term "environment" is reflected in domestic and international legal instruments. By its very nature, law, in particular international law, tends to react slowly to changes in the society. In any event, it seldom anticipates them. This obvious statement leads to two observations. First, the development of both the scientific and the cultural notions of environment have deeply influenced the way lawyers have approached the issue. Second, in those few instances when legal scholars have tried to determine, for the purpose of a given norm or set of norms, what is part of the environment and what is not, the notion provided has been invariably extremely historicized, and therefore of scarce speculative interest. Indeed, by browsing through any collection of environmental treaties, it is not difficult to guess in which decade those agreements were concluded merely by looking at the preambulary clause containing the definitions.

Very few treaties, declarations, codes of conduct, guidelines, or similar instruments, have attempted to define the term "environment". No doubt this is because, as was pointed out above, it is difficult both to identify and to restrict the scope of such an ambiguous word. Perhaps the lack of a general framework convention on the protection of the environment can be blamed for the absence of a generally agreed definition. But this cannot be the only explanation. In those few instances when an attempt to get to a definition has been made, States have usually preferred a sectorial approach by defining, case by case, what constitutes, for the purposes of that treaty and only that treaty, "marine environment", "Antarctic environment", "flora and fauna", "ecosystem", etc., rather than venturing into the quagmire of a general notion. The quest for a synthetic definition of "environment" has almost been abandoned altogether since the beginning of the 1990s, in part because it is, after all, of scarce legal significance and in part because "environment" has been gradually replaced by "ecosystem" as term of choice.

The "mother of all environmental declarations" (i.e. the Final Declaration of the 1972 United Nations Stockholm Conference on the Human Environment, otherwise called "the Stockholm Conference") does not contain a definition of the term "environment" but rather vaguely refers to "man's environment ...which gives him physical sustenance and affords him the opportunity for intellectual, spiritual, moral and social growth" [80] adding that "both aspects of man's environment, the natural and the man-made, are essential for his well-being and enjoyment of basic human rights"[81].

Besides not being a definition of the term but rather an explanation of what the role of the environment is, or what the drafters of the declaration whished to be, this statement, because of its extreme anthropocentric approach, is obsolete and could not be regarded as a term of choice under contemporary international law. It could also be noted that this definition is gender-biased, as it refers to man's environment and not human environment.

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80 Report of the United Nations Conference on the Human Environment, Stockholm, 1972, A/CONF. 48/14/Rev. 1 (New York, 1972), at preamble, para. 1

81 Ibid.

Fourteen years and some hundreds of environmental treaties later, in 1986 the World Commission on Environment and Development (WCED), in its report "Our Common Future" quite laconically defined environment as "...where we all live"[82]. Needless to say, this definition is too vague and of little scientific use. Significantly enough, the Final Declaration of the 1992 Rio Conference on Environment and Development does not contain a definition of "environment" nor of "ecosystem".

If soft-law instruments do not help shed light on the normative content of the term "environment", international treaties are even less useful. Either they have avoided the problem or they have shyly confined themselves to the purposes of that particular regime. To illustrate this point, the 1980 Convention on Conservation of Antarctic Marine Living Resources (CCAMLR) defines the "Antarctic ecosystem" as:

> "the complex or relationships or marine living resources with each other and with their physical environment"[83].

The 1988 Convention on the Regulation of Antarctic Mineral Resource Activities defines "damage to the Antarctic environment" as:

> "any impact on the living or non-living components of that environment or those ecosystems, including harm to atmospheric, marine or terrestrial life"[84].

The 1985 Vienna Convention on the Protection of the Ozone Layer defines "adverse effects on the environment" as:

> "changes in the physical environment or biota, including changes in climate, which have significant deleterious effects on human health or on the composition, resilience and productivity of natural and managed ecosystems, or on materials useful to mankind"[85].

The 1979 Convention on Long-range Transboundary Air Pollution defines air pollution as:

> "the introduction by man, directly or indirectly, of substances or energy into the air resulting in the deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and material property and impair or interfere with amenities and other legitimate uses of the environment"[86].

Finally, the 1982 United Nations Convention on the Law of the Sea (UNCLOS) does not contain a definition of the "marine environment", but it is generally understood that it includes both the atmosphere and the marine life itself [87].

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82 World Commission on Environment and Development, *Our Common Future: The Report of the World Commission on Environment and Development*, New York, Oxford University Press, 1987, 400 pp., at XI.

83 1980 Convention on Conservation of Antarctic Marine Living Resources, (67), art. 1, para. 2 and 3.

84 1988 Convention on the Regulation of Antarctic Mineral Resource Activities, (90), art. 1, para. 15.

85 1985 Vienna Convention on the Protection of the Ozone Layer, (78), art. 1, para. 2

86 1979 Convention on Long-range Transboundary Air Pollution, (65), art. 1.a.

87 Nordquist, M. H. (ed.), *The United Nations Convention on the Law of the Sea: A Commentary*, Dordrecht, Nijhoff, 1991, para. 42–43.

Not even the World Court, which provided the archetypal definition of a dispute in the *Mavrommatis* case[88], has been able to get any closer to a workable definition of the environment. In the Advisory Opinion rendered in 1996 on the *Legality of the Threat or Use of Nuclear Weapons*[89], it stated:

> "The Court...recognizes that the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn"[90].

The sanction of the supreme judicial body of the United Nations of the fact that the environment is not only an abstract notion but also something tangible is perhaps supererogatory. Yet, when it comes to define what empirical reality corresponds to the word "environment", the Court does not add much to States' fruitless efforts.

The only significant attempt to come to a general definition of environment under international law has recently been made by the Working Group of Experts on Liability and Compensation for Environmental Damage arising from Military Activities, established by UNEP to assess what constituted, within the purview of Security Council Resolution 687 (1991), environmental damage and depletion of natural resources resulting from Iraq's unlawful invasion and occupation of Kuwait[91].

The Report of the Working Group stated that "it is safe to say that the term environment includes abiotic and biotic components, including air, water, soil, flora, fauna and the ecosystem formed by their interaction"[92]. Moreover, according to the Working Group "there is also authority in international environmental agreements for the proposition that "environment" also includes cultural heritage, features of the landscape and environmental amenity"[93]. Finally it noted that "a broad construction of the term would be consistent with the more recent treaties and acts of international organizations". Indeed, the Group felt that, consistently with current State practice, on balance the term environment should tend to be broadly construed, and that a narrow and exclusionary construction should only be taken if a broad approach would lead to absurd or unreasonable results[94].

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88 *Supra*, note 23.

89 *Legality of the Threat or Use of Nuclear Weapons*, (Advisory Opinion), *ILM*, Vol. 35, 1996, pp. 809–938.

90 *Ibid.*, para. 29, at 821.

91 The United Nations Security Council Resolution 687 of April 3, 1991, reads: "Iraq ... is liable, under international law, for any direct loss, damage – including environmental damage and the depletion of natural resources – or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait". UNSC Res. 687, (April 3, 1991), *ILM*, Vol. 30, 1991, at 846, para. 16. Cottereau, G., "De la responsabilité de l'Iraq selon la Résolution 687 du Conseil de Sécurité", *A.F.D.I.*, Vol. 37, 1991, at 99; David, E., "La guerre du Golfe et le droit international", *Revue belge de droit international*, 1987, Vol. 20, pp. 153–183; Low, L./Hodgkinson, D., "Compensation for Wartime Environmental Damage: Challenges to International Law after the Gulf War", *Virginia Journal of International Law*, Vol. 35, 1995, pp. 406–483.

92 UNEP, *Report of the Working Group of Experts on Liability and Compensation for Environmental Damage arising from Military Activities*, May 17, 1996, para. 42.

93 Ibid.

94 *Idem*, para. 43.

Despite these bold observations, the Working Group partly backed off, concluding that it was not possible, on the basis of existing international legal instruments, to conclude that the international community had taken a clear and consistent direction towards a particular definition[95]. According to the members of the Working Group, State practice is still too scarce and inconsistent to conclude that the international community has come to any agreed definition of the term "environment".

2.4. In Quest of a Definition of "International Environmental Dispute"

2.4.1. Some Previous Attempts

Now that the terms "dispute", "international" and "environment" have been discussed, with varying degrees of conclusiveness, it is possible to try to put forth a definition of "international environmental dispute" which, though limited in scope to this study, still might be meaningful.

Very few attempts have been made in the past to define an "international environmental dispute". Perhaps the inherent difficulty to define the term "environment" has defused those few attempts. More likely, this is due to the fact that very few scholarly works have been specifically dedicated to the issue of the peaceful settlement of international environmental disputes. This fact by itself justifies this work.

Two endeavors, however, deserve particular attention. The first one is the definition proposed in 1975 by Richard Bilder. In his seminal course on the peaceful settlement of environmental disputes, held at The Hague Academy of International Law, he defined an international environmental dispute as

"any disagreement or conflict of views or interests between States relating to the alteration, through human intervention, of natural environmental systems"[96].

Bilder's definition of international environmental dispute, indeed, closely recalls the generic definition of dispute put forward by the Permanent Court of International Justice in the *Mavrommatis* case ("a disagreement on a point of law or fact, a conflict of legal views or of interest between the parties"[97]), which has, since then, become the paradigm. Undoubtedly, it has the merit of conciseness and relies on the weight of its illustrious precedent. Moreover, it excludes from its scope natural alterations, confining itself to human intervention. Yet, it is still too generic and it does not distinguish between degradation and improvement of the "natural environmental systems", nor does it refer to the notion of ecosystem which, nowadays, has become central to international discourse.

A more specific definition was given in 1986 by another legal scholar, who suggested that:

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95 *Idem*, para. 41.

96 Bilder, R.B., "The Settlement of Disputes in the Field of International Law of the Environment", *Hague Academy of International Law, Collected Courses*, Vol. 144, 1975–I, pp. 141–239.

97 *Supra*, note 23.

> "An international environmental dispute exists whenever there is a conflict of interest between two or more States (or persons within those States) concerning the alteration and condition (either qualitatively or quantitatively) of the physical environment"[98].

This definition includes "not only cases in which one State wishes to continue the activity causing the alteration to another State's territory or to a shared resource, while the other State wishes it to cease, but also cases in which there is a common interest in the discontinuance (and reversal) of the alteration, since there is still the potential for conflict in the apportionment of costs and benefits of the action to be taken[99]". However, this definition does not suit this study, first because by referring to "persons within those States" it enlarges the domain of international environmental disputes to so-called transnational disputes. Second, it speaks about alterations generically, without qualification. Third, it does not specify the source of the alteration.

2.4.2. A New Notion of "International Environmental Dispute"

These were perhaps the only two attempts made by international legal scholars to define an international environmental dispute. However, despite their value, we feel the need to adjust these definitions, taking into consideration the rapid and recent evolution of international environmental law. Indeed, they date back more that twenty and ten years, respectively, and therefore, *panta rei*, they need to be updated. What we would like to put forward here is a new definition of environmental dispute hinged on the concept of "ecosystem" rather than "environment"[100] (although, as it was explained, we will resort to the word "environment" throughout this study[101]). However, to do so it is necessarily first to introduce the concept of "ecosystem".

2.4.2.1. The Notion of Ecosystem

An "ecosystem" (short for "ecological system" and otherwise called "biogeocoenosis") is "an ecological community together with its environment, functioning as a unit"[102]. Ecosystems vary greatly in size (from the universal to the micro-biological scale) and characteristics. Moreover, it is possible to distinguish between natural and cultural ecosystems, the latter being the result of the addition of cultural (i.e. anthropogenic) factors to natural ecosystems. For instance, the so-called polder is the typical example of a cultural ecosystem. A polder is an area of low-lying land, especially in The Netherlands, that has been reclaimed from a body

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98 Cooper, C.A., "The Management of International Environmental Disputes in the Context of Canada-United States Relations: A Survey and Evaluation of Techniques and Mechanisms", *Can.Y.I.L.*, Vol. 24, 1986, pp. 247–313, at 243.

99 Ibid.

100 The arguments put forward in this section have been modeled, by and large, on a short paper by Stephan Libiszewski. Libiszewski, S., "What is an Environmental Conflict?", *Environment and Conflicts Project (ENCIO) Occasional Paper N. 1*, Zurich/Berne, Center for Security Policy and Conflict Research/Swiss Peace Foundation Berne, 1992, pp. 1–13. This paper can also be found on the Net. <http://www.fsk.ethz.ch/encop/1/libisz92.htm> (Site last visited on August 17, 1997).

101 *Supra*, Ch.I.2.3.2, last paragraph.

102 *American Heritage Dictionary of the English Language*, *op.cit.*

of water and is protected by dikes. In such a case, human intervention has shaped a natural ecosystem (e.g. a marsh) into something new, which did not exist before and which hosts a number of other species.

Yet all ecosystems, natural or cultural, large or small, have two common features. First they are circular. The ecological community influences the biotic and abiotic environment and vice-versa. Second, they tend to be self-regulating. Indeed, ecosystems show a tendency to maintain an equilibrium, where each component influences and checks the others' expansion by way of positive and negative feedback. This equilibrium is dynamic. Once it has been destabilized, an ecosystem will eventually find a new and different balance.

2.4.2.2. Degrading v. Improving Effects of Ecosystemic Alterations

Not all changes in ecosystems are due to the influence of random natural events. This holds true only in the case of strictly natural ecosystems (e.g. in the case of a meteorite falling on Earth and causing the extinction of dinosaurs). Some alterations are side-effects of human activities and may even be the result of deliberate social choices, as in the case of the polders. The reciprocal interplay between natural and cultural components in cultural ecosystems is illustrated by people shaping their environments and, in turn, by the "humanized" environments influencing the evolution of human societies. Marsh drainage leads to an increase of crop land which in turn increases food availability to sustain a larger population.

These interactions, which constantly destabilize the ecosystem's equilibrium, are neutral from the point of view of the ecosystem itself. It is a process of adaptation and regulation in which all possible equilibria have the same value. It is only from the point of view of a subject that a change in the ecosystem's balance can acquire a value, or, to put it in other words, that it can be regarded as a degradation or an improvement. To continue with the same example, the drained marsh might be regarded either as an improvement (by local inhabitants, who will avoid malaria) or as a degradation (by other species, such as mosquitoes, which will lose their habitat). It is not enough, therefore, to qualify environmental disputes as those disputes arising out of "alterations of the physical environment"[103]. It is necessary to specify whether they are to be regarded as improvements or degradation and from whose point of view.

Admittedly, shifting the focus from the notion of "environment" (anthropocentrically biased) to that of "ecosystem" might trigger absurd results. Indeed, this work cannot and does not intend to deal with the peaceful resolution of conflicts between different species, such as mosquitoes or whales versus human beings, even though in the distant future this might become a classroom example. Still, it is possible to look at changes in the ecosystem's equilibrium as potential or actual sources of conflict from the point of view of human beings without giving away the ecosystemic approach. The choice of a particular observer does not necessarily jeopardize the "acentric" and circular nature of the system. The focus of this study, therefore, will be only on those alterations of the ecosystem's balance which have a detrimental effect on the human race. Furthermore, this study will disregard modifications of the ecosystem's equilibrium which, though detrimental to human beings,

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103 *Supra*, note 98.

are merely the effect of random natural events. Admittedly, so-called natural catastrophes (e.g. earthquakes, landslides, tornadoes, etc.) frequently are disastrous environmental consequences of human folly[104]. Indeed, while natural events which precipitate natural catastrophes are beyond human control, vulnerability to their effects are typically the product of human activity[105]. But disputes arising out of naturally caused alterations of the ecosystem (e.g. disputes resulting from a change in the Earth's climate caused by a shift of its axis) lie outside the scope of this work.

2.4.2.3. Renewable v. Non-Renewable Resources

Besides the distinction between degrading and improving effects of ecosystemic alterations, a further differentiation, this time between renewable and non-renewable resources, should be introduced. The essential feature of a renewable resource is its ability to be integrated into the ecological feedback cycle, which eventually guarantees the replacement or preservation of its quantity and/or quality. Typically, all living resources are, given certain conditions, renewable. For instance, a forest, even when it has been destroyed by fire, might eventually grow again. For certain non-living resources (e.g. air, fresh water, fertile land, etc.), their quality if not their quantity can also be regarded as renewable. In certain conditions sewage water can be purified and become drinkable again. However, other non-renewable resources (such as minerals), while still part of the cycle, are unidirectional. Admittedly, even fossil fuels are, because of their organic origin, theoretically renewable. However, it takes several hundred thousand years for them to form, which makes their regeneration, from a human point of view, purely speculative. Therefore, one can conclude that, once exhausted, non-renewable resources cannot be reintegrated into the ecosystem. In other words, they can be depleted but not degraded.

It follows that while the combustion of oil in the atmosphere is an example of environmental (notably air) degradation, the extraction and consumption of oil by itself cannot be regarded as an environmental degradation, but only as depletion. Even the total exhaustion of the world's oil reserves, or by the same token any mineral, such as gold, does not represent by itself a degradation of the ecosystem. Admittedly, it would be a net reduction of the world's wealth (and create serious economic problems if a cost-efficient alternative were not discovered), but from the ecological point of view it would not amount to degradation, unless it were proven that its disappearance undermined the natural ecosystem. Conversely, the total exhaustion of the world's fresh water or fisheries (both renewable resources) would amount to a net degradation of the ecosystem because it would produce negative effects on human health, not to mention other species. Conflicts over the possession of or access to oil and other non-renewable resources are, therefore, within the purview of this study, not to be regarded as "environmental". Rather

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104 Handl, G., "Internationalization of Hazard Management in Recipient Countries: Accident Preparedness and Response", Handl, G./Lutz, R., *Transferring Hazardous Technologies and Substances*, London, Graham and Trotman, 1989, pp. 106–128, at 109.

105 Final Report of the World Conference on Natural Disaster Reduction. Yokohama, Japan, May 23–27, 1994, (Annex I, point I.A.1). UN Doc. A/CONF. 172/9. See also Pepe, V., "Il messaggio di Yokohama – La conferenza mondiale sulla prevenzione delle catastrofi", *Rivista giuridica dell'ambiente*, Vol. 10, 1995, pp. 161–167.

they are economic or social conflicts. This is the reason why this study will discuss the peaceful settlement of disputes such as the *Gabcikovo-Nagymaros* case[106] over the diversion of the Danube waters, or the fisheries dispute between Canada and Spain[107], but not the controversies between Western oil companies and Gulf countries over oil concessions[108].

2.4.2.4. Resource Scarcity

The concept of environmental degradation leads to another important differentiation concerning the concept of "resource scarcity"[109]. Natural resources, both renewable and non-renewable, are or can become scarce because of several factors, both natural and anthropogenic. More specifically, one can distinguish four types of scarcity. First, a resource might be rare or *physically scarce.* Minerals, such as titanium, or animals such as the Panda, are extremely uncommon. Second, a resource might be relatively abundant but unequally distributed on Earth. Oil and kangaroos might be found only in certain regions of the globe. Their uneven distribution makes them relatively abundant within one State and absent in another. This is the so-called *geo-political scarcity.* Third, resources might be unevenly allocated between and within different societies. In most countries a small percentage of the population possesses the great majority of resources. In a similar way a few States own the bulk of the world's wealth. This kind of scarcity can be aptly called *socio-economic scarcity.*

None of these three types of scarcity will be the object of this study. This explains why we will not dwell upon the problem of the delimitation of the respective spheres of sovereignty of the coastal States over the continental shelf, nor on the North-South debate on environment and development. Rather, one could identify a fourth type of scarcity which is caused by the overuse (e.g. when the consumption rate is higher than the replenishment rate) of natural resources. In other words, scarcity generated by the failure to achieve sustainable management of natural renewable resources. Indeed, while by definition renewable resources can in principle be restored to their original quality and quantity, this is no more longer when their regenerative capacities are overstrained[110]. In this case regeneration might simply not be cost-effective, or conflicts might arise over who pays the "cleaning-up bill". It is only in this last case, of *environmental scarcity*, that

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106 *Infra*, Ch.III.7.

107 *Infra*, Ch.III.3.

108 For instance, the arbitration held on March 24, 1982, on the expropriation of oil concessions (*Kuwait v Aminoil*), *International Law Reports*, Vol. 66, pp. 518–627.

109 The following distinction between physical, geopolitical, economic and environmental origins of resource scarcity problems is taken from Rees, J., "Resources and the Environment. Scarcity and Sustainability", Bennett, R.J./ Estall, R. (ed.), *Global Change and Challenge. Geography for the 1990's*, London, Routledge, 1991, XII–264 pp.

110 This is the case, for instance, of the so-called endangered species, whose reproduction rate is lower than the death rate, or of the Amazon forest. Trees can be planted again, but the resulting ecosystem will be something quite different and poorer that the original. One may also mention the case of soil heavily contaminated by pollutants such as lead, cadmium, radioactive materials, etc.

renewable resources become relevant sources of disputes for the purpose of this study.

This categorization has two crucial implications. First, it excludes non-renewable resources from our specific interest. These resources, indeed, can only be physically, geo-politically or economically scarce. Second, as renewable resources can also be physically, geo-politically or socio-economically scarce, the emphasis will not be put on their capacity of regeneration, but rather on their capacity to be degraded. It is only when renewable resources are degraded up to a point where they are environmentally scarce that they will become, for the purpose of this study, a source of dispute[111]. Thus, conflicts over the allocation of territories which contain cropland, which is typically a renewable resource, might come within the purview of this study only if the land becomes the object of a dispute as a result of man-caused soil erosion, climate change, changes of river flows, pollution, etc. Therefore, conflicts such as the two World wars and most colonial and de-colonization wars, which have been regarded by Westing as environmental conflicts, will not be regarded as environmental disputes[112].

In brief, anthropogenic alterations of the ecosystem, having detrimental effect on human society and leading to environmental scarcity of natural resources, are what this study means by "environmental" cause of dispute.

2.5. What this Study Means by "International Environmental Dispute"

In light of the conclusions reached on the terms "dispute", "international" and "environment", a satisfactory definition of an international environmental dispute could be the following:

> A conflict of views or of interest between two or more States, taking the form of specific opposing claims and relating to an anthropogenic alteration of an ecosystem, having detrimental effect on human society and leading to environmental scarcity of natural resources.

This study will deal only with disputes which meet this test. It follows that disputes which have not been caused by environmental problems, as here defined, but

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111 The inclusion in this work of the *Phosphates* dispute (*infra* Ch.III.10) is consistent with the methodological criteria here expounded. Although phosphates are a non-renewable resource, the real object of the dispute was the rehabilitation of the mined-out land (a renewable resource) and not the depletion of phosphates themselves.

112 *Supra*, note 14.

which nonetheless might contain some environmental aspects will be equally excluded[113].

There are two further caveats that should be introduced. First, only those international environmental disputes which have been subject to an international adjudicative process entailing a binding decision will be taken into account. Admittedly, States relatively seldom resort to adjudicative means (i.e. settlement through third-party intervention according to the law and entailing a binding decision) to settle their disputes, and this is even more true for environmental disputes. The settlement of disputes between States by judicial action is only one facet of the enormous problem of the maintenance of international peace and security[114]. However, there are signs that international courts and tribunals are increasingly gaining a central role in the life of the international community.

The past few years have seen a significant increase in the number of cases being brought to well-established bodies (including the International Court of Justice, the International Centre for the Settlement of Investment Disputes (ICSID), and regional and global human rights bodies). The modification of other systems (e.g. the introduction of the panel system and of the Appellate Body of the World Trade Organization) and the creation of new bodies (e.g. the Implementation Committee of the Montreal Protocol on Ozone Depleting Substances and the International Tribunal on the Law of the Sea) provide additional fora for the resolution of international disputes. For their part, non-State entities are increasingly playing a role in international dispute settlement mechanisms. Finally, as commercial and other activities become increasingly transnational, venues for the settlement of commercial disputes (e.g. ICSID or the Court of Arbitration of the ICC) grow in importance. Moreover, the unprecedented growth of the international judiciary has been accompanied by an increased willingness by members of the international community to use these bodies. The dockets of some of them are better filled than ever.

International environmental disputes have been adjudicated only by a few of these bodies, and the potential of the international judiciary to address environmental issues has not yet been duly explored. This study intends to tap the knowledge acquired in two particular areas (i.e. the World Court and *ad hoc* arbitration) to draw a few lessons which could eventually facilitate the work of others.

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113 For instance, in the *Passage through the Great Belt* case (Finland v. Denmark) there were some environmental considerations, such as the impact on the Baltic of the modification of the sea-bed between Denmark and Sweden, caused by the building of a fix traffic connection across the East and West Channels of the Great Belt (Storebaelt). Yet, this was not the gist of the dispute. What Finland actually claimed was that the effect of the Danish project would be permanently to close the Baltic for deep draught vessels of over 65 meters height, thus preventing the passage of drill ships and oil rigs manufactured in Finland, as they require more than that clearance. *Passage through the Great Belt* (Finland v. Denmark), Provisional Measures, Order of July 29, 1991, ICJ Reports 1991, pp. 12–39.

114 Brownlie, I., *Principles of Public International Law*, Oxford, Clarendon Press, 1990, fourth edition, XLVIII–748 pp., at 708.

As a second consideration, the ambition of this study is to assess the capacity of adjudicative means of settlement (among them in particular those of arbitration and of recourse to the World Court) to *resolve* international environmental problems[115].

115 The focus on the capacity of adjudicative means of settlement to resolve international environmental disputes justifies the exclusion from this study of the *Gut Dam* arbitration. The so-called *Gut Dam* dispute took place between the United States and Canada from 1952 through 1968. It was caused by extensive property damage in U.S. territory, along the southern shore of Lake Ontario and the St. Lawrence River during the 1951–1952 winter, as a result of an unexpected increase in the average water level. The United States, espousing hundreds of claims of its nationals, claimed that the damage had been caused by a dam built in 1903 by Canada on the St. Lawrence River (the so-called Gut Dam). Canada, conversely, disputed both the extent of damages suffered by U.S. citizens and the role played by the dam in the floods.

The dispute developed through several steps. First, the affected individuals filed claims in the competent U.S. Federal Court, but their claims were turned down on procedural grounds. While these actions were pending, the U.S. and Canadian Governments asked the International Joint Commission to investigate and report on the issue. The IJC Report concluded that the Gut Dam was only one of the factors, along with heavy rain and high winds, that caused the damages, and this reinforced Canada's belief that she did not owe compensation to the affected individuals. In order to overcome the reluctance of Canada to negotiate a settlement, in 1962 the U.S. Congress authorized the Foreign Claims Settlement Commission to begin adjudication for the validity and amount of the claims. Meanwhile, under pressure of the progressing work of the Foreign Claims Settlement Commission, negotiations re-opened. They eventually led, in 1965, to the conclusion of an *ad hoc* arbitration agreement which set up the "Lake Ontario Claims Tribunal United States-Canada" to decide finally on the merits and amount of damages (Canada-US Lake Ontario [Gut Dam] Arbitration Agreement, *ILM*, Vol. 4, 1965, pp. 468–476). However, in 1968, before the Tribunal could render its judgment, Canada and the U.S. agreed to a lump-sum settlement of $350,000 and proceedings before the Tribunal were accordingly discontinued.

While the Gut Dam dispute is usually included by international doctrine in the discussion of the principles of international environmental law, and still retains value as an example of a settlement of damages arising out of human interference with the environment, it will not be included in this study. Indeed, this work intends to assess the capacity of certain means for the peaceful settlement of disputes to resolve satisfactorily environmental controversies by removing the cause of the problem. The alleged cause of the floods that hit the southern shore on the Lake Ontario in the winter of 1951–1952 was the Gut Dam. However, because of the work required in connection with the realization of the St. Lawrence sea-way, during the following winter Canada removed it. Therefore, once the alleged cause of the damages had been removed, what remained was mere litigation on the amount of damages. And in this respect the history of the Gut Dam dispute does not substantially differ from that of many other international settlements of claims arising out of various activities, such as war. In short, the problem of the flooding of the southern Ontario shore, therefore, was not resolved by the Lake Ontario Claims Tribunal but rather by a unilateral action of Canada, prompted by considerations other than the avoidance of damage to the environment.

On the Gut Dam dispute see: Report of the Agent of the United States before the Lake Ontario Claims Tribunal, *ILM*, Vol. 8, 1969, pp. 118–143; The Foreign Claims Settlement Commission and the Lake Ontario Claims Program, *ILM*, Vol. 4, 1965, pp. 473–476; Lillich, R.B., "The Gut Dam Claims Agreement with Canada", *A.J.I.L.*, Vol. 59, 1965, pp. 892–899; Erades, L., "The Gut Dam Arbitration", *Nederlands Tijdschrift voor Internationaal Recht*, Vol. 16, 1969, pp. 161–206; Kerley, E.L./Goodman, C.F., "The Gut Dam Claims. A Lump-Sum Settlement Disposes of an Arbitrated Dispute", *Virginia Journal of International Law*, Vol. 10, 1970, pp. 300–327; Re, E.D., "International Claims Adjudication: The United States-Canadian Agreement", *Buffalo Law Review*, Vol. 17, 1967–68, pp. 125–134; Piper, D. C., *The International Law of the Great Lakes*, Durham, N.C., Duke University Press, 1967, at 83–84; Bédard, Ch., *Le régime juridique des Grands Lacs de l'Amérique du Nord et du Saint-Laurent*, Québec, Les Presses de l'Université Laval, 1966; Chandler, J.G./Vechsler, M.J., "The Great Lakes-St. Lawrence River Basin from an IJC Perspective", *Canada-United States Law Journal*, Vol. 18, 1992, pp. 261–282.

Indeed, there is often a discrepancy between an environmental problem and the international dispute precipitated by it. Settlement of the latter does not necessarily resolve the former. The dispute may well be localized while the problems are much more internationalized[116]. Or the parties to the dispute (two sovereign States) might simply not be the ultimate stake-holders and beneficiaries of the settlement.

Too often international legal scholars have been concerned with the process itself rather than with its results. Invariably, scholarly articles on international legal cases deal with the origins of a dispute, the proceedings and the judgment. Some venture to asses the coherence and consistency of the judgment rendered with international law. None, however, take the trouble to look at what happened in terms of the environmental problem that caused the dispute. What happened to the Pacific Fur Seals after the arbitral award was rendered? Did they disappear or were they preserved? What happened to the Columbia River valley after the Trail Smelter company adopted the measures ordered by the Arbitral Tribunal? What happened to the water of the Carol River? And to the people of Nauru? And what of the water level of the Meuse after the judgment rendered by the PCIJ?

Answering these questions is essential to assess the effectiveness of adjudicative means. Some legal scholars might be satisfied with the broad statements of principle contained in the judgments rendered by international courts and tribunals. However, it should be taken into account that, if the parties to a dispute took the trouble to go through a lengthy and expensive judicial procedure, they did so only because they were convinced that their factual problems might eventually be resolved (unless, of course, one of the parties intends to use courts and tribunals to put pressure on the other party to get to an extra-judicial settlement). This is the benchmark that States will use to determine whether it is worth referring future international environmental disputes to adjudication. Wider legal statements, such as the much quoted assertion made by the *ad hoc* arbitral tribunal in the *Trail Smelter* arbitration[117], are of little use to those adversely affected by fumes, unless they trigger the resolution of the problem.

Was the dispute between Australia and New Zealand on one side and France on the other over nuclear tests in the South Pacific settled because of the involvement of the ICJ? Did noxious fumes stop drifting down the Columbia River Valley because of the award rendered by the Arbitral Tribunal? Was the judgment rendered by the ICJ in the *Fisheries Jurisdiction* dispute between the United Kingdom, West Germany and Iceland of any relevance to the settlement of the dispute and eventual preservation of herring and cod stocks? This study intends to answer these and other questions.

The following chapter will analyze how dispute settlement procedures are applied to international environmental disputes through the prism of multilateral environmental treaties. This particular focus on multilateral arrangements is justified

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116 Schneider, J., *World Public Order of the Environment: Towards an International Ecological Law and Organization*, Toronto, University of Toronto Press, 1979, at 182.

117 "[U]nder principles of international law, as well as the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein". Trail Smelter arbitration, *infra* Ch.III.8, United Nations, *Reports of International Arbitral Awards (RIAA)*, Vol. 3, 1949, pp. 1903–1982, at 1965.

by three observations. First, international environmental agreements have made an original contribution to the strengthening of the fundamental principle of the peaceful settlement of disputes. The existence of several international environmental agreements, providing for settlement procedures in the event of disputes arising out of their implementation, confirms the fact that States are indeed obliged to settle their disputes peacefully (i.e. without resorting to force). At the same time, the large range of measures provided reconfirms the principle of the "free choice of means".

But the exclusive focus on multilateral treaties could seem *prima facie* too narrow. Indeed, many innovative procedures for the settlement of environmental disputes have been developed in bilateral frameworks. In this sense, much is owed to the work of the International Joint Commission[118] established by the 1909 Boundary Waters Treaty[119]. Nevertheless, multilateral treaties can highlight the unique function that dispute settlement provisions and non-compliance procedures perform by brokering a plurality of interests, particularly in light of the emergence of so-called global interests, much better than mere bilateral agreements.

Finally, as bilateral environmental agreements can nowadays be counted by the thousands[120], reasons of expediency and practicality suggest focusing on a few hundred multilateral environmental treaties.

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118 On the role played by the International Joint Commission in the settlement of environmental disputes between Canada and the United States and in the development of international environmental law, see Gulden, T. M., "Transfrontier Pollution and the International Joint Commission: A Superior Means of Dispute Resolution", *Southwestern University Law Review*, Vol. 17, 1987, pp. 43–64.

119 1909 Treaty Relating to the Boundary Waters and Questions Arising along the Boundary Between the United States and Canada, Washington, January 11, 1909, reprinted in Rüster, B. / Simma, B., *International Protection of the Environment: Treaties and Related Documents*, Dobbs Ferry, Oceana, Vol. X, at 5158.

120 *Infra*, Ch.II.1.2.

II. Dispute Settlement Procedures in Multilateral Environmental Treaties

1. MULTILATERAL ENVIRONMENTAL TREATIES AND DISPUTE SETTLEMENT CLAUSES: AN OVERVIEW

1.2. Multilateral Environmental Treaties Thrive

The conclusion of multilateral treaties to address environmental problems is a relatively recent phenomenon. Although some international agreements of this kind had already been concluded back in the nineteenth century[1], it was not until the early 1950s that multilateral environmental treaties (METs) became a regular feature of international relations. Since then, the number of METs concluded each year has unremittingly increased, urging international legal scholars to talk about "treaty congestion"[2]. While until the end of the 1960s the average number of METs concluded each year was about three, from the beginning of the 1970s it almost doubled, to reach the astonishing figure of about 35 agreements concluded from 1990 to 1994 alone. By the end of 1999, therefore, by a modest count, there are thousands of international environmental agreements[3], of which about 270 are multilateral[4].

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1 For instance: Convention between Baden, Bavaria, Hesse, the Netherlands, Oldenburg, Prussia, Switzerland and Wurtenberg for the Uniform Regulation of Fishing in the Rhine, Berlin, June 30, 1885, *CTS*, Vol. 166, at 245-260.

2 See, *inter alia*, Handl, G., "Compliance Control Mechanisms and International Environmental Obligations", *Tulane Journal of International and Comparative Law*, Vol. 5, 1997, pp. 29-49, at 29-30; Brown Weiss, E., "Environmental Equity: the Imperative for the Twenty-First Century", Lang, W., *Sustainable Development and International Law*, London, Dordrecht, Boston, Graham & Trotman/M. Nijhoff, 1995, pp. XXI-219, at 17.

3 Kiss, A. Ch./ Shelton, D., *International Environmental Law*, Ardsley-on-Hudson, Transnational Publisher, 1990, at 96.

4 This figure has been obtained by basically relying upon: Burhenne, W.E. (ed.), *International Environmental Law: Multilateral Treaties – Droit international de l'environnement: traités multilatéraux – Internationales Umweltrecht: multilaterale Verträge*, 7 vols., Berlin, Erich Schmidt, 1974 – (loose-leaf service). This is the most comprehensive multilingual collection of multilateral (more than two parties) environmental treaties available. It is periodically updated. However, it is not exhaustive nor is the updating constant. Therefore, a number of other sources have been used to supplement the original list provided by Burhenne. They are: UNEP: *Register of International Treaties and Other Agreements in the Field of the Environment*, UNEP/ GC.16/Inf. 4, Nairobi, 1991; Kiss, A., Ch. (ed.), *Selected Multilateral Treaties in the Field of the Environment*, UNEP, Nairobi, 1983, Vol. 1; Rummel-Bulska, I./ Osafo, S. (ed.), *Selected Multilateral Treaties in the Field of the Environment*, UNEP, Nairobi, 1991, Vol. 2; Handl, G. (ed.), *Y.I.E.L.*, London, Graham and Trotman, Vols. 1-3 (1990-1993); *International Legal Materials*, Vols. 32-37, (1993-1998); United Nations Economic Commission for Europe (UN-ECE), *Environmental Conventions*, New York, United Nations, 1992.

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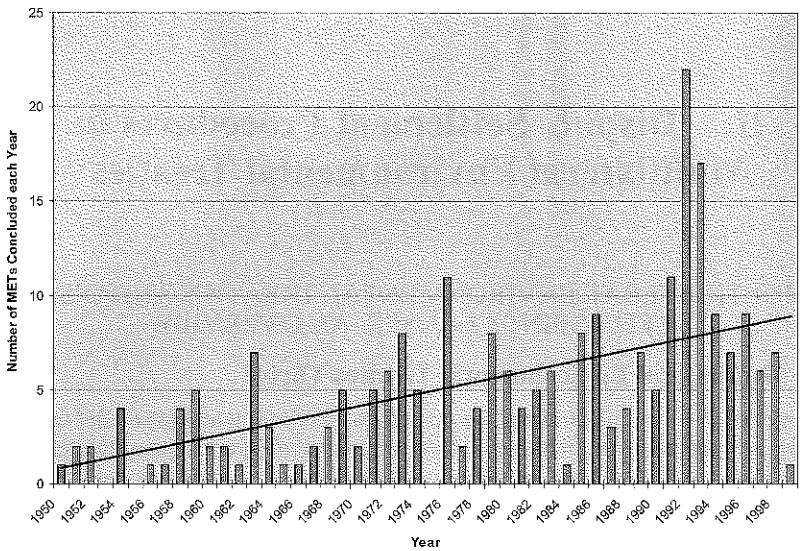

Chart 1 Number of METs concluded each year (1960–1999)

Nowadays, an extensive web of international legal instruments envelops most of contemporary environmental problems, including treaties addressing issues of biological diversity[5], air pollution[6], the transfer of hazardous wastes[7], the marine environment[8], fresh water resources[9], desertification[10] and the global

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Cont.

The number of METs collected by Burhenne is actually much larger than 240. However, Burhenne's notion of what constitutes a MET is much larger than the notion adopted in this study. Treaties such as the UN Charter, the North Atlantic Treaty, or the Constitution of the United Nations Industrial Development Organization, to cite but a few, are not considered as environmental for the purpose of this study. It is impossible to list all the treaties which are contained in Burhenne but that have been excluded here. For fast reference, however, all agreements designated by Burhenne as "Legal and Institutional Questions" (non-environmental) in the general index, Vol. 1, have been excluded. Moreover, Burhenne does not distinguish between METs and subsequent protocols. The figure of 240 METs includes only "original" treaties and not protocols to previous agreements. Finally, no distinction has been made in this study between treaties in force, treaties which never, or have not yet, entered into force, and treaties which have been terminated.

5 1973 Convention on the International Trade of Endangered Species, (49).

6 1979 Convention on Long-Range Transboundary Air Pollution, (65); 1992 United Nations Framework Convention on Climate Change, (105).

7 1989 Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, (92); 1991 Convention on the Ban of the Import of Hazardous Wastes into Africa and on the Control of their Transboundary Movements within Africa, (94).

8 1976 Convention on the Protection of the Mediterranean Sea against Pollution, (54); 1982 United Nations Convention on the Law of the Sea, (73); 1973 International Convention for the Prevention of Pollution from Ships (MARPOL), (50).

9 1991 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (101); 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses, (133).

10 1994 International Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, (120).

commons[11] (to cite but the major areas). Yet what the international community is still missing is a general treaty which could codify existing customary international environmental law and, eventually, develop it, as happened with the Vienna Conventions on the Law of the Treaties[12] or the Vienna Conventions on Diplomatic and Consular Relations[13]. As a matter of fact, the absence of a general treaty codifying the principles of customary international law on the protection of the environment is probably the cause of the large number of METs concluded each year[14]. When new environmental problems arise, a new treaty is needed immediately because few general principles seem to exist to respond to them[15].

In the past, some attempts have been made to codify the environmental rights and obligations of States under international law. On the Governmental level, the Final Declaration of the Stockholm Conference[16], that of the Rio de Janeiro Conference[17] and the World Charter for Nature[18] are the most notable examples. The Brundtland Report[19] and the International Covenant on Environment and Development[20], conversely, are perhaps the highest achievements of the non-Governmental sector. Yet, despite this strenuous efforts of progressive development of international law, these documents, however convincing they may be, still belong to the realm of soft law and fall short of an authoritative codification of international law[21].

The International Law Commission (ILC), the UN body devoted to the codification and progressive development of international law, has so far remained aloof from the problem. It was only in 1997, on the occasion of its 50th anniversary, that the ILC included the topic "The Law of the Environment: Rights and Duties of States for the Protection of the Human Environment" in its Long-Term Program of

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11 1959 Antarctic Treaty, (21); 1979 Agreement governing the Activities of States on the Moon and other Celestial Bodies, (66).

12 Vienna Convention on the Law of Treaties, Vienna, May 23, 1969, *UNTS*, Vol. 115, at 331; Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations, Vienna, March 21, 1968. UN Doc. A/CONF.129/15.

13 Vienna Convention on Diplomatic Relations, Vienna, April 18, 1961, *UNTS*, Vol. 55, at 95; Vienna Convention on Consular Relations, Vienna, April 24, 1963, *UNTS*, Vol. 596, at 261.

14 Koskenniemi remarked that "what is needed now is less the adoption of new instruments than more effective implementation of existing ones". Koskenniemi, M., "Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol", *Y.I.E.L.*, Vol. 3, 1992, pp. 123-162, at 123.

15 O'Connell remarked that not having a general treaty, indeed, is like having numerous safety regulations but no tort law. O'Connell, M.E., "Enforcing the New International Law of the Environment", *G.Y.I.L.*, Vol. 35, 1992, pp. 293-332, at 299.

16 Report of the United Nations Conference on the Human Environment, Stockholm, 1972, A/CONF. 48/14/Rev. 1 (New York, 1972).

17 Final Declaration of the United Nations Conference on Environment and Development, Rio de Janeiro, 1992, reprinted in Robinson, H.A. (ed.), *Agenda 21 and the UNCED Proceedings*, New York, Oceana, 1992, Vol. 1, at XCVII

18 UNGA Res. 37/7 (October 28, 1982). World Charter of Nature, 1983, UN Doc. A/37/51, at 19.

19 World Commission on Environment and Development, *Our Common Future*, Oxford, Oxford University Press, 1987, pp. 351.

20 Commission on Environmental Law of the IUCN (The World Conservation Union) in Cooperation with International Council of Environmental Law, *International Covenant on Environment and Development*, Bonn, IUCN, 1995, pp. XXIV-199.

21 For an assessment of these documents, see Pallemaerts, M., "International Environmental Law from Stockholm to Rio: Back to the Future?", Sands, Ph. (ed.), *Greening International Law*, *op.cit.*, pp. 1-19.

Work[22]. However, considering that the ILC has not in the past been noted for its celerity, there is but a slight chance that the issue will be dealt with in the foreseeable future. International Environmental Law, therefore, is likely to continue developing *ad hoc* and, as a consequence, the number of METs concluded each year is likely to remain large.

As international cooperative efforts tend to encompass an increasingly large array of problems, the frequency of dispute settlement clauses in multilateral environmental treaties and quality have changed, too[23].

1.2.1. Dispute Settlement Provisions in METs: A Quantitative Assessment

Many of the earliest METs did not provide for any dispute settlement procedure at all[24]. Yet, gradually things have changed. Indeed, in 1972, a study carried out by Curt Reithel at the University of Washington on the frequency of dispute settlement clauses in international treaties determined that only a quarter of international treaties concluded until then contained express provisions for the settlement of disputes[25]. However, the same study also found that the frequency of dispute settlement clauses has constantly increased both in absolute and relative terms[26]. Another study, this time focused only on METs, carried out at the beginning of the 1980s by Alexander Kiss concluded that one third of existing agreements contained some dispute settlement provisions[27]. Almost 20 years later, the share of

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22 Report of the International Law Commission on the Work of its Forty-Eighth Session, 6 May-26 July 1996, Annex II. General Assembly Official Records, Fifty-first Session, Supplement No. 10. UN Doc. A/51/10.

23 Boisson de Chazournes remarks that: "Le règlement des différends a progressivement reçu droit de cité dans le cadre des diverses conventions de protection de l'environnement. L'insertion de clauses de règlement des différends est, en effet, devenue depuis quelques décennies une pratique établie et celles-ci ont gagné en raffinement au cours des récentes années. S'ajoutent, en outre, a ce large éventail de possibilités diplomatiques et juridictionnelles, les possibilités offertes par les conventions de règlement des différends d'application générale." Boisson de Chazournes, L., "La mise en oeuvre du droit international dans le domaine de la protection de l'environnement: Enjeux et défis", *R.G.D.I.P.*, Vol. 99, 1995, pp. 37-76, at 41.

24 E.g. 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, Washington, October 12, 1940, *UNTS*, Vol. 161, at 193; 1946 International Convention for the Regulation of Whaling, Washington, December 2, 1946, *UNTS*, Vol. 161, at 72; 1971 Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Ramsar, February 2, 1971, *UNTS*, Vol. 996, at 245; 1972 Convention for the Protection of the World Cultural and Natural Heritage, Paris, November 16, 1972, *ILM*, Vol. 11, 1972, at 1358. It is worth noting that conventions establishing civil liability regimes for damage caused by oil pollution at sea or the carriage of hazardous and noxious substances at sea, too, do not contain provisions on inter-state dispute settlement relating to their interpretation and/or implementation.

25 Reithel, C. G., *Dispute Settlement in Treaties: A Quantitative Analysis*, Ph.D. Dissertation, University of Washington, 1972.

26 *Ibid.* One third of treaties published in the *United Nations Treaty Series*, from volume 588 through 799, contain dispute settlement provisions. Alhéritière, D., "Settlement of Public International Disputes on Shared Resources: Elements of a Comparative Study of International Instruments", in Utton, A.E./ Teclaff, L.A., (eds.), *Transboundary Resources Law*, Boulder, Co., Westview Press, 1987, pp. 139-149, at 147, note 70.

27 In 1982 Kiss calculated that one third of the existing conventions contained some dispute settlement provisions. Kiss, A. Ch., "Le règlement des différends dans les conventions multilatérales relatives à la protection de l'environnement", Dupuy, R.J. (ed.), *The Settlement of Disputes on the New Natural Resources*, Hague Academy of International Law, United Nations University, at 120.

METs containing some dispute settlement provisions has reached more than half, since it is possible to count no less that 150 dispute settlement provisions in some 270 concluded treaties[28].

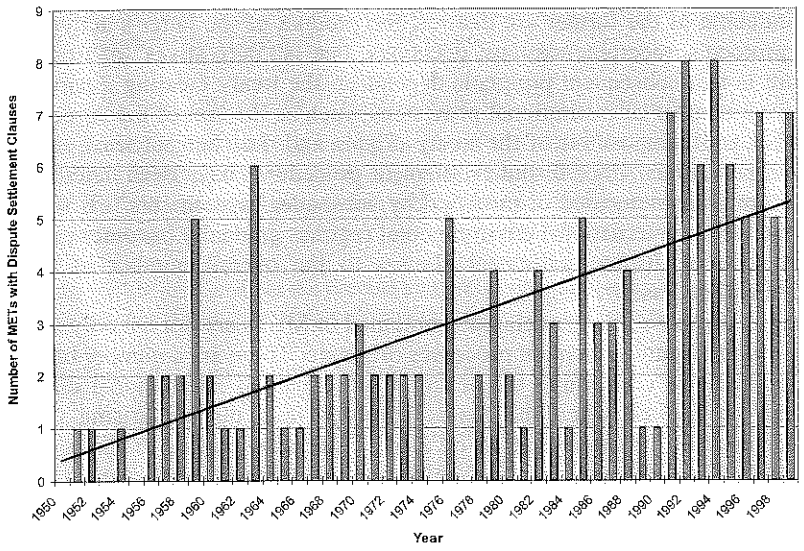

Chart 2 Number of METs containing a dispute settlement procedure concluded each year (1960–1999)

The constant increase in the proportion of METs endowed with some dispute settlement provisions proves not only the extreme vitality of this particular field of international law, but also two more facts. First, States consider environmental problems a touchy issue, from which disputes are likely to arise. Second, States seem to attribute paramount importance to the implementation of the agreements they negotiate, because dispute settlement provisions create a formal mechanism through which complaints about the implementation of the agreement by other parties can be made. However it is unlikely that the absolute number of dispute settlement clauses contained in multilateral environmental treaties will continue to grow.

Two considerations prompt this observation. First, at least for what concerns the environmental domain, there is a strong tendency towards the institutionalization of the international legislative process[29]. Several METs, and in particular those concluded since the beginning of the 1970s, established permanent institutions (e.g. a conference of the parties, a secretariat, several technical and scientific bodies, a fund, etc.) to pursue the agreements' goals and manage the resources

28 *Supra*, note 4.

29 Nearly 25 percent of METs concluded before the early 1990s created a new international institution with secretarial, review or coordinating functions. Sachariev, K., "Promoting Compliance with International Environmental Legal Standards: Reflections on Monitoring and Reporting Mechanisms", *Y.I.E.L.*, Vol. 2, 1991, pp. 31-52, at 33. There seems to be enough evidence to conclude prima facie that this figure has even increased during last decade.

which have been entrusted to them to this end. It goes without saying that, as this institution-building phenomenon increases, the international legislative activity will be gradually transferred from ad hoc international diplomatic conferences to the various treaty organs (typically the plenary organ of the agreement). While the typical outcome of the former are treaties, the product of the latter's activity are usually protocols, recommendations, decisions, that is "derivatives" of treaties[30]. The result is that subsequent protocols depend on the treaty creating a particular regime for a number of institutional provisions, such as the aim of the agreement, the number and composition of the treaty organs and, last but not least, dispute settlement provisions. Once dispute settlement procedures have been determined, they are rarely supplemented or modified by subsequent agreements[31]. It follows that, as the web of international environmental regimes gradually becomes exhaustive, the ratio of dispute settlement clauses to the overall number of METs concluded will necessarily drop.

Second, dispute settlement clauses contained in METs are not the only source through which dispute settlement processes originate. There are a number of other general agreements concerning the peaceful settlement of international disputes which can be applied when the States involved in a dispute arising out of the implementation or interpretation of a MET are also parties to that general agreement[32]. One example of the deference of dispute settlement clauses contained in METs to other larger international arrangements for the settlement of international disputes is provided by article 33.1 of the 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, which reads:

> "In the event of a dispute between two or more parties concerning the interpretation or application of the present Convention, the parties concerned shall, *in the absence of an*

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30 Admittedly, the Vienna Convention on the Law of the Treaties, *UNTS*, Vol. 1155, at 331, does not contain any such distinction. See art. 2.1.(a). However, while both treaties and protocols have the same legal value (i.e. they are both binding on the parties), the former can be regarded as the progenitors of the latter. Examples of these couples of "pivot" and "derivative" legal instruments are the 1985 Vienna Convention on the Protection of the Ozone Layer (78) and the 1987 Montreal Protocol (88); the 1979 Long-Range Transboundary Air-Pollution Convention (65) and its protocols (1985 Sulphur Protocol, (80); 1988 Protocol Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes, (91); 1991 Volatile Organic Compounds Protocol, (98); 1994 Protocol to the LRTAP on Further reduction of Sulphur Emissions, Oslo, June 14, 1994, text in Burhenne, *op.cit.*, 979:84/E). On the settlement of disputes under the 1979 Long-Range Transboundary Air-Pollution Convention regime, see Longchamps De Berier, F., "The Role of International Dispute Resolution in Transboundary Air Pollution Law", *Polish Yearbook of International Law*, Vol. 21, 1994, pp. 249-267.

31 The major exception is the non-compliance procedure of the Montreal Protocol to the Vienna Convention on the Protection of the Ozone Layer. The non-compliance procedure supplemented the dispute settlement procedure originally contained in article 11 of the Vienna Convention. The non-compliance procedure is dealt with more extensively later on in this study. *Infra*, Ch.II.3. Another exception is the case of the 1994 Oslo Sulfur Protocol to the 1979 Long-Range Transboundary Air-Pollution Convention, which contains far more extensive dispute settlement provisions than the "pivot" Convention itself. Sands notes that "in some cases reference back to dispute settlement provisions in an earlier treaty may reflect a progressive trend – for example reference to Part V of UNCLOS in the 1996 London Convention Protocol, (130), and in the 1995 Straddling Stocks Agreement, (124)". Sands, "Settlement of Disputes ...", *op.cit.*, para. 45, at 14.

32 E.g. Revised General Act for the Pacific Settlement of International Disputes, adopted by the General Assembly of the United Nation, New York, April 2, 1949, *UNTS*, Vol. 71, at 102-127.

> *applicable agreement between them*, seek a settlement of the dispute by peaceful means in accordance with the following provisions"[33]

What is more, many States have accepted the jurisdiction of several international courts and tribunals (e.g. ICJ, PCA, ITLOS, etc.) which, unless reservations were attached, have jurisdiction over such disputes[34].

1.2.2. Dispute Settlement Provisions in METs: Qualitative Remarks

Dispute settlement provisions in METs are on the rise. However, it is legitimate to wonder whether they are bringing anything new to the much seasoned domain of the peaceful settlement of international disputes. At the beginning of the 1980s, Jan Schneider remarked:

> "there is little unique about the process and procedures for the settlement of international environmental disputes as distinct from other types of...controversies"[35].

Indeed, multilateral environmental treaties, *prima facie*, have not evolved much in the field of dispute settlement procedures. After all, the classical categories of judicial and diplomatic means have been crystallized by a century-long practice and it is hard to imagine any new procedure for the settlement of disputes which could not be traced back to them. Admittedly, most of the METs that contain dispute settlement provisions reflect to a greater or lesser degree the methods for peaceful settlement of disputes listed in article 33 of the UN Charter[36]. What is more, despite the large number of METs containing settlement clauses, patterns repeat themselves convention after convention, qualifying the first impression of great diversity[37]. Indeed, quite often conventions concluded under the aegis of the same organization (e.g. IAEA, FAO, IMO, UNEP, UN-ECE, etc.) contain the same dispute settlement clauses[38]. These considerations might reinforce the impression of the lack of originality of METs as compared to other areas of international law.

Nonetheless, a closer scrutiny reveals several distinctive features. The following pages will substantiate this statement, but it is necessary to mention

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33 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, (133), art. 33.1, (emphasis added).

34 *Infra*, Ch.II.4.

35 Schneider, *op.cit.*, at 177.

36 "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". UN Charter, art. 33.1.

37 Sand, P.H., "New Approaches to Transnational Environmental Disputes", *International Environmental Affairs*, Vol. 3, 1991, pp. 193-206, at n. 6.

38 E.g. the various agreements concluded under the aegis of the FAO in the 1960s for the establishment of a series or regional commissions for controlling desert locusts (South-West Asia, (31); Near East, (34); North-West Africa, (44)) or those concluded by the IAEA in the aftermath of the Chernobyl catastrophe (Convention on Early Notification of Nuclear Accident, (83); and the Convention on Assistance, (84)); or the conventions concluded under the aegis of the UN-ECE at the beginning of the 1990s (Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (101); Convention on Environmental Impact Assessment in a Transboundary Context, (95); Convention on the Transboundary Effects of Industrial Accidents, (102)).

some of these features to confute summary judgments. First, it is undeniable that procedures contained in multilateral environmental treaties have taken advantage of the increased level of sophistication of modern dispute settlement mechanisms. In this sense, it would be worthwhile to investigate the positive effect of the interaction between the development of dispute settlement procedures within the Conference on Security and Cooperation in Europe[39] and the environmental treaties concluded in 1991 and 1992 under the aegis of the Economic Commission for Europe[40]. METs tend to tap the latest developments in the field of the peaceful settlement of international disputes.

Second, the most recent METs provide parties with a spectrum of options rather than a single procedure[41]. Several of these treaties include no less than three or four mechanisms, some of which may be invoked simultaneously, providing for an ideal, though not desirable, escalation of the dispute, from the informal, non-contentious and non-adversarial, such as consultation and negotiation, to the more formal, contentious and adversarial, procedures, such as international adjudication[42]. This indicates the existence of a trend to move away from the treatment of dispute settlement clauses as a sort of afterthought, opting rather to include articulated, carefully drafted and broad provisions[43].

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39 On the new developments of the peaceful settlement of disputes in the OSCE see Caflisch, L., (ed.), *Le règlement pacifique des différends entre États: Perspectives universelle et européenne: The Peaceful Settlement of Disputes between States: Universal and European Perspectives*, The Hague, Kluwer, 1998, pp. 25-41; Bothe, M./ Ronzitti, N./ Rosas, A., *The OSCE in the Maintenance of Peace and Security: Conflict Prevention, Crisis Management, and Peaceful Settlement of Disputes*, The Hague, Kluwer, 1991, pp. XIX-557; Caflisch, L., "Vers des mécanismes pan-européens de règlement pacifique des différends", *R.G.D.I.P.*, 1993, Vol. 97, pp. 1-38; *idem*, "Le règlement pacifique des différends en Europe: la procédure de La Vallette et les perspectives d'avenir", Dominice, Ch. (ed.), *Études de droit international en l'honneur de Pierre Lalive*, Basle, Helbing & Lichtenhahn, 1993, pp. 437-456; *idem*, (ed.), *Le règlement pacifique des différends entre États: Perspectives universelle et européenne: The Peaceful Settlement of Disputes between States: Universal and European Perspectives*, The Hague, Kluwer, 1998; Leben, Ch., "La création d'un organisme de la CSCE pour le règlement des différends", *R.G.D.I.P.*, Vol. 95, 1991, pp. 857-880; Dascalopoulou-Livada, Ph., "The CSCE Valletta Meeting on Peaceful Settlement of Disputes: A Step Forward or an Opportunity Missed?", *Revue hellénique de droit international*, Vol. 44, 1991, pp. 287-301; Kooijmans, P.H., "The Mountain Produced a Mouse: The CSCE Meeting of Experts on Peaceful Settlement of Disputes, Valletta 1991", *Leiden Journal of International Law*, Vol. 5, 1992, pp. 319-361; Ruiz Fabri, H., "La CSCE et le règlement pacifique des différends: L'élaboration d'une méthode", *A.F.D.I.*, Vol. 31, 1991, pp. 297-314; Condorelli, L., "En attendant la "Cour de conciliation et d'arbitrage de la CSCE": Quelques remarques sur le droit applicable", Dominice, Ch. (ed.), *op.cit.*, pp. 457-468.

40 *Supra*, note 38.

41 Sands, Ph./ Mackenzie, R., *Settlement of Disputes under International Environmental Agreements: A Potential Role for the Permanent Court of Arbitration*, 1997 (on file with the author), para. 43, at 13.

42 E.g. the 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, (133), art. 33.

43 Adede, A.O., "Avoidance, Prevention and Settlement of International Environmental Disputes", Lin, S./Kurukulasuriya, L. (ed.), *UNEP's New Way Forward: Environmental Law and Sustainable Development*, Nairobi, UNEP, 1995, pp. XXII-397, at 62. Ott attributes this to the "negotiators' desire of completeness", a sort of legal *horror vacui*. Ott, H. E., "Elements of a Supervisory Procedure for the Climate Regime", *Z.a.ö.R.V.*, pp. 732-749, at 737, note 24. Koskenniemi speaks of "ritualistic nod towards legal settlement". Koskenniemi, M., "Peaceful Settlement of Environmental Disputes", *Nordic Journal of International Law*, Vol. 60, 1991, pp. 73-92, at 82.

This tendency towards more comprehensive dispute settlement arrangements probably reached its apex with the 1982 UNCLOS, which, by far, contained the most articulated, complex and comprehensive settlement clauses ever[44]. That Convention tailors its dispute settlement options to particular categories of disputes, by providing, for instance, the establishment of special chambers within the International Tribunal for the Law of the Sea[45], or the exclusion of certain categories of disputes from the otherwise mandatory and binding procedures[46]. Finally, as part of the move towards more comprehensive and articulated clauses, more and more often METs contain separate articles dealing with dispute avoidance (i.e. consultation and notification provisions), and non-compliance aspects[47].

Third, in 1983, Kiss concluded that the designation of existing institutions for dispute settlement was relatively rare and that States relied on special or *ad hoc* arrangements in the great majority of METs[48]. Yet, as has already been anticipated, this trend, which reflects the institutionalization of the international legislative process during the last decade, has at least partially reversed, as dispute settlement procedures have gradually become more institutionalized as well[49].

Fourth, METs of the last decade are characterized by an increased recourse to compulsory conciliation[50]. Although in no sense binding, the recommendatory award of a conciliation body can have a relevant impact on the dispute. By radically changing the bargaining positions of the parties, it exerts heavy pressure on them to comply. Given the sensitivities about submission to adjudication, compulsory conciliation has a promising future, since it could represent a viable alternative to those more formal means of settlement.

Fifth, the possibility for third parties to intervene in the arbitral process is surely a remarkable feature of the environmental treaties of the early 1990s[51]. It is clearly a consequence of an increased awareness of the ultimate unity of the global environment. Yet it is still doubtful in the absence of any practice, whether arbitral tribunals will be able to cope adequately with the legal difficulties inherent in such interventions.

Finally, and most important, the emergence of the so-called non-compliance procedures (which will be extensively analyzed below) has not only dramatically changed the way in which international environmental regimes work, but has also upset the orthodox taxonomy of dispute settlement means by introducing a new species.

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44 On the dispute settlement clauses of the UNCLOS, see, in general, Boyle, A., "Dispute Settlement and the Law of the Sea Convention: Problems of Fragmentation and Jurisdiction", *I.C.L.Q.*, Vol. 46, 1997, pp. 37-54; Sohn, L., "Settlement of Law of the Sea Disputes", *International Journal of Marine and Coastal Law*, 1995, Vol. 10, pp. 205-217, at 210.

45 Section 4 of Annex VI of the UN Convention on the Law of the Sea, (73).

46 *Ibid.*, art. 298.

47 Adede, *op.cit.*, at 64. E.g. art. 28 and 30 of the 1995 Agreement for the Implementation of the Provisions of the UNCLOS relating to Conservation and Management of Straddling Stocks and Highly Migratory Fish Stocks, (124).

48 Kiss, *op.cit.*, at 122-123.

49 *Supra*, Ch.II.1.2.1.

50 *Infra*, Ch. II.2.5.

51 *Infra*, Ch. II.4.1.2.

1.2.3. Dispute Settlement Provisions in METs: What For?

Despite their growing number, dispute settlement provisions of METs have never been officially resorted to. Why then bother spending precious negotiating time and energy to draft provisions that always remain idle? There may be several reasons for this paradox and here are but a few. First, States are unlikely to take action which will seem hostile or which will result in a precedent being set by which they themselves might later be judged. Few States have an environmental record so clean as to be able to throw the first stone[52]. This could help explain the unwillingness of many European States to invoke the international responsibility of the USSR for the damages caused by the Chernobyl catastrophe.

Admittedly, even when a dispute is brewing, diplomats usually tend to avoid dangerous labeling. Funneling a dispute through a formal procedure (even when the procedure is nothing more than a generic call for negotiations) obliges the parties to the dispute to recognize being in disagreement. Such recognition might be undesirable, however obvious it might be, simply because it might affect concordance in other areas of the parties' relations.

By the same token, disputes can occur without ever being made public. Disagreements between States might merely remain at the level of mere cocktail party anecdotes without ever becoming suitable for scholarly examination. Diplomats might simply be able to dispose of them swiftly without letting them reach a critical level. A dispute has appeared, but it has not left enough of a trace for international legal scholars to use it, to paraphrase article 38.1.(b) of the ICJ Statute, as evidence of States' general practice[53].

Again, traditional dispute settlement can be crudely summarized as a procedure used only as a result of a breach of international law, bilateral and confrontational in nature, where a judicial or quasi-judicial body external to the agreement makes a decision, allocating blame for past action without providing a positive remedy. These features are not compatible with the characteristics of international legal regimes, which nowadays comprise the large majority of environmental treaties.

Finally, and perhaps most convincingly, the non-recourse to dispute settlement procedures might simply be evidence of their effectiveness as dispute avoidance means[54]. Knowing that if things turn nasty there will be a formal procedure that will question parties' reasons, possibly by exposing them to third-party scrutiny, might simply induce the parties to settle the issue confidentially among themselves or simply to avert confrontation by modifying their behavior.

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52 However, while States could fear counterclaims, international organizations would not. O'Connell, *op.cit.*, at 312. This is a further argument in favor of the enlargement of the contentious jurisdiction of the World Court to International Organizations.

53 Art. 38.1 of the ICJ Statute reads: "The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply: (b) international custom, as evidence of a general practice accepted as law".

54 Merrills says that "a provision for compulsory arbitration, by its very existence, can discourage unreasonable behavior". Merrills, J. G., *International Dispute Settlement*, London, Sweet and Maxwell, 1984, at 106. See also Koskenniemi, "Peaceful Settlement ...", *op.cit.*, at 91, note 63, citing Merrills; Gray, C./Kingsbury, B., "Developments in Dispute Settlement: Inter-State Arbitration since 1945", *B.Y.I.L.*, Vol. 63, 1992, pp. 97-134, at 100.

The observations developed in this introductory section will now be broken down into the classical taxonomy of diplomatic means (negotiation, good offices, etc.) to determine how METs have provided for recourse to every single of those means and to assess development in each area. A separate section will be devoted to so-called non-compliance procedures. Finally, we will move to the domain of adjudicative means. Arbitration first, and then judicial means, most notably recourse to the International Court of Justice. This will lead us to chapter three, where ten different case studies will be conducted to substantiate this study's conclusions.

2. DIPLOMATIC MEANS OF SETTLEMENT

References to means of settlement based on diplomatic contacts between the parties to the dispute, either direct or indirect (i.e. through the intervention of a third party), are extremely frequent in METs. The success of these means can be attributed principally to the fact that, by resorting to them, the parties to a dispute retain control over the outcome insofar as they may accept or reject a proposed settlement. Indeed, provisions for recourse to the so-called diplomatic means (e.g. consultation; negotiation; good offices; mediation; conciliation; inquiry; and the like) far outnumber those indicating adjudicative means, which result in legally binding decisions for the parties, as instruments to be employed to settle disputes.

Moreover, in those frequent cases where both avenues are provided, invariably the use of diplomatic means is considered a prerequisite to more formal and adversarial procedures. For instance, the 1935 International Convention for the Campaign against Contagious Diseases of Animals provides:

> "If there should arise between the High Contracting Parties a dispute of any kind relating to the interpretation of the present Convention, and if such dispute cannot be satisfactorily settled by diplomacy, it shall be settled in accordance with any applicable agreements in force between the Parties providing for the settlement of international disputes"[1].

As a second consideration, it should be noted that, among those METs providing for recourse to diplomatic means, the great majority do not make a distinction between the various means but merely lump them together, much as article 33 of the UN Charter does[2]. For example:

> "If any dispute arises between two or more of the Contracting Parties concerning the interpretation or application of this convention, those Contracting Parties shall consult among themselves with a view to having the dispute resolved by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement or other peaceful means of their own choice"[3].

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1 1935 International Convention for the Campaign against Contagious Diseases of Animals, (5), art. 9.1.

2 UN Charter, art. 33.1.

3 E.g. 1980 Convention on the Conservation of Antarctic Marine Living Resources, (67). art. 25.1.

2.1. Negotiation and Consultation[4]

The first, primarily voluntary and non-binding mechanism for the resolution of any kind of disputes, is direct negotiation between the parties to the dispute. Negotiation, or consultation – a term which is usually employed as a synonym of the former-, as a technique of dispute settlement is as old as human kind. In the environmental sphere, its roots date back more than a hundred years[5].

The reasons for this primogeniture are best illustrated by the following definition of negotiation:

> "[A] process in which explicit proposals are put forward ostensibly for the purpose of reaching agreement on an exchange or on the realization of a common interest where conflicting interests are present. It is the confrontation of explicit proposals that distinguishes negotiation from tacit bargaining and other forms of collective behavior"[6].

In other words, negotiation can be explained as an attempt to explore and reconcile conflicting positions, by identifying areas of common interest and conflict, in order to reach an outcome acceptable for both parties[7].

Nowadays, negotiations take many forms, bilateral or multilateral, through orthodox diplomatic channels, or within international organizations, conferences or informal meetings. The range of agents used for diplomatic negotiations is equally wide, including heads of State, prime ministers, ministers of foreign affairs, and ministers and officials of other ministries of State, as well as traditional diplomatic agents. Finally, modern telecommunications have both accelerated and simplified the conduct of negotiations, allowing them to take place at great distances (as opposed to negotiations carried out across a table), thereby increasing their general

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4 On negotiation and consultation see, in general, Lall, A.S. (ed.), *Multilateral Negotiation and Mediation: Instruments and Methods*, New York, Pergamon Press, 1985, IX-206 pp.; Sjostedt, G. (ed.), *International Environmental Negotiation*, Newbury Park, CA, Sage, 1992, XVI-344 pp.; De Waart, P., *The Element of Negotiation in the Pacific Settlement of Disputes*, The Hague, Nijhoff, 1973; Bourquin, M., "Dans quelle mesure le recours a des négociations préalables est-il nécessaire avant qu'un différend puisse être soumis a la juridiction internationale?", *Hommage d'une génération des juristes au Président Basdevant*, Paris, Pedone, 1960, pp. 43-58; Fombad, Ch., M., "Consultation and Negotiation in the Pacific Settlement of International Disputes", *African Journal of International and Comparative Law*, Vol. 1, 1989, pp. 707-724; Ghozali, N.E., "La négociation diplomatique dans la jurisprudence internationale", *Revue belge de droit international*, Vol. 25, 1992, pp. 323-350; Gross Stein, J., "International Negotiation: A Multidisciplinary Perspective", *Negotiation Journal*, Vol. 4, 1988, pp. 221-231; Reuter, P., "De l'obligation de négocier", *Comunicazione e Studi*, Vol. 14, 1975, pp. 711-733; Geamanu, G., "Les négociations: moyen principal de règlement pacifique des différends internationaux", *Essays in International Law in Honor of Judge Manfred Lachs*, Dordrecht, Nijhoff, 1984, pp. 375-387; Lachs, M., "International Law, Mediation and Negotiation", Lall, A. (ed.), *Multilateral Negotiation and Mediation: Instruments and Methods*, New York, Pergamon Press, 1985, pp. 183-195; Ahi, M.-M., *Les négociations diplomatiques préalables à la soumission d'un différend à une instance internationale*, (Ph.D. Dissertation), IUHEI, Geneva, 1957.

5 Sands, Ph., "Enforcing Environmental Security", *op.cit.*, at 379.

6 Iklé, F. Ch., *How Nations Negotiate*, New York, Harper & Row, 1964, pp. XII-274, at 3. See also the comment made by Schnelling, T. C., *Arms and Influence*, New Haven, Yale University Press, 1966, pp. VII-293, at 131.

7 Barston, R. P., *Modern Diplomacy*, London, Longman, 1997, pp. XIV-308, at 84.

efficacy as the chief instrument of peaceful settlement[8]. In the environmental field, negotiations play a central role. Frequently they take place at the bilateral level on a range of issues, including access to and use of shared natural resources, location of hazardous industrial facilities and joint cooperation for the management of transboundary resources[9].

The paramount importance of negotiations to any dispute settlement effort was laconically stressed by the ICJ in the *North Sea Continental Shelf* cases when it stated that

> "there is no need to insist upon the fundamental character of this method of settlement"[10].

Both the Permanent Court of International Justice, in the *Free Zones* case[11], and the ICJ, in the *North Sea Continental Shelf* cases[12], stressed that, unlike other means of settlement, the idea of negotiations which lead to the direct and friendly settlement of disputes between parties is universally accepted. Indeed, it would not be incorrect to state that negotiations have become, under customary international law, an obligatory prerequisite to the taking of any other step. As the Permanent Court of International Justice said in the *Mavrommatis* case:

> "Before a dispute can be made the subject of an action at law, its subject matter should have been clearly defined by diplomatic negotiations"[13].

Negotiations, therefore, are usually the first means resorted to by States to settle international disputes[14]. It follows that almost every single multilateral environmental treaty provides that, in the event of a dispute concerning the interpretation

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8 David Davies Memorial Institute of International Studies, *International Disputes: The Legal Aspect. Report of a Study Group of the David Davies Memorial Institute of International Studies*, London, Europa Publications, 1972, pp. XVIII-325, at 35.

9 In the context of a dispute over international fisheries jurisdiction, the ICJ has laid out the objectives underlying negotiation as an appropriate method for the solution of a dispute. *Fisheries Jurisdiction* (United Kingdom v. Iceland), Merits, Judgment, ICJ Reports 1974, pp. 3-173, at 31.

10 *North Sea Continental Shelf* cases, (Federal Republic of Germany/Denmark; Federal Republic of Germany/ The Netherlands), Judgment, ICJ Reports 1969, pp. 3-257, at 48, para. 86.

11 *Free Zones of Upper Savoy and the District of Gex*, Order of August 19, 1929, *PCIJ*, Series A, No. 22, at 13.

12 *North Sea Continental Shelf* cases, Judgment, at 48, para. 86.

13 *Mavrommatis Palestine Concessions* (Jurisdiction), *PCIJ*, Ser. A, No. 2, (1924), at 15. The issue of the preeminence of negotiation over other means of settlement was discussed, *inter alia*, within the framework of the UN Special Committee on Principles of International Law concerning Friendly Relations and Cooperation among States. *Official Record of the General Assembly*, Twentieth Session, Annexes, agenda items 90 and 94, UN Doc. A/5746, para. 156, 158 and 161-163; *Ibid.* Twenty-First Session, Annexes, agenda item 87, UN Doc. A/6230, para. 195-206.

14 Moreover, judicial proceedings do not preempt negotiations. "The judicial settlement of international disputes, with a view to which the Court has been established, is simply an alternative to the direct and friendly settlement of such disputes between the Parties". While the case is pursued, "any negotiation between the parties with a view to achieving a direct and friendly settlement is to be welcomed". *Passage through the Great Belt*, (Finland v. Denmark), Interim Protection, Order of July 29, 1991, ICJ Reports 1991, pp. 12-39, para. 35, quoting the case of the *Free Zones of Upper Savoy and the District of Gex*, Order of August 19, 1929, *PCIJ*, Ser. A, No. 22 (1929), at 13. See also *Frontier Dispute* (Burkina Faso/ Republic of Mali), Judgment, ICJ Reports 1986, pp. 554-663, para. 46, at 577.

or the application of its provisions, the parties are expected to attempt to settle it first by direct negotiations[15]. This is a general rule; however, exceptions do exist. For instance, the Agreement concerning the Regulations of Lake Inari by Means of the Kaitakoski Hydro-Electric Power Station, concluded in 1959 between Finland, Norway and the USSR, inverts the customary order by providing first for settlement through a mixed commission, composed by six members (two for each party) and subsequently, if agreement is not reached, for settlement "through the diplomatic channel"[16]. Article 9.1 of the Convention Regulating the Withdrawal of Water from Lake Constance, concluded in 1966 by the lake's riparians (Switzerland, the Federal Republic of Germany and Austria) provides that:

> "Where the Riparian States are unable to reach agreement through discussions in the Consultative Committee...agreement shall be sought through the diplomatic channel"[17].

This apparent paradox can be easily explained. Since both these agreements were concluded between only three States, the preliminary use of treaty organs (e.g. mixed commission or consultative committee) cannot be regarded as a great departure from the rule requiring prior bilateral talks, as it would be in the case of a multilateral agreement binding upon several parties. Discussions within a three-party consultative committee or consultations among the two parties in dispute, perhaps with the good offices of the third, do not differ much.

Sometimes negotiations and consultations are not considered as a means to settle the dispute by themselves, but only as a means to reach an agreement on which method should eventually be employed. In other words, negotiations are resorted to as "stepping stones" towards a settlement process. For instance, article 13 of the Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea provides that:

> "If any dispute arises between two or more of the Parties concerning the interpretation or application of this Convention, those Parties shall consult among themselves with a view to having the dispute resolved by available peaceful means of their own choice"[18].

This use of negotiations is justified by the observation that, despite the fact that almost all METs that address the settlement of disputes envisage negotiations as the first resort where a dispute arises, they usually do not specify the institutional arrangements to be used to carry them out[19]. Hence, their preambulary nature.

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15 Sands, "Settlement of Disputes ...", *op.cit.*, para. 8, at 3. The 1959 Antarctic Treaty, the 1979 Convention on Physical Protection of Nuclear Material and the 1980 Convention on the Conservation of Antarctic Marine Living Resources, *inter alia*, employ the term consultation rather than that of negotiations, to indicate the talks that must necessarily take place before the parties could resort to other means to settle their disputes. 1959 Antarctic Treaty, (21), art. 11; 1979 Convention on Physical Protection of Nuclear Material, (64), art. 17; 1980 Convention on the Conservation of Antarctic Marine Living Resources, (67), art. 25.

16 1959 Agreement concerning the Regulations of Lake Inari by Means of the Kaitakoski Hydro-electric Power Station, (18), art. 7.

17 1966 Convention Regulating the Withdrawal of Water from the Lake Constance, (35), art. 9.1.

18 1994 Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea, (118), art. 13; Convention on Supplementary Compensation for Nuclear Damage, (136), art. 16.

19 Sands, "Dispute Settlement...", *op.cit.*, para. 8, at 3.

Finally, in certain recent treaties, like the 1994 Convention on Nuclear Safety and the 1997 Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, negotiations and consultations between parties to a dispute are required to be held within particular frameworks, such as the Conference of the Parties to that Convention or other organs[20]. This feature confirms the existence of a trend – which will be the subject of a more in-depth analysis below – towards the adoption of non-confrontational and multilateral means for the settlement of disputes.

Historically, most international disputes, like most disputes within States, have been settled informally and directly by negotiation between the disputants. In some instances, direct negotiations between the parties have led to the payment of lump-sums as final compensation. One such example is the *Cosmos 954* case, which concerned the damages caused by the crash in Canadian territory of a Soviet satellite fueled by a nuclear reactor. In that case, the parties agreed to settle the dispute by arranging for payment by the USSR of a lump-sum of 3,000,000 Canadian dollars as compensation for the damages suffered by Canada[21]. Other examples include the settlement of the dispute between Nauru and Australia arising out of the past colonial exploitation of phosphate deposits on the island[22], and the settlement of the issue arising out of the radiological contamination of Australian territory caused by Great Britain in the 1950s[23].

As a final consideration, it should be stressed that direct negotiations, while still central to dispute settlement processes and frequently successful, often might not be enough to bring about a settlement[24]. This is the reason why certain treaties fix time limits – from three to 12 months – within which agreement must be reached through negotiations[25]. And this is the reason why a large part of METs do not merely call for negotiations and consultations, but provide for an ideal escalation of the dispute, which should take the parties in two (e.g. negotiations and then

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20 1994 Convention on Nuclear Safety, (119), art. 29; 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, (135), art. 38.

21 For the text of the Agreement, see: *ILM*, Vol. 20, 1981, at 689.

22 *Infra*, Ch.III.10.

23 *Infra*, Ch.III.9, note 15.

24 It is impossible to assess conclusively the effectiveness of negotiations and consultations in the settlement of a dispute because the evidence in this field is extremely scarce. Very often, disputes are sorted out by interested States before the news of their existence even becomes public. While this probably makes the work of diplomats easier, inevitably it complicates that of scholars.

25 1956 Convention on the Canalization of the Mosel, (13), art. 57 (three months); 1963 Optional Protocol Concerning the Compulsory Settlement of Dispute of the Vienna Convention on Civil Liability for Nuclear Damage, (28), art. 2 and 3 (two months); 1988 Convention on the Regulation of Antarctic Mineral Resources Activities, (90), art. 55 (twelve months); 1994 Convention on Cooperation for the Protection and Sustainable Use of the Danube River, (119), art. 24 (twelve months); 1997 Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage and to adopt a Convention on Supplementary Funding, (134), art. 20A (six months); 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, (133), art. 33.3 (six months); Protocol to the 1979 LRTAP on Persistent Organic Pollutants, (140), art. 12, (twelve months); Protocol to the 1979 LRTAP on Heavy Metals, (141), art. 11, (twelve months); Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade, (143), art. 20, (twelve months).

third-party intervention or judicial means) or three (negotiations, third-party intervention and eventually judicial means) steps to the final settlement[26].

2.2. Good Offices[27]

Good offices were defined by the 1948 American Treaty on Pacific Settlement (otherwise known as the "Pact of Bogotá") as:

> "the attempt by one or more...Governments not parties to the controversy, or by one or more eminent citizens of any...State which is not party to the controversy to bring the parties together, so as to make it possible for them to reach an adequate solution between themselves"[28].

The Pact further provided that

> "once the parties have been brought together and have resumed direct negotiations, no further action is to be taken by the State or citizens that have offered their good offices"[29].

In other words, good offices are resorted to when relations between the parties to a dispute have deteriorated so much that direct negotiations and discussions have become impossible. Usually they take place when diplomatic relations have been broken, thus making direct negotiations through ordinary diplomatic channels arduous. Recourse to the good offices of an individual, or a body of high reputation, plays an exclusively procedural role in dispute settlement, for it simply aims to bring the parties to the dispute to the negotiating table and to improve the atmosphere for subsequent negotiations.

In METs – as in all other treaties – good offices are not isolated from other means of dispute settlement, but usually are listed indifferently, together with mediation, conciliation and inquiry, as one of the many methods which could possibly be used to settle the dispute. Moreover, as disputes usually are not static but evolve, sometimes the role each of these means actually play might be blurred. Indeed, it is often difficult to say where good offices end and mediation begins. This fuzziness is illustrated by article 11 of the Vienna Convention for the Protection of the Ozone Layer which provides that:

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26 METs which provide for negotiations *tout court* are quite rare. See, *inter alia*, the 1985 ASEAN Agreement on the Conservation of Natural Resources, (81), art. 30; the 1987 Agreement on the Resolution of Practical Problems with Respect to Deep Sea-Bed Mining, (87), art. 6; and the 1991 Agreement on the Conservation of Bats in Europe, (100), art. 9.

27 On good offices see, in general Probst, R. R., "Good Offices in International Relations in the Light of Swiss Practice and Experience", *Hague Academy of International Law, Collected Courses*, Vol. 201, 1987-I, pp. 211-383; Newsom, D.D. (ed.), *Diplomacy under a Foreign Flag: When Nations Break Relations*, Washington D.C, Institute for the Study of Diplomacy, Georgetown University, 1990, pp. VII-132; Pechota, V., "Good Offices of the Secretary-General of the United Nations: Contemporary Theory and Practice", Rao, K./ Nawaz, M.K. (ed.), *Essays in Honor of Krishna Rao*, Leyden, Sijthoff, 1976, at 191-205.

28 American Treaty on Pacific Settlement, Bogotá on April 30, 1948, art. 9, *UNTS*, Vol. 30, at 55.

29 *Ibid.*, art. 10.

> "If the parties concerned cannot reach agreement by negotiation, they may jointly seek the good offices of, or request mediation by, a third party."[30]

The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons is actually the only MET which gives good offices the honor of being mentioned separately from mediation[31]. Article 24.3 provides that:

> "The Executive Council may contribute to the settlement of a dispute by whatever means it deems appropriate, including offering its good offices, calling upon the States Parties to a dispute to start the settlement process of their choice and recommend a time-limit for any agreed procedure"[32].

This is, in short, what good offices can do: Re-establish severed communications. Yet, because of their extremely narrow scope, their usefulness in environmental disputes is rather limited. Indeed, whereas good offices might be extremely helpful when face-to-face negotiations are politically arduous, tension, in the context of environmental conflicts, has not, at least so far, reached these extremes. The only case in which something close to good offices was carried out within the context of an international environmental dispute was in 1976, when the Secretary-General of the NATO, Mr. Joseph Luns, encouraged Great Britain and Iceland to restart negotiations to settle the *Icelandic Fisheries Jurisdiction* dispute[33]. In that case, since the two countries had broken diplomatic relations, negotiations, which eventually led to a settlement, could be re-opened only thanks to the encouragement of the Atlantic Alliance.

2.3. Mediation

Mediation is a method peacefully to settle international disputes where a third party intervenes to reconcile the claims of the contending parties and to advance its own

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30 1985 Vienna Convention for the Protection of the Ozone Layer, (78), art. 11.2. See also the 1986 Convention for the Protection and the Natural Resources and Environment of the South Pacific Region, (85), art. 26.1; 1992 Convention on the Protection of the Environment of the Baltic Sea Area, (103), art. 26; 1992 Convention of Biological Diversity, (106), art. 27.2; Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, (137), art. 10.

31 Article 36 of the Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict reads: "The Protecting Powers shall lend their good offices in all cases where they may deem it useful in the interests of cultural property...". However, the whole procedure can be described as conciliation rather than good-offices. Actually, article 36 is indeed entitled "Conciliation Procedure". Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict, (145).

32 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, (108), art. 14.3.

33 *Infra*, Ch.III.2.7.

proposals aimed at a mutually acceptable compromise[34]. In the case of mediation, as opposed to mere good offices, the third party is involved as an active participant in the dialogue between the disputants and may even propose terms of settlement. Yet, this process is basically voluntary and can hardly work if the parties have a vested interest in not reaching agreement.

Several METs provide for the use of international institutions as generic go-betweens whenever disputes arise[35]. However, considering that the final outcome of these procedures, in the majority of cases, is a non-binding recommendation which the parties shall consider in good faith, the use of international institutions and treaty-based organs, even if not specifically labeled as mediation, can be classified as such[36].

Thus, despite the fact that provisions requiring the active intervention in the dispute by a third party represent a fairly heterogeneous category, it is possible to identify some common features. The clearest example is provided by the series of Conventions for the Establishment of a Commission for Controlling the Desert Locust concluded under the aegis of the FAO:

> "Any dispute regarding the interpretation or application of this Agreement, if not settled by the Commission, shall be referred to a committee composed of one member appointed by each of the parties to the dispute and, in addition, an independent chairman chosen by the members of the committee. The recommendations of such a committee, while not binding in character, shall become the basis of a renewed consideration by the parties

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34 United Nations, *Handbook on the Peaceful Settlement of Disputes between States*, New York, United Nations, 1992, pp. VIII-229, para. 123, at 40.

On mediation see, in general, Rubin, J. Z., "Third-Party Roles: Mediation in International Environmental Disputes", Sjostedt, *op.cit.*, pp. 275-290; Bercovitch, J., "International Mediation: A Study of the Incidence, Strategies and Conditions of Successful Outcomes", *Cooperation and Conflict,* Vol. 21, 1986, pp. 155-168; Dryzek, J.S./ Hunter, S., "Environmental Mediation for International Problems", *International Studies Quarterly*, Vol. 31, 1987, pp. 87-102; Raymond, G., "Third Party Mediation and International Norms: A Test of Two Models", *Conflict Management and Peace Science*, Vol. 9, 1985, pp. 33-51; Ury, W., "Strengthening International Mediation", *Negotiation Journal*, Vol. 3, 1987, pp. 225-229; Mitchell, C.R./Webb, K. (ed.), *New Approaches to International Mediation*, New York, Greenwood Press, 1988, XIII-255 pp.; Touval, S./Zartman, J.W. (ed.), *International Mediation in Theory and Practice*, Boulder, Co., Westview Press, 1985, IX-274 pp.

35 E.g. 1968 African Convention on the Conservation of Nature and Natural Resources, (38), (referring disputes to the Commission of Mediation, Conciliation and Arbitration of the OAU). Article 18 of the 1979 Convention on the Conservation of European Wildlife and Natural Habitats, (63), provides that the Standing Committee established under the Convention (composed of representatives of the parties) shall, in the first instance, facilitate "friendly settlement of any difficulty" that may arise. On the Bern Convention and the mediating role of the Standing Committee, see: Koester, V., "Pacta Sunt Servanda", E.P.L., Vol. 26, 1996, pp. 78-91, at 81. Other instances are: 1982 Convention on the Law of the Sea, (73); 1985 Convention for the Protection of the Ozone Layer, (78); 1987 Montreal Protocol, (88); 1992 Convention on Biological Diversity, (106); 1974 Convention on the Protection on the Baltic Sea Area, (52); 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, (130); 1997 Convention on the Law of Non-Navigational Uses of International Watercourses, (133); 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, (85); 1959 Antarctic Treaty, (21); Agreement on International Humane Trapping Standards Between the European Community, Canada and the Russian Federation, (139); Convention on the Protection of the Environment through Criminal Law, (144).

36 Kiss, "Le règlement des différends", *op.cit.*, at 125-126.

> concerned of the matter out of which the disagreement arose. If as the result of this procedure the dispute is not settled, it shall be referred to the International Court of Justice in accordance with the Statute of the Court, unless the parties to the dispute agree on another method of settlement."[37]

This three-step procedure based on a first attempt by an organ of the Convention, the mediation of a second organ and, finally, judicial settlement, is quite widespread. In other cases, the whole procedure is shorter, calling for submission of the dispute to an organ of the Convention and, in case of failure, either to a special committee[38], to arbitration[39] or to some other pre-constituted tribunal[40]. Finally, there are a few treaties providing for a single-step procedure[41].

In this context, the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin is rather Byzantine, since it makes mediation subject to an unusually long list of prerequisites[42]. First, it provides for submission of the dispute to the Mekong River Commission[43]. Then,

> "in the event the Commission is unable to resolve the difference or dispute within [*sic*] a timely manner, the issue shall be referred to the Governments to take cognizance of the matter for resolution by negotiation through diplomatic channels within [*sic*] a timely manner, and may communicate their decision to the Council for further proceedings as may be necessary to carry out such decision. Should the Governments find it necessary or beneficial to facilitate the resolution of the matter, they may, by mutual agreement, request the assistance of mediation through an entity or party mutually agreed upon, and thereafter to proceed according to the principles of international law."[44]

In the environmental field perhaps the best-known instance of mediation is that carried out in the 1950s by the International Bank for Reconstruction and Development in the

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37 1963 Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in South-West Asia, (31), art. 17; 1965 Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Near East, (34), art. 16; 1970 Agreement for the Establishment of a Commission for Controlling the Desert Locust in North-West Africa, (44), art. 16. Such wording was used for the first time in an environmental treaty in the 1949 Agreement for the Establishment of a General Fisheries Council for the Mediterranean, (7), art. 13. This Agreement as well as those for the establishment of commissions for controlling the desert locust were all concluded under the aegis of the FAO.

38 1956 Plant Protection Agreement for the South East Asia and Pacific Region, (12).

39 1979 Convention on the Conservation of European Wildlife and Natural Habitats, (63); 1991 West Indian Ocean Tuna Organization Convention, (99); Agreement on International Humane Trapping Standards Between the European Community, Canada and the Russian Federation, (139).

40 1960 Convention on Third Party Liability in the Field of Nuclear Energy, (22). art. 17 provided that the dispute will first be submitted to the Steering Committee for friendly settlement, and in case of failure to the Tribunal established by the 1957 Convention on the Establishment of a Security Control in the Field of Nuclear Energy, (15).

41 1951 International Plant Protection Convention, (8); 1978 Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, (59); 1983 and 1994 International Tropical Timber Agreements, (76) and (120).

42 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, (123).

43 *Ibid.*, art. 34, 18.c and 24.f.

44 *Ibid.*, art. 35.

case of the dispute between India and Pakistan over the diversion and use of the waters of the Indus River[45]. In that case the World Bank managed to broker an agreement between the two parties, on the basis of the partition of the fresh water resources of the Indus River basin, by providing substantial technical expertise and financial resources – both through Bank loans and pledges from donor countries – to help the two parties realize the necessary improvements[46].

2.4. Inquiry

The essential features of inquiry – indifferently called enquiry, fact-finding or investigation – have been quite aptly summarized by article 9 of the 1907 Hague Convention on the Pacific Settlement of International Disputes:

> "In disputes of an international nature involving neither the honor nor essential interests, and arising from a difference of opinion on points of fact, the Contracting Powers deem it expedient and desirable that the parties who have not been able to come to an agreement by means of diplomacy should, as far as circumstances allow, institute an *international commission of inquiry, to facilitate a solution of these disputes by elucidating the facts by means of an impartial and conscientious investigation*"[47].

Inquiry, therefore, aims at clarifying the disputed facts and issues[48]. Usually this is accomplished, to cite but a few examples, by way of a hearing of the parties, an examination of witnesses and experts, or on-the-spot visits; actions, indeed, very much like those carried out by adjudicatory bodies. In the past, inquiry has been resorted to in a few instances, and it is not by chance that in many of those instances, inquiries were related to acts committed at sea by one State against one

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45 On the Indus Waters dispute see, *inter alia*, Baxter, R.R., "The Indus Basin", Garretson, A.H. /Hayton, R.D./ Olmstead, C.J. (ed.), *The Law of International Drainage Basins*, Dobbs Ferry, NY, Oceana (Published for the Institute of International Law, NYU), 1967, X-916 pp.; Biswas, A. K., "Indus Water Treaty: The Negotiating Process", *Water International*, Vol. 17, 1992, pp. 201-209; Khan, Y. M., "Boundary Water Conflict between India and Pakistan", *Ibid.*, Vol. 15, 1990, pp. 95-199; Kirmani, S. S., "Water, Peace and Conflict Management – The Experience of the Indus and Mekong River Basins", *ibid.*, pp. 200-205; United Nations, *Experiences in the Development and Management of International River and Lake Basins*, New York, United Nations, 1983, pp. VII-424; Gulhati, N. D., *Indus: Exercise in International Mediation*, Bombay, Allied Publications, 1973, pp. XXVIII-472.

46 Indus Waters Treaty, Karachi, September 19, 1960, *UNTS*, Vol. 444, at 259. For the financial component of the agreement, see *ibid.*, Vol. 419, at 126.

47 For the text see: Carnegie Endowment for International Peace, James Brown Scott (ed.), *The Proceedings of The Hague Peace Conferences*, "The Conference of 1907", Vol. I, New York, Oxford University Press, 1920, at 599. [Italics added].

48 On international inquiry, see, in general, Baar-Yaakov, N., *The Handling of International Disputes by Means of Inquiry*, London, Oxford University Press, 1974; Bensalah, T., *L'enquête internationale et le règlement des conflits*, Paris, Librairie générale de droit et de jurisprudence, 1976; Bourloyannis, M. Ch., "Fact-finding by the Secretary General of the UN", *New York University Journal of International Law and Politics*, Vol. 22, 1990, pp. 641-669; Ruegger, P., "Nouvelles réflexions sur le rôle des procédures internationales d'enquête dans la solution des conflits internationaux", *Le droit international a l'heure de sa codification; Etudes en l'honneur de Roberto Ago*, Milan, Giuffré, 1987, pp. 327-361.

or more vessels of another State. This is true in the cases of the *Maine*[49], *Tavignano*[50], *Tiger*[51] and *Red Crusader*[52] vessels, as well as of the *Dogger Bank* incident[53], when units of the Russian navy mistakenly damaged and sank British trawlers. Indeed, issues of fact are extremely important in the case of accidents at sea. Determining objectively when, where and how something occurred far out at sea might indeed be difficult. The declarations of one party are pitted against those of the other, as there are no neutral third-party witnesses nor landmarks. Sometimes the examination of the vessels' log-books might simply not be sufficient to find out what happened.

Inquiry can reveal the truth and, therefore, facilitate the settlement of a dispute, because it combines the tools of diplomacy with legal techniques to obtain for the parties an impartial report on the issue. Nonetheless, despite the issues of fact which frequently arise and the positive role inquiry could play in dissipating the factual uncertainties that often surround environmental problems (i.e. who did what, when, where and how), provisions for inquiry or fact-finding in METs are quite *rarae aves*.

A very crude and rather peculiar provision for fact-finding, to be applied in case disputes arise between the nationals of different contracting parties concerning damaged fishing-gear or damage to vessels resulting from the entanglement of gear, is contained in article 7 of the 1967 Convention on Conduct of Fishing Operations in the North Atlantic[54]. In that event, at the request of the party of which the complainant is a national, each party to the Convention is required to appoint a review board or other appropriate authority for handling the claim, through the examination of the facts at issue and by endeavoring to bring about a settlement[55]. This provision is peculiar for a number of reasons. First, it intends to settle disputes originating from individuals' claims, even if they are eventually espoused by their States. Second, instead of establishing a single procedure of investigation, it delegates the authority to do so to "each Contracting Party concerned". Third, these arrangements are "without prejudice to the right of complainants to prosecute their claims by way of ordinary legal procedure"[56].

The 1992 Convention on the Protection of the Marine Environment of the North-East Atlantic provides generically for the use of inquiry without working out the details[57]. However, at the same time it contains an articulated procedure for the

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49 On the *Maine* case, see *Annual Register* 1898, at 362-363.

50 On the *Tavignano* case, see Carnegie Endowment of International Peace, Brown Scott, J. (ed.), *The Hague Court Reports*, New York, Oxford University Press, 1916, at 413.

51 On the *Tiger* case, see Baar-Yaakov, *op.cit.*, at 156-170.

52 On the North Sea or *Dogger Bank* case, see Carnegie Endowment of International Peace, Brown Scott, J. (ed.), *The Hague Court Reports*, New York, Oxford University Press, 1916, at 403.

53 On the *Red Crusader* case, see Exchange of Notes Constituting an Agreement Establishing a Commission of Enquiry, London on November 15, 1961, *UNTS*, Vol. 420, at 67 See also Lauterpacht, E., *The Contemporary Practice of the United Kingdom in the Field of International Law*, London, British Institute of International and Comparative Law, 1962, at 50.

54 1967 Convention on Conduct of Fishing Operations in the North Atlantic, (37), art. 7.1.

55 *Ibid.*

56 *Ibid.*, art. 7.2.

57 1992 Convention on the Protection of the Marine Environment of the North-East Atlantic, (107), art. 32.

continuous monitoring of the agreement's implementation by the parties. A commission, made up of representatives of each of the contracting parties, is to assess the latter's compliance with the Convention, as well as with decisions and recommendations adopted by it, on the basis of periodic reports[58]. Moreover, when appropriate, the Commission is empowered to decide upon and call for steps to bring about full compliance with the Convention and to promote the implementation of recommendations, including measures to assist a contracting party in carrying out its obligations[59]. The 1992 Convention on the Protection of the Marine Environment of the North-East Atlantic, therefore, stretches the role of inquiry and fact-finding well beyond its classical function of dispute settlement to enter into the domain of dispute avoidance. And this, as we will see below, is a feature of many METs concluded in the last decade.

Most recently, the 1997 Convention on the Law of the Non-navigational Uses of International Watercourses has boldly put fact-finding (with some strong conciliatory overtones) at the very center of its dispute settlement procedure[60]. It is not unlikely that the positive record in dealing with cognate questions of the International Joint Commission, established under article IX of the Canada-USA Boundary Waters Treaty[61], persuaded the negotiators of the 1997 Convention to prefer fact-finding to other dispute settlement means. If, after six months from the time negotiations have been requested, the parties to the dispute have not been able to settle the dispute, it is to be submitted, at the request of either party, to "impartial" fact-finding[62]. The Fact-finding Commission is to be established according to a formula which can be frequently found in the field of arbitration: one commissioner for each for the parties, plus a third, neutral one[63]. The parties shall be obliged to provide the Commission with

> "such information as it may require and, on request, to permit the Commission to have access to their respective territory and to inspect any facilities, plant, equipment, construction or natural features relevant for the purpose of its inquiry"[64].

The report of the Commission, setting forth its findings, the reasons therefore and any recommendations deemed appropriate, once adopted by majority vote, is to be submitted to the parties who will have to consider it in good faith, but will not be bound by it[65]. As a matter of fact, the whole procedure closely recalls conciliation,

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58 *Ibid.*, art. 10 and 23.a.

59 *Ibid.*, art. 23.b.

60 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, (133), art. 33. On the dispute settlement clause of the 1997 Convention see Kasme, B., "L'obligation de reglement des differends relatifs aux cours d'eau internationaux", Yakpo, E./Boumedra, T. (ed.), *Liber Amicorum Judge Mohammed Bedjaoui*, The Hague, Kluwer, 1999, pp. 1-22.

61 *Infra*, Ch.III.7, note 10.

62 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, (133), art. 33.3. One cannot but notice the redundancy of the adjective "impartial" inserted in the text of the Convention, as if "partisan" fact-finding were an option at all.

63 *Ibid.*, art. 33.4. *Infra*, Ch.II.4.1.2. Again, as in arbitration, if the parties fail to appoint the third commissioner within three months, the appointment will be made by the UN Secretary-General. *Ibid.* art. 33.5. See also *ibid.*

64 *Ibid.*, art. 33.7.

65 *Ibid.*, art. 33.8.

but, again, the divide between the various diplomatic means of dispute settlement is often blurred.

The clarification of factual circumstances undoubtedly plays a fundamental role in issues dealing with disarmament and proliferation of weapons of mass destruction[66]. Thus, the 1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass-Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof allows each State party to verify through observation the activities of the other parties on the sea-bed and on the ocean floor, as well as in the subsoil thereof[67]. If, after observation, reasonable doubts remain, the party having such doubts shall notify the other parties, and all together will carry out procedures of verification, including inspection of objects, structures, installations or other suspected facilities, to ascertain whether a violation of the Treaty has taken place[68]. Similarly, the 1995 Treaty on the Southeast Asia Nuclear Weapons Free Zone provides that, should a party have doubts about the respect of the agreement by another party, it will be entitled to request clarification[69]. If the doubts persist, the suspecting party may ask the Executive Committee of the Treaty to send a fact-finding mission to the suspected State[70] and, if any breach is found to have occurred, the Executive Committee may decide on any measures it deems necessary to cope with the situation, including submission of the matter to the International Atomic Energy Agency and, if the situation threatens international peace and security, to the UN Security Council and the General Assembly[71].

Besides these few exceptions, and despite the fact that inquiry might play an important role both in the settlement and in the prevention of international environmental disputes, it remains a rare guest in the environmental landscape, or at least, it is not resorted to as frequently as its features warrant[72]. One of the few instances of States systematically resorting to scientific inquiry to establish the causes or consequences of environmental pollution is the Canada-USA International Joint Commission[73]. And this could help explain the excellent record of this body in the field of dispute settlement[74].

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66 On this issue, see Ifft, E., "The Use of On-Site Inspection in the Avoidance and Settlement of Arms Control Disputes", Dahlitz, J. (ed.), *Avoidance and Settlement of Arms Control Disputes*, New York and Geneva, United Nations, 1994, pp. 9-28. See also, Myier, E., "Supervisory Mechanisms and Dispute Settlement", *ibid.*, pp. 149-172.

67 1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass-Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof, (45), art. 3.1. See also Treaty Establishing the African Nuclear-Weapon-Free Zone Treaty, (128), Annex IV.

68 *Ibid.*, art. 3.2 and 3.3.

69 1995 Treaty on the Southeast Asia Nuclear Weapons Free Zone, (127), art. 12.

70 *Ibid.*, art 13.

71 *Ibid.*, art. 14.

72 Another dispute settlement provision which might be regarded as establishing a sort of fact-finding commission is contained in article 29 of the 1995 Straddling Fish Stocks Agreement, (124). It provides that: "Where a dispute concerns a matter of a technical nature, the States concerned may refer the dispute to an *ad hoc* expert panel established by them. The panel shall confer with the States concerned and shall endeavor to resolve the dispute expeditiously, without recourse to binding procedures for the settlement of disputes".

73 *Supra*, Ch.III.8. A notable instance of recourse to fact-finding within the framework of the International Joint Commission are the *ad hoc* scientific bodies appointed in the 1970s to report on acid rain in North America. Schmandt/Clarkson/Roderick, *op.cit.*

74 Gulden, *op.cit.*, at 63.

Among the few other attempts to give inquiry the role it deserves, one should mention the proposal advanced by six European States, grouped together in an informal caucus called "The Hexagonal"[75], during the preparatory work of the United Nations Conference on Environment and Development[76]. The Hexagonal urged the establishment of an inquiry procedure when situations originating on the territory of one State would likely lead to environmental disputes with other States. In that case, not only the State in which the situation arises would be under an obligation to provide all other States likely to be affected with adequate information – a duty which nowadays can be considered by and large part of customary international law-[77], but the latter would also be entitled to request at any time the establishment of an inquiry commission to clarify and establish factual issues. The whole procedure was to be operated by UNEP. Much like the Permanent Court of Arbitration, the Executive Director of the Program was supposed to maintain a list of experts in various subject areas, designated by States, eventually to provide panelists for the Commission. The distinctive feature of the Hexagonal's proposal lay, therefore, in the fact that commissions of inquiry were not to be used only to ascertain facts and propose a solution to deal with a critical situation, but also to prevent the emergence of that situation[78]. While the Hexagonal's proposal did not produce important results on its own, it was at least incorporated in some way into the 1991 UN-ECE Convention on Environmental Impact Assessment[79], article 3 of which eventually provided for an inquiry procedure to determine whether a

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75 The Hexagonal grouped Austria, Czechoslovakia, Hungary, Italy, Poland and Yugoslavia. It was the result of an ingenious attempt by Italy to carve out a niche for her own foreign policy in Eastern Europe in the aftermath of the Cold War. However, this initiative did not survive the demise of some of its participants, namely, Yugoslavia and Czechoslovakia.

76 UNCED, Prep.Com., UN Doc. A/CONF. 151/PC/L. 29 (1991). This proposal was submitted to the UNEP Meeting of Senior Legal Advisers, Nairobi, September 1991. It originated from this particular group of States, probably because some of them experienced a major environmental dispute, namely the *Gabcíkovo-Nagymaros* case. *Infra*, Ch.III.7. The proposal is commented in: Bhagwati, P. N., "Environmental Disputes", Sand, P.H. (ed.), *The Effectiveness of International Environmental Agreements*, Cambridge, Grotius, 1992, pp. 436-452. On the serious environmental problems affecting Central and Eastern Europe countries, see Gabrowska, G., "Environmental Conflicts in Border Areas", Bardonnet, D. (ed.), *The Peaceful Settlement of International Disputes in Europe: Future Prospects*, Workshop of The Hague Academy of International Law, Dordrecht, Nijhoff, 1991, pp. 137-144; Carter, F., W./Turnock, D., *Environmental Problems in Eastern Europe*, London, Routledge, 1993, pp. XIV-249; Klarer, J./Moldan, B., *The Environmental Challenge for Central European Economies in Transition*, Chichester, John Wiley & Sons, 1997, XII-292 pp.; Scovazzi, T., "La protezione dell'ambiente e i nuovi stati dell'Europa centrale e orientale", *Anuario de derecho internacional*, Vol. 9, 1993, pp. 145-153.

77 On the duty to inform of imminent or actual dangers under customary international law see: Sands, Ph., *Chernobyl: Law and Communication*, Cambridge, Grotius, 1988, pp. XXXIII-312.

78 Inquiry may indeed, under certain circumstances, contribute to a reduction of tension and the prevention of an international dispute, as distinct from facilitating the settlement of such a dispute. The possibility of fact-finding or inquiry contributing to the prevention of an international dispute was recognized by the UN General Assembly. UNGA Res. 18/1967 (December 16, 1963). United Nations, *Handbook, op.cit.*, para. 77, at 24-25.

79 1991 Convention on Environmental Impact Assessment in a Transboundary Context, (95).

proposed activity would likely have a significant adverse transboundary impact[80].

As a final note on inquiry in METs, it should be stressed that while reports of fact-finding or inquiry commissions are not binding and while, therefore, the parties to the dispute retain their complete freedom of action with respect to the dispute, the 1982 UNCLOS provides for an inquiry procedure the results of which ("finding of fact"), are to be considered conclusive by the parties to the dispute, unless they have otherwise agreed[81].

2.5. Conciliation

The 1949 Revised General Act for the Pacific Settlement of International Disputes defines the task of a conciliation commission as follows:

> "to elucidate the questions in dispute, to collect with that object all necessary information by means of enquiry or otherwise, and to endeavor to bring the parties to an agreement. It may, after the case has been examined, inform the parties of the terms of settlement which seem suitable to it, and lay down the period within which they are to make their decision."[82]

In other words, conciliation combines the basic features of both inquiry (i.e. the ascertainment of facts) and mediation (i.e. the endeavor to bring the parties to an agreement); in its most structured expressions, it might even resemble judicial means but for the fact that its outcome is not binding[83]. However, unlike what occurs in mediation, the third party assumes a more formal and detached role, often investigating the details of the dispute[84]. The final outcome of conciliation is usually a formal proposal for the settlement of the dispute, which may or may not include findings on matters of fact and of law. Because it provides the parties with a thorough ascertainment of facts by fact-finding, a fundamental element of judicial means, and an articulated proposal on how to settle the dispute by preserving the fundamental interests of all stake-holders, conciliation is, out of all diplomatic means, the one which probably has been most often included in METs.

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80 The 1974 Nordic Environment Convention provides for the establishment of a commission upon the demand of each party to give an opinion on the permissibility of environmentally harmful activities which entail considerable nuisance to another party. 1974 Nordic Convention for Protection of the Environment, (51), arts. 11 and 12.

81 Annex VIII of UNCLOS relating to the special arbitration allows the parties to a dispute to restrict the tribunal to an inquiry into the facts giving rise to the dispute in question. In such instances, findings of facts will be considered "conclusive as between the parties", unless the parties agree otherwise. 1982 United Nations Convention on the Law of the Sea, (73), Annex VIII, art. 5.2.

82 Revised General Act for the Pacific Settlement of International Disputes, art. 15.1.

83 On conciliation see, in general, Cot, J-P., *La conciliation internationale*, Paris, Pedone, 1968; Patchen, M., *Resolving Disputes between Nations: Coercion or Conciliation?*, Durham, NC, Duke University Press, 1988, XIII-365 pp.; Herrmann, G., "La conciliation: nouvelle méthode de règlement des différends", *Revue de l'arbitrage*, Vol. 1981-1985, 1986, pp. 343-372; Kerameus, K.D., "The Use of Conciliation for Dispute Settlement", *Revue hellénique de droit international*, Vol. 32, 1979, pp. 41-53; Nguyen, Quoc Dihn, "Les commissions de conciliation sont-elles aussi des commissions d'enquête?", *R.G.D.I.P.*, Vol. 71, 1967, pp. 565-674.

84 Sands, "Enforcing Environmental Security...", *op.cit.*, at 62.

As a matter of fact, conciliation is provided for in several environmental treaties. Many of them cite conciliation as an option among all other non-judicial means[85]. Others spell out, with different degrees of detail, when and how the conciliation procedure will take place. This is the case, for instance, of fisheries disputes under the 1982 United Nations Convention on the Law of the Sea[86], the 1963 Optional Protocol Concerning the Compulsory Settlement of Disputes of the Vienna Convention on Civil Liability for Nuclear Damage[87], the 1969 International Convention on Intervention on the High Seas in Cases of Oil Pollution Casualties[88], the 1985 Vienna Convention for the Protection of the Ozone Layer[89], the 1992 Convention on Biological Diversity[90], the 1992 Framework Convention on Climate Change[91] and the 1994 Convention to Combat Desertification[92].

A number of other agreements, while not providing for conciliation *expressis verbis*, nonetheless establish procedures which closely resemble conciliation[93]. For instance, the 1951 International Plant Protection Convention provides that if a dispute arises, the FAO Director-General should, after consultation with the Government concerned, appoint a committee of experts that includes the representatives of the Governments involved to consider the questions in the dispute, taking into account all documents and other forms of evidence submitted by the Governments concerned[94]. As a result of this examination, the Committee shall submit a report to the FAO Director-General to be transmitted to the Governments concerned.

The 1963 Optional Protocol Concerning the Compulsory Settlement of Disputes[95] of the Vienna Convention on Civil Liability for Nuclear Damage[96] was the first MET to contain a provision for the establishment of a conciliation procedure which goes beyond a mere mention among other means. Yet its structure is still quite rough. The Protocol provides that, before resorting to the ICJ and within two months from the notification of the existence of a dispute, the parties may agree to a conciliation procedure[97]. Nothing is said about the composition and

85 For instance, the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, (135), art. 38; 1996 Final Act and Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, (131), art. 12.

86 1982 United Nations Convention on the Law of the Sea, (73), art. 297.

87 1963 Optional Protocol Concerning the Compulsory Settlement of Disputes of the Vienna Convention on Civil Liability for Nuclear Damage, (28).

88 1969 International Convention on Intervention on the High Seas in Cases of Oil Pollution Casualties, (41), Annex, Chapter I.

89 1985 Vienna Convention for the Protection of the Ozone Layer, (78), art. 11.4 to 11.6.

90 1992 Convention on Biological Diversity, (106), art. 27.4 and Annex II, Part 2.

91 1992 Framework Convention on Climate Change, (105), art. 14.5 to 14.7.

92 1994 Convention to Combat Desertification, (120), art. 28.6.

93 E.g. Agreement on International Humane Trapping Standards Between the European Community, Canada and the Russian Federation, (139); Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, (110).

94 1951 International Plant Protection Convention, (8), art. 9.2. See also the 1956 Plant Protection Agreement for the South East Asia and Pacific Region, (12), art. 2 and 7.

95 1963 Optional Protocol to the Convention on Civil Liability for Nuclear Damage concerning the Compulsory Settlement of Disputes, (28).

96 1963 Vienna Convention on Civil Liability for Nuclear Damage, (27).

97 Article III of the Optional Protocol.

powers of the conciliation commission. All that is said is that the conciliation commission shall make its recommendations within five months from its constitution[98]. If these recommendations are not accepted by the parties to the dispute within two months after they have been made, either party is free to bring the dispute before the International Court of Justice[99].

The Optional Protocol was negotiated more than 35 years ago. However, as knowledge of the dynamics of international environmental disputes has increased, conciliation procedures in METs have gradually become more and more complex and articulated. The 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties is indeed much more detailed than its predecessors[100]. It provides that, in the event of a failure of negotiations, the dispute can be submitted upon the request of any party to conciliation or, in case of failure of the latter, to arbitration[101]. At the request of any party to the dispute, a conciliation commission composed of three members is established. Its members, one appointed by each of the parties to the dispute and the third chosen jointly by the first two members, are selected from a list previously drawn up and kept by the International Maritime Organization (IMO)[102]. The persons on the list are appointed by States Parties. If a party fails to appoint its own conciliator, or if the first two conciliators have not been able to designate by common agreement the Chairman of the Commission, the IMO Secretary-General will make the required nomination[103]. The Conciliation Commission decides on its own procedure, which shall in any case permit a fair hearing. The parties will be represented before the Commission by agents, and may benefit from the expertise of advisers and experts[104]. After examining the case, the Commission shall communicate to the parties a recommendation, fixing a period of 90 days within which the parties are called upon to state whether or not they accept the recommendation[105]. Conciliation is deemed unsuccessful if 90 days after the parties have been notified of the recommendation, either party has not notified the other of its acceptance of the recommendation. Conciliation shall likewise be deemed unsuccessful if the Commission has not been established within the period described or the Commission has not issued its recommendation within one year[106]. If the conciliation procedure fails, the dispute will be submitted to arbitration[107].

The 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties reflects a trend initiated in the same year by the Vienna Convention on the Law of the Treaties: conciliation procedures, instead of being set in motion by mutual consent of the States parties to an international dispute, can be started as an independent compulsory process, relying upon the

98 Article III.2 of the Optional Protocol.
99 *Ibid.*
100 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties,(41).
101 *Ibid.*, art. 8. Both procedures are described in an annex to the Convention.
102 The characteristics of this list are spelled out in art. 4 of the Annex, Chapter I.
103 *Ibid.*, art. 3.3.
104 *Ibid.*, art. 5.2.
105 *Ibid.*, art. 8.
106 *Ibid.*, art. 10.
107 *Ibid.*, art. 13.2.

request of only one party[108]. Admittedly, the final outcome of the conciliation procedure itself remains non-binding, but this is, nonetheless, a substantial departure from previous practice. This trend was further refined by the 1982 UNCLOS, in which the classical conciliation procedure provided for in article 284 and Annex V, Section 1, is clearly distinguished from Section 2 of the same Annex, which specifically provides that any party to a dispute invited to submit to the conciliation procedure "shall be obliged to submit to such proceedings" and that

> "failure of a party or parties to the dispute to reply to notification of institution of proceedings or to submit to such proceedings shall not constitute a bar to the proceedings"[109].

The 1985 Vienna Convention on the Protection of the Ozone Layer has further crystallized the tendency towards unilateral recourse to conciliation. Moreover, it has started a newer fashion by which conciliation becomes the subsidiary settlement procedure in case parties to the agreement either did not choose the same adjudicatory means (usually the alternative is between arbitration and the ICJ) or did not select either of the two. Accordingly, the 1985 Vienna Convention for the Protection of the Ozone Layer, the 1992 Convention on Biological Diversity, the 1992 Framework Convention on Climate Change and the 1994 Convention to Combat Desertification, in a like manner provide that first:

> "[w]hen ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a State or regional economic integration organization may declare in writing to the Depositary that for a dispute not resolved...it accepts one or both of the following means of dispute settlement as compulsory:
>
> a) Arbitration...
> b) Submission of the dispute to the International Court of Justice..."[110],

and then

> "if the parties have not ... accepted the same or any procedure, the dispute shall be submitted to conciliation"[111].

As a final remark on the newest trends in conciliation procedures in METs, the 1992 Biological Diversity Convention for the first time overcame the fundamental feature of all dispute settlement procedures —their bilateralism— to transform

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108 1969 Vienna Convention on the Law of Treaties, *UNTS*, Vol. 115, at 331, art. 66(b) and Annex.

109 1982 United Nations Convention on the Law of the Sea, (73), Annex V, Section 1 and 2.

110 1985 Vienna Convention for the Protection of the Ozone Layer, (78), art. 11.3; 1992 Convention on Biological Diversity, (106), art. 27.3; 1992 Framework Convention on Climate Change, (105), art. 14.2; 1994 Convention to Combat Desertification, (120), art. 28.2.

111 1985 Vienna Convention for the Protection of the Ozone Layer, (78), art. 11.4; 1992 Convention on Biological Diversity, (106), art. 27.4; 1992 Framework Convention on Climate Change, (105), art. 14.5; 1994 Convention to Combat Desertification, (120), art. 28.6; Protocol to the 1979 LRTAP on Persistent Organic Pollutants, (140), art. 12; Protocol to the 1979 LRTAP on Heavy Metals, (141), art. 11; Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade, (143), art. 20; Protocol to the 1979 LRTAP to Abate Acidification, Eutrophication and Ground-Level Ozone, (148), art. 11.

them, at least potentially, into multilateral instruments. Indeed, under article 2 of the Convention's conciliation procedure

> "in disputes between more than two parties, parties in the same interest shall appoint their members of the commission jointly by agreement. Where two or more parties have separate interests or there is a disagreement as to whether they are of the same interests, they shall appoint their members separately"[112].

To summarize, the two major trends in conciliation under METs are the unilateral triggering of conciliation procedures (i.e. obligatory conciliation) and their use as a subsidiary means when the parties fail to reach agreement on more formal and binding procedures (i.e. adjudicative means). It still remains to be seen whether the breakthrough achieved by the Biodiversity Convention in providing for conciliation between more than two parties will eventually consolidate into a permanent feature of METs.

So much for diplomatic means of dispute settlement as applied in METs. In the environmental sphere, diplomatic means are undergoing rejuvenation and modification. On the whole, however, the most significant tendency is perhaps towards abandoning clear-cut distinctions between the various dispute settlement procedures. More and more, distinctions between various diplomatic means become blurred. Conciliation, in its more refined expressions, resembles adjudicative means except for the fact that the outcome of the procedure is not binding. But that is not all. Dispute settlement procedures and dispute avoidance procedures (e.g. control of the implementation of obligations) increasingly overlap. Admittedly, dispute avoidance is not yet the subject of a general international obligation as is settlement, but, nonetheless, it is receiving increasing attention. As dispute avoidance is gradually losing much of its political and diplomatic aspects to become a clearly defined legal concept, it tends to be incorporated into classical settlement procedures. This is the case of the emergence, in recent multilateral treaties on environmental protection, of so-called non-compliance procedures, which will be analyzed in the following section[113].

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112 1992 Convention on Biological Diversity, (106), Annex 2, Part 2, art. 2.

113 As further evidence for the abandonment of classical distinctions, as the next chapter will make clear, the non-compliance procedure provided for by the 1987 Montreal Protocol to the 1985 Vienna Convention on the Protection of the Ozone Layer can, to a large extent, be assimilated to the more familiar conciliation procedures. Birnie, P.W./ Boyle, A.E., *International Law and the Environment*, Oxford, Clarendon Press, 1992, at 185.

3. NON-COMPLIANCE PROCEDURES

The depletion of stratospheric ozone has been a major environmental issue for about the last 25 years[1]. At first it was only an intriguing scientific hypothesis[2], and until 1981 there was no *prima facie* case against chlorofluorocarbons (CFC). However, when a hole in the ozone layer was found above Antarctica, all of a sudden it became a matter of urgency requiring intergovernmental action. The Convention on the Protection of the Ozone Layer (hereafter referred to as the Vienna Convention) represents an unprecedented breakthrough in the history of international cooperation[3]. For the first time the international community was mobilized to find a way to address an environmental crisis originating 50 kilometers above the planet, threatening all life on Earth far into the next centuries, and allegedly caused by an exemplary chemical (i.e. non-toxic, non-flammable, non-corrosive and highly profitable) employed in thousands of products and processes by virtually every industrialized country.

In other words, the Vienna Convention was the first agreement to address a truly global environmental problem, equally affecting all States of the world and every living being on the planet, caused by pollution from non-point sources and involving time scales transcending a life span. Because of these extremely peculiar features of the ozone layer depletion problem, it is not surprising that, when international policy makers were faced with the challenge of creating a procedure that could address and eventually prevent breaches of the legal regime, they

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1 The "Ozone Layer", a layer of ozone molecules (O_3) found in the stratosphere between 10 and 50 kilometers above ground, shields the Earth from the harmful effects of certain wavelengths of ultra-violet light from the sun, specifically the UV-B. Increase in the levels of UV-B can boost skin cancers, suppress the immune system, exacerbate eye disorders, affect plants and animals and deteriorate plastic materials. "Ozone Treaties", <http://www.unep.org/ozone/treaties.htm> (Site last visited December 10, 1997).

2 The first theorization of the negative interaction between CFCs and the ozone layer was made by Mario Molina and F. Sherwood Rowland in 1974. Molina, M.J./Rowland, F.S., "Stratospheric Sink for Chlorofluoromethanes: Chlorine Atom-Catalyzed Destruction of Ozone", *Nature*, Vol. 249, 1974, pp. 810-812. In 1995, Molina and Rowland were awarded the Nobel Prize in Chemistry for their discovery.

3 1985 Vienna Convention on the Protection of the Ozone Layer, (78). On the Vienna Convention and the ensuing international regime for the protection of the ozone layer, see, in general, Caron, D. D., "La protection de la couche d'ozone stratosphérique et la structure de l'activité normative internationale en matière d'environnement", *A.F.D.I.*, Vol. 36, 1990, pp. 704-725; Parson, E.A., "Protecting the Ozone Layer", Keohane, R.O./Haas, P.M./Levy, M.A. (ed.), *Institutions for the Earth: Sources of Effective International Environmental Protection, Global Environmental Accords Series*, Cambridge, MA, MIT Press, 1993, pp. 27-73.

responded with a major breakthrough: the so-called non-compliance procedure (NCP)[4].

The remarkable headway in the phasing-out of ozone depleting substances which took place during last decade has been the result of several elements[5]. However, the very fact that in the 1990s the NCP of the ozone regime has been emulated by several major METs suggests that this innovative procedure has been regarded, rightly or wrongly, as a key-factor in the phasing-out process. Starting from the Montreal Protocol to the Vienna Convention on the Protection of the Ozone Layer (Montreal Protocol)[6], provisions for NCPs or the like[7] have spread in all directions. The 1992 Climate Change Convention[8], and the 1994

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4 Although the NCP of the Montreal Protocol to the Vienna Convention on Substances that deplete the Ozone Layer is a central model for other NCPs, the literature that actually assesses its operation is quite limited. Among the few, see Széll, P., "The Development of Multilateral Mechanisms for Monitoring Compliance", Lang., W. (ed.), *Sustainable Development and International Law*, London Graham and Trotman, 1995, pp. 97-109; *id.*, "Implementation Control: Non-Compliance Procedure and Dispute Settlement in the Ozone Regime", Lang., W. (ed.), *The Ozone Treaties and Their Influence on the Building of Environmental Regimes*, Vienna, Austrian Ministry of Foreign Affairs, Austrian Foreign Policy Documentation, 1996, pp. 43-50; Schally, H., "The Role and Importance of Implementation Monitoring and Non-Compliance Procedures in International Environmental Regimes", *ibid.*, pp. 82-98; Rummel-Bulska, I., "Implementation Control: Non-Compliance Procedure and Dispute Settlement: from Montreal to Basel", *ibid.*, pp. 51-57; Victor, D., "The Montreal Protocol's Non-Compliance Procedure: Lessons for Making other International Environmental Regimes More Effective", *ibid.*, pp. 58-81; *id.*, *The Early Operation and Effectiveness of the Montreal Protocol's Non-Compliance Procedure*, Vienna, IIASA, Executive Report N. 96-2, 1996, pp. XII-53; Handl, "Compliance Control ...", *op.cit.*; Werksman, J., "Compliance and Transition: Russia's Non-Compliance Tests the Ozone Regime", *Z.a.ö.R.V.*, Vol. 56, 1996, pp. 750-773; Koskenniemi, M., "Breach of Treaty or Non-Compliance?", *op.cit.*; Trask, J., "Montreal Protocol Non-Compliance Procedure: The Best Approach Resolving International Environmental Disputes", *Georgetown Law Journal*, Vol. 80, 1992, pp. 1973-2001.

5 Perhaps the two most important are the discovery of cheap and clean substitutes of CFCs and the mass-media campaign which obliged policy makers to keep ozone depletion high on their agenda. For a detailed picture of the progress in the phasing-out of ozone-depleting substances, see the Report of the President of the Implementation Committee to the 10th Meeting of the Parties to the Montreal Protocol (November 23-24, 1998), UNEP/OzL.Pro.10/9, para. 72-82.

6 1987 Montreal Protocol to the Vienna Convention on the Protection of the Ozone Layer, (88).

7 Sometimes the compliance control procedure of the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR), (107), is also included in articles regarding compliance control with METs. Marauhn, T., "Towards a Procedural Law of Compliance Control in International Environmental Relations", *Z.a.ö.R.V.*, Vol. 56, 1996, pp. 697-731, at 697; Lang, W., "Compliance Control in International Environmental Law: Institutional Necessities", *Z.a.ö.R.V.*, Vol. 56, 1996, pp. 685-695, at 693. However, as Handl remarked, unlike "orthodox" NCPs, the compliance control procedure of the OSPAR provides only for a compliance procedure centered on the Convention's Commission, made up of representatives of each contracting party, and not on a free-standing, special and dedicated institutional mechanism. Handl, "Compliance Control Mechanisms...", *op.cit.*, at 33, note 16.

8 1992 United Nations Convention on Climate Change, (105), art. 13. For a commentary of the UNFCCC, see Bodansky , D., "The United Nations Framework Convention on Climate Change: A Commentary", *Yale Journal of International Law*, Vol. 18, 1993, pp. 451-558. For an analysis of the negotiations that led to the conclusion of the UNFCCC, see Mintzer, I. M./ Leonard, J. A., *Negotiating Climate Change*, Cambridge, Cambridge University Press, 1994.

Desertification Convention[9], contain provisions for the "adoption of a multilateral consultative process for the resolution of questions regarding implementation". The 1997 Kyoto Protocol to the Climate Change Convention requires the Conference of the Parties to "...approve appropriate and effective procedures and mechanisms to determine, and to address cases of non-compliance..., including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance"[10]. In a similar way, the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, indicates that the Meeting of the Parties shall "...establish, on a consensus basis, optional arrangements of a non-confrontational, non-judicial and consultative nature for reviewing compliance with the provisions of the Convention"[11]. Comparable provisions can also be found in the 1996 Protocol to the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (MARPOL)[12], in the Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade[13], and the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes[14]. In other instances, non-compliance procedures have been adopted years after the pivotal legal instrument of the regime had entered into force, for instance in the case of the 1979 ECE Convention on Long-Range Transboundary Air Pollution (LRTAP)

9 1994 International Convention to Combat Desertification, (120), art. 27. To date the NCP of the Desertification Convention has not yet been established. For the most recent developments and an overview of the procedures which are being considered as models for the NCP of the Desertification Convention, see "Consideration of Procedures and Institutional Mechanisms for the Resolution of Questions of Implementation, in Accordance with Article 27 of the Convention, with a View to Deciding How to Take This Matter Forward", (ICCD/COP(3)/18, July 19, 1999).

10 1997 Kyoto Protocol, (138), art. 17.

11 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, (142), art. 15.

12 Article 11 provides that within two years from the entry into force of the Protocol, the Meeting of the Contracting Parties "shall establish those procedures and mechanisms necessary to assess and promote compliance". 1996 Protocol to the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, November 7, 1996. (IMO Doc. LC/SM 1/6).

13 1998 Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade, (143), art. 17.

14 1999 Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (147), art. 15.

and its protocols[15], and the 1989 Basel Convention on Control of Transboundary Movements of Hazardous Wastes and their Disposal[16].

Despite NCPs are expanding at breathtaking pace, the following pages will focus mainly on the procedure of the 1987 Montreal Protocol. Indeed, to date the Montreal Protocol is the only major multilateral environmental treaty whose NCP has been put to the test of actual non-compliance. Although the Climate Change Convention[17], the Basel Convention[18], and the LRTAP regime[19], are endowed with non- compliance procedures, they are either still under consideration, or in the early stages of operation, and therefore too immature to provide useful indications on their use and effectiveness.

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15 For the NCP of the Oslo Protocol, see: Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Further Reduction of Sulfur Emissions and Decisions on the Structure and Functions of the Implementation Committee, as well as Procedures for its Review of Compliance, Oslo, June 14, 1994, text in Burhenne, *op.cit.*, 979:84/E. (UN Doc. ECE/EB.AIR/40). Article 3.3 of the Protocol to the LRTAP on Volatile Organic Compounds provides that: "The Parties shall establish a mechanism for monitoring compliance with the present Protocol. As a first step, based on information provided pursuant to article 8 or other information and Party which has reasons to believe that another Party is acting or has acted in a manner inconsistent with its obligations under this Protocol may inform the Executive Body to that effect and, simultaneously, the Parties concerned. At the request of any Party, the matter may be taken up at the meeting of the Executive Body." 1991 Protocol to the 1979 Convention on Long-range Transboundary Air Pollution Concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes, (98), art. 3.3.

16 1989 Convention on Control of Transboundary Movements of Hazardous Wastes and their Disposal, (92), art. 19.

17 The NCP of the Climate Change Convention was adopted during the fourth Conference of the Parties, held in Buenos Aires on November 2-14, 1998, with Decision 10/CP.4 (FCCC/CP/1998/16/Add.1), on the basis of the report of the Ad Hoc Group on Article 13 (FCCC/AG13/1998/2), adopted during its sixth session held in Bonn, June 5-11, 1998. On the NCP of the Climate Change Convention (UNFCCC), see Ott, *op.cit.*; Werksman, J., "Designing a Compliance System for the Climate Change Convention", *FIELD Working Paper*, London, Foundation for International Environmental Law and Development, 1995, pp. 1-22, (on file with the author).

18 Decision III/11, "Monitoring of the Implementation of and Compliance with the obligations Set Out by the Basel Convention", reprinted in *Y.I.E.L.*, Vol. 6, 1995, at 786. The Terms of Reference of the Basel NCP should be adopted during the fifth Meeting of the Parties to be held in December 1999.

19 In 1997, the Executive Body of the LRTAP Convention, with Decision 1997/2, urged the Parties to the 1994 Protocol on Further Reduction of Sulfur Emissions ("Oslo Protocol"), and the 1991 Protocol Concerning the Control of Emissions of Volatile Organic Compounds (VOCs), to decide that "...the structure, functions and procedures set out in the annex to this decision shall apply for the review of compliance...in place of the regime adopted [for each of those protocols]". In other words, with Decision 1997/2 the Executive Body of the LRTAP has moved towards the adoption of a single and new compliance regime for all LRTAP protocols. Accordingly, article 11 of the 1998 Protocol to LRTAP on Persistent Organic Pollutants, article 9 of the 1998 Protocol on Heavy Metals, and article 9 of the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, provide that "the compliance by each party with its obligations...shall be reviewed regularly. The Implementation Committee established by decision 1997/2 of the Executive Body...shall carry out such reviews...". Protocol to the 1979 LRTAP to Abate Acidification, Eutrophication and Ground-Level Ozone, (148), 9; Protocol to the 1979 LRTAP on Persistent Organic Pollutants, (140), 11; Protocol to the 1979 LRTAP on Heavy Metals, 24/6/1998, (141), 9.

The aim of the following section is to determine whether non-compliance procedures are a new category of dispute settlement means with the right to be singled out, alongside mediation, good offices, conciliation and arbitration, in the list of settlement procedures, or rather represent the careful adaptation of canonical dispute settlement means to new circumstances[20]. To do so, the following pages will contour a throughout description of the Montreal Protocol's NCP, as archetype of all non-compliance procedures; they will then put forward some considerations which might help explaining their singularity and the reasons of their popularity.

3.1. Origins of the Montreal Protocol's Non-Compliance Procedure

Despite the fact that it took four years of intense negotiations, the 1985 Vienna Convention on the Ozone Layer in itself is nothing very exceptional. In Vienna, States parties merely agreed to take

> "appropriate measures...to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer"[21].

But how to reach that goal was unspecified. There was no mention of any substances that might harm the ozone layer, and CFCs only appeared towards the end of the Annex to the agreement, where they were generically mentioned as chemicals that should be monitored[22]. The main thrust of the Convention was to lay down the framework to encourage cooperation among States through research and

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20 It is not the aim of this brief section to enter into the merits of the larger debate about control of the implementation of international commitments in the environmental field. On this issue there is a large and rapidly expanding literature. For an account of existing literature on the subject see the general bibliography at the end of this study. On compliance in international environmental regimes, see, in particular: Chayes, A./ Chayes, A./ Mitchell, R., "Active Compliance Management in Environmental Treaties", Lang, W. (ed.), *Sustainable Development and International Law*, London, Graham and Trotman, 1995, pp. 75-89, Sachariev, *op.cit.*; Boisson de Chazournes, *op.cit.*; Marauhn, T., "Towards a Procedural Law of Compliance Control in International Environmental Relations", *op.cit.*; Lang, W., "Compliance Control in International Environmental Law", *op.cit.*; Széll, "The Development of Multilateral Mechanisms for Monitoring Compliance", *op.cit.*; Keohane, R. O./Haas, P.M./Levy, M. A., "Improving the Effectiveness of International Environmental Institutions", Keohane, R. O./Haas, P.M./Levy, M. A. (ed.), *Institutions for the Earth: Sources of Effective International Environmental Protection*, Cambridge, MA, MIT Press, 1993, pp. 397-426; Kummer, K., "Providing Incentives to Comply with Multilateral Environmental Agreements: An Alternative to Sanctions?", *European Environmental Law Review*, Vol. 3, 1994, pp. 256-263; Cameron, J. / Werksman, J. /Roderick, P. (ed.), *Improving Compliance with International Environmental Law*, London, Earthscan, 1996, pp. XVIII-341; Brown Weiss, E. / Jacobson, H.J. (ed.), *Compliance with International Environmental Agreements*, Irvington, NY, Transnational Publishers, 1996, 250 pp.; Mitchell, R.B., *From Paper to Practice: Improving Environmental Treaty Compliance*, Ann Arbor, UMI, 1992, pp. VII-412. On compliance control in general, see Fox, H./ Meyer, M.A., *Effecting Compliance*, London, British Institute of International and Comparative Law, 1993, pp. XVII-251; Chayes, A./Chayes, A., *The New Sovereignty: Compliance with International Regulatory Agreements*, Cambridge, MA, Harvard University Press, 1995, pp. XII-417.

21 Article 2.1.

22 Annex I, point 4.c.

exchange of information. As a "framework treaty"[23], it set forth general principles and institutional structures but contained no substantive emission reduction provisions or rules on liability.

Disputes arising from alleged breaches of the few rules contained in this shell are to be treated in accordance with the traditional dispute settlement procedures provided for in article 11 of the Convention[24]. First the parties to the dispute must seek a solution through negotiation[25]. If they cannot reach an agreement, they may jointly seek the mediation or good offices of a third party[26]. In ratifying or acceding to the Convention, parties may make an optional declaration accepting the jurisdiction either of the International Court of Justice or of an ad hoc arbitral tribunal[27]; if the parties have not accepted the same or any other procedure, the dispute may be submitted unilaterally to conciliation[28].

The Vienna Convention was concluded in March 1985. In May of the same year, as the legal experts began to explore specific measures to fill that framework, the journal *Nature* published a paper by a group of British scientists about severe ozone depletion in the Antarctic[29]. The paper's findings were later confirmed by American satellite observations and offered the first tangible proof of such depletion, making the need for definite measures urgent. Negotiations received a new impulse and, in September 1987, agreement was reached in Montreal on specific measures to be taken, including those of reducing the consumption and production of ozone-depleting substances and of providing technical and financial assistance[30]. Accordingly, the Protocol on Substances that Deplete the Ozone Layer was signed.

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23 "A framework convention consists of stipulation in abstract and general words mainly in search for general recognition by the states of the necessity of international regulation over the problem concerned, and for some national political commitments to that. And it is usually by a protocol to it that concrete standards and measures are provided to implement a general obligation under a framework convention." Kanehara, A., "The Significance of the Japanese Proposal of "Pledge and Review" Process in Growing International Environmental Law", *Japanese Annual of International Law*, Vol. 35, 1992, pp. 1-32, at 19, note 44.

24 Note that the dispute settlement procedure of the Vienna Convention has been reproduced, without major changes, both in the 1992 Climate Change Convention, (105), art. 14, and in the 1992 Biodiversity Convention, (106), art. 2.7. For the classical view concerning the settlement of disputes relating to the interpretation and implementation of treaties, see: Sohn, L.B., "Settlement of Disputes Relating to the Interpretation and Application of Treaties", *Hague Academy of International Law, Collected Courses*, Vol. 150, 1976-II, pp. 195-294.

25 1985 Vienna Convention on the Protection of the Ozone Layer, (78), art. 11.1.

26 *Ibid.*, art. 11.2.

27 *Ibid.*, art. 11.3

28 *Ibid.*, art. 11.

29 Farman, J.C./Gardiner, B.G./Shanklin, J.D., "Large Losses of Total Ozone in Antarctica Reveal Seasonal CLOx/Nox Interaction", *Nature*, Vol. 315, May 16, 1985, pp. 207-210.

30 Article 2 of the Protocol calls for a 50 percent cut in most ozone depleters by mid-1999. At the Second Meeting of the Parties to the Montreal Protocol, held in London in 1990, a more ambitious plan of reduction of production and consumption of CFCs and other depleting substances was launched, which should lead to the complete elimination of the consumption and production of CFCs by the year 2000. Adjustments and Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer, June 29, 1990, *ILM*, Vol. 30, 1991, at 537.

Although in principle the dispute settlement system of the Vienna Convention applies also to the Montreal Protocol[31], parties were aware of the need to ensure the highest degree possible of implementation for the stringent provisions of the Protocol, and of the inadequacy of the classical means of settlement for addressing disputes arising from that agreement. At the eleventh hour of the negotiations, these considerations interacted with tactical calculations of the United States delegation[32], resulting in the hasty inclusion of a provision in the Montreal Protocol requiring the Parties, after their first meeting, to

> "consider and approve procedures and institutional mechanisms for determining non-compliance with the provisions of the Protocol and for the treatment of Parties found to be in non-compliance"[33].

As the proposal on verification and compliance was introduced only very late in the negotiations, it stood no chance of being elaborated on as part of the agreement itself, but was deferred to subsequent meetings of the parties. A first interim non-compliance procedure, based on the conclusions of an *ad hoc* working group of legal experts[34], was adopted by the Second Meeting of the Parties (London 1990)[35]. But, on account of its novelty, complexity and, in certain respects, sensitivity, the full Terms of Reference of the non-compliance procedure were only approved at the Fourth Meeting of the Parties (Copenhagen 1992)[36].

Through November 1999, the Implementation Committee under the Non-Compliance Procedure of the Montreal Protocol held 22 meetings. In nine years of functioning, seven in full capacity, the Implementation Committee has developed a consistent practice which has sometimes confirmed the letter of the decision instituting it and sometimes filled gaps in the original mandate[37]. Yet,

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31 Article 11.6 of the Vienna Convention on the Protection of the Ozone Layer provides that the dispute settlement procedure of the Convention shall apply to any protocol unless provided otherwise.

32 Széll writes: "It is interesting to note...that in origin the proposal for a verification and compliance clause was little more than a tough negotiating ploy on the part of one State [the United States] designed to keep maximum pressure, during the final stage of the negotiation, on what it saw as its principal adversary [the European Community]. It may be doubted whether there was, at the time, any thought in the proposer's, or anyone else's, mind that the Protocol would not deliver its overall environmental goal unless a verification process more compelling than peer pressure, yet less abrasive than settlement of disputes, were devised". Széll, "Implementation Control: Non-Compliance Procedure and Dispute Settlement in the Ozone Regime", *op.cit.*, at 45.

33 1987 Montreal Protocol, (88), art. 8.

34 Report of the First Meeting of the *Ad hoc* Working Group of Legal Experts on Non-Compliance with the Montreal Protocol, UN Doc. UNEP/Ozl.Pro.LG.1/3 (1989), reprinted in *E.P.L.*, Vol. 19, 1989, at 223.

35 Second Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, Decision II/5, UN Doc. UNEP/OzL.Pro.2/3 (1990).

36 Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (hereafter referred to as Terms of Reference), UN Doc. UNEP/OzL.Pro./4/15.

37 On the basis of the experience acquired during the first years of operation, the NCP of the Montreal Protocol was formally amended in November 1998 by Decision X/10 of the tenth Meeting of the Parties (UNEP/OzL.Pro.10/9, December 3, 1998). See also Decision IX/35 of the ninth Meeting of the Parties (UNEP/OzL.Pro.9/12, September 25, 1997), instituting the Ad Hoc Working Group of Legal and Technical Experts on Non-Compliance.

because of its novelty, to date there are very few studies containing a thorough assessment of its operation or its reaction to the first cases of non-compliance[38]. While it is not the ambition of this study to undertake such an assessment of the NCP's practice, since the following pages will be limited to a brief exposition of the structure of the Montreal Protocol's NCP and the legal issues arising out of its functioning, reference will nonetheless be made, from time to time, to the "case law" developed by the NCP so far.

3.2. Anatomy of a Non-Compliance Procedure

3.2.1. Aim

Under paragraph 8 of the Terms of Reference for the Montreal Protocol's NCP, the overall aim of the procedure is to "secure an amicable solution of the matter on the basis of respect for the provisions of the Protocol". To ensure the attainment of this goal, the NCP was intended to be[39], and to a large extent is[40], based upon five fundamental principles. Namely, it should be:

(a) non-complex;
(b) non-confrontational;
(c) non-judicial;
(d) transparent; and
(e) subject to the authority of the plenary organ (i.e. the Meeting of the Parties).

In other words, the general aim of the NCP is to create a system to guarantee the implementation of the obligations undertaken under the Vienna Convention and

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38 The only studies thus far of the first years of functioning of the Implementation Committee are: Victor, *The Early Operation and Effectiveness of the Montreal Protocol's Non-Compliance Procedure*, *op.cit.*; Werksman, "Compliance and Transition", *op.cit.*.

39 Report of the First Meeting of the *Ad hoc* Working Group of Legal Experts on Non-Compliance with the Montreal Protocol.

40 Admittedly, the requirement of transparency does not seem to be fully met in the Montreal Protocol non-compliance procedure. One of the distinctions between the Oslo Sulfur Protocol and the Montreal Protocol is that while in the former reports relating to compliance are not required to be confidential, in the latter they are. See para. 15 of the Terms of Reference. This is largely due to the fact that data on sulfur emissions do not have the same commercial value as those concerning chlorofluorocarbons. It is important to note that in the Montreal Protocol information is not confidential per se but must be designated as confidential ("received in confidence"). However, although there is no provision on who is competent to do so, it may be assumed that this power is in the hands of the party submitting the relevant information.

Also the Climate Change Convention contains a provision regarding the confidentiality of information. Marauhn, *op.cit.*, at 729. Article 12.9 states that information received by the Secretariat that is designated by a Party as confidential shall be aggregated by the Secretariat to protect its confidentiality. However, the designation of the information as confidential can be effected only in accordance with the criteria to be established by the Conference of the Parties. Full transparency in international regimes is, in any case, a mere illusion. If closed consultations and negotiations are not allowed, the Parties will always find private fora of their own to handle delicate matters. The Montreal Protocol Implementation Committee's Reports are available to the public at <http://www.unep.org/ozone/reports.htm> (Site last visited on January 22, 1998). On the importance of transparency in NCPs see Handl, "Compliance Control Mechanisms...", *op.cit.*, at 42-43.

the Montreal Protocol which could work smoothly in a multilateral context and build confidence through non-confrontational discussion rather than adjudication[41]. In particular, the NCP of the Montreal Protocol consists of two interlocking systems, managed by a standing committee (i.e. the Montreal Protocol Implementation Committee)[42]. Under the first (i.e. regular) system, the Implementation Committee debates general matters related to reporting requirements and the implementation of and compliance with the Protocol, making recommendations to other bodies on ways to improve working procedures[43]. Under the second (i.e. *ad hoc)* system, the Implementation Committee reviews specific submissions about alleged non-compliance filed by parties to the Montreal Protocol, or the Convention's Secretariat, and reports on them, including any recommendations it deems necessary, to the plenary organ of the regime, the Meeting of the Parties[44]. During the first five years of its life, most of the Committee's workload arose out of the regular system; the first formal submission was filed only in mid-1995[45]. However, while the regular system pertains to the general domain of control of the implementation of international commitments – again, a topic which does not belong to the present study – the ad hoc system is of extreme relevance to the issue of the settlement of international disputes. For this reason, the following pages will neglect the former and focus on the latter.

3.2.2. Submissions

Para. 1 of the Terms of Reference of the Montreal Protocol's NCP reads:

> "If one or more Parties have reservations regarding another Party's implementation of its obligations under the Protocol, those concerns may be addressed in writing to the Secretariat. Such a submission shall be supported by corroborating information"[46].

Undoubtedly, the fact that any party has the right to demand that any other party respect the agreements is implicit in the fundamental customary principle *pacta sunt servanda*. This is the cornerstone of the whole edifice of international law. It is the basis not only of all procedures to handle disputes arising out of the lack of compliance with international agreements, but also of the international law on State

41 These four principles are the basis of the non-compliance procedure of the Oslo Protocol as well. They were expressly recalled in the 1993 ECE Ministerial Declaration of Lucerne, Switzerland, which urged 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 making decisions to the Contracting Parties; (4) allow the 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 by the Parties. Declaration by the Ministers of the Environment of the Region of the United Nations Economic Commission for Europe (UN/ECE) and the Members of the Commission of the European Communities Responsible for the Environment, Lucerne, April 30, 1993, at 8, para. 23.1.

42 Victor, "The Early Operation...", *op.cit.*, at IX.

43 Para. 7(b) of the Terms of Reference.

44 *Ibid.*, para. 1-4 and 7.a.

45 This is the case of the so-called self-submission filed by Russia, Bulgaria, Poland, Belarus and Ukraine. *Infra*, note .

46 Terms of Reference, para. 1.

responsibility. However, how far does the right to challenge any other party's behavior extend in an NCP, and in Montreal's in particular?

The canonical view on the international law of State responsibility is that non-compliance with (or, to use a more orthodox term, violation of) obligations arising under a multilateral treaty entails an essentially bilateral legal relationship between the trespasser and the injured State (or States; even in this case, the relation is still bilateral because it remains possible to distinguish the wrongdoer, on the one hand, and the victims as a group, on the other hand). This position makes perfect sense in most instances. For example, if the Commonwealth of Virginia starts criminal proceedings against a national of Paraguay without giving notice of this to the consular authorities of that State, Paraguay is entitled to seek redress against the United States for violation of the 1963 Vienna Convention on Consular Relations[47]. A third State, say Italy, being a party to that same convention, cannot do the same because it cannot claim an injury caused by the violation committed by the United States. As a rule, the exercise of the "right to complain" under general international law is subject to the existence of a legal interest. Usually, only those States which can show that the behavior of another State has prejudiced their rights can raise the issue before an international adjudicative body[48].

However, as the International Law Commission's Special Rapporteur on State Responsibility, Gaetano Arangio-Ruiz, admitted:

> "there are rules...apparently escaping the...pattern of bilateralism...which, in the pursuit of 'general' or 'collective' interests, create obligations compliance with which is in the legally protected interest – and in that sense the legal right – of all States to which the rule is addressed"[49]

The derogation from the bilateral view, typical of the classical approach to State responsibility, has been the result of the emergence in international law of two specialized sets of rules: international human rights law first, and international environmental law, later. Because of the ultimate unity of the environment (as well as on account of the ultimate oneness of human rights, which are individual's inherent rights and, as such, belong to all human beings), leaving the possibility of holding accountable States which have committed environmental misdeeds only in the hands of those who could prove having suffered damage would have made the defense of international environmental law very arduous. Indeed, as Günther Handl observes,

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47 *Case Concerning the Vienna Convention on Consular Relations* (Paraguay v. USA), Provisional Measures, Order of April 9, 1998, *ILM*, Vol. 37, 1998, pp. 810-823; *Case Concerning the Vienna Convention on Consular Relations* (Germany v. USA), Provisional Measures, Order of March 3, 1999, *ILM*, Vol. 38, 1999, at 308-316.

48 On the restrictive view of what constitutes an "injured State" in the practice of judicial bodies, in particular the ICJ, see: South West Africa, (Ethiopia v. South Africa; Liberia v. South Africa), Second Phase, Judgment, ICJ Reports, (1966), pp. 6-505, at 34, para. 50-52; Military and Paramilitary Activities in and Against Nicaragua, (Nicaragua v. United States), Merits, Judgment, ICJ Reports, (1986), pp. 14-546, at 127, para. 249.

49 Arangio-Ruiz, G., Fourth Report on State Responsibility, UN Doc. A/CN.4/444/Add.2, at 22, para. 132 (1992).

> "the vindication of international community interest in protecting environmental resources [would] be beyond the individual State's ability to invoke the defaulting State's international responsibility to obtain redress for non-compliance, unless the incriminated conduct rises also to the level of infringing the rights of the complaining state concerned"[50].

The Vienna Convention, along with its Protocols, is the result of a problem equally affecting all States of the world and every living being on the planet, caused by pollution from non-point sources and involving time scales transcending a single life span. Being the global treaty *par excellence*[51], it necessarily derogates from the no-tort-no-right-to-complain rule[52]. This must necessarily be so, even when it is not explicitly provided for in the NCP's Terms of Reference[53]. It is, in other words, implicit in the multilateral character of the regime. While the wording of the Montreal Protocol, when it calls the whole mechanism "non-compliance procedure", is somewhat misleading, the wording of the Climate Change Convention is much clearer and leaves no room for doubt. Article 13 provides for the establishment of a "multilateral consultative process, available to Parties on their request, for the resolution of questions regarding the implementation of the Convention".

It follows that NCPs necessarily endow each and every party with the competence to voice concerns about the implementation of the Convention's and Protocols' obligations by another party. By challenging other parties' behavior, certain States would thus act as trustees of all other parties, seeking to ensure the protection of their collective rights[54]. This very much resembles an *actio popularis* in the interest of all Parties[55].

So much for the theory; however, as was already pointed out at the beginning of this chapter, the history of international law knows of no single instance of a State which has decided overtly to challenge the implementation of a MET by another State through the established procedures[56]. Diplomatic mumbling and even outspoken dissatisfaction is not rare in the functioning of international environmental regimes, but the actual use of the institutionalized procedures has constantly

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50 Handl, "Compliance Control Mechanisms", *op.cit.*, at 35.

51 This primacy is now perhaps shared with the UNFCCC, the Biodiversity Convention and the UNCLOS.

52 Some authors have resorted to the notion of "soft legal interest" to find a legal basis for the commencement of a non-compliance procedure. Boisson de Chazournes, *op.cit.*, at 65-66.

53 The ILC does not seem to be of the same opinion, because it seems to make the universalization of the "injured state" dependent on an *express* stipulation to this effect in the MET concerned. See, e.g. Draft Articles on State Responsibility, Part 2, art. 5, para. 2(f) (as provisionally adopted by the ILC in 1985); *Y.B.I.L.C.*, Vol.2, part 2, at 25; *ibid.*, at 27, para. 24 (commentary). On this point see Handl, "Compliance Control Mechanisms...", *op.cit.*, at 36. If so, however, it is difficult to read in para. 1 of the Montreal Protocol's NCP an expression of such entitlement, since it merely reads: "If one or more Parties have reservations regarding another Party's implementation of its obligations under the Protocol, those concerns may be addressed in writing to the Secretariat. Such a submission shall be supported by corroborating information".

54 It should be noted that the fact that States under the Climate Change Convention have different obligations should not imply a differing capacity to trigger the non-compliance procedure.

55 Sand, P.H., "Transnational Environmental Disputes", Bardonnet, D. (ed.), *The Peaceful Settlement of International Disputes in Europe: Future Prospects*, Workshop of The Hague Academy of International Law, Dordrecht, Nijhoff, 1990, pp. 123-135, at 131-132.

56 *Supra*, Ch.II.1.2.3.

been avoided by States. The NCP of the Montreal Protocol is no exception. Of all submissions handled to date by the Implementation Committee, none of them has been put forth by a State Party[57].

Moreover, beside the actual States' restraint in avoiding formal submissions, the procedure has been carefully designed to eschew confrontation. Claims regarding alleged non-compliance, along with "corroborating information", are submitted to the Secretariat in writing[58]. Within two weeks of its receiving a submission, the Secretariat sends a copy of the submission to the Party whose implementation is at issue, and, after having given it a reasonable time to reply – not to exceed three months[59]–, the Secretariat will transfer the submission to the Implementation Committee. In this way, conflict between individual Parties is avoided from the beginning. As a matter of fact, the Secretariat is the organ which formally submits the complaint, while the Meeting of the Parties, acting in its capacity as the plenary and highest decision-making body of the regime in each case decides on possible action. This way, claimant and alleged violator avoid snarling at each other across the table.

A second way in which non-compliance can be raised is through the Secretariat of the Vienna Convention. To this end, para. 3 of the Terms of Reference reads:

> "Where the Secretariat, during the course of preparing its report, becomes aware of possible non-compliance by any Party...it may request the party concerned to furnish necessary information about the matter. If there is no response ... within three months or such longer period as the circumstances of the matter may require, or the matter is not resolved through administrative action or through diplomatic contacts, the Secretariat shall include the matter in its report to the meeting of the parties...and inform the Implementation Committee accordingly."[60]

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57 Széll observes: "There have undoubtedly been times over the past five years when individual parties have considered others to be in breach but they have deemed it wiser to draw attention to the matter by other, less direct means. Either they have applied multilateral pressure; or they have used the secretariat as the conduit for drawing their concerns about the performance of others to the Committee's attention. This pattern seems unlikely to change, save, perhaps, where there is a particular flagrant breach of the Protocol's obligations, although even then the probability is that the reference to the Committee will be made by a consortium of Parties and not just one. Given the aim that the non-compliance regime should be non-confrontational, such joint action would seem both logical and laudable." Széll, "Implementation Control: Non-Compliance Procedure and Dispute Settlement in the Ozone Regime", *op.cit.*, at 48.

58 Terms of Reference, para. 1. It is not clear what "corroborating information" means. Is it a true burden of proof or simply a way to assist the Implementation Committee in carrying out its duties? Considering the non-judicial and non-confrontational nature of the procedure, it seems reasonable to incline toward the latter.

59 The importance of strict time-limits for dispute settlement procedures is particularly stressed by the GATT/WTO practice. In the dispute settlement procedure of the WTO, not more than nine months can pass between the filing of the case and the panel ruling. 1994 Uruguay Understanding on Rules and Procedures Governing the Settlement of Disputes, *ILM*, Vol. 33, 1994, at 1226.

60 Terms of Reference, para. 3.

The possibility for the Convention's Secretariat to submit cases is a feature common to the overwhelming majority of METs[61]. Yet, the critical element is how the Secretariat will become "aware of possible non-compliance by any Party". Indeed, one of the main differences between the non-compliance procedure of the Montreal Protocol and that of the Oslo Protocol to the 1979 LRTAP is that in the case of the former, the Secretariat can bring to the attention of the Implementation Committee only information regarding implementation by Parties which it uncovers in the process of producing its report, that is, on the basis of the information that States themselves provide. If the Secretariat is not satisfied with the information it receives, it may call for further information from the Parties, and if its concerns are not answered, it must report the matter to the Meeting of the Parties, but it cannot go any further. Conversely, in the case of the NCP under the Oslo Protocol, the Secretariat has a stronger role. It can submit to the Implementation Committee such information, however it finds it.

This could play, undoubtedly, a positive role in bringing about observance of the Convention. International organizations and NGOs could, acting as ombudsman of individuals, provide the Secretariat with relevant information. Yet, this positive picture is reduced to its true proportion by three observations. First, non-governmental organizations and international Governmental organizations, even if they are able to set the procedure in motion by tipping-off the Secretariat, may not fully participate in it. Second, the Implementation Committee has merely a faculty and not a legal duty to consider any information forwarded by the Secretariat. Finally, under the Oslo Protocol's NCP Terms of Reference, the Meeting of the Parties simply "...may...decide upon and call for steps to bring about full compliance with the Protocol...and to further the protocol's objectives"[62]. In other words, it is not compelled to act.

Last but not least, issues of non-compliance (or even only of potential non-compliance) can be brought to the attention of the regime's organs by "self-incrimination". Under para. 4 of the Terms of Reference, indeed:

> "Where a Party concludes that, despite having made its best *bona fide* efforts, it is unable to comply fully with its obligations under the Protocol, it may address to the Secretariat a submission in writing, explaining, in particular, the specific circumstances that it considers to be the cause of its non-compliance. The Secretariat shall transmit such submission to the Implementation Committee which shall consider it as soon as practicable"[63].

The fact that a State can submit its own non-compliance to the scrutiny of other members is probably one of the most striking features of the whole procedure[64]. Self-submission to the perusal of the Implementation Committee is a further signal

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61 Incidentally, it should be noted that the original Montreal Protocol procedure (UN Doc. UNEP/OzL.Pro.2/3 [1990]), following the "orthodox" tenets, provided merely for the activation of the process by one party against another one. The Secretariat was only given the power to trigger the regime when the provisions were revised in November 1992 (UN Doc. UNEP/OzL.Pro./4/15).

62 1994 Protocol to the LRTAP on Further reduction of Sulphur Emissions (Oslo Protocol), art. 7.2.

63 Terms of Reference, para. 4. "Self-incrimination", with much foresight, was introduced by a proposal of the former Soviet Union, which considered this option to conform to the conciliatory, multilateral and non-confrontational character of the regime. Széll, "The Development of Multilateral...", *op.cit.*, at 100.

64 Boisson de Chazournes, *op.cit.*, at 64.

that the underlying aim of the whole procedure is to build confidence among parties and to search for a satisfactory solution rather than to allocate blame and legally sanction the breach. Clearly, it would be absurd if the context were one of mere legal responsibility, where violation equals sanction. Therefore, in light of the considerations to be developed later in this chapter, it should not be surprising that to date the most consequential cases reviewed by the Implementation Committee originated from requests by individual parties for guidance regarding the adequacy of steps they intended to take in order to meet their obligations[65].

3.2.3. The Implementation Committee

The composition of the Implementation Committee under the Montreal Protocol's NCP greatly resembles many other restricted organs of multilateral treaties. It is constituted by 10 members who are elected by the Parties and represent their States[66]. There is no specific provision outlining the qualifications required for serving on the Committee, as is the case, for instance, of the International Covenant on Civil and Political Rights[67]. Elected members serve a term of two years and may only be re-elected once[68]. To limit the wasting of useful experience acquired by members serving on the Committee, only half of them are replaced every year. The election of members is based on the principle of equitable geographical distribution[69]. Finally, the Committee elects its own President and Vice-President, who serve a term of one year each[70]. The Committee meets bi-annually, unless it decides otherwise, and its meetings are organized by the Secretariat[71]. When performing its duty, it may request further information and also undertake further

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65 In this regard see Decisions VII/15-19 concerning, respectively, Poland, Bulgaria, Belarus, Russia and Ukraine, adopted in Vienna on December 7, 1995. The five parties, led by Russia, originally intended to submit their request for a special five-year grace period directly to the Meeting of the Parties, but instead, their request was boldly rerouted through the Implementation Committee, which declared them as "submissions" under para. 4 of the Procedure. Victor, *The Early Operation*, *op.cit.*, at 28; Werksman, "Compliance and Transition...", *op.cit.*, at 764. Lithuania and Latvia self-submitted their own non-compliance, too. See UNEP/OzL.Pro.8/12 (December 16, 1996), para. 71.

66 Terms of Reference, para. 5. The size of the Implementation Committee of the Oslo Protocol is still to be determined. However, the parties are expected to follow the lead taken by the Convention's Executive Body at the adoption of the Protocol in 1994 and establish a limited membership committee. Handl, "Compliance Control Mechanisms...", *op.cit.*, at 39. The figure put forward by the Executive Body was of eight Parties. This is due to the limited number of states parties to the ECE Convention. As of February 19, 1998, 166 States had ratified the Vienna Convention on the Protection of the Ozone Layer, but only 13 the Oslo Protocol. Decision Taken by the executive Body at the Adoption of the protocol, June 14, 1994, on the Structure and Functions of the Implementation Committee, as well as Procedures for its Review of Compliance, attached to the 1994 Protocol to the LRTAP on Further Reduction of Sulphur Emissions.

67 1966 International Covenant on Civil and Political Rights, *UNTS*, Vol. 999, at 171, art. 28.2.

68 Terms of Reference, para. 5.

69 For instance, the Fifteenth Meeting of the Implementation Committee was attended by Committee members from Austria, Bulgaria, Canada, Philippines, Peru, Sri Lanka, Ukraine, United Republic of Tanzania, Uruguay and Zambia. Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol, *Report*, Fifteenth Meeting, San José, November 18, 1996, para. 4. UNEP/OzL.Pro/ImpCom/15/3, 18 December 1996.

70 Terms of Reference, para. 5.

71 *Ibid.*, para. 6.

data-gathering inside the territory of a Party, although "only upon invitation of the Party concerned"[72].

Under the Terms of Reference, participation in the meetings of the Implementation Committee is a privilege restricted to the so-called involved parties, that is to say, the Party that initiated the non-compliance procedure – if any – and the Party whose implementation is at issue – provided it is not the same–, unless they do not already sit on the Committee. Their participation, however, is restricted to the discussions, since they are still unable to take part in the elaboration and adoption of the Committee's Report[73]. Beside the members of the Committee itself and the Parties involved in the procedure, the Implementation Committee, during the first five years of its functioning, has developed the practice of inviting representatives both of technical organs of the Convention (e.g. the Technology and Economic Assessment Panel) and of the various implementing agencies for the financial mechanisms under the Montreal Protocol (e.g. UNDP, UNEP, UNIDO, World Bank, GEF), as well of the Secretariat of the Multilateral Fund[74]. As financial assistance plays a key-role in the actual implementation of the Protocol's obligations, particularly in the case of developing countries and economies in transition, the presence of the funding agencies helps the Committee both to verify the regular flow of resources to complying States and to put pressure on non-complying parties.

Finally, the Committee reports to the Meeting of the Parties its recommendations for the adoption of any measures it deems necessary[75]. The Report should include, at the minimum, a reasonably well-documented case for the decision, as well as the decision itself. The result, as may be derived from the spirit of the whole procedure, is more than a laconic decision: it is specific information and an interpretation of the facts, along with possible recommendations for action to be taken and provisions for eventual follow-up by the Meeting of the Parties.

3.2.4. The Meeting of the Parties

The Meeting of the Parties is the plenary organ established by the Montreal Protocol[76], and it represents the political and legal fulcrum of the entire regime. It is also the necessary terminal of all the Implementation Committee's reports. While the Montreal Protocol itself laconically states that one of the functions of the Meeting of the Parties is to "consider and undertake any...action that might be required for the achievement of the purposes of this Protocol"[77], the Terms of Reference of the NCP specify that:

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72 *Ibid.*, para. 7.d. Admittedly, the possibility of carrying out inspection activities and data-gathering on the territory of the Parties is quite rare in environmental treaties. Boisson de Chazournes, *op.cit.*, at 64. Among the few examples of treaties granting the possibility of carrying out inspections and data-gathering on the "territory of the Parties", there are the 1959 Antarctic Treaty, (21), art. VII, and the 1946 International Convention on the Regulation of Whaling, *UNTS*, Vol. 161, at 72, Schedule of 13 July 1979, para. V.

73 *Ibid.*, para. 11.

74 Werksman, "Compliance and Transition", *op.cit.*, at 755-758.

75 Para. 9. In the process of deciding what action to take, the Meeting of the Parties may invite the Implementation Committee to make further recommendations to assist consideration by the Meeting of the Parties of a given case.

76 1987 Montreal Protocol, (88), art. 11.

77 *Ibid.*, art. 11.4 (j).

> "After receiving a report by the [Implementation] Committee the [Meeting of the] Parties may, taking into consideration the circumstances of the matter, decide upon and call for steps to bring about full compliance with the Protocol, including measures to assist the Parties' compliance with the Protocol, and to further the Protocol's objectives"[78].

When the Implementation Committee reports to the Meeting of the Parties that a case of non-compliance with the obligations established in the Protocol has occurred, the Meeting of the Parties may adopt whatever measures it deems appropriate to "secure an amicable solution of the matter on the basis of respect for the provisions of the Protocol"[79], including:

> "**A**. Appropriate assistance, including assistance for the collection and reporting of data, technical assistance, technology transfer and financial assistance, information transfer and training;"
>
> "**B**. Issuing cautions;"
>
> "**C**. Suspension, in accordance with the applicable rules of international law concerning the suspension of the operation of a treaty, of specific rights and privileges under the Protocol, whether or not subject to time limits, including those concerned with industrial rationalization, production, consumption, trade, transfer of technology, financial mechanisms and institutional arrangements."[80]

This list, as its title ("Indicative List of Measures that Might be Taken by a Meeting of the Parties in Respect of Non-Compliance with the Protocol") explains, is not exhaustive and merely indicates some of the options available. For instance, nothing prevents the Committee, where a party's inability to comply indicates a generic problem with the Protocol's provisions, from recommending an amendment to the Protocol itself[81]. Moreover, the Meeting of the Parties is not obliged to decide on the case, and it may choose not to respond at all. In short, in the NCP of the Montreal Protocol the plenary organ remains the master of the process and retains all the options, as it is not confined to the strict application of the law.

Such a latitude of choice goes well beyond classical forms of reaction to non-compliance included in many international agreements. Indeed, it ranges from usual penalties, like issuing cautions and suspending specific rights and privileges under the Protocol – which, incidentally, are missing completely in the case of the Oslo Protocol's NCP – to development measures, such as supply of appropriate technical, technological and financial assistance, as well as information transfer and training.

The underlying idea of such an unorthodox approach to the violation of international obligations is that non-compliance with METs is frequently the

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78 Terms of Reference, para. 9.

79 *Ibid.*, para. 8.

80 *Ibid.*, Indicative List of Measures that might be taken by a Meeting of the Parties in Respect of Non-Compliance with the Protocol.

81 Handl, G., "Controlling Implementation of Compliance with International Environmental Commitments: The Rocky Road from Rio", *Colorado Journal of Environmental Law and Policy*, Vol. 5, 1994, pp. 305-331, at 328; Handl, "Compliance Control Mechanisms...", *op.cit.*, at 35; Chayes/Chayes, "Active Compliance Management...", *op.cit.*, at 80.

consequence not so much of malice or greed but rather of technical, administrative or economic problems[82]. Admittedly, this accommodating approach to non-compliance is justified only in environmental agreements, and not in all of them[83]. For instance, in the case of those instruments which try to put a stop to the proliferation of weapons of mass destruction, a tough posture *vis-à-vis* actual and even mere potential non-compliers is warranted by the observation that to violate a disarmament agreement requires much more resources and technology (e.g. to keep the arming efforts moving and secret as long as possible) than simply to comply with it. As restraining from doing something (e.g. building, testing and deploying a weapon) is an option that does not imply costs, non-compliance with armament non-proliferation efforts usually cannot be excused by scarcity of means, but rather it is the result of a deliberate intent to cheat the other party and to gain an unfair advantage[84].

Conversely, in the case of certain kinds of METs parties might be required to undertake difficult and expensive measures to cope with a particular environmental problem. Admittedly, in certain cases, while States have the resources necessary to comply with their obligations, they might simply decide to invest them somewhere else and "free-ride" on the efforts of the international community. When resources are diverted from the implementation of METs to other domains that do not benefit the international community as a whole (e.g. payment of bribe-money, drug-trafficking or, in some cases, armaments), peer pressure from the international community can eventually convince those States that the costs of non-compliance will be far higher than the benefits of free-riding. However, in many other instances States, in particular developing countries, might simply face the dilemma of having to allocate an extremely scarce amount of resources between different areas of intervention (e.g. literacy v. environment) or between competing environmental obligations (e.g. protection of the ozone layer v. protection of biodiversity). In these cases, non-compliance may be the consequence of a scarcity of financial and technological resources rather than the result of a deliberate choice to evade international obligations. Penalties in this context will not bring those countries back to compliance but push them to withdraw from the regime, as the costs inherent in the regime will outweigh those of staying away from it. Such an outcome would be deleterious both for sanctioning and sanctioned States. In these

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82 Széll, "Implementation Control…", *op.cit.*, at 46. The best example for not needing to come down too hard on accidental non-compliers is the case of the Czech Republic. Prague in 1995 was found in non-compliance with the freeze in the consumption of methyl bromide. However, since the average annual consumption for the two years 1995 and 1996 was below the required level, the Ninth Meeting of the Parties decided that "no action is required on this incident of non-compliance, but the Czech Republic should ensure that a similar case does not occur again". Meeting of the Parties, *Report*, Ninth Meeting, Montreal, September 25, 1997. UNEP/OzL.Pro.9/12, Decision IX/32, para. 3.

83 Namely, only in the case of those agreements that require positive action on the part of States (e.g. installing water-treatment plants) rather than a mere abstention from doing something (e.g. not advancing claims on Antarctica or the Moon and other celestial bodies).

84 The major exception to this is given by those agreements which provide for the destruction of arsenals (e.g. nuclear, biological or chemical weapons). In such a case, the operation might involve high costs because of the intrinsic danger of the operation. But, again, in this case we are once again in the realm of "obligations to do" and not "obligations not-to-do".

cases, non-complying States should be coaxed or otherwise helped to achieve full compliance. Traditional dispute settlement means (i.e. adversarial ones) provide sticks, some more or less effective than others, but not carrots.

A very straightforward example of the functioning of the Montreal NCP is the case of Latvia. In 1997, that country had not yet ratified the 1990 London Amendment of the Montreal Protocol, nor even started the necessary procedures in the national parliament. Moreover, it had ignored a request for clarification in that sense by the Secretariat[85]. As a consequence, at its 17th meeting the Implementation Committee

> "made the following observations for the consideration of the Ninth Meeting of the Parties:
>
> (a) It regretted that Latvia had not yet submitted its timetable for the ratification process for the London Amendment as requested by the Eight Meeting of the Parties;
> (b) It reiterated the request made to Latvia...
> (c) It reminded Latvia that, in accordance with the GEF [N. B. Global Environmental Facility – one of the funding agencies of the regime] eligibility criteria, and as mentioned by the representative of the facility at the current meeting, the process for approval by GEF of the phase-out projects could begin only after GEF had been informed of the timetable for ratification...and that no financial assistance could be released until after the deposit of the instrument of ratification with the Secretary-General of the United Nations..."[86]

At the following meeting – only seven weeks later – the Secretariat reported that Latvia had submitted a timetable for the ratification of the London Amendment, together with its country program for the phase-out of ozone-depleting substances up to the year 2000, which had been prepared in collaboration with UNDP and UNEP[87]. Accordingly, the Implementation Committee recommended to the Meeting of the Parties that, in light of the country's commitment, international assistance, particularly by the GEF, should be considered favorably[88]. The Ninth the Meeting of the Parties endorsed the Committee's report but also warned Latvia that

> "according to the information contained in Latvia's country program for the phase-out of ozone-depleting substances, Latvia is in a situation of non-compliance with the Montreal Protocol in 1997 and there is a possibility of non-compliance with the Montreal Protocol in 1998[.]" "[S]o ... the Implementation Committee might have to revert to that question that year."[89]

Finally, the tenth meeting, the Parties to the Montreal Protocol decided:

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85 Implementation Committee, *Report*, Seventeenth Meeting, Geneva, April 15-16, 1997. UNEP/OzL.Pro/ImpCom/17/3, para. 9.
86 *Ibid.*, para. 11.
87 Implementation Committee, *Report*, Eighteenth Meeting, Nairobi, June 2–4, 1997. UNEP/OzL.Pro/ImpCom/18/3, para. 14.
88 *Ibid.*, para. 15.
89 Meeting of the Parties, *Report*, Ninth Meeting, Montreal, September 25, 1997. UNEP/OzL.Pro.9/12, Decision IX/29, para. 2.

"1. To note that Latvia acceded to the Montreal Protocol on 28 April 1995 and ratified the London and Copenhagen Amendments on 2 November 1998. The country is classified as a non-Article 5 Party under the Protocol and, for 1996, reported to positive consumption of 342 tons ODP of Annex A and B substances, none of which was for essential uses exempted by the Parties. *As a consequence, in 1996, Latvia was in non-compliance with its control obligations...the Montreal Protocol.* Latvia also expresses a belief that this situation may continue through at least the year 2000, necessitating annual review by the Implementation Committee and the Parties until such time as Latvia comes into compliance.

2. To note with appreciation the fact that Latvia has made tremendous strides in coming into compliance with the Montreal Protocol. Although Latvia ratified the Protocol just three years ago, it has decreased its consumption steadily... . This significant reduction is a clear demonstration of Latvia's commitment to become a Party in full compliance with the Protocol. The Parties note with appreciation that Latvia has made efforts to achieve compliance through agreements with its industry, and through the application of a tax on imports of ozone-depleting substances. Latvia has also undertaken efforts to understand the disposition of halons that are currently deployed, and to stockpile halon from decommissioned uses in order to ensure availability to meet future critical uses. The Parties note these important undertakings, and point out that similar undertakings could be considered by other countries who are striving to comply with the provisions of the Protocol. ...

3. To note Latvia's report that a majority of its remaining use of ozone-depleting substances is in the aerosol sector, a sector with alternatives that are available at a cost savings to users. The Parties further note the late time at which phase-out projects are being initiated. Accordingly, and considering the plan produced by Latvia, the Parties are hopeful that Latvia will be able to achieve a total phase-out ... by 1 July 2001. Achievement of these commitments and goals will necessitate the strict application of import quota restrictions on an annual basis to ensure phased reductions in consumption;

4. To closely monitor the progress of Latvia with regard to the phase-out of ozone-depleting substances... . In this regard, to request that Latvia submit a complete copy of its country program, and subsequent updates, if any, to the Ozone Secretariat. *To the degree that Latvia is working towards and meeting the specific time-based commitments noted above and continues to report data annually demonstrating a decrease in imports and consumption, Latvia should continue to be treated in the same manner as a Party in good standing.* In this regard, Latvia should continue to receive international assistance to enable it to meet these commitments in accordance with item A of the indicative list of measures that might be taken by a meeting of the Parties in respect of non-compliance[90]. However, through this decision, the Parties caution Latvia, in accordance with item B of the indicative list of measures[91], that in the event that the country fails to meet the commitments noted above in times specified, the Parties shall consider measures, consistent with item C of the indicative list of measure[92]. These measures

90 I.e., appropriate assistance, including assistance for the collection and reporting of data, technical assistance, technology transfer and financial assistance, information transfer and training. *Supra*, Ch.II.3.2.4.

91 I.e., issuing cautions. *Ibid.*

92 I.e., suspension, in accordance with the applicable rules of international law concerning the suspension of the operation of a treaty, of specific rights and privileges under the Protocol, whether or not subject to time limits, including those concerned with industrial rationalization, production, consumption, trade, transfer of technology, financial mechanisms and institutional arrangements. *Ibid.*

could include the possibility of actions that may be available under Article 4[93], designed to ensure that the supply of CFCs and halons that is the subject of non-compliance is ceased, and that exporting Parties are not contributing to a continuing situation of non-compliance... [emphasis added]".

Admittedly, this seems to be an effective use of treats and threats[94]. However, fostering actions, while paramount to the vitality of the regime, do not exhaust the arsenal available to the Meeting of the Parties as a regime body, and to each and every State Party, to react to eventual non-compliance. Both customary international law and the dispute settlement procedure contained in article 11 of the Vienna Convention provide the parties to the Montreal Protocol with tested – albeit hardly employed or employable – means to address violations of the legal regime. This raises a number of interesting legal questions relating to their co-existence with the NCP. However, these issues have already been extensively dealt with elsewhere[95]; in any event, they are rather speculative since the actual recourse to the canonical settlement procedure provided for in article 11 of the Vienna Convention is, considering State practice, a mere hypothesis[96].

3.3. Non-Compliance Procedures and International Regimes: A Symbiotic Relationship

So much for the structure and functioning of the Montreal Protocol's NCP. Yet, in order to perceive the reason of the rapid diffusion of similar procedures in several METs, as well as their inherent limits, it is necessary to understand the rationale of their development, the very peculiar breeding ground in which they took roots:

93 Article 4 of the Montreal Protocol contains measures to control trade of ozone-depleting substances with Parties and Non-Parties, and licensing.

94 Another excellent example of the stick-and-carrot approach is provided by the issue of Russia's non-compliance. Werksman, "Compliance and Transition", *op.cit.*. However, because of the "size" of Russia ("Russia accounts for over 60 percent of the consumption of controlled substances in the region and it is the only producer of controlled substances and the main supplier of ozone depleting substances of at least 20 of the countries with economies in transition". *Idem*, note 2), it still remains to be seen whether the technique works only for small States. On Russia's non-compliance, see: Meeting of the Parties, *Report*, Ninth Meeting, Montreal, September 25, 1997. UNEP/OzL.Pro.9/12, Decision IX/31.

95 Koskenniemi, M., "Breach of Treaty or Non-Compliance?", *op.cit.*, pp. 123–162. On the issue, see also Handl, "Compliance Control...", *op.cit.*, at 46–48.

96 On art. 11 of the Vienna Convention, see *supra*, Ch.II.3.1.

international regimes[97]. International regimes in the environmental sphere are a relatively recent phenomenon. Indeed, while until the end of the 1960s METs, like Moses' tablets, were typically a mere list of "thou shalt" and "thou shalt not" with extremely weak provisions for control and revision of the norms[98], since the early 1970s METs have increasingly provided for regular (usually annual) meetings of their parties[99]. These conferences undertake a variety of tasks, encompassing both

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97 Despite the fact that the term "international regime" has become a buzz-word in international legal literature, there is still a certain degree of confusion on its exact meaning and use. This uncertainty has probably been engendered by the confusion of the terms "international regime", created and mainly resorted to by political scientists, and "international legal regime", locution resorted to in international law. In my opinion "international legal regimes" are not "international regimes" when described by international legal scholars. They are two very similar, albeit structurally different, notions.

"International legal regime" usually indicates a set of rules (either customary or codified in "hard" and "soft" legal instruments) governing a given area of international relations. This is, at least, the meaning of the phrase according to the ICJ in the *United States Diplomatic and Consular Staff in Teheran* case. Paragraph 83 of the Court's judgment states that "diplomatic law itself provides the necessary means of defense against, and sanction for, illicit activities". Paragraph 86 adds "The rules of diplomatic law, in short, constitute a self-contained regime...". *United States Diplomatic and Consular Staff in Teheran* (United States/Iran), Judgment, ICJ Reports 1980, pp. 3–65, at 38–40, para. 83–86. In this sense, international legal scholars speak about the "regime of the high seas", referring to that set of rules, both customary and treaty-based, which govern the rights and duties of States on the high sea. Almost invariably, "international legal regimes" are pegged to a "pivot agreement" (e.g. the UNCLOS or the Vienna Conventions on Consular and Diplomatic relations). Very often there is an international institution to govern and develop a given "international legal regime". Indeed, in the case of the "international legal regime" of diplomatic law, such an institution does not exist.

The expression "international regime", *tout court*, conversely, is something more institution-oriented, as it refers to regulations developed within international institutions (again, invariably treaty-based) to further the pivotal agreement's goals. It refers, in other words, to the study of a social organization which answers to some degree of central coordination, as compared to "international legal regimes", which are often developed through a coordinated and organized law-making effort. Instances of "international regimes", to cite but a few, are those created by the Antarctic Treaty, the Whaling Convention, the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES), the International Convention for the Prevention of Pollution from Ships (MARPOL), the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, and, of course, the Vienna Convention on the Protection of the Ozone Layer. Outside the environmental field, probably the most widely-known instance of "international regime" is that constituted by the 1947 General Agreement on Tariffs and Trade (GATT), replaced in 1994 by the World Trade Organization (WTO).

For a different opinion on what is meant by international legal scholars and by political scientists by "international regimes", see Handl, "Compliance Control Mechanisms", *op.cit.*, at 31, note 10. On the issue, see, in general Lang, W., "Diplomacy and International Law-Making: Some Observations", *Y.I.E.L.*, Vol. 3, 1992, pp. 108–122, at 117. See also Gehring, T., "International Environmental Regimes: Dynamic Sectoral Legal Systems", *Y.I.E.L.*, Vol. 1, 1990, pp. 35–56; Krasner, S.D., *International Regimes*, Ithaca, New York, Cornell University Press, 1991, pp. X–327.

98 Obviously, there are major exceptions to this. For instance, the international regime for the protection of the Antarctic, created by the 1959 Antarctic Treaty, (21), and the international regime for the conservation of whales, created by the 1946 International Convention for the Regulation of Whaling, *UNTS*, Vol. 161, at 72.

99 There does not exist a unique term for indicating the plenary organ of the Parties to a convention. Usually, it is called either the Meeting of the Parties or the Conference of the Parties. Its use can be observed in numerous treaties including, *inter alia*, the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters, London, December 29, 1972, text in Burhenne, *op.cit.*, 972:96; the 1985 Ozone Layer Convention, (78); the 1973 Convention on the International Trade of Endangered Species, (49); the 1946 International Convention for the Regulation of Whaling, *UNTS*, Vol. 161, at 72; and many other regional agreements.

classical politically-oriented tasks and more technical functions. For instance, the plenary organ of a post-1960s MET typically supervises the implementation of treaty prescriptions, receives reports and carries out data-gathering functions (usually through a subsidiary body), settles disputes between the parties, and constantly keeps the legal regime apace with scientific and technical developments by adopting protocols and annexes.

Hence, the characteristics of multilateral treaties (i.e. the set of obligations) and international organizations (i.e. the institution-building provisions) are combined in international regimes. Like treaties, international regimes set up a specific legal framework to organize coordinated international action to address specific problems. On the other hand, like international organizations they provide a permanent mechanism for adapting this framework to the new needs of and challenges to the international community. For this extraordinary capacity of adaptation, and particularly for their ability to keep pace with scientific advancement, international regimes have been found to be particularly suitable tools in addressing environmental problems, especially those concerning collective interests. However, what makes international regimes relevant to this study is that they combine lawmaking, law enforcement and dispute settlement within the same institution[100]. This explains why non-compliance procedures have developed within the framework of international regimes, and perhaps also why they can hardly function outside this particular context.

International regimes have a tremendous advantage over dispute settlement mechanisms as they are not constrained by the straight-jacket of the law, as codified in the original agreement and successive protocols, but may modify it to suit a new situation. While third-party institutions would have to base their decisions upon legal principles, the parties to a given regime, as a group, usually decide on the interpretation of the regimes' rules by consensus[101] (or, as in the case of Russian non-compliance, according to the formula "consensus minus

100 Birnie and Boyle, *op.cit.*, at 161; Handl, "The Rocky Road from Rio", *op.cit.*, at 329; Handl, "Compliance Control Mechanisms", *op.cit.*, at 37.

101 Indeed, the non-compliance procedure itself, as well as article 11(3) of the Montreal Protocol, is silent about a majority being necessary to reach a decision on the Report of the Implementation Committee in the Meeting of the Parties. Whereas some procedures are explicitly submitted to consensus, namely the adoption of the rules of procedure and financial rules by the First Meeting of the Parties, decisions on all matters of substance require a two-thirds majority of the members present and voting. See the Rules of Procedure for Meetings of: (i) the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer and (ii) the Conference of the Parties to the Vienna Convention for the Protection of the Ozone Layer, Rule 40. The Rules of Procedure can be found at <http://www.unep.org/ozone/treaties.htm> (Site last visited on January 22, 1998). From a strictly legal point of view, in the absence of any explicit provision on the adoption of the report, one can reasonably assume that this rule is applicable to decisions on the Report of the Implementation Committee as well. Yet, considering the spirit of international regimes and the paramount importance of maintaining consensus on the interpretation of the normative structure, it is hard to conceive the Meeting of the Parties taking any substantive decision by majority vote. However, see next note.

one"[102]), and in light of factual circumstances[103]. Specifically, while disputes submitted to adjudication are to be settled in accordance with international law, recourse to the non-compliance procedure will simply be considered "with a view to securing an amicable resolution of the matter on the basis of respect for the provisions of the Protocol"[104].

No reference is made to provisions of international law outside the regime's normative structure. By combining within themselves the creation and enforcement of law, international environmental regimes therefore develop into comparatively autonomous sectorial "legal regimes"[105]. While classical dispute settlement procedures settle conflicts outside the regime by using third-party action (e.g. the International Court of Justice), non-compliance procedures do so within the regime respecting the sundry of customary norms and even the mere expectations of the parties[106].

In other words, in seeking a satisfactory settlement of the dispute, under a given NCP the Implementation Committee first, and the Meeting of the Parties later, will be able to ignore certain rules of international law the application of which might not be considered desirable (i.e. those on liability for damage resulting from non-compliance), and resort only to the rules developed within the regime, regardless of their formal legal status. Therefore, international institutions become a forum for dispute settlement and treaty compliance through discussion and negotiation, rather than through the adjudication of questions of law or interpretation, creating a continuum between the negotiations that lead to the adoption of a convention and those which take place within the legal regime created by that convention[107].

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102 At its 12th meeting, just before the seventh Meeting of the Parties (December 1995), the Implementation Committee sought to agree with the Russian delegation on an approach to responding to Russia's likely non-compliance which could be recommended to the Meeting of the Parties for adoption. Russia and the Committee failed to agree. The Committee's recommendation (a mix of trade restrictions and financial help) went forward to the seventh Meeting of the Parties without Russia's full agreement. Report of the Seventh Meeting of the Parties, UN Doc. UNEP/OzL.Pro.7/12, para. 44. Text at <http://www.unep.org/ozone/reports.htm> (Site last visited April 18, 1998). Basing itself on the Secretariat's interpretation that "the practice followed in a Meeting of the Parties to the Montreal Protocol [is] that, when only one Party object[s] to a draft decision, that decision [is] carried by consensus and the position of the dissenting party would be clearly reflected in the report of the Meeting" (Id., para. 130), and despite Russia's demand for a vote, the Meeting of the parties adopted the Committee's Report (id., para. 132). As Werksman observed "the way in which the Meeting of the Parties adopted the decision on Russia non-compliance may have more important implications for the future development of the Protocol and of the Non-Compliance Procedure than does the substance of the decision itself". Werksman, "Compliance and Transition", *op.cit.*, at 771.

103 Decisions taken by the Meeting of the Parties must, under para. 9 of the Terms of Reference, take "into consideration the circumstances of the case".

104 Terms of Reference, para. 8. The Oslo Protocol does not envisage "an amicable solution" of the dispute. This is mainly due to the fact that the *ad hoc* Working Group of Legal Experts felt that this could lead to confusion with the European Committee of Human Rights' objective of securing a "friendly settlement". See art. 28(b) of the 1950 European Convention on Human Rights, *UNTS*, Vol. 213, at 221.

105 *Supra*, note ; Gehring, *op.cit.*, at 37.

106 Handl, *op.cit.*, at 329.

107 "Negotiation does not end with the conclusion of the treaty but is a continuous aspect of living under the agreement". Chayes, A./ Chayes, A., "Compliance without Enforcement: State Behavior under Regulatory Regimes", *Negotiation Journal*, Vol. 7, 1991, pp. 311-330, at 313.

International regimes and, as a consequence, non-compliance procedures never cease growing. They are constantly evolving to adapt to new challenges. Resolution of critical cases over time could yield a body of "case-law" interpreting the Convention, thereby providing the latter with a mechanism to evolve within bounds, in response to particular concerns and problems in a more efficient manner than repeated, formal diplomatic negotiations. Moreover, as only the broadest outlines of the non-compliance procedure are codified into the Terms of Reference, the procedure is given the flexibility to evolve on a case-by-case basis and to generate its own means to facilitate the settlement of the case. Details of non-compliance procedures develop through decisions of the Meeting of the Parties instead of being written into the Convention, thereby avoiding expensive formality.

These particular features of the normative phenomenon of international regimes help explain both the high degree of compliance and the ensuing low level of conflict that characterize international regimes[108]. Because the rules arise from within these regimes and because they are based on consensus, all the Parties hold a great stake in the protection of the stability of the legal regime and will seek to protect it against incidental or unintended modifications threatened by disputes among individual Parties. In short, conserving the collective interest and avoiding the demise of the community sometimes might be more important than the narrow interpretation of a legal rule[109].

3.4. Nihil Novi Sub Sole?

For all these reasons, it is not surprising that the provision for institutional supervision, regulation and settlement of disputes is now common in environmental treaties. Because their primary purpose is not so much to fault a State for defaulting on its obligations as it is to help it comply, NCPs might be more constructive for resolving conflicts in an environmental context than the mechanism of State responsibility[110]. Reliance on institutional machinery in the form of intergovernmental commissions and meetings of treaty Parties as a means of coordinating policy, developing the law, supervising its implementation, putting community pressure on individual States, and resolving conflicts of interest might meet the need of effective environmental protection more flexibly and effectively than traditional bilateral forms of dispute settlement, including adjudication[111].

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108 Schachter remarked that "treaty-regimes, taken as a group, are characterized by a relatively high degree of compliance. This is attributable in part to the fact that they provide for institutional decisions by a representative organ or an executive body. Such institutional decisions tend to limit the sphere of self-interpretation by States of their obligations." Schachter, O., "The Nature and Process of Legal Development in International Society", McDonald/ Johnston (ed.), *op.cit.*, pp. 745-808, at 782.

109 Boisson de Chazournes, *op.cit.*, at 65.

110 Handl, "Rocky Road from Rio", *op.cit.*, at 328; *Idem*, "Compliance Control", *op.cit.*, at 35.

111 Birnie and Boyle, *op.cit.*, at 137-138.

Nevertheless, one may legitimately wonder whether the emergence of non-compliance procedures is the result of a true change in the nature of dispute settlement procedures or just the repackaging of an old, familiar process. Admittedly, the *ad hoc* group of experts that designed the NCP of the Montreal Protocol intended to create something innovative that could help ensuring the implementation of the obligations undertaken. Contrary to classical settlement procedures, they did not want to create a procedure that pitted one party against the other[112]. In addition, unlike in cases of traditional diplomatic means, they wanted to add some bite to the procedure and be able promptly to detect and thrash out cases of non-compliance.

This praiseworthy commitment, however, was transformed into a somewhat vacuous terminology. The Montreal Protocol speaks of "non-compliance" rather than "unlawful act", of "Parties involved" instead of "Parties to the dispute", and of "submissions" rather than "claims". But does this new terminology imply a substantial change of contents? Not really. Indeed, if one takes a closer look at the whole non-compliance procedure, it is difficult to deny the existence of striking similarities with the more familiar diplomatic means of settlement. In fact, the Implementation Committee, in its quest for the attainment of amicable settlement, plays a function typical of the mediator in an international dispute. In its quest for facts, it acts much like a fact-finder. Moreover, the very fact that the final outcome of the Implementation Committee review process is a recommendation makes the whole procedure appear like a refined conciliation procedure. In the end, in non-compliance procedures orthodox peaceful means of settlement of international disputes, such as negotiation, mediation and conciliation, are resorted to but without excessive formality[113].

Nonetheless, the analysis of non-compliance procedures cannot stop at their dispute settlement aspect. Non-compliance procedures reflect a collective, or rather multilateral, concern for meeting treaty obligations, as opposed to essentially bilateral forms of settlement, the outcome of which is to find fault with the trespasser[114]. Their novelty, thus, lies in their function as a means to avoid disputes rather than in their objective of settling disputes. To illustrate this point, one of the possible measures the Meeting of the Parties can take in response to non-compliance is to issue cautions or even to decide to assist the defaulting Party by providing technical and financial aid. The possibility to have recourse to fostering actions emphasizes the significance of the distinction between breaches of the law and non-compliance. While a breach would entail the ascertainment of a violation

112 Boisson de Chazournes, *op.cit.*, at 63.

113 *Ibid.*, at 65.

114 Handl writes: "The NCP offers a number of very significant advantages as regards the 'management' of legal relations among the parties to the [agreement]. Typically, the NCP aims less at branding a State party as 'defaulting on its obligations', and at imposing sanctions or providing remedies for past infractions, than at helping the incriminated party come into compliance and protecting future integrity of the regime against would-be defectors. The NCP is hence forward – rather than backward – looking. It embodies a quintessentially collective approach, rather than being steeped in the traditional paradigm of bilateralism – the relationship between the non-complying State and the directly injured other state or States". Handl, "Compliance Control Mechanisms", *op.cit.*, at 34.

of a treaty obligation through classical third-party procedures, ultimately giving rise to international responsibility, non-compliance is, after all, merely a political matter. Whether it exists and what counter-measures might seem appropriate would be determined on a case-by-case basis through a treaty-specific political process[115]. Moreover, while time-honored dispute settlement procedures can be triggered only in the presence of an alleged breach of an obligation, non-compliance procedures are completely free from any legal consideration. The very fact that a State can freely submit its own difficulties in implementing its obligations to the scrutiny of other members is something that would be inconceivable if the context was purely bilateral and based on considerations of legal responsibility.

Non-compliance procedures bridge the gap between traditional reporting provisions and dispute settlement procedures[116]. In this sense, dispute settlement and non-compliance procedures complement each other. Respect for the requirements of a non-compliance regime is strengthened by the knowledge that a traditional settlement of disputes procedure is waiting to be activated at any time. Therefore, non-compliance procedures cannot be viewed independently of canonical forms of dispute settlement[117].

Moreover, while dispute settlement procedures have not yet been invoked, non-compliance procedures are intended for regular use. Being preventive in approach, they serve the day-to-day operation of the international regime and do not necessarily represent the last resort in cases of breach of the law. From a legal point of view, non-compliance procedures, along with monitoring institutions and processes, present themselves primarily as elaborate "dispute avoidance" mechanisms. These observations, therefore, could help explain why non-compliance procedures will most likely become a stable feature of future METs[118], insofar as the institutionalization of international environmental law will continue.

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115 Rosenne, S., *Developments in the Law of Treaties*, Cambridge, Cambridge University Press, 1991, at 94.

116 As Handl points out, international regimes "straddle traditional law-making and law-enforcement functions". Handl, *op.cit.*, at 329; *Idem*, "Compliance Control", *op.cit.*, at 37.

117 Koskenniemi, "Breach of Treaty or Non-Compliance?", *op.cit.*.

118 "Non-compliance procedures are clearly here to stay". Handl, *op.cit.*, at 328.

4. ADJUDICATIVE MEANS OF SETTLEMENT

There is a notorious refrain about international adjudication (i.e. the settlement of disputes between States by a binding award on the basis of law and as result of an undertaking voluntary accepted[1]): States shun it. This statement is usually based on three observations: first, few international legal instruments provide for international adjudication; second, when they do, the possibility for one of the parties unilaterally to initiate adjudication is rare; third, international litigation is a sporadic phenomenon. Disputes between States settled by this means each year can be counted on one, perhaps two, hands. Before moving on to analyze to what extent and how States have provided for international adjudication in METs, however, it is our intention to confute at least two of these arguments to show that in reality the attitudes of States towards adjudication has not been cold, but rather mature. These attitudes do not demonstrate contempt towards the idea itself, but awareness of its implications.

First of all, it is not correct to state that few international legal instruments provide for international adjudication, at least with regard to the environmental field. Indeed, out of 150 METs surveyed in this study which are endowed with

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1 This notion of what constitutes an adjudicative means encompasses both arbitration and judicial settlement. Indeed, the power to render binding decisions is a characteristic which arbitration shares with the method of judicial settlement by international courts and tribunals. The difference between the two methods, therefore, is rather tiny and can be narrowed down to the difference in the method of selecting the adjudicators. "While, in arbitration proceedings, this is usually done by agreement between the parties, judicial settlement presupposes the existence of a standing tribunal with its own bench of judges and its own rules of procedure which Parties to a dispute must accept". Schwarzenberger, G., *Manual of International Law*, Milton, Professional Books, 1976, 6th ed., LIX-612 pp., at 195.

On international adjudication, see in general Anand, R.P., *Studies in International Adjudication*, Delhi, Vikas Publications, 1969; Bilder, R.B., "Some Limitations of Adjudication as an International Dispute Settlement Technique", *Virginia Journal of International Law*, Vol. 23, 1982, pp. 1-12; Schachter, O., "Enforcement of International Judicial and Arbitral Decisions", *A.J.I.L.*, Vol. 54, 1960, pp. 1-24; Merrills, J.G., "The Role and Limits of International Adjudication", Butler, W.E., *International Law and the International System*, Dordrecht, Nijhoff, 1987, pp. 169-181. On selected aspects of international adjudication, see Delbez, L., *Les principes généraux du contentieux international*, 3rd ed., Paris, Librairie générale de droit et de jurisprudence, 1962; Mani, V.S., *International Adjudication. Procedural Aspects*, Dordrecht, Nijhoff, 1980, XX-456 pp.; De Visscher, Ch., *De l'équité dans le règlement arbitral ou judiciaire des litiges en droit international*, Paris, Pedone, 1972; McWhinney, E., "International Arbitration and International Adjudication: The Different Contemporary Lots of the Two Hague Tribunals", *Can.Y.I.L.*, Vol. 29, 1991, pp. 403-413; Shinkaretskaya, G., "The Present and Future Role of International Adjudication as a Means for Peacefully Settling Disputes", *Indian Journal of International Law*, Vol. 29, 1989, pp. 87-93; American Society of International Law, "Current Developments Concerning the Settlement of Disputes Involving States by Arbitration and the World Court", *Proceedings of the 83rd Annual Meeting of the American Society of International Law*, Chicago, Ill., 1989, pp. 568-589.

dispute settlement provisions, no less than 85 provide for international adjudication among the means to which States should resort to settle their disputes[2]. If one takes at face value the commitments undertaken in international agreements, States do not show any particular hostility, as a matter of principle, towards international adjudication.

However, one also points to the fact that international litigation is a sporadic phenomenon. Again, the comment looks correct only *prima facie*. Admittedly, international tribunals, such as the International Court of Justice, even at their high points, have not rendered judgments in more than three or four cases per year. However, the assertion that international litigation occurs infrequently stems from the hasty comparison between the frequency and number of cases litigated before domestic courts and the workload of international courts and tribunals. Obviously, the former outnumber the latter by tens of thousands.

A rather different picture might be obtained by looking at the ratio of the number of cases per potential plaintiff. For instance, the number of judgments rendered in 1996 by the French judicial system (all grades of jurisdiction) on civil and commercial cases was 2,014,203[3]. At the time, the French population (i.e. the potential users of the judicial system) was 58,609,285[4]. This is a ratio of 29 inhabitants per judgment rendered, which can be used as an approximate "index of litigiousness" of a given State. There is no reason to think this figure might be significantly different for any other country, although this issue is open to further study.

If the same ratio were applied to the international system as presently composed of about 185 sovereign States (for convenience sake the UN members, even though not all States are members of the UN), one would discover that for the international community to be as prone to go to court as the French people it would require slightly more than six cases a year, a figure which is well within the reach of the international judicial system as presently organized. If international litigation seldom occurs, therefore, it is not so much due to the alleged reluctance of States to submit themselves to binding third-party procedures, but rather because of the relatively small number of potential plaintiffs and defendants.

If States do not loathe international adjudication *per se*, it is nonetheless an indisputable fact that, as in domestic courts, litigation in international law is a matter of last resort. States, much like individuals, go before courts and tribunals when all other possible means, short of unfriendly or even openly hostile acts, have failed. Actually, States are even required by international law to exhaust all other possible avenues before turning to international adjudication[5]. The possible worsening of relations by recourse to unilateral acts, the uncertainty of the outcome of

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2 "States have generally accepted procedures resulting in binding decisions among the procedures for the settlement of environmental disputes". Adede, A.O., *International Environmental Law Digest*, Amsterdam, Elsevier, 1993, at 208.

3 République Française, Ministère de la Justice, "Les chiffres-clés de la justice", <http://www.justice.gouv.fr/chiffres/cles.htm>. (Site last visited March 28, 1998).

4 Central Intelligence Agency, *World Factbook*, <http://www.odci.gov/cia/publications/factbook/country-frame.html> (Site last visited March 28, 1998).

5 *Supra*, Ch.II.2.1, note 67.

legal proceedings[6], their length and cost, and the eventual embarrassment of an adverse ruling are considerations that deter potential litigants in international fora no less than in domestic ones[7].

Yet, a fundamental difference does exist. If the cost and length of legal proceedings sometimes deter the potential plaintiff at the national level (and the same could be argued at the international level[8]), the absence in most cases of compulsory jurisdiction is the ultimate weapon for the defendant in the international legal system. Sovereign States are not subject to procedures resulting in third-party binding decisions unless they have consented to it[9]. At the national level, citizens can be dragged to the court-room against their will, because this is implicit in the tacit social pact which created the State and permits its furtherance. At the international level, this possibility does not exist because, since the Peace of Westphalia, all States are equal and *superiorem non reconoscentes*. This is the element which ultimately determines the nature of international litigation and which, by and large, engenders the hasty dismissal of international adjudication as largely irrelevant to international relations.

In those frequent instances (at least, in the case of METs) in which resorting to adjudicative means is an option, States can agree *a priori* (e.g. by inserting a clause, called "optional clause" to underline its voluntaristic nature, which reads: "in the event of disputes, *either Party* may ..."), and thus talk of "compulsory jurisdiction", or *a posteriori* (e.g. by inserting a clause which reads: "in the event of disputes, by *common agreement,* the parties may ...") to have their disputes settled through international adjudication[10]. Among the treaties requiring the common agreement of the parties for the submission of a dispute to binding settlement (*a posteriori* approach) it is possible to distinguish, from a formal point of view, between those which require, *expressis verbis*, the existence of the common

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6 Oddly enough, some of the uncertainty about the outcome of international litigation can be attributed to the fact that the content of international law itself is disputed. And, paradoxically, this is so because so few cases are taken to court. Gross, L. (ed.), *The Future of the International Court of Justice*, Dobbs Ferry, NY, Oceana, 1976, Vol. II, at 746.

7 Fitzmaurice, G., *ibid.*, at 463-470.

8 Vignes, D., "Aide au développement et assistance judiciaire pour le règlement des différends devant la Cour internationale de Justice", *A.F.D.I.*, Vol. 35, 1989, pp. 321-324; O'Connell, M.E., "International Legal Aid: The Secretary General's Trust Fund to Assist States in the Settlement of Disputes through the International Court of Justice", Janis, M.W., *International Courts for the Twenty-First Century*, Dordrecht, Nijhoff, 1992, pp. 235-244.

9 "It is well established in international law that no State can, without its consent, be compelled to submit its disputes with other States either to mediation or to arbitration, or to any other kind of pacific settlement. *Eastern Carelia*, *PCIJ*, Ser. B, No. 5 (1923), Advisory [Non-]Opinion of July 23, 1923. Consequently, international claims "cannot, in the present state of the law as to international jurisdiction, be submitted to a tribunal, except with the consent of the States concerned". *Reparation for Injuries*, Advisory Opinion, ICJ Reports 1949, pp. 177-178". American Law Institute, *Restatement of the Law, Foreign Relations Law of the United States*, (Revised), Tent. Draft No, 5, para. 902, comment (e), at 168.

As to arbitration: "[A] State may not be compelled to submit its disputes to arbitration without its consent". Ambatielos (Greece v. United Kingdom), Merits, Judgment, ICJ Reports 1953, pp. 10-35, at 19.

10 See, in general, Cocatre-Zilgien, A., "Justice internationale facultative et justice internationale obligatoire", *R.G.D.I.P.*, Vol. 80, 1976, pp. 689-737.

consent[11], and those which resort to more hermetic formulae. For instance, some METs provide that "the dispute shall be referred to the International Court of Justice in accordance with the Statute of the Court"[12], which is tantamount to saying that the dispute can be referred to the Court either by an ad hoc (special) agreement[13] or because the States concerned have previously filed with the Registrar a declaration of acceptance of the compulsory jurisdiction of the Court[14]. Consent is an inescapable element. This is so even if a MET is silent about the need for common consent, for the existence of consent to submit the dispute to judicial settlement can never be presumed [15].

Admittedly, only the *a priori* approach can be considered as a step towards abandoning the Westphalian system[16]. Providing that States will have to agree to submit the dispute to adjudication and providing nothing at all has the same value, since States are duty-bound, in any event, under customary international law, to attempt to settle their disputes peacefully. In doing so they can resort to whatever means they consider suitable. To require that after the emergence of the dispute the parties will have to agree whether to resort to a given dispute settlement means (for instance, arbitration rather than the ICJ) is, again, meaningless since dispute settlement clauses are not *jus cogens* and can be derogated from by mutual agreement of

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11 1959 Antarctic Treaty, (21); 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora,(49); 1976 Convention for the Protection of the Mediterranean Sea Against Pollution, (54); 1980 Convention on the Conservation of Antarctic Marine Living Resources, (67); 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, (74); 1985 Vienna Convention for the Protection of the Ozone Layer, (78); 1985 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, (79); 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, (85); 1989 Basle Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal, (92); 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area, (103); 1992 Convention on the Transboundary Effects of Industrial Accidents, (102); 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (101); 1991 Convention on Environmental Impact Assessment in a Transboundary Context, (95); 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, (110); 1992 Convention on Biological Diversity, (106); Convention for the Conservation of Southern Bluefin Tuna, (109). The arbitral procedure of the 1994 Desertification Convention, (120), and of the 1992 Climate Change Convention, (105), are still to be adopted.

12 1949 Agreement for the Establishment of a General Fisheries Council for the Mediterranean, (97); 1963 Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in South-West Asia, (31); 1965 Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Near East, (34); 1970 Agreement for the Establishment of a Commission for Controlling the Desert Locust in North-West Africa, (44); Agreement for the Establishment of the Indian Ocean Tuna Commission, (112).

13 Statute of the International Court of Justice, art. 36.1.

14 *Idem*, art. 36.2-5.

15 1991 West Indian Ocean Tuna Organization Convention, (99); 1991 Convention on the Ban of the Import Into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, (94).

16 See, in general, Przetacznik, F., "The Compulsory Jurisdiction of the International Court of Justice as a Prerequisite for Peace", *Revue de droit international, de sciences diplomatiques et politiques*, Vol. 68, 1990, pp. 39-74.

the parties. If the parties to a dispute wish to resort to the ICJ, they can and will do so, no matter what is stated in the dispute settlement clause.

As far as the *a priori* approach is concerned, it should be remarked that consent to submit disputes to adjudication can be given at any time. Drawing on the blueprint of article 36.2-5 of the Statute of the ICJ, the 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution introduced a formula which eventually was imitated by several later METs. Article 22.3 of the Barcelona Convention reads:

> "[T]he Contracting Parties may at any time declare that they recognize as compulsory *ipso facto* and without special arrangement, in relation to any other Party accepting the same obligation, the application of the arbitration procedure ..."[17].

The 1982 United Nations Convention on the Law of the Sea improved upon this precedent in many regards, setting a standard which would eventually be copied in other METs[18]. First, article 287.1 of the Convention is more precise than the formula "at any time". It specifies: "When signing, ratifying or acceding to this Convention or anytime thereafter". Second, it provides for the form of such a declaration: "by means of a written declaration...". Third, it enlarges the choice of means from mere arbitration to other procedures by providing that the parties may choose from a menu[19] comprising:

> "(a) the International Tribunal for the Law of the Sea...;
> (b) the International Court of Justice;

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17 1976 Convention for the Protection of the Mediterranean Sea against Pollution, (54).

18 On the dispute settlement provisions of the UNCLOS, see Adede, A.O., *The System for Settlement of Disputes under the United Nations Convention on the Law of the Sea: A Drafting History and Commentary*, Dordrecht, Nijhoff, 1987, XV-285 pp.; Dupuy, R.J./Vignes, D., *A Handbook of the New Law of the Sea*, Dordrecht, Nijhoff, 1991, 2 Vol., pp. LV-169; Schallawitz, R.L., *The Settlement of Disputes in the Law of the Sea Convention*, Thesis, Geneva, IUHEI, 1986, XVII-380 pp.; Singh, G., *UNCLOS: Dispute Settlement Mechanism*, New Delhi, Academic Publ., 1985, XVI-271 pp.; Boyle, "Dispute Settlement and the Law of the Sea Convention", *op.cit.*; Sohn, "Settlement of Law of the Sea Disputes", *op.cit.*; Kindt, J.W., "Dispute Settlement in International Environmental Issues: The Model Provided by the 1982 Convention on the Law of the Sea", *Vanderbilt Journal of Transnational Law*, Vol. 22, 1989, pp. 1097-1118; Carnegie, A.R., "The Law of the Sea Tribunal", *I.C.L.Q.*, Vol. 28, 1979, pp. 669-684; Coquia, J.R., "Settlement of Disputes in the UNCLOS: New Directions in the Settlement of International Disputes", *Indian Journal of International Law*, Vol. 25, 1985, pp. 171-190; Jaenicke, G., "Dispute Settlement under the Convention on the Law of the Sea", *Z.a.ö.R.V.*, Vol. 43, 1983, pp. 813-827; Lukaszuk, L., "Settlement of International Disputes Concerning Marine Scientific Research", *Polish Yearbook of International Law*, Vol. 16, 1987, pp. 39-56; Jacovides, A., "Peaceful Settlement of Disputes in Ocean Conflicts: Does UNCLOS III Point the Way?" in Buergenthal, T. (ed.), *Contemporary Issues in International Law*, Kehl, N.P. Engel, 1984, pp. 165-168; Janis, M.W., "The Law of the Sea Tribunal", Janis, M.W., *International Courts for the Twenty-First Century*, Dordrecht, Nijhoff, 1992, pp. 245-251.

19 See, in general, Quéneudec, J-P., "Le choix des procédures de règlement des différends selon la Convention de Nations Unies sur le droit de la mer", *Le droit international au service de la paix, de la justice et du développement: Mélanges Michel Virally*, Paris, Pedone, 1991, pp. 381-387.

(c) arbitral tribunal constituted in accordance with Annex VII;
(d) a special arbitral tribunal constituted in accordance with Annex VIII ..."

What is more, to avoid a deadlock if two States have not chosen the same procedure, article 287.5 provides that:

"If the Parties to a dispute have not accepted the same procedure for the settlement of the dispute, it may be submitted only to arbitration in accordance with Annex VII, unless the Parties otherwise agree"

Since 1982, the practice of allowing contracting parties to pick from a menu of adjudicative means of settlement has become widely used[20], but it has not led States to rush to METs' secretariats to file their declarations. For instance, in the case of the Climate Change Convention, whose article 14.2 contains a similar provision, to date only the Solomon Islands have deposited such declaration[21]. What is more, Cuba expressly declared that, in relation to the same article, disputes should be settled only by way of diplomatic negotiations[22]. Relatively better is the "performance" of the UNCLOS, since as of December 1, 1999 24 States out of 132[23] have made a choice on the applicable dispute settlement means[24]: 15 States selected the International Tribunal on the Law of the Sea (ITLOS), either exclusively or as an alternative to the ICJ[25]; 15 States selected the ICJ, either exclusively or as an alternative to the ITLOS[26]; two rejected the jurisdiction of the ICJ for any

20 Other METs incorporating these feature are: 1985 Vienna Convention on the Protection of the Ozone Layer, (78); 1989 Convention on Control of Transboundary Movements of Hazardous Wastes, (92); 1991 Convention on Environmental Impact Assessment in a Transboundary Context, (95); 1991 Protocol to the Antarctic Treaty on Environmental Protection, (97); 1992 Convention on the Protection and Use of Transboundary Watercourses, (101); 1992 Convention on the Transboundary Effects of Industrial Accidents, (102); 1992 Convention on Biological Diversity, (106); 1994 Convention on Cooperation for the Protection and Sustainable Use of the Danube River, (119); 1994 Desertification Convention, (120); 1995 Convention to Ban Importation into Forum Island Countries of Hazardous Wastes and Radioactive Wastes, (126); Protocol to the 1979 LRTAP on Persistent Organic Pollutants, (140).; Protocol to the 1979 LRTAP on Heavy Metals, (141); Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, (142).; Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade, (143); Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (147); Protocol to the 1979 LRTAP to Abate Acidification, Eutrophication and Ground-Level Ozone, (148).

21 Ott, *op.cit.*, at 736.

22 UN Doc. FCCC/1996/Inf. 1, at 15.

23 As of April 1, 1998. <http://www.un.org/Depts/los/los94st.htm> (Site last visited April 25, 1998).

24 <http://www.un.org/Depts/los/los_sdm1.htm> (Site last visited April 25, 1998).

25 Argentina, Austria, Belgium, Cape Verde, Chile, Croatia, Finland, Germany, Greece, Italy, Oman, Portugal, Tanzania, Uruguay. Ukraine accepts the jurisdiction of the ITLOS only in respect of questions relating to the prompt release of detained vessels and crews. Please, note that the Captain of the M/V Saiga (the vessel which was the object of the first case adjudicated by the ITLOS) Mickael Orlof Alexandrovich, was indeed an Ukrainian national.

26 Algeria (only with a prior agreement between the Parties concerned), Austria, Belgium, Cape Verde, Croatia, Finland, Germany, Italy, Netherlands, Norway, Oman, Portugal, Spain, Sweden, United Kingdom.

kind of dispute[27]; three selected the arbitration under Annex VII[28]; and five chose special arbitration under Annex VIII as an alternative to the ITLOS or the ICJ[29]. This is a promising development, but still the declarations are not very numerous[30].

Because of the sensitivity of certain issues, article 298 of the UNCLOS for them provides the reverse pattern: When signing, ratifying, etc., States may opt out of compulsory procedures entailing binding decisions which otherwise would be compulsory by default[31]. In the case of the UNCLOS, this can be done with respect to disputes concerning sea-boundaries delimitation, military activities or disputes where the UN Security Council is exercising the functions assigned to it by the UN Charter[32]. Following the example of the UNCLOS, the two agreements concluded in 1986 under the aegis of the IAEA, in the aftermath of the Chernobyl accident, read:

> "When signing, ratifying, accepting, approving or acceding to this Convention, a State may declare that it does not consider itself bound by either or both of the dispute settlement procedures provided for in paragraph 2 [i.e. the ICJ and arbitration]..."[33].

A similar provision, allowing States to opt out of compulsory adjudication, is contained in the 1997 Convention on Supplementary Compensation for Nuclear Damage[34], and in the 1988 Convention on the Regulation of Antarctic Mineral Resource Activities. However, in the case of the latter, such an exclusion cannot cover disputes concerning the interpretation or application of "any provisions of [the] Convention or of any measure in effect pursuant to it relating to the protection of the Antarctic environment or dependent or associated ecosystems"[35].

At the beginning of the 1980s, there was a distinct tendency in METs towards the unilateral submission of disputes to adjudication in cases where other means failed (i.e. the *a priori* approach)[36]. However, this promising trend was abruptly

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27 Cuba and Guinea-Bissau.

28 Egypt, Portugal and Ukraine.

29 Argentina, Austria, Chile, Portugal and Ukraine.

30 On the issue of optional declarations of acceptance of jurisdiction in the UNCLOS, see Treves, T., "Conflicts between the International Tribunal for the Law of the Sea and the International Court of Justice", *NYU Journal of International Law and Politics*, Vol. 31, 1999, pp. 809-822.

31 1982 UNCLOS, (73), art. 298. It has been noted that these exclusions do not have a functional basis, but exist because of the political sensitivity of the issues involved, or because trade-offs in the negotiations of the agreement. Boyle, "Dispute Settlement and the Law of the Sea Convention", *op.cit.*, at 63. Article 297.3, moreover, allows Parties to refuse compulsory recourse to adjudication in the case of disputes involving sovereign rights of coastal states with respect to the living resources of the EEZ. Similarly the dispute settlement provisions of the 1988 Convention on the Regulation of Antarctic Mineral Resource Activities, (90), and the 1991 Protocol on Environmental Protection to the Antarctic Treaty, (97), exclude certain categories of disputes (essentially disputes concerning territorial claims in relation to Antarctica) from the mandatory provisions.

32 Becirevic, N., "Limitations and Exceptions of the Compulsory Settlement of Disputes According to the United Nations Convention on the Law of the Sea", *Thesaurus Acroasium*, Vol. 17, 1991, pp. 675-686.

33 1986 Convention on Early Notification of a Nuclear Accident, (83), art. 11.3; 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, (84), art. 13.3. See also the 1997 Protocol to the Vienna Convention on Civil Liability for Nuclear Damage, (134).

34 Convention on Supplementary Compensation for Nuclear Damage, (136), art. 16.3.

35 1988 Convention on the Regulation of Antarctic Mineral Resource Activities, (90), art. 58.1.(a).

36 Kiss, "Le règlement des différends dans les conventions multilatérales relatives à la protection de l'environnement", *op.cit.*, at 123.

brought to an end following the U.S. decision to shun the ICJ by withdrawing its optional declaration[37] because of what it perceived as an unjustifiable adverse ruling in the *Nicaragua* case[38]. The 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, which denies the possibility of unilateral submission of disputes to adjudication, became the first victim of such a sharp turn in American international legal policy[39]. Two years later, the determination of the U.S. Government not to be dragged to court unexpectedly (and perhaps not to be dragged to court at all) did not yield to the joint pressures of 16 other Western countries during the negotiation of the Vienna Convention for the Protection of the Ozone Layer[40]. Against this gloomy background, the 1991 Protocol on Environmental Protection to the Antarctic Treaty[41], the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic[42], the 1997 Agreement on International Humane Trapping Standards[43], the 1999 Convention on the Protection of the Rhine[44], and, to a certain extent, the 1994 Energy Charter Treaty[45], represent some notable exceptions.

The majority of the treaties concluded since the beginning of the 1980s, therefore, have recourse to judicial settlement on the basis of a *common agreement* between the parties to the dispute, precluding any quasi-judicial enforcement and taking us back to the need of prior compromissory negotiation. In this connection, the so-called "Brundtland Report" did not receive much attention[46]. On the whole, after lean and prosperous periods, neither of the two solutions can be said to prevail at the present time. Indeed, on the whole only about half of the METs providing for adjudicative means of settlement grant parties the possibility of unilaterally

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37 Statement of January 18, 1985 on U.S. withdrawal from the proceedings initiated by Nicaragua in the International Court of Justice, with observations by the U.S. State Department, *ILM*, Vol. 24, 1985, pp. 246-249.

38 *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v. United States), (Jurisdiction and Admissibility), Judgment, ICJ Reports 1984, pp. 392-637.

39 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, (74). Sand, "Transnational Environmental Disputes", *op.cit.*, at 124.

40 Declaration Annexed to the Final Act of the Vienna Conference of the Plenipotentiaries on the Protection of the Ozone Layer, UNEP/IG.53/5/Rev.1 (1985). For an account of the genesis of the Vienna Convention's dispute settlement procedure see *supra*, Ch.II.3.1.

41 1991 Protocol on Environmental Protection to the Antarctic Treaty, (97).

42 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic, (107).

43 Agreement on International Humane Trapping Standards Between the European Community, Canada and the Russian Federation, (139).

44 Convention on the Protection of the Rhine, (146).

45 1994 European Energy Charter Treaty, (121). The Treaty's general mechanism for dispute settlement between contracting parties is arbitration, which can be triggered unilaterally by either party to the dispute. See art. 27. A number of exceptions to this, however, do exist. Namely, different dispute settlement procedures exist for, *inter alia*, trade (arts. 5 and 29); investment (art. 26); transit (art. 7.7).

46 World Commission on Environment and Development, *op.cit.*; see also: Experts Group on Environmental Law of the World Commission on Environment and Development, *Environmental Protection and Sustainable Development: Legal Principles and Recommendations*, London, Graham and Trotman, 1987, at 17. "[The World Commission] recommends that States, when unable to resolve any dispute concerning transboundary natural resource or environmental interference within reasonable time, agree to submit any such case for binding arbitration or judicial settlement to, for example, the Permanent Court of Arbitration or the International Court of Justice". See also article 62.2 of the "International Covenant on Environment and Development", Commission on Environmental Law of the IUCN, *op.cit.*

submitting disputes, after the failure of negotiations, to binding third-party procedures[47].

So much for how States have provided for recourse to adjudicative means of settlement in METs. The following pages will explain how these treaties have structured two particular kinds of adjudicative means of dispute settlement: arbitration and judicial settlement through the ICJ. Admittedly, arbitration and the ICJ do not exhaust the panoply of adjudicative means available to settle international environmental disputes. Among others, one could recall the International Tribunal for the Law of the Sea (constituted under the 1982 UNCLOS[48]) and the Dispute Settlement Body of the World Trade Organization[49]. On the regional level, the Court of Justice of the European Communities plays a key role in the implementation of the EU environmental regulations and in the settlement of disputes over their implementation (although the number of inter-State cases brought before the Court is very small)[50]. Several other regional economic integration agreements have established international courts

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47 1954 International Convention for the Prevention of Pollution of the Sea by Oil, (11); 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas, (17); 1960 Convention of Third Party Liability in the Field of Nuclear Energy, (22); 1963 Convention Supplementary to the Paris Convention of 26 July 1960 on Third-Party Liability in the Field of Nuclear Energy, (26); 1963 Vienna Convention on Civil Liability for Nuclear Damage, (27); 1968 African Convention on the Conservation of Nature and Natural Resources, (38); 1968 European Convention for the Protection of Animals During International Transport, (39); 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, (41); 1973 International Convention for the Prevention of Pollution from Ships, (50); 1974 Convention for the Prevention of Marine Pollution from Land-Based Sources, (53); 1976 Convention for the Protection of the Rhine against Chemical Pollution, (57); 1979 Convention on the Conservation of European Wildlife and Natural Habitats, (63); 1976 Convention on the Protection of the Rhine against Pollution by Chlorides, (58); 1980 Convention on the Physical Protection of Nuclear Material, (64); 1980 Convention Creating the Niger Basin Authority, (68); 1982 United Nations Convention on the Law of the Sea, (73); 1986 Convention on Early Notification of a Nuclear Accident, (83); 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, (84); 1988 Agreement on the Network of Acquaculture Centers in Asia and the Pacific, (89); 1988 Convention on the Regulation of Antarctic Mineral Resources Activities, (90); 1991 Protocol on Environmental Protection to the Antarctic Treaty, (97); 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic, (107); Agreement on International Humane Trapping Standards Between the European Community, Canada and the Russian Federation, (139); Convention on the Protection of the Rhine, (146).

48 On the International Tribunal for the Law of the Sea see, in general, *supra* note .

49 On the dispute settlement mechanism of the GATT/WTO, see, in general, Petersmann, E.U., *The GATT/WTO Dispute Settlement System: International Law, International Organizations, and Dispute Settlement*, London, Kluwer Law International, 1997, pp. XVII-344; Swacker, F.W., *World Trade without Barriers: The WTO and Dispute Resolution*, Charlottesville, VA., Butterworth, 1995-, (loose-leaf service); Pescatore, P., *Handbook of WTO/GATT Dispute Settlement*, Ardsley-on-Hudson, NY, Transnational Publ., 1991-, (loose-leaf service).

50 On the Court of Justice of the European Communities and European Environmental Law, see, in general, Kiss, A. Ch./ Shelton, D., *Manual of European Environmental Law*, Cambridge, Cambridge University Press, 1997, 2nd ed., pp. XLIII-622; Krämer, L., *E.C. Treaty and Environmental Law*, London, Sweet & Maxwell, 1995, 2nd ed., pp. XXX-178; Krämer, L., *Focus on European Environmental Law*, London, Sweet & Maxwell, 1997, 2nd ed., pp. XXX-378.

and tribunals which might eventually develop relevant case-law on environmental disputes[51].

Other agreements, such as the North American Agreement on Environmental Cooperation, establish special adjudicative procedures to settle disputes arising out of their implementation[52]. Others, such as the 1948 Convention Concerning the Regime of Navigation on the Danube[53] or the 1994 International Tropical Timber Agreement[54], provide for the referral of the dispute to treaty organs whose decisions are binding and, therefore, by and large comparable to arbitration as defined in this study.

This array of fora to settle international environmental disputes is undoubtedly remarkable and seems to be in constant expansion. However, a more limited focus is justified by two considerations. First, arbitration and the ICJ are by far the most widely resorted to by the drafters of environmental treaties. Very few agreements include adjudicative means other than these two[55]. Second, unlike other judicial means, there is a substantial number of environmental disputes which have actually been settled through them. Ten environmental disputes have been submitted either to arbitration or to the World Court. In August 1999, the ITLOS entered the environmental arena by ordering provisional measures in the *Southern Bluefin Tuna* dispute[56]. Of course, the

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51 E.g. the Treaty Establishing the Common Market for Eastern and Southern Africa, Kampala, Uganda, November 5, 1993, *ILM*, Vol. 33, 1994, at 1067 (arts. 19-44 establishing the Court of Justice and Arts. 122-126 on Cooperation in the Development of Natural Resources, Environment and Wildlife); Treaty of the Southern African Development Community, Windhoek, Namibia, August 17, 1992, *ILM*, Vol. 32, 1993, at 116 (art. 16 and art. 5.g). The Protocol on Shared Watercourse Systems in the Southern African Development Community Region provides that disputes will be settled by the SADC Tribunal. Protocol on Shared Watercourse Systems in the Southern African Development Community Region, (125), art. 7.1.

52 1993 North American Agreement on Environmental Cooperation, (109). On the way disputes are settled within the NAFTA, see Abbott, F., "The NAFTA Environmental Dispute Settlement System as Prototype for Regional Integration", *Y.I.E.L.*, Vol. 4, 1993, pp. 3-29; Castel, J.G., "Le règlement des différends en vertu de l'Accord de libre échange entre le Canada et les États-Unis", *Journal du droit international,* Vol. 117, 1990, pp. 601-610; Charnovitz, S., "The NAFTA Environmental Side Agreement: Implications for Environmental Cooperation, Trade Policy and American Treaty-making", *Temple International and Comparative Law Journal*, Vol. 8, 1994, pp. 257-314; Garvey, J.I., "Trade Law and Quality of Life. Dispute Resolution under the NAFTA Side Accords in Labour and the Environment", *A.J.I.L.*, Vol. 89, 1995, pp. 439-453; Patton, K.W., "Dispute Resolution under the North American Commission on Environmental Cooperation", *Duke Journal of Comparative and International Law*, Vol. 5, 1994, pp. 87-116; Turp, D., "L'Accord de libre échange nord américain et sa procédure générale de règlement des différends", *A.F.D.I.*, Vol. 38, 1992, pp. 808-822.

53 Article 45 of the Convention on the Regime of Navigation on the Danube reads: "Tout différend entre les Etats signataires qui n'aurait pas été reglé par voie de négociations directes sera ... soumis à une commission de conciliation... La décision de la commission de conciliation est définitive et obligatoire pour les parties au différend".

54 Article 31 of the 1994 International Tropical Timber Agreement reads: "Any complaint that a member has failed to fulfill its obligations under this Agreement and any dispute concerning the interpretation or application of this Agreement shall be referred to the Council for decision. Decisions of the Council on these matters shall be final and binding".

55 E.g. the ITLOS in the case of the 1982 UNCLOS; the 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, (110), art. 9; the 1995 Agreement for the Implementation of the Provisions of the UNCLOS relating to Conservation and Management of Straddling Stocks and Highly Migratory Fish Stocks, (124), art. 30.

56 *Infra*, Ch.III.4.

environmental jurisprudence of the ITLOS is still small, and rightly so since it started operating only in Autumn 1996[57], but its potential in the environmental domain is considerable[58].

Admittedly, the GATT/WTO dispute settlement system holds some notable records in the environmental field[59]. In less than five years, the Word Trade Organization Appellate Body and panels have already been faced with a number of cases involving environmental issues[60]. However, a distinguishing feature of environmental disputes, which will be analyzed in depth elsewhere, is that environmental claims are rarely if ever raised in isolation of other legal arguments and issues. In the GATT/WTO context, trade considerations are inevitably and properly put at the center of legal reasoning and the findings of the bodies, while environmental considerations are put in the background, with different degrees of influence. In other words, disputes litigated in the GATT/WTO dispute settlement system are first and foremost trade-related cases, sometimes with environmental overtones. Trade disputes are thus addressed and hopefully resolved, but environmental problems, the gist of this study, do not receive similar attention.

Finally, other international judicial bodies which might play a role in the settlement of international environmental disputes (e.g. the European Court of Justice or the Southern Africa Development Community Tribunal) will not be considered here. First, because they rarely, if ever, are called to adjudicate cases between sovereign States. Second, because the only reliable method to assess the capacity of a given procedure to resolve international environmental problems —the aim of the present study— is to examine how they performed in real-life situations, speculations about whether and how the SADC Tribunal might be able to settle international environmental disputes would be superfluous.

The observations made in the following pages on arbitration and the ICJ will serve as background for the detailed analysis carried out in Chapter Three of the existing international environmental case-law.

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57 The tribunal was inaugurated on August 1, 1996. The judges of the Tribunal took oath of office on October 18, 1996.

58 On the potential role of ITLOS in the settlement of environmental disputes, see Mensah, T., "The International Tribunal for the Law of the Sea and the Protection and Preservation of the Marine Environment", *Environmental Policy and Law*, Vol. 28, 1998, pp. 216-219. A similar piece can also be found in *idem*, "The International Tribunal for the Law of the Sea and the Protection and Preservation of the Marine Environment", *RECIEL*, Vol. 8, 1999, pp. 1-5. See also Boyle, A., "Dispute Settlement and the Law of the Sea Convention: Problems of Fragmentation and Jurisdiction", *op.cit.*; Sohn, L., "Settlement of Law of the Sea Disputes", *op.cit.*

59 On the environmental record of the GATT/WTO dispute settlement system, see Dunoff, J., "Institutional Misfits: The GATT, the ICJ and Trade/Environment Disputes", *Michigan Journal of International Law*, Vol. 15, 1994, pp. 1043-1128; Petersmann, E.U., "International Trade Law and International Environmental Law. Prevention and Settlement of International Disputes in GATT", *Journal of World Trade*, Vol. 27, 1993, pp. 42-81; Schoenbaum, T.J., "International Trade and Protection of the Environment: The Continuing Search for Reconciliation", *A.J.I.L.*, Vol. 91, 1997, pp. 268-313.

60 United States – Standards for Reformulated and Conventional Gasoline, Report of the Panel WT/DS2/R, 29/1/1996, Report of the Appellate Body WT/DS2/AB/R, 20/5/1996; EC Measures Concerning Meat and Meat Products (hormones), AB, 5/01/1998, WT/DS26/AB/R, WT/DS48/AB/R; United States – Import Prohibition of Certain Shrimp and Shrimp Products, Report of the Panel WT/DS58/R, 15/05/98; Report of the Appellate Body WT/DS58/AB/R, 12/10/1998.

4.1. Arbitration

4.1.1. Some Remarks

The 1899 and 1907 Hague Conventions for the Pacific Settlement of International Disputes describe international arbitration as a procedure for the settlement of disputes between States before judges chosen by the parties themselves – as opposed to what happens in the case of judicial settlement by international courts and tribunals – and on the basis of the respect for law[61].

Arbitration holds some notable records[62]. It is undisputedly not only the oldest adjudicative means of dispute settlement[63]; it is also one of the third-party procedures most frequently provided for in international agreements[64] and eventually

61 Articles 15 and 37, respectively, of the 1899 and 1907 Hague Conventions for the Pacific Settlement of International Disputes.

62 On international arbitration, see in general, Schlochauer, H.J., "Arbitration", *Encyclopedia of Public International Law*, Vol. 1, Amsterdam, North-Holland, 1981; Anand, *op.cit.*; Carlston, K.S., *The Process of International Arbitration*, New York, Columbia University Press, 1946; Soons, A.H.A. (ed.), *International Arbitration: Past and Prospects*, Dordrecht, Kluwer, 1990; Wetter, J. G., *The International Arbitral Process*, Dobbs Ferry, N.Y., Oceana, 1979, Vol. 1; Caflisch, L., "L'avenir de l'arbitrage interétatique", *A.F.D.I.*, Vol. 25, 1979, pp. 9-45; Gray, C./Kingsbury, B., "Developments in Dispute Settlement", *op.cit.*; Gray, C./Kingsbury, B., "Inter-State Arbitration since 1945: Overview and Evaluation", Janis, M.W., *International Courts for the Twenty-First Century*, Dordrecht, Nijhoff, 1992, pp. 55-83; Johnson, D.H.N., "International Arbitration Back in Favor?", *Yearbook of World Affairs*, Vol. 34, 1980, pp. 305-328; Sohn, L., "The Role of Arbitration in Recent International Multilateral Treaties", *Virginia Journal of International Law*, Vol. 23, 1983, pp. 171-189; Sohn, L., "The Function of International Arbitration Today", *Hague Academy of International Law, Collected Courses*, Vol. 108, 1963-I, pp. 9-113; Teymouri, E., *L'évolution de l'arbitrage international au XXème siècle*, Teheran, Imprimerie de l'institut franco-iranien, 1958. On particular aspects of arbitration, see: Balasko, A., *Causes de nullité de la sentence arbitraire en droit international public*, Paris, Pedone, 1938; Carlston, *op.cit.*; Chapal, Ph., *L'arbitrabilité des différends internationaux*, Paris, Pedone, 1967; Rubino Sammartano, M., *International Arbitration Law*, Deventer, Kluwer, 1989, XII-537 pp.; Schwebel, S., *International Arbitration: Three Salient Problems*, Cambridge, Grotius, 1987, XVIII-303 pp.; Johnson, D.H.N., "The Constitution of an Arbitral Tribunal", *B.Y.I.L.*, Vol. 30, 1953, pp. 152-177; Schwebel, S.M., "The Majority Vote of an International Arbitral Tribunal", *The American Review of International Arbitration*, Vol. 2, 1991, pp. 402 – 410; Leahy, E.R./Pierce, K.J., "Sanctions to Control Party Misbehavior in International Arbitration", *Virginia Journal of International Law*, Vol. 26, 1986, pp. 291-325.

63 Scholars usually trace the origins of arbitration as a mean to settle disputes back to the pre-classical antiquity. Schlochauer, H.J., "Arbitration", *op.cit.*, pp. 15-19; Rader, A.H., *L'arbitrage international chez les Hellènes*, New York, G.B. Putnam's Sons, 1912. However, it was not until the gradual breaking up of the medieval world and the rise of nation-States that the basic features of international arbitration emerged. The origins of modern international arbitration, accordingly, are traced to the Jay Treaty of 1794 between Great Britain and the United States. This agreement was followed by numerous other similar treaties made by the United States with South American States. For a comprehensive review of international arbitrations since the Jay Treaty, see: Stuyt, A.M., *Survey of International Arbitration 1794-1989*, Nijhoff, Dordrecht, 3rd ed., 1990, XXI-658 pp.; La Fontaine, H., "Histoire sommaire et chronologique des arbitrages internationaux (1794-1900)", *Revue de droit international et de législation comparée*, Vol. 34, 1902, pp. 349-380; 558-582; 623-648.

64 Sohn, L.B., "The Role of Arbitration...", *op.cit.*, at 171 and following, and footnote 1 at 172.

resorted to[65]. The same holds true in the environmental field. Indeed, the first environmental arbitrations date back to the ninetieth century[66]; in METs providing for the possibility of submitting disputes to binding third-party settlement, arbitration is probably the most frequent mechanism.

Much of the success enjoyed by arbitration can be attributed to its great flexibility. It combines the fundamental features of judicial settlement (i.e. binding settlement according to a previously agreed-upon procedure) with the fact that it leaves a fairly large degree of influence to the States involved on key issues such as the composition of the tribunal, the choice of the applicable law, the rules of procedure, the seat of the tribunal, the litigation calendar, and, in general, the limits of its powers[67].

Moreover, although the *compromis* will almost invariably refer to international law, national law, too, could be referred to as the proper law. This could be particularly helpful in the context of international environmental disputes, where resorting to domestic law can help fill the lacunae of international environmental law, *Trail Smelter* arbitration *docet*[68].

Thanks to its malleability, therefore, arbitration is often provided for in multilateral environmental treaties. In the environmental context, international arbitration has produced a few remarkable decisions that have become *topoi,* such as the much quoted *Trail Smelter*[69], *Lake Lanoux*[70], *Gut Dam*[71] *and Bering Sea Fur Seals* arbitrations[72].

However, arbitration is affected by certain specific drawbacks. First, it is more expensive than judicial settlement. In the former, the parties bear *in toto* the costs of the procedure, while in the latter, many of the litigation costs (e.g. salaries of the judges and registrar, courtroom and clerical support, including translations) are borne collectively by those States which are Parties to the agreement instituting that particular court or tribunal. Nonetheless, this factor does not seem to have significantly deterred past litigants from resorting to this kind of *à-la-carte* justice.

Second, and more important, while it presents many of the inadequacies typical of jurisdictional settlement, arbitration also has the specific handicap of requiring the collaborative action of the States involved in the dispute to reach agreement on the arbitrators, on the procedure and on other elements. Hence, when one party refuses even to acknowledge the existence of disputed issues, arbitration is unlikely to be a viable option[73].

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65 Support for this statement can be found in Coussirat-Coustere, V./Eisemann, P.M. (ed.), *Repertory of International Arbitral Jurisprudence,* Dordrecht, Nijhoff, 1989. It comprises two volumes of cases decided between 1946 and 1988. This collection of arbitral awards demonstrates not only the enormous number of cases settled by arbitration but also the variety of categories of disputes which have been settled by this particular means.

66 I.e. *Bering Sea Fur Seals* arbitration. *Infra,* Ch.III.1.

67 Dupuy/Vignes, *op.cit.*, at 1344.

68 In the *Trail Smelter* arbitration, the basis of the decision, as set out in art. 4 of the Special Agreement, was "the law and practice followed in dealing with cognate questions in the United States of America as well as international law and practice". *Infra,* Ch.III.8.

69 *RIAA* (*Trail Smelter*), Vol. 3 (1949), at 1905.

70 *RIAA* (*Lac Lanoux*), Vol. 12 (1957), at 281.

71 Canada-USA Settlement of Gut Dam Claims, September 22, 1968, Report of the Agent of the United States before the Lake Ontario Claims Tribunal, *ILM*, Vol. 8, 1969, at 118.

72 *Bering Sea Fur Seals* arbitration (United Kingdom v. USA), 15 August 1893, in Moore, J.B., *A Digest of International Law,* Washington, Government Printing Office, 1906, Vol. I, at 890. *Infra,* Ch.III.1.

73 Schneider, J., *World Public Order of the Environment: Towards and International Ecological Law and Organization*, *op.cit.*, at 187.

When agreeing to arbitrate, indeed, the parties are often fairly close to settling the dispute altogether. This factor alone may account for the fact that the awards by international arbitral tribunals enjoy a greater degree of compliance compared to judgments rendered by the ICJ.

4.1.2. Arbitration Clauses in METs

The best evidence of the dynamism of arbitration is provided by the heterogeneity of arbitration clauses in multilateral environmental treaties. To begin with, METs frequently do not merely refer to arbitration as a possible means to settle disputes, but spell out, with different degrees of detail, the arbitral procedure[74]. In 33 METs, the description of the arbitral procedure is spelled out in an annex to the convention or in an additional protocol[75]. In

74 The arbitration provisions included in the treaties vary in the degree of detail they provide, but where they are included they generally provide for such aspects as: the appointment of arbitrators; the adoption of rules of procedure by the arbitral tribunal; the costs of the tribunal; the request for, or notification of, agreement to submit a dispute to arbitration; notification of other States Parties to the agreement; appointment of arbitrators in default of appointment by a party; appointment of the chairman of the tribunal; replacement of arbitrators; composition of the tribunal in multi-state disputes; applicable law; the duty of the parties to the dispute to facilitate the work of the arbitral tribunal; consequences of non-appearance of a party; power to order provisional measures; intervention by third-party states with a legal interest in the dispute; hearing of counterclaims; effects of the arbitral award; and requests for interpretation of awards.

75 1963 Vienna Convention on Civil Liability for Nuclear Damage, (27); 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Causalities, (41); 1973 International Convention for the Prevention of Pollution from Ships, (50); 1974 Convention for the Prevention of Marine Pollution from Land-based Sources, (53); 1976 Convention for the Protection of the Mediterranean Sea Against Pollution, (54); 1976 Convention for the Protection of the Rhine Against Chemical Pollution, (57); 1976 Convention for the Protection of the Rhine Against Pollution by Chlorides, (58); 1980 Convention for the Conservation of Antarctic Marine Living Resources, (67); 1981 Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, (69); 1982 United Nation Convention on the Law of the Sea, (73); 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, (74); 1985 Vienna Convention for the Protection of the Ozone Layer, (78); 1985 Convention for the Protection of the Marine and Coastal Environment of the Eastern African Region, (79); 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, (85); 1988 Convention on the Regulation of Antarctic Mineral Resource Activities, (90); 1989 Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, (92); 1991 Bamako Convention on the Ban of the Import Into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, (94); 1991 Convention on Environmental Impact Assessment in a Transboundary Context, (95); 1992 Convention on the Transboundary Effects of Industrial Accidents, (102); 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (101); 1992 Convention on Biological Diversity, (106); 1994 Convention on Cooperation for the Protection and Sustainable Use of the Danube River, (119); 1995 Convention to Ban Importation into Forum Island Countries of Hazardous Wastes, (126); Agreement on International Humane Trapping Standards Between the European Community, Canada and the Russian Federation, (139); Protocol to the 1979 LRTAP on Persistent Organic Pollutants, (140); Protocol to the 1979 LRTAP on Heavy Metals, (141); Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, (142); Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade, (143); Protocol to the 1979 LRTAP to Abate Acidification, Eutrophication and Ground-Level Ozone, (148); Convention for the Conservation of Southern Bluefin Tuna, (109); Convention on the Protection of the Rhine, (146). The Protocols on arbitration of the Climate Change, (105), and of the Desertification (120) conventions have not yet been negotiated and adopted.

ten other cases it is incorporated directly into the text of the treaty[76]. It goes without saying that since lengthy descriptions are more suitably incorporated in annexes than in the texts of the agreements, it is therefore possible to infer that States usually pay great attention to the way in which the arbitral procedure is organized. Second, while some treaties indicate a preference for arbitration by putting it at the very center of the dispute settlement procedure[77], other instruments simply provide for arbitration as an alternative to the submission of the dispute to the International Court of Justice or other judicial means[78].

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76 1968 European Convention for the Protection of Animals during International Transport, (39); 1979 Convention on the Conservation of European Wildlife and Natural Habitats, (63); 1988 Agreement on the Network of Acquaculture Centers in Asia and the Pacific, (89); 1991 West Indian Ocean Tuna Organization Convention, (99); 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic, (107); 1991 Protocol on Environmental Protection to the Antarctic Treaty, (97); 1993 North American Agreement on Environmental Cooperation, (109); 1994 Agreement on Cooperative Enforcement Operations Directed to Illegal Trade in Wild Fauna and Flora, (118); 1994 Energy Charter Treaty, (121); 1994 Final Act of the Conference of Plenipotentiaries on the Establishment of the Lake Victoria Fisheries Organization, (120).

77 I.e. 1968 European Convention for the Protection of Animals during International Transport, (39), or 1993 North American Agreement on Environmental Cooperation, (109).

78 1954 International Convention for the Prevention of Pollution of the Sea by Oil, (11); 1963 Vienna Convention on Civil Liability for Nuclear Damage, (27); 1963 Act Regarding Navigation and Economic Co-Operation between the States of the Niger Basin, (30); 1980 Convention on the Physical Protection of Nuclear Material, (64); 1980 Convention on the Conservation of Antarctic Marine Living Resources, (67); 1982 United Nations Convention on the Law of the Sea, (73); 1985 Vienna Convention for the Protection of the Ozone Layer, (78); 1986 Convention on Early Notification of Nuclear Accidents, (83); 1986 Convention on Assistance in Case of Nuclear Accident or Radiological Emergency, (84); 1988 Convention on the Regulation of Antarctic Mineral Resource Activities, (90); 1989 Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, (92); 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area, (103); 1991 Protocol on Environmental Protection to the Antarctic Treaty, (97); 1991 Bamako Convention on the Ban of the Import Into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, (94); 1991 Convention on Environmental Impact Assessment in a Transboundary Context, (95); 1992 Convention on the Transboundary Effects of Industrial Accidents, (102); 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (101); 1994 Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, (120); 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, (110); 1992 Convention on Biological Diversity, (106); 1992 United Nations Framework Convention on Climate Change, (105); 1993 Agreement to Promote Compliance with International Conservation and management Measures by Fishing Vessels on the High Seas, (110); 1994 Convention on Cooperation for the Protection and Sustainable Use of the Danube River, (119); 1995 Convention to Ban Importation into Forum Island Countries of Hazardous Wastes, (126); 1997 Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage, (134); Protocol to the 1979 LRTAP on Persistent Organic Pollutants, (140); Protocol to the 1979 LRTAP on Heavy Metals, (141); Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, (142); Convention On The Prior Informed Consent Procedure For Certain Hazardous Chemicals And Pesticides In International Trade, (143); Convention on the Protection of the Environment through Criminal Law, (144); Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (147); Protocol to the 1979 LRTAP to Abate Acidification, Eutrophication and Ground-Level Ozone, (148); Convention for the Conservation of Southern Bluefin Tuna, (109); Convention on Supplementary Compensation for Nuclear Damage, (136).