



CONVENTION ON BIOLOGICAL DIVERSITY

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OPEN-ENDED AD HOC WORKING GROUP OF LEGAL AND TECHNICAL EXPERTS ON LIABILITY AND REDRESS IN THE CONTEXT OF THE CARTAGENA PROTOCOL ON BIOSAFETY

Third meeting

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Item 3 of the provisional agenda*

EXPERIENCE OF OTHER INTERNATIONAL INSTRUMENTS AND FORUMS AS REGARDS DAMAGE SUFFERED IN AREAS BEYOND NATIONAL JURISDICTION

Note by the Executive Secretary

I. INTRODUCTION

1. The Open-ended Ad Hoc Working Group of Legal and Technical Experts in the Context of the Cartagena Protocol on Biosafety held its second meeting from 20 to 24 February 2006 in Montreal. The Working Group, in its conclusion, requested, *inter alia*, that the Secretariat gather and make available, at its third meeting information on how damage suffered in areas beyond limits of national jurisdiction or control of States is being addressed in other international instruments and forums. The following information document has been prepared in response to that request.

2. The document presents, in section II, a few cases of environmental pollution or damage, including damage to biological diversity that have been documented or reported to have occurred in areas beyond the limits of national jurisdiction. Then, section III reviews the geographical scope of some relevant international instruments. In section 4, the document briefly describes some situations where liability for damage suffered in areas beyond the limits of national jurisdiction or control of States has actually been raised under relevant international instruments or processes.

3. It should be noted, from the outset, that this document is far from being an exhaustive review of incidents, international instruments, or cases relevant to or involving the issue of damage suffered in areas beyond the limits of national jurisdiction or control of States.

II. SOME INCIDENTS OF DAMAGE SUFFERED IN AREAS BEYOND THE LIMITS OF NATIONAL JURISDICTION OR CONTROL OF STATES

4. Generally speaking, there is lack of direct evidence of damage to the environment in general and to biodiversity in particular, in areas beyond the limits of national jurisdiction or control. Distance and cost have historically limited scientific research to more easily accessible areas. With respect to fisheries, most of the conclusions have been extrapolations of studies done within exclusive economic zones

* UNEP/CBD/BS/WG-L&R/3/1.

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(EEZs). As a result, although damage is considered certain to occur or to have occurred during some activities, for example, high seas trawling, only a small number of reports can identify precise locations or extent of damage. Some cases of damage have, however, been documented.

A. Introduction of alien invasive species on the high seas

5. Alien invasive species are better documented within national jurisdiction, where they tend to directly affect human livelihoods. However, it is very likely that there is a great deal of concentration of invasive species in areas beyond the limits of national jurisdiction. One example is the algae *Caulerpa taxifolia*, which was first detected in the Mediterranean in 1984. It produces a toxin, which repels species, which would normally feed on algae; it also dominates and excludes entirely the indigenous algal species. ^{1/} It is occurring beyond the declared territorial seas of States, where no EEZ has been claimed.

B. Climate change

6. There is ample evidence of damage to biological diversity beyond national jurisdiction attributable to climate change. In 2004, a study in the Mediterranean high seas demonstrated loss of functional diversity and species evenness after a warming event in the deep ocean. The biodiversity did not return to its original values even after the temperature returned to normal. ^{2/}

7. The Inuit Circumpolar Conference (ICC) launched a petition to the Inter-American Commission for Human Rights in late 2005, “seeking relief from violations resulting from global warming caused by acts and omissions of the United States.” ^{3/} Among the complaints, the ICC alleges alterations in species and habitats, including significant behavioural and morphological changes and heightened risks of extinction. ^{4/}

C. Illegal fishing on the Grand Banks

8. Although evidence of damage to biological diversity in the high seas is scant, the general perception is that over fishing, and particularly trawling is causing as much damage as in areas within national jurisdiction or control. For instance, there are three areas very high in biodiversity, and also historically very valuable for the commercial fisheries that fall on the continental shelf but outside the Canadian EEZ. These are the Flemish Cap, and the Nose and Tail of the Banks. These areas are habitat for unique populations such as the genetically distinct populations of redfish, as well as for migratory species.

^{1/} For more information, see Meinesz *et al.*, “Spread of the introduced green algae *Caulerpa taxifolia* in Northern Mediterranean waters” (1993) 5 *Journal of Applied Psychology* 151.

^{2/} Robert Danavaro et al., “Biodiversity response to climate change in a warm deep sea” (2004) 7 *Ecol Letters* 821 at 821.

^{3/} *Petition to the Inter American Commission on Human Rights Seeking Relief for Violations Resulting from Global Warming Caused by Acts and Omissions of the United State*. Full text of the petition can be accessed online <<http://www.inuitcircumpolar.com/files/uploads/icc-files/FINALPetitionICC.pdf>>

^{4/} *Ibid.* at 26.

9. Moratoriums on redfish catch have been in place for several years, owing to the fact that they were once of commercial value and are now considered “severely depleted by over fishing.” ^{5/} However, during the 2000-2001 season, 22.1 million redfish were caught as by catch in the Northern prawn trawl fishery on the Flemish Cap. ^{6/} On the Nose, where peak catch of redfish was once 79, 000 metric tonnes (mt), there has been a moratorium on redfish catch since 1998. Despite that moratorium, 840 mt. were caught as by catch in the Greenland Halibut fishery in 2001, ^{7/} further reducing the stock and placing its very existence in question.

10. In 2002, Canadian fishing authorities determined that the Russian-flagged vessel *Olga* had caught 49 tonnes of cod beyond the Canadian EEZ, and was as such engaged in a direct fishery in violation of the NAFO moratorium on all cod stocks. ^{8/} The issue was solved through diplomatic measures; the vessel’s license to fish in North Atlantic Fisheries Organization (NAFO) waters was cancelled by Russia, but no other liability ensued.

11. In 2002, the Portuguese vessel *Aveirense* was found in the NAFO regulatory area to have been conducting a fishery specifically directed at American Plaice, another species under moratorium for more than a decade. ^{9/} No liability seems to have ensued. A number of other similar infractions of NAFO have occurred ^{10/} but the NAFO Convention does not include any liability provisions.

D. Antarctic oil spill: the *Bahia Paraiso*

12. On 23 January 1989, the *Bahia Paraiso*, an Argentinean vessel carrying Antarctic oil, scientists and tourists, ran aground and spilled more than 250 000 gallons of diesel off the coast of Antarctica. Fourteen years later, oil slicks continue to be reported, particularly around part of the vessel, which is still above water. ^{11/} Limpet mortality was especially high after the wreck. ^{12/} This case preceded, and precipitated, the Environmental Protocol to the Antarctic Treaty; at the time of the incident, there was no environmental protection regime in Antarctica.

E. Radioactive waste dumping

13. Evidence suggests that even low-level radioactive wastes in the deep sea may cause damage to biodiversity. According to some studies, more than 295 000 drums of low and intermediate-level waste were dumped in the deep sea between 1949 and 1982. At these sites, measurable levels of contamination have been found in sessile suspension feeders, deposit feeders and mobile predators. ^{13/} No studies on

^{5/} Kock, 1992 as cited in Myers, RA & CA Ottensmeyer, “Extinction risk in marine species” in Norse EA and LB Crowder, eds., *Marine Conservation Biology: the Science of Monitoring the Sea’s Biodiversity* (Island Press: Washington, 2005).

^{6/} Matthew Gianni, “High Seas bottom trawl fisheries and their impacts on the biodiversity of vulnerable deep sea ecosystems” (2004) IUCN, online: <www.greenpeace.org.nz/pdfs/GianniJune2004.pdf>.

^{7/} *Ibid.*

^{8/} CBC News, “Russian ship caught fishing Grand Banks cod leaves Canada”, April 4, 2002, online : <http://www.cbc.ca/news/story/2002/04/03/fishing_newf020403.html>

^{9/} Fisheries and Oceans Canada, “Special NAFO enforcement operation” in *Media Room Backgrounders*, May 2004, online: <http://www.dfo-mpo.gc.ca/media/backgrou/2004/hq-ac45b_e.htm>.

^{10/} For information and citations, see Government of Canada. “Citations” in *Over fishing and International Fisheries and Oceans Governance*, 2006, online: <http://www.dfo-mpo.gc.ca/overfishing-surpeche/en_citations_e.htm>.

^{11/} Lucio Jose Janiot *et al.*, “Evidence of oil leakage from the *Bahia Paraiso* wreck in Arthur Harbour, Antarctica” (2003) 46 Mar. Poll. Bull. 1615 at 1615.

^{12/} *Ibid.*

^{13/} A.G. Glover and C.R. Smith, “The deep-sea floor ecosystem: current status and prospects of anthropogenic change by the year 2025”, (2003) 30(3) *Envtl. Conserv.* 219 at 228.

these specific sites exist, but various laboratory studies ^{14/} indicate mortalities and permanent genetic damage to aquatic and marine organisms even at low levels of exposure. Dumping of radioactive waste has been banned since 1993 but previously dumped items remain on the sea floor.

F. Waste/sludge dumping

14. As in other sources of damage, detailed evidence of damage in areas beyond national jurisdiction is lacking regarding ocean dumping. However, more shallow areas have significant experience with dumping and the loss of biodiversity, which it can cause. The Christiansen Basin, in eastern United State of America, suffered a dumping incident, which covered 75 square kilometres with sludge. The benthic community (organisms that live in close relationship with the ground in the lowest level of a water body) was significantly reduced in diversity, with pollutant-tolerant worms becoming abundant and dominating the ecosystem. ^{15/} Another study found reductions in both abundance and diversity of species of commercial interest when sewage sludge dumping occurred in deep seas. ^{16/}

G. Casey Station in the Antarctic

15. Pursuant to the Environmental Protocol to the Antarctic Treaty, most waste from Antarctic research stations is now disposed of in home States. However, there are still waste sites in existence that predate the Protocol. In particular, a large one exists near Casey Station. Recent studies have demonstrated changes in the soft-sediment fauna from areas near the waste sites. Other sources document diminished biodiversity in the area. ^{17/}

III. RELEVANT INTERNATIONAL INSTRUMENTS AND FORUMS

A. Convention on Biological Diversity

16. The Convention on Biological Diversity makes two important distinctions with respect to its jurisdictional application: on the one hand, between “components of biological diversity” and “activities and processes” and, on the other, between areas within and those beyond the limits of national jurisdiction. ^{18/}

17. In areas beyond the limits of national jurisdiction, the provisions of the Convention apply only to activities and processes carried out under a Party’s jurisdiction or control which may have adverse impact on biological diversity. Because they have no sovereignty or jurisdiction over the resources, Parties have no direct obligation with regard to the conservation and sustainable use of specific components of biological diversity in areas beyond the limits of national jurisdiction. The Convention on Biological

^{14/} See for example, Josephine A. Hagger, Franck A. Atienzar & Awadhesh N. Jha, “Genotoxic, cytotoxic, developmental and survival effects of tritiated water in the early life stages of the marine mollusc, *Mytilus edulis*” (2005) 74 *Aquatic Toxicology* 205; RB Jarvis & JF Knowles, “DNA damage in zebrafish larvae induced by exposure to low-dose rate gamma-radiation: detection by the alkaline comet assay” (2003) 541 *Genetic toxicology and environmental mutagenesis* 1; Walker ST *et al*, “Oxidative-stress: comparison of species specific and tissue specific effects in the marine bivalves *Mytilus edulis* (L.) and *Dosinia lupinus* (L.)” (2000) 27(3) *Biochemistry and Molecular Biology* 347.

^{15/} C.G. Gunnerson *et al.*, “Management of domestic wastes”, in: G.F. Mayer, Editor, *Ecological Stress and the New York Bight: Science and Management*, (1982) Estuarine Research Federation, Columbia, SC, pp. 91–112. As cited in R. Lawrence Swanson *et al.*, “Science, policy and the management of sewage materials. The New York City experience”. (2004) 49 *Mar. Poll. Bull.* 679.

^{16/} SW Chang, “Deep-water dumpsite off New Jersey” (1993) 91(4) *Fisheries Bull.* 594.

^{17/} See Jonathan S. Stark *et al.*, “Influence on an Antarctic waste dump on recruitment to near shore marine soft-sediment assemblages” (2004) 276 *Mar. Ecol. Prog. Ser.* 53. See also Anna Salleh, “Antarctic waste cleanup” *News in Science*, February 25, 2002, online: <<http://www.abc.net.au/science/news/stories/s488429.htm>>.

^{18/} Articles 4(a) and (b) of the Convention on Biological Diversity.

Diversity, consequently, underlines the need for cooperation among Parties “in respect of areas beyond national jurisdiction (...) for the conservation and sustainable use of biological diversity”. 19/

18. The Conference of the Parties requested, at its second meeting, the Executive Secretary to undertake, in consultation with the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations (UNDOALOS), a study of the relationship between the Convention on Biological Diversity (CBD) and the United Nations Convention on the Law of the Sea (UNCLOS) with regard to the conservation and sustainable use of genetic resources on the deep seabed. 20/ In accordance with that request, the Executive Secretary and UNDOALOS prepared a study on the issue, which was made available, as an information document (UNEP/CBD/SBSTTA/8/INF/3/Rev.1) for the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), held in March 2003.

19. The study noted that whereas the provisions of the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea were complementary and mutually supportive regarding the conservation and sustainable use of marine and coastal biodiversity, an important legal lacuna existed with respect to commercially oriented activities relating to marine genetic resources in the Area. In that regard the study concludes by proposing options regarding the management of genetic resources of the deep seabed beyond the limits of national jurisdiction. One of the proposed options was amending the Convention on Biological Diversity in order to extend its application to components of biological diversity in areas beyond the limits of national jurisdiction. 21/

B. Law of the sea instruments

20. The United Nations Convention on the Law of the Sea 22/ establishes several relevant obligations on Parties. Furthermore, several articles of the Convention are considered to be customary international law, binding even on non-Parties. It covers basic obligations to protect and preserve the marine environment; 23/ control point-source pollution; 24/ protection and preservation of rare/fragile ecosystems and the habitat of depleted, threatened or endangered species. 25/

21. The Convention establishes liability for damage under Articles 139, 235 and 263, both within and beyond national jurisdiction. Article 139(2) applies to the seabed, ocean floor, and subsoil thereof, beyond national jurisdiction. 26/ It establishes that damage caused by a State’s failure to carry out its responsibility in the Area (i.e., the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction) will result in liability.

22. The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks was adopted in 1995 and entered into force in 2001. It applies explicitly to the management of straddling and migratory fish stocks in areas beyond the limits of national jurisdiction. 27/ The Agreement elaborates on the fundamental principle, established in the United

19/ Article 5 of the Convention. See also paragraph 8 of the note by the Executive Secretary on Conservation and sustainable use of deep seabed genetic resources beyond national jurisdiction: study of the relationship between the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea, prepared for the eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice in March 2003 (UNEP/CBD/SBSTTA/8/9/Add.3/Rev.1).

20/ Paragraph 12 of decision II/10 of the Conference of the Parties to the Convention on Biological Diversity.

21/ See paragraph 10 (c) of document UNEP/CBD/SBSTTA/8/9/Add.3/Rev.1 and paragraph 126 of document UNEP/CBD/SBSTTA/8/INF/3/Rev.1.

22/ 21 ILM 261 (entered into force 1994).

23/ Article 192

24/ Articles 194-196, 207-212.

25/ Article 194 (5).

26/ Article 1(1)(1).

27/ Article 3(1).

Nations Convention on the Law of the Sea, that States should cooperate to ensure conservation and promote the objective of the optimum utilization of fisheries resources both within and beyond the exclusive economic zone. Article 35 of the Agreement states that “State Parties are liable in accordance with international law for damage or loss attributable to them in regard to this Agreement”. The Agreement does not define either damage or loss.

23. At its resumed sixth session in 2000, the Assembly of the International Seabed Authority approved the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area. ^{28/} The Regulations are intended to apply to the International Seabed Area (the “Area”). “Marine environment” as defined in paragraph 3 (e), part I, regulation 1 includes “physical, chemical, geological and biological components, conditions and factors which interact and determine the productivity, state, condition and quality of the marine ecosystem, the waters of the sea and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof.” “Serious harm to the environment” is any effect “from the activities in the Area on the marine environment which represents a significant adverse change in the marine environment, determined according to the rules, regulations, and procedures adopted by the Authority on the basis of internationally recognized standards and practices.” ^{29/}

24. The liability mechanism in these regulations comes from section 16 of the *Standard Clauses for Exploration Contract*. It holds the contractor liable for the actual amount of damage, including environmental; that amount includes “the costs of reasonable measures to prevent or limit damage to the marine environment.” As such, mediation and prevention are clearly compensable, however there is no indication that the contractor would be liable for full restoration. Furthermore, the contractor is only liable where the damage resulted from wrongful acts or omissions.

C. Instruments on civil liability for nuclear damage

25. There are three interrelated conventions that constitute the existing legal framework on civil liability for nuclear damage:

(a) The Convention on Third Party Liability in the Field of Nuclear Energy (“the Paris Convention”) adopted in Paris on 29 July 1960 under the auspices of the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA); ^{30/}

(b) The Vienna Convention on Civil Liability for Nuclear Damage (“the Vienna Convention”) adopted on 21 May 1963 under the auspices of the International Atomic Energy Agency (IAEA); ^{31/} and

(c) The Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material (“the 1971 Brussels Convention”) adopted on 17 December 1971 under the auspices of IAEA, OECD and the International Maritime Organization (IMO). ^{32/}

26. The Paris Convention was supplemented in 1963 by the Brussels Supplementary Convention on Third Party Liability in the Field of Nuclear Energy (“the Brussels Supplementary Convention”) and amended by additional protocols adopted in 1964 and 1982. In 1988, at the initiative of both the IAEA and OECD/NEA, the Paris and Vienna Conventions were linked by the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention (“the Joint Protocol”), which entered into force on 27 April 1992. In 1997, the Vienna Convention was amended by the Protocol to Amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage (“the Vienna Amending Protocol”) and

^{28/} ASBA/6/A/8.

^{29/} Article 3(h).

^{30/} The Paris Convention is a regional instrument for West European countries. It entered into force on 1 April 1968.

^{31/} The Vienna Convention is global in character. It entered into force on 12 November 1977.

^{32/} The 1971 Brussels Convention is global in character. It entered into force on 15 July 1975.

supplemented by the Convention on Supplementary Compensation for Nuclear Damage (“the Convention on Supplementary Compensation”).

27. The regimes of the Paris and Vienna conventions have several common elements. One of these common elements is that the geographical scope of the application of both instruments is limited. The Paris Convention provides that it does not apply to nuclear incidents occurring in the territory of non-contracting States or to damage suffered in such territory. The original Vienna Convention contained no provision concerning its territorial application. Consequently, the 1997 Vienna Amending Protocol introduced a new Article I A, which provides that the Convention applies to nuclear damage wherever suffered (Article 3). However, an “Installation State” may, subject to certain conditions, exclude from the application of the Convention damage suffered in the territory of a non-contracting State or in any maritime zones established by a non-contracting State in accordance with the international law of the sea. The territorial limits of application established under both the Paris and Vienna Conventions have largely been overridden by the provisions of the Convention on Supplementary Compensation. The public funds from contracting parties’ contributions under the latter Convention cover damage suffered not only within the territory of a contracting party but also in maritime areas beyond the territorial sea and the exclusive economic zone.

D. The oil pollution liability instruments

28. The oil pollution liability and redress regime is provided by:

(a) The 1969 International Convention on Civil Liability for Oil Pollution Damage (“the Oil Pollution Convention”);

(b) The 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution (“the Oil Fund Convention”); and

(c) The 1977 Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources.

29. The objective of the Oil Pollution Convention is to ensure that adequate compensation is available to persons who suffer damage resulting from the escape or discharge of oil from ships. The Convention covers pollution damage resulting from spills of persistent oils suffered in the territory, including the territorial sea of a Contracting State and to preventive measures taken to prevent or minimize such damage. ^{33/} In other words, the Convention restricts its territorial application to pollution damage caused in the territory of a Contracting State, including its territorial sea. However, “pollution damage” as defined by the Convention is “loss or damage caused outside the ship carrying oil by contamination resulting from the escape or discharge of oil from the ship, *wherever such escape or discharge may occur*, and includes the costs of preventive measures and further loss or damage caused by preventive measures” (emphasis added).

30. This definition suggests that the Convention may be applicable beyond national jurisdiction. The jurisdictional scope of the Convention has been extended by the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage of 29 November 1969 (“the 1992 Amending Protocol”). The scope is extended to cover the exclusive economic zone of a Contracting State, or if the Contracting State has not established such a zone, “in an area beyond and adjacent to the territorial sea of that State determined by that State in accordance with international law and extending not more than 200 nautical miles from the baselines from which the breadth of its territorial sea is measured”. ^{34/} Similarly, although the definition of “pollution damage” is restricted in the 1969 Convention to “loss or damage (...) by contamination resulting from escape or discharge of oil” including costs of preventive measures, the 1992 Amendment has clarified this as including impairment of the

^{33/} Article II, 1969 Oil Pollution Convention.

^{34/} Article 3 (a) (ii), the 1992 Amending Protocol.

environment and loss of profits arising from such impairment. ^{35/} With regard to preventive measures, the Convention does not impose any territorial limits. It applies to preventive measures, wherever taken, to prevent or minimize such damage. ^{36/}

31. The 1971 Oil Fund Convention has a double objective. In the first instance, it endeavours to guarantee full compensation to the victims of oil pollution damage in cases where the regime established by the 1969 Convention does not afford full protection. Secondly, it seeks to alleviate the financial burden imposed on the shipping industry by the 1969 Convention by shifting part of the financial responsibility to the oil cargo interests. The Convention applies to pollution damage caused in the territory, including the territorial sea, of a Contracting Party and to preventive measures taken by a Contracting Party within or outside its territory. The Oil Fund Convention was amended in 1992 through the International Maritime Organization (IMO) Protocol to Amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971. The Protocol made important adjustments to the 1971 regime. One of these adjustments relates to the jurisdictional application of the regime, which was extended by the Protocol to cover the exclusive economic zone and preventive measures taken within or outside the limits of national jurisdiction.

32. The 1977 Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources addresses oil pollution damage arising from the exploration for and exploitation of seabed mineral resources. The operator of an offshore installation is liable to pay compensation for loss or damage caused by contamination resulting from the escape or discharge of oil from the installation, including the cost of preventive measures. The Convention applies to damage suffered within the territory of a contracting party and to preventive measures wherever taken.

E. Instruments regarding damage caused during the transport of dangerous goods and substances

33. There are three multilateral instruments in this category:

(a) The 1989 Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD);

(b) The 1996 International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea (the HNS Convention); and

(c) The 1999 Basel Protocol on Liability and Compensation for Damage resulting from Transboundary Movements of Hazardous Wastes and Their Disposal.

34. The CRTD imposes strict liability on the “carrier” of dangerous goods for damage occasioned during the transport of such goods. Damage is defined to include:

(a) Loss of life or personal injury;

(b) Loss of or damage to property;

(c) Loss or damage by contamination of the environment; and

(d) The costs of preventive measures.

35. The application of the Convention is limited to damage sustained in the territory of a contracting party and to preventive measures wherever taken.

36. The HNS Convention deals with the transport of defined hazardous and noxious substances. ^{37/} It imposes strict liability against the ship owner for damage caused by hazardous and noxious substances in connection with their carriage by sea on board a ship. The Convention does not apply to pollution damage as defined in the 1969 International Convention on Civil Liability for Oil Pollution Damage. As

^{35/} Paragraph 6(a), Article 2, the 1992 Amending Protocol.

^{36/} Article 3 (b), the 1992 Amending Protocol.

^{37/} See Article 1.

regards territorial limits of application, the Convention has interesting departures from other instruments. It applies to any damage caused in the territory, including the territorial sea, of a State Party; to damage by contamination of the environment caused in the exclusive economic zone, or its equivalent, of a State party; to damage, other than damage by contamination of the environment, caused outside the territory of any State party, if the damage is caused by a substance carried on board a ship registered in a State party or, if unregistered, by a ship entitled to fly the flag of a State party; and to preventive measures wherever taken. Damage to person or property caused outside the limits of national jurisdiction can be compensated as long as the subject ship is registered in a State party or is entitled to fly the flag of a State party. However, environmental damage in areas outside the limits of national jurisdiction is not covered by the Convention. Nevertheless, as is the case with most of the instruments examined, measures to prevent or mitigate damage, including environmental damage, outside national jurisdiction would fall within the ambit of the Convention.

37. The Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal was adopted on 10 December 1999 at the fifth meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. The objective of the Protocol is to provide a comprehensive liability regime as well as a mechanism to ensure adequate and prompt compensation for damage resulting from the transboundary movement of hazardous wastes and other wastes, including incidents occurring because of illegal traffic in such wastes.

38. The jurisdictional application of the Protocol is circumscribed in a number of respects. As a general rule, the Protocol applies to damage due to an incident occurring during a transboundary movement of hazardous wastes and other wastes and their disposal, including illegal traffic, from the point where the wastes are loaded on the means of transport in an area under the national jurisdiction of a State of export. ^{38/} The application of the Protocol is regulated in accordance with the various operations specified in annex IV to the Convention. Nevertheless, the Protocol applies, with two notable exceptions, only to damage suffered in an area under the national jurisdiction of a contracting party. ^{39/} These exceptions are:

(a.) As regards damage to person or property or the costs of preventive measures, the Protocol's application is extended to areas beyond any national jurisdiction; ^{40/} and

(b) The Protocol applies to all categories of damage suffered in an area under the jurisdiction of a State of transit which is not a party provided that such State appears in annex A (largely composed of small island developing States) and has acceded to a multilateral or regional agreement concerning transboundary movements of hazardous wastes. ^{41/}

F. Antarctic Treaty system

39. The Antarctic Treaty entered into force in 1961. ^{42/} In 1991, a Protocol on Environmental Protection to the Antarctic Treaty was adopted under which negotiations on a liability annex have been under way for several years. Article 16 of the Protocol provides that "the Parties undertake to elaborate rules and procedures relating to liability for damage arising from activities taking place in the Antarctic Treaty area and covered by the Protocol". The Treaty, its Protocol and Annexes apply in the area south of

^{38/} Article 3(1).

^{39/} Article 3 (3) (a).

^{40/} Article 3.3(c).

^{41/} Article 3.3(d).

^{42/} 402 UNTS 71. Also note that this treaty has also been reviewed in a previous information document entitled, on recent developments in international law relating to liability and redress, including the status of international environment-related third party liability instruments prepared for the second meeting of the Open-ended Ad Hoc Working Group of Legal and Technical Experts on Liability and Redress in the Context of the Cartagena Protocol on Biosafety (UNEP/CBD/BS/WG-L&R/2/INF/5).

60°S latitude, including ice shelves. ^{43/} Liability and redress are dealt with under Annex VI ^{44/} to the Protocol. This Annex does not actually provide for liability or redress for environmental damage *per se*; it only entitles for compensation for response action taken by State parties, or alternatively a fine equivalent to the cost of response action, had it been taken.

40. The other instrument within the Antarctic treaty system is the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA). ^{45/} CRAMRA was adopted in 1988. It applies within the Antarctic Treaty Area (all areas south of 60°S Latitude). ^{46/} Its liability provisions are contained in Article 8, and establish strict liability on the part of the Operator for “damage to the Antarctic environment or dependent or associated ecosystems arising from its Antarctic mineral resource activities, including payment in the event that there has been no restoration to the status quo ante” as well as loss of or impaired use of an ecosystem. Exceptions are made for damage caused by war or by unforeseeable natural disasters, ^{47/} and for damaged caused intentionally or by gross negligence of the Party claiming the damage. ^{48/} The Convention 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, beyond that which is negligible or which has been assessed and judged to be acceptable pursuant to this Convention.” ^{49/}

G. The Convention on Civil Liability for Damage Resulting From Activities Dangerous to the Environment (“The Lugano Convention”)

41. The Lugano Convention was adopted under the auspices of the Council of Europe. It deals with environmental damage regardless of whether it has a transboundary dimension. However, the Convention leaves considerable flexibility to national legal systems with respect to its implementation and also allows them to establish provisions, which go much further than those of the Convention in terms of environmental protection and the protection of victims of environmental damage. The stated objective of the Convention is to ensure adequate compensation for damage resulting from activities dangerous to the environment and also to provide for means of prevention and reinstatement.

42. As regards jurisdictional scope, the Convention shall apply when the incident occurs in the territory of a contracting party or when the incident occurs outside the territory of a party but the conflict of law rules lead to the application of the law in force in a contracting party. ^{50/}

H. Convention on the International Liability for Damage Caused by Space Objects

43. The Convention on the International Liability for Damage Caused by Space Objects (commonly known as the “Liability Convention”) was adopted in 1972. ^{51/} The objective of the Convention is to establish effective international rules and procedures concerning liability for damage caused by space objects and to ensure prompt payment of full and equitable compensation to victims of such damage. Damage under the Convention is restricted to loss of life, personal injury or other impairment of health, or loss of or damage to property. ^{52/}

44. The Convention represents features such as broad geographical scope, absolute liability and original State liability, which are not common in other international instruments. It provides for different

^{43/} Article 1(b) of the *Protocol*; Article VI of the *Treaty*.

^{44/} Not yet in force.

^{45/} Adopted in 1988.

^{46/} Article 5.

^{47/} Article 8(4).

^{48/} Article 8(6).

^{49/} Article 1(14).

^{50/} Article 3.

^{51/} As of 1 January 2006, the Convention has been ratified by 82 States.

^{52/} Paragraph 1, Article I.

standards of liability based on where the damage has been caused. Accordingly, a launching State is absolutely liable to pay compensation for damage caused by its space object on the surface of the Earth or to an aircraft in flight. ^{53/} In the event of damage being caused elsewhere than on the surface of the earth to a space object of one launching State or to persons or property on board such a space object by a space object of another launching State, the latter will be held liable only if the damage is due to its fault or the fault of persons for whom it is responsible. ^{54/}

45. Furthermore, in the event of damage being caused elsewhere than on the surface of the earth to a space object of one launching State or to persons or property on board such a space object by a space object of another launching State, and of damage thereby being caused to a third State or to its natural or juridical persons, the first two States will be held, under the Convention, jointly and severally liable to the third State. ^{55/} The extent of their liability depends, once again, on where such damage has been caused. Joint and several liability also applies for any damage caused by a space object jointly launched by two or more States. A State from whose territory or facility a space object is launched is regarded as a participant in a joint launching.

I. *International Law Commission's Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities*

46. During the preparation of the draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, some had suggested to include damage to global commons beyond national jurisdiction within the scope of the principles. It was, however, felt that questions concerning standing to sue in case of damage to the environment *per se* and the types of claims that would be admissible including claims concerning the “no-use value” meant that it was best for the global commons to be left outside the scope of the principles. In their final form, the principles contain a definition of “transboundary damage” which states, “damage caused to persons, property or the environment in the territory or in other places under the jurisdiction or control of a State other than the State of origin”. ^{56/}

IV. SOME LEGAL CASES INVOLVING DAMAGE SUFFERED IN AREAS BEYOND THE LIMITS OF NATIONAL JURISDICTION

A. *Bering Sea Fur Seal Arbitration, 1893*

47. This arbitration may be considered the first case of an attempt to enforce national conservation rules against damage to biological diversity in areas beyond the limits of national jurisdiction or the control of a State. In the nineteenth century, the territorial sea extended only three miles from the shoreline. While the decision ultimately turned on the United States assertion of possession and the law of capture, it discusses damage and liability as well.

48. The damage in this case was the annual capture of 40,000 to 50,000 predominantly female fur seals in the Bering Sea. It was described by the Joint Expert Committee that “a marked diminution in the number of seals (...) had taken place, that such diminution had been ‘cumulative in effect’ and that it was the ‘result of excessive killing by man.’” ^{57/} The claim was also based on evidence from other regions, where the same activity had already decimated several seal rookeries. ^{58/}

^{53/} Article II
^{54/} Article III.
^{55/} Paragraph 1, Article IV.
^{56/} Principle 2, paragraph e.
^{57/} *Bering Sea Fur Seal Arbitration* at 808.
^{58/} *Ibid.* at 778.

49. The ability of the United States to enforce conservation provisions beyond its territorial sea was refuted. The arbitrator further concluded that pursuit of seals on the high seas could not be considered to be contrary to international law, ^{59/} and that the United States had no right to protect the fur seal beyond the limits of its national jurisdictional. ^{60/} Great Britain was awarded damages from the United States, for the period during which Canadian vessels refrained from hunting.

B. Southern Bluefin Tuna

50. The Southern Bluefin Tuna stock is highly migratory and shared essentially between Australia, New Zealand and Japan. National quotas were agreed upon in order to conserve the species, which all three States agree was depleted. However, Japan opened an experimental fishery, which fished outside the Japanese quota during the 1998, and 1999 seasons. New Zealand and Australia brought the case to the International Tribunal for the Law of the Sea (ITLOS).

51. ITLOS granted a provisional order, recognizing that Japan had failed to adopt “necessary conservation measures for its nationals fishing on the high seas...” and ordering Japan to restrict itself and those under its jurisdiction to the national quota, which had been agreed upon previously. The provisional order is in effect until the Parties reach a permanent agreement.

C. Conservation and sustainable exploitation of swordfish

52. Chile and the European Union have been in dispute for more than a decade over the management of swordfish stocks. Swordfish are considered highly migratory species, and the stock at issue migrated in and out of Chilean waters off the coast of South America. According to Chile, the European Union was not respecting conservation measures, and was causing damage to biological diversity. Chile attempted to extend its domestic legislation to their adjacent high seas, and also closed its ports to European Union vessels as a result of disputes. ^{61/} The European Union brought a case to the WTO, complaining that Chile closing its ports violated the General Agreement on Tariffs and Trade (GATT) 1994. Chile maintained that the issue was related to conservation, not commerce, and went to ITLOS to argue that the European Union was not respecting conservation measures for highly migratory species, contrary to United Nations Convention on the Law of the Sea. ^{62/}

53. The case was settled between the parties in 2001 with a provisional agreement. The agreement requires the European Union to engage in bilateral agreements, to adhere to a scientific fisheries programme, and the development of a multilateral environmental agreement for the region. Chile was also required to provide port access. The parties have reserved the right to return to ITLOS, and the case will remain on the docket until 2008.

^{59/} *Ibid.* at 793.

^{60/} *Ibid.* at 917.

^{61/} Marcos Orellana, “The EU and Chile suspend the swordfish case proceedings at the WTO and the International Tribunal of the Law of the Sea” *Asil Insights*, February 2001, online: <http://www.asil.org/insights/insigh60.htm#author>.

^{62/} *Ibid.* Chile’s claims at ITLOS fell under Article 64 (calling for cooperation in ensuring conservation of highly migratory species), 116-119 relating to conservation of the living resources of the high seas), 297 concerning dispute settlement), and 300 (calling for good faith and no abuse of right) of UNCLOS. In response, the EU requested the tribunal to declare whether Chile has violated the same UNCLOS articles that Chile has invoked, and including Article 87 (on freedom of the high seas including freedom of fishing, subject to conservation obligations), and 89 (prohibiting any State from subjecting any part of the high seas to its sovereignty).