

CHAPTER 9. ENVIRONMENTAL SECURITY

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9.3 Environmental Security: United Nations Doctrine for Managing Environmental Issues in Military Actions

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A three-year international assessment of global changes conducted by the Millennium Project¹ identified fifteen global challenges facing the world, reaching into most facets of change, from prospective water shortages to moral and ethical issues. Of the fifteen challenges, six are environmentally related. Environmental threats may well outweigh military threats in the future. This report is an investigation into the roles that might be required of the UN and related international organizations, as well as the conventions and protocols that might be involved in the resolution of future threats to environmental security.

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¹ Jerome C. Glenn and Theodore J. Gordon. 1999. *1999 State of the Future: Challenges We Face at the Millennium*, Washington, DC: American Council for the United Nations University.

SECTION 1

1. Executive Summary

A previous study of environmental security by the AC/UNU Millennium Project,² found uncertainty in the international community about when the UN and related international organizations should have leadership responsibility for addressing transborder environmental security threats (including those within a country that have potential transborder consequences).

The purpose of this study was to identify existing UN military doctrine on environmental security, to analyze the ways United Nations forces and related non-military international organizations (IOs) can address current and emerging environmental security issues and threats, and to speculate about future arrangements. The UN's role in both addressing environmental security issues that might lead to conflict and its role in addressing the environmental effects of conflict are explored.

In order to identify preventive, responsive, and remedial environmental security roles for the UN and related international organizations, a review of international conventions, protocols and treaties was performed, including the charters of the UN and its related international organizations. Senior UN officials were interviewed to explore current and potential UN doctrine for managing environmental issues in UN peacekeeping operations.

The research reveals that **there is only one formal environmental security guideline in UN doctrine for military action**. The UN Secretary-General's Bulletin of 6 August 1999 entitled "Observance by United Nations Forces of International Humanitarian Law" states:

*The United Nations force is prohibited from employing methods of warfare which may cause superfluous injury or unnecessary suffering, or which are intended, or may be expected to cause, **widespread, long-term and severe damage to the natural environment**. (paragraph 6.3) [bold emphasis added].*

Secretary-General Kofi Annan's bulletin uses the same language (bold in quote above) as the Geneva Convention's First Protocol authored in 1977, the proposed International Criminal Court's (ICC) Charter (The Rome Statute), and The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD). The latter three international instruments do not refer to a chain of authority as does the Secretary-General's Bulletin.

Environmental security³ is more than just preventing environmental damage from war, as addressed in the above four international instruments. Environmental security threats can also

² Jerome C. Glenn, Theodore J. Gordon, and Renat Perelet. 1998. *Environmental Security: Emerging International Definitions, Perceptions and Policy Considerations*. Washington, D.C.: American Council for the UNU.

³ Environmental Security can be defined simply as "environmental viability for life support." More comprehensive definitions are presented in the previously referenced report (footnote 2)

come from ignorance and/or mismanagement of socio-economic activities, terrorism, migration, and natural disasters.

The following chart illustrates a range of environmental security threats and how they may be classified.

Examples of Environmental Security Threats

	By Ignorance and/or Mismanagement	By Intention	Mix of Natural and Human Actions
Within a Country	C.1 Oil spills in Ogoniland Nigeria Aral Sea depletion in Russia Indonesian fires Ground water contamination and fresh water scarcity Hazardous wastes Soil erosion Human settlement and development patterns	C.2 Sarin gas attack in Tokyo subway Chemical attacks and draining marshes in Iraq Poisoning or diversion or misuse of water resources	C.3 Floods Famines Salinization Earthquakes Introduction of exotic species
Trans-border	C.4 Rain forest depletion River usage in (Jordan, Nile, Tigris, Euphrates) Chernobyl nuclear accident Diminishing biodiversity Ozone depletion Fisheries depletion Global climate change Acid rain and air pollution Poverty Radioactive waste	C.5 Burning oil fields in Kuwait Poisoning water Dam construction and water diversion Biological weapons Water and soil pollution due to military activity	C.6 Solar radiation changes Global warming New, emerging, and drug-resistant diseases such as AIDS and others affecting plants and animals Desertification Population growth Rich-Poor gap

A NATO study suggests an alternative typology. In the report *Environment & Security in an International Context*,⁴ four general types of environmental conflict are identified:

- ethno-political conflicts
- migration conflicts (internal, cross-border and demographically caused migration)
- international resource conflicts
- environmental conflicts due to fundamental global environmental change

⁴ NATO. *Environment & Security in an International Context*. 1999. Report No. 232. Bonn, Germany.

There are many international instruments that relate to preventive, responsive, and remedial roles for environmental security threats due to causes other than war, but they lack enforcement capacity without UN Security Council resolutions or appeal to the proposed International Criminal Court.⁵ There is, as yet, no direct UN doctrine with effective enforcement powers to address these sources of non-military causes of environmental security threats that could lead to conflict.

The following chart can help illustrate the range of potential roles for the UN in addressing environmental security:

Range of potential UN environmental security roles

UN's role in addressing environmental <u>effects</u> of conflict within a country or transborder	UN's role in addressing environmental <u>causes</u> of conflict within a country or transborder
<p>By UN force: How the law binds the UN forces and their action</p> <p>By non-UN force: what UN mandate might prevent or punish other's illegal actions</p>	<p>Through intervention before the conflict</p> <p>Through intervention during the conflict</p> <p>Peacekeeping and/or other UN or related IOs after the conflict</p>

Key articles of international treaties, conventions, and protocols that might be used to address these circumstances are discussed in the next sub-section and listed in part to of this section of this report, along with relevant articles of International Organizations.

Although the interviews found little attention is currently being given to environmental security at the UN, there was great interest expressed in exploring this possibility in greater detail and an understanding that such threats are increasing and require more attention. As a result, it is likely that greater awareness and acceptance within UN circles will be created for the need to factor environmental security into the planning and implementation of peacekeeping operations and to explore how the UN and related organizations might intervene to prevent conflict due to environmental stress.

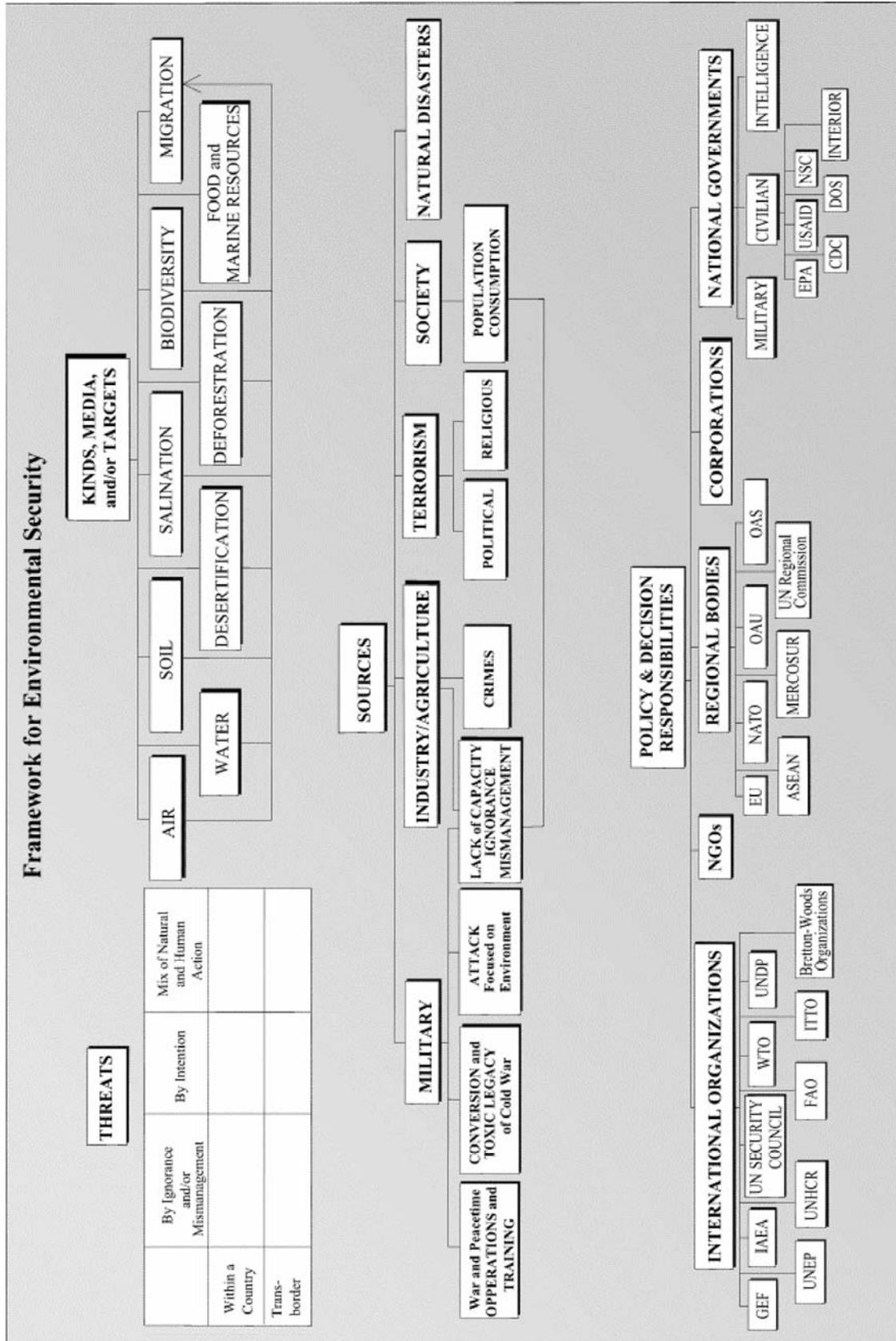
⁵ It should be noted that the Secretary-General's Bulletin reiterates current UN practice that "In cases of violations of international humanitarian law, members of the military personnel of a United Nations force are subject to prosecution in their national courts." (Section 4) In the absence of this assurance, there is widespread agreement that few nations would make troops available to peacekeeping operations.

This new awareness is likely to express itself in the development of standards and guidelines governing in-theater operations.

Eventually, some kind of UN-authorized mechanism will have to be established to send teams to document environmental security threats within one country that would affect another country. Following the findings of such teams, an additional mechanism will have to be established to act on the findings⁶. One such mechanism was suggested in 1997 by US Ambassador John McDonald, Executive Director of the Institute for Multi-Track Diplomacy. Ambassador McDonald recommended the establishment of a UN Environmental Mediation Program to train environmental mediators, establish national environmental mediation centers, assist national research programs, and set up an international panel of environmental mediators to be on call to help resolve transboundary disputes (see Appendix H).

The following chart can act as a framework to help think through the broad nature of environmental security and related issues throughout this report.

⁶ The idea of UN teams to identify future problems is different but related to the UN teams sent after the Gulf and Yugoslav conflicts. One can now suggest that such practices be institutionalized and integrated into existing UN facilities dealing with international conflict (and, possibly, international terrorism).



2. UN Role: Environmental Effects of Conflict

ENVIRONMENTAL SECURITY IN DOCTRINE

There is only one formal environmental security guideline in UN or related international organization doctrine for military action. The UN Secretary-General's Bulletin of 6 August 1999 entitled "Observance by United Nations Forces of International Humanitarian Law" states:

The United Nations force is prohibited from employing methods of warfare which may cause superfluous injury or unnecessary suffering, or which are intended, or may be expected to cause, widespread, long-term and severe damage to the natural environment. (paragraph 6.3).

Secretary-General Kofi Annan's bulletin uses the same language as the Geneva Convention's First Protocol authored in 1977, which outlaws "methods or means of warfare which are intended, or may be expected, to cause widespread, long-term, and severe damage to the natural environment."

Additionally, the International Criminal Court's (ICC) charter (the Rome Statute), Article 8(2)(b)(iv) uses the same language to define war crimes related to the environment as: "...widespread, long-term, and [causing] severe damage to the natural environment." The charter was completed in July 1998 with a 120-7 vote for approval. The U.S. was one of the seven countries who voted against it. Nevertheless, it is expected that the ICC will open within three years as the permanent mechanism for prosecuting war crimes.

The August 1999, Secretary-General's Bulletin and the ICC's charter did not define "widespread," "long-term," or "severe." However, Protocol One of the Geneva Convention had an official commentary that defined "long-term" as "measured in decades." Unfortunately, this definition would require either waiting years to see if the environmental damage persists or accepting long-range forecasts of impacts before deciding whether the standard has been violated.

This same language is also used in Article One of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD): "Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injure to any other State Party." According to the Environmental Law Institute (ELI),⁷ ENMOD

...has been interpreted to define "widespread" as "encompassing an area on the scale of several hundred square kilometers"; "long-term" as "lasting for a period of months, or approximately a season"; and "severe" as "involving

⁷ Jay Austin and Carl Bruch. 1999. *The Greening of Warfare: Developing International Law and Institutions to Limit Environmental Damage During Armed Conflict*, Washington, D.C.: Environmental Law Institute.

serious or significant disruption or harm to human life, natural and economic resources, or other assets.

However, ELI goes on to say that this interpretation cannot necessarily be extended to the other three uses of this language, since it referred only to ENMOD, a convention different in character from the other instruments.⁸ Nevertheless, the UN Secretary-General's Bulletin is very new and it remains to be seen how definitions may evolve.

ENVIRONMENTAL SECURITY IN UN PEACEKEEPING OPERATIONS

While the UN has a Department of Peacekeeping Operations (DPKO), the function is without specific authorization in the UN Charter. Peacekeeping has been characterized as “Chapter 6 ½” of the Charter, falling between Chapter 6 on pacific settlement of disputes and Chapter 7 on action with respects to the peace, breaches of peace, and acts of aggression.

In the absence of an entity devoted to peacekeeping – whether autonomous specialized agency (food, health, labor) or a semi-autonomous program (refugees, population, children) – the basic document creating and governing a peacekeeping operation is a Security Council Resolution.⁹

A second essential element of a peacekeeping operation is the Status of Forces Agreement (SOFA) or Status of Mission Agreement (SOMA) negotiated with the host country or countries.¹⁰

While the scope of this brief study would not permit a detailed review of all Security Council resolutions on peacekeeping, one of the authors of this report, Joe Sills, having been intimately familiar with the scope and content of these resolutions during his UN career, recalled no reference in any of them to environmentally related mandates to govern activities of UN forces. A selective review of a number of resolutions confirmed this. Further, telephone interviews with officials of both DPKO and the Security Council Division of the Department of Political Affairs

⁸ In correspondence with Jay Austin, he notes: "The ENMOD definition is less restrictive, but also less relevant: it deals not with *collateral* environmental damage from a standard military attack, but with deliberate manipulation of environmental forces for military purposes. Short of bombing dams, or the cloud-seeding that the U.S. allegedly engaged in over North Vietnam, it's hard to imagine a real-world scenario to which it would apply."

⁹ James Sutterlin. 1995. *The United Nations and the Maintenance of International Security*. Westport, CT. & London: Praeger. At page 24, Sutterlin notes that while a few earlier peacekeeping operations were authorized by the General Assembly: “It is now generally accepted, however, that only the Security Council can authorize the deployment of peacekeeping forces.”

¹⁰ A SOFA is negotiated where the UN presence is primarily military; a broader SOMA covers areas where, in addition to a military presence, the UN provides such elements as election monitors, civilian police, etc. As negotiated with host governments, these are confidential agreements. They are based on a model agreement dating back to the 1980s; efforts to update it have been, to date, unsuccessful. Thus, each SOFA and SOMA as negotiated will have a large number of *ad hoc* provisions specific to the individual operation.

confirmed that **no mandates or instructions regarding environmental security in the theater were included in any Council resolution.**

Surprisingly, UN sources state that there are no references to environmental standards or goals in the “model SOFA,” nor could they recall any in various agreements as negotiated with countries hosting UN operations, even as regards such basics as cleanup following departure. It was indicated that, on a case-by-case basis, individual contingents would work these matters out with local officials at the time of departure, but without formal guidance.

Following the termination of the UN Protection Force (UNPROFOR), the government of Bosnia and Herzegovina presented the UN with a bill for some \$70 million for various items, including some alleged environmental damage. However, the UN did not accept this claim, and no payment was made.

After the closing of the Kosovar refugee camp in Albania earlier this year, the Albanian government sought directly from the United States funds to return a site (which had been built for use by UNHCR) to its original state. While this matter is still under discussion, there is a possibility that the site as developed could be adapted for an alternate, economically valuable use, rather than dismantling it.

DPKO has issued a series of handbooks for field operations, such as those for civilian police and military observers. Discussions with DPKO confirm that no such handbook, or other formal written guidelines, have been issued dealing with environmental security nor, to the best of their knowledge, have there been consideration of doing so.

In the absence of such guidelines, what environmental rules do UN peacekeeping forces in the field follow? Due to the considerable autonomy contingents have at the operational level, they follow instructions and guidelines promulgated by their governments for their own troops. As a result, these standards vary, perhaps significantly, from contingent to contingent. This variance not only creates discrepancies in actual operations, but also has the potential to create friction between the UN and host governments and people due to uneven attention given to environmental concerns. (Note: *Defining Environmental Security: Implications for the US Army*: Atlanta, Army Environmental Policy Institute, 1998 notes that “the North Atlantic Treaty Organization (NATO) continues to list environmental security, ‘including the reclamation of contaminated military sites, regional environmental problems and natural and man-made disasters’, among its most important priorities.” Interviews suggested that Canada and Australia had particularly good policies in this regard.)

In sum, the link between UN peacekeeping and environmental security has simply not been made within the UN, either conceptually or operationally, nor is there any indication in the literature reviewed or the telephone interviews conducted that the matter has been given any thought, much less serious thought.

ENVIRONMENTAL CONSIDERATION IN PAST CONFLICT

Professor Bruce Russett of Yale makes the point:

The locus of a post-Cold War United Nations...should be on human security – not just the security of states which are members of the United Nations, but the security of populations within states... Peace would require the integration of UN institutions directed toward traditional forms of security from military violence with those parts of the UN concerned with security from poverty and disease and those concerned with the security of political and cultural rights from abuse.¹¹

In *The Blue Helmets: A Review of United Nations Peacekeeping*¹² neither “environment” nor “United Nations Environment Program” appears in the extensive index. In his introduction, however, then Secretary-General, Boutros Boutros-Ghali, states:

*Early warning mechanisms are among the instruments available to the United Nations in its efforts to prevent conflict... Its early warning network takes account not only of threats of armed conflict but also of **environmental hazards** [emphasis added], the risk of nuclear accident, natural disasters, mass population movement, the threat of famine and the spread of disease.*

However, there has been no apparent effort to link this general statement to functioning peacekeeping operations, although Mr. Boutros-Ghali does state that “Peacekeeping operations should be part of an integrated approach to peace-building, encompassing political, social, economic, humanitarian and human rights aspects.”¹³ A strong case can be made for adding “environmental” to this list.

The UN has not as yet dealt with environmental implications and the effects of their peacekeeping operations. Rather, the UN has established the practice of sending missions to assess environmental impacts of conflicts of international significance after the fact, such as the Gulf War and recently in the Kosovo region.

The following examples illustrate this point.

1. The environmental consequences of the Israeli-Palestinian confrontations were the subject of numerous decisions taken by the UNEP's Governing Council in the 1980s. Nearly every session adopted a decision condemning Israeli actions that led to environmental damage. A considerable number of decisions were taken on the remnants of military operations – mainly anti-personnel mines.

¹¹ James Sutterlin. 1995. *The United Nations and the Maintenance of International Security*. Westport, CT. & London: Praeger. In his Forward, Bruce Russett is characterizing the views Sutterlin puts forward in the book.

¹² UN Department of Public Information. 1996. *The Blue Helmets: A Review of United Nations Peacekeeping*. New York, 3rd ed.

¹³ Ibid.

2. In the wake of the Iraqi invasion of Kuwait in August 1990, and following a series of Security Council Resolutions (SCRs) that failed to reverse the Iraqi action, a coalition of forces, acting with Security Council authorization, but not under UN command, began an air campaign in mid-January 1991. On 27 February, Kuwait City was liberated by the follow-up ground operation, and on the same day Iraq announced that its armed forces had withdrawn from Kuwait.

Measures to evaluate and compensate for environmental damage caused by the invasion and withdrawal actions (specifically, setting fire to Kuwait oil wells and deliberately spilling oil in the Persian Gulf) were an integral part of the Security Council resolutions giving terms for ending the hostilities. SCR 687, adopted on 3 April 1991, was the longest and probably most complex set of decisions ever taken by the Council. The UN Environment Program (UNEP) was involved in the assessment of the ecological damage.

Section E of the resolution reaffirms Iraq's liability for any direct loss or damage resulting from the invasion, "including environmental damage and the depletion of natural resources as a result of its unlawful invasion and occupation of Kuwait"¹⁴ and called for the creation of a fund, with resources from Iraq's petroleum revenues, and a commission to administer the fund and disburse the awards. The UN Compensation Commission (UNCC) was established by SCR 692 of 20 May, 1991 for adjudicating the amount of damage claims, and the Governing Council of the Commission approved, in December 1996, an award of \$610 million to Kuwait for the costs of extinguishing the oil well fires set by retreating Iraqi troops, and cleaning up the residue.

This was the first time an international entity was ever charged with the assessment and valuation of environmental damage from war, and awarding financial compensation. A side result of the Iraqi invasion and its aftermath was the adoption of a resolution by the UN General Assembly on "the protection of the environment in time of conflict" (GA res. 47/37, November 1992) which stated that

destruction of the environment not justified by military necessity and carried out wantonly, is clearly contrary to international law.

In 1993 and 1994 the International Committee of the Red Cross (ICRC) prepared guidelines for inclusion in military manuals and other materials of information on the laws of war relevant to the protection of the environment during armed conflict. These were drawn from existing international legal instruments – with which the UN General Assembly resolution referred to above had urged states to comply – and also existing State practice. They stated that the general prohibition against destroying civilian properties should also be construed as protecting the environment.¹⁵

However, these ICRC and UN General Assembly efforts related to armed conflict among (and, presumably, within, in the case of the ICRC Guidelines) states are not specifically related to

¹⁴ Security Council Resolution (SCR) 687. 1991, April. Par. 16.

¹⁵ *The United Nations and the Iraq-Kuwait Conflict: 1990-1996*. 1996. United Nations Blue Book Series, Vol. IX. pp. 68

practice of UN peacekeeping operations deployed following (or to prevent) conflicts. The UN Iraq-Kuwait Observer Mission (UNIKOM) was created to deter boundary violations and report on hostile activities. No mention was made in the Security Council Resolution creating UNIKOM of responsibilities related to the environment, other than noting that mines and unexploded ordnance would have to be cleared for safety purposes.

3. In the case of Cambodia, there is available an authoritative, independent study of the United Nations Transitional Authority in Cambodia (UNTAC) which analyzes UNTAC's operations from conception to termination.¹⁶ Heininger observes that “no [UN] mission has matched that in Cambodia for the scope of responsibilities... or the degree of control exercised by the United Nations over the internal workings of a country.”

Two environmentally related concerns were identified early by UNTAC.

First, the advance team included a twenty-person ‘mine awareness’ group, but no actual clearance operations were undertaken by them. In spite of the early recognition and gravity of the problem, Heininger notes that, “lack of emphasis on mine clearance in the early stages of the UN operation...was to have serious repercussions for reparation efforts later because mine clearance operations could not keep up with demand for mine-free land.”¹⁷ It is relevant that the Secretary-General’s implementation plan for UNTAC assigned responsibility for assisting with mine clearance, including training and mine awareness programs, to UNTAC’s military wing.

Second, “UNTAC early on recognized the serious threat posed to Cambodia’s environment and its economic future by overexploitation of natural resources, particularly the rapid depletion of timber stocks and gem mines.”¹⁸ It must be noted that the income from these sources was largely financing the Khmer Rouge, which made this concern particularly acute.

One of the two areas in which Heininger gives UNTAC highest marks (the other being the work of the information and education units) was the ‘quick impact’ projects and civic action programs. These small-scale efforts were undertaken by individual military contingents, frequently on their own initiative and at their expense. Several of them dealt with environmentally related matters, such as providing potable water and sanitation facilities to villages.¹⁹ This type of small-scale project has also been undertaken by other UN peacekeeping operations, for example, by the UN Interim Force in Lebanon.²⁰

4. A recent United Nations effort not related to peacekeeping operations provides an interesting example. The escalation of violence in Kosovo since 1997 and the NATO air strikes against the

¹⁶ Janet E. Heininger. 1994. *Peacekeeping in Transition: the United Nations in Cambodia*. New York: The Twentieth Century Fund Press.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid. pp. 53-4, 116, 120-22

²⁰ Sutterlin. op.cit., p. 34

Federal Republic of Yugoslavia (FRY) which began in late March 1999 led the Secretary-General to propose, and the government of the FRY to agree, to sending a UN Inter-Agency Needs Assessment Mission (NAM) in May 1999. The NAM visited the FRY in late May, and on 9 June the Secretary-General submitted its report to the Security Council (S/1999/662).

The primary objective of the NAM was “to provide an initial assessment of the emergency needs of civilian populations and of the medium-term rehabilitation requirements in the country in the light of the approaching winter.” This initial assessment was to be followed by a more in-depth assessment, as well as by sectorial evaluations by relevant agencies. A senior representative of the UN Environment Program (UNEP) was a member of the NAM.

The mission’s conclusions related to the environment were centered on the effects of NATO air attacks on more than eighty industrial facilities. The report states:

Damage to oil refineries, fuel dumps and chemical and fertilizer factories, as well as the toxic smoke from huge fires and the leakage of harmful chemicals into the soil and water table, have contributed to as yet unassessed levels of environmental pollution in some urban areas, which may, in turn, have a negative impact on health and ecological systems.

The NAM concluded that a scientific and technical fact-finding mission under UNEP’s lead, also involving UNDP, the UN Economic Commission for Europe, and UN Center for Human Settlements (Habitat) “is urgently called for.”

UNEP moved quickly, conducting a series of missions to assess ecological damage at industrial sites, including taking of samples that were analyzed; going up and down the Danube assessing water quality; and looking at biodiversity issues. These findings were consolidated in the UN report released on October 15, 1999: *The Kosovo Conflict - Consequences for the Environment & Human Settlements*.

UNEP’s responsibilities in the NAM and the follow-up indicate a greater role for UNEP in environmentally-related aspects of military action as they are a part of the overall role of the UN as chronicled in Appendix H.

In the Yugoslavia case, numerous environmental assessment missions have essentially come to the conclusion that there is no Yugoslav eco-catastrophe. Instead, action was urged for several hotspots left by NATO. The finding by the Regional Environmental Center for Central and Eastern Europe (REC) was that there were severe strains on fresh-water and sewage facilities in Albania, due to the need to construct large refugee camps with little time for prior planning. Appendix H is a collection of media statements related to NATO’s bombing campaign in Yugoslavia, as an example of case analysis of environmental consequences of war.

Although the UN has not expressed much interest in environmental security, the academic community has picked it up and is developing the concept. The latest notion of 'human security' includes environmental security as its prominent component. It is interesting that in all recent warfare operations, the offensive side ignored environmental effects, while the defensive side

usually raised that issue as a collateral one in claiming compensation for damage such as human loss, material damage, etc. UN assistance, including UN peacekeeping forces, was usually invited (called for) by the defensive party. Sometimes scientists forecast frightening effects of military actions spreading almost all over the globe. That was a conclusion about the environmental impact of oil field fires in Iraq during the Gulf war that was never realized and quickly forgotten.

The lack of UN instructions for its peacekeepers regarding the environment can be partly explained by the lack of coherent (harmonized) position of (and among) nation-states on environmental harm during war/military operations.

The military's activities during peace-time (military ammunition production, storage, waste, transportation, training, etc.) are usually very closely followed and scrutinized by the public with the 'right to know' appeals to authorities. They insist that environmental 'peacetime' standards for companies should equally be applied to the military.

'Environmental rules' during military wartime activities are much fuzzier and vary from country to country and, as pointed out in the present paper, are difficult to reconcile for UN peacekeepers from different countries. International conventions concerning environmental effects of warfare usually set fairly broad limits. Although it is generally recognized that international environmental conventions are not applicable to warfare situations (unless they specifically deal with military operations such as the ENMOD convention), the Environmental Law Institute is exploring arguments that certain environmental treaties may apply to such wartime situations.

UN ROLE IN ENVIRONMENTAL SECURITY ISSUES THAT COULD LEAD TO CONFLICT

The previous section explored the status of United Nations doctrine regarding environmental damage caused by UN-directed and other military forces. The concept of environmental security also includes environmental damage caused by non-military sources that could lead to conflict.

NATO has recently released a report entitled *Environment & Security in an International Context* that stressed the key role of international agreements in the prevention of conflicts due to environmental stress.

*Taking preventive action on environmental stress thus is the most appropriate approach to preventing environmental conflicts. Such preventive action is needed at all levels, but given that environmental stresses tend to be rooted in transboundary, regional and global environmental problems, **international and regional environmental agreements play a particularly important role in preventing environmental conflict**²¹ [emphasis added].*

There is no comprehensive agreement to address environmental security. Since it is such a broad

²¹ NATO. Committee on the Challenges of Modern Society. 1999. *Environment & Security in a International Context*. Report 232. Brussels, Belgium.

concept, it may not be possible nor desirable to create such a comprehensive treaty. There is, however, a broad range of conventions and protocols that address environmental security threats.

To document the status of international agreements that address environmental security, a list of threats was drawn from the previous Millennium Project report *Environmental Security: Emerging International Definitions, Perceptions, and Policy Considerations* and matched with the appropriate international treaty, convention, and/or protocol. The results are listed below. A listing of applicable international instruments appears in the second part of this section.

3. Examples of Environmental Security Threats

1. Ozone layer depletion
2. Global climate change due to greenhouse gas emission (rising sea level, changing rain distribution)
3. Radioactive waste management; nuclear waste storage tanks leakage
4. Radioactive spills from leaking nuclear submarines
5. Nuclear bomb tests
6. Accidents in nuclear plants; low radiation from accidents occurring in old nuclear power-plants
7. Environmental impact of war such as the impact of bombing, and use of landmines and chemical and/or biological weapons
8. Environmental modification during war
9. Spills from stockpiles of “old weapons”
10. Oil spill and pollution
11. Natural disasters: earthquakes, floods, storms, volcanic activities, tornado and hurricanes
12. Food security (ex. Famines in Somalia and potentially North Korea may induce migration, disease and war)
13. Water scarcity and pollution including ground water contamination
14. Increasing international river usage
15. Soil erosion
16. Salinization
17. Deforestation
18. Desertification
19. Human migration as cause of environmental security such as settlement onto hazardous environments (river basin, coastal flood plains, and earthquake-prone zones) and onto ecologically sensitive zones (certain forest, desert, wetland and marine environments)
20. Human migration as effect of environmental stress
21. Human population growth
22. Loss of biodiversity
23. Industrial development; Industrial contamination of air and oceans
24. Fishery depletion due to over-fishing
25. Forest fires like those in Indonesia, Australia, Amazonian and Mediterranean countries
26. Transplantation of alien species into new ecosystems
27. New, re-emergent and drug-resistant diseases
28. Disposal of hazardous/toxic wastes
29. Poverty; growing gap between rich and poor

30. Increasing intensive use of chemical fertilizer, pesticides and detergents
 31. Destruction of coral reefs
 32. Artificial genetic pollution

Some of these threats are anticipated by existing conventions, protocols and treaties; these are summarized in the table below.

Environmental Security Threats	Treaties, Conventions, and Protocols
1. Ozone layer depletion	<p>In Force:</p> <ul style="list-style-type: none"> • Vienna Convention for the Protection of the Ozone Layer '85 • Montreal Protocol on Substances that deplete the Ozone Layer '85
2. Global climate change due to greenhouse gas emission (rising sea level, changing rain distribution)	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Long-Range Transboundary Air Pollution '79 • United Nations Framework Convention on Climate Change '92 • Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes '99 <p>Not in Force:</p> <ul style="list-style-type: none"> • December 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change • Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment '93 (European Nations)
3. Radioactive waste management; Nuclear waste storage tanks leakage	<p>In Force:</p> <ul style="list-style-type: none"> • Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal '89 • Convention on Nuclear Safety '94 (U.S. not ratified) • Convention on Early Notification of a Nuclear Accident '86 • Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency '86 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72

	<ul style="list-style-type: none"> • Convention on Biological Diversity '92 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations) <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil liability for Damages Resulting from Activities Dangerous to the Environment '93 (European Nations)
4. Radioactive spills from leaking nuclear submarines	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Early Notification of a Nuclear Accident '86 • Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency '86 <p>(If threatening the marine environment)</p> <ul style="list-style-type: none"> • Convention for the Protection of the World Cultural and Natural Heritage '72 • United Nations Convention on the Law of the Sea '82 • Convention on Biological Diversity '92 • Convention on the High Seas '58 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations)
5. Accidents in nuclear plants; low radiation from accidents occurring in old nuclear power-plants	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency '86 • Convention on Early Notification of a Nuclear Accident '86 • Convention on Nuclear Safety '94 • (If threatening biodiversity) Convention on Biological Diversity '92 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage

6. Nuclear bomb tests	<p>In Force:</p> <ul style="list-style-type: none"> • Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water '63 • (if done in the Antarctic) The Antarctic Treaty '59 • (if done on the High Seas) Convention on the High Seas '58 • United Nations Convention on the law of the sea '82 • Convention on Biological Diversity '92 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage'72 <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment '93 (European Nations) • Comprehensive Nuclear-Test-ban Treaty '96
7. Environmental impact of war such as the impact of bombing, and use of landmines and chemical and/or biological weapons	<p>In Force:</p> <ul style="list-style-type: none"> • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage • Convention on Biological Diversity '92 • Convention on the Development, Production and Stockpiling of Bacteriological and Toxin Weapons, and on their destruction '72 • Convention on the Prohibition of the Development, Production , Stockpiling and the use of Chemical Weapons and on their Destruction '93 • Protocol 1 to the Geneva Conventions '77
8. Environmental modification caused by war	<p>1. General</p> <p>In Force:</p> <ul style="list-style-type: none"> • Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques '76 • Protocol 1 to the Geneva Conventions '77 <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment '93 (European Nations)

	<p>2. <i>Effects on atmosphere, ozone layer and climate change</i></p> <p>In Force:</p> <ul style="list-style-type: none"> • Vienna Convention for the Protection of the Ozone Layer '85 • Montreal Protocol on Substance that deplete the Ozone Layer '85 • Convention on Long-Range Transboundary Air Pollution '79 • United Nations Framework Convention on Climate Change '92 <p>Not in Force:</p> <ul style="list-style-type: none"> • Kyoto Protocol to the United Nations Framework Connection on Climate change '98 <p>3. <i>Water pollution</i></p> <p>In Force:</p> <ul style="list-style-type: none"> • Convention on the Protection and use of Transboundary Watercourse and International Lakes (European Nations) • United Nations Convention on the Law of the Sea '82 • Convention on the High Seas '58 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations) <p>4. <i>Effects on biodiversity</i></p> <p>In Force:</p> <ul style="list-style-type: none"> • Convention for the Protection of the World Cultural and Natural Heritage '72 • Convention on Biological Diversity '92 • Convention on Wetlands of International Importance especially as waterfowl Habitat '71 <p>5. <i>Dumping of wastes</i></p> <p>In Force:</p> <ul style="list-style-type: none"> • Basel Convention on Transboundary Movements of Hazardous Wastes and their Disposal '89
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<p>9. Spills from stockpiles of environmentally dangerous “old weapons”</p>	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • (if bacteriological or Toxin) Convention on the Development, Production and Stockpiling of Bacteriological and Toxin Weapons, and on their destruction '72 • Convention on the Prohibition of the Development, Production , Stockpiling and the use of Chemical Weapons and on their Destruction '93 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72 <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment '93 (European Nations)
<p>10. Oil Pollution such as oil spills and leakage</p>	<p>In Force:</p> <ul style="list-style-type: none"> • (if threatening biodiversity) Convention on Biological Diversity '92 • (If threatening to cultural and natural heritage) The Convention on the Protection of World's Cultural and Natural Heritage • (If threatening to the marine environment) United Nations Convention on the law of the Sea '82 • Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships '73 (does not apply to warships) • International Convention of the Prevention of Pollution of the Sea by oil (does not include naval ships) • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations) • International Convention on Oil Pollution Preparedness, Response and Co-operation '90 (does not apply to warships)

<p>11. Natural disasters: Earthquakes, Floods, Storms, Volcanic activities, Tornado and Hurricanes</p>	<p>In Force:</p> <ul style="list-style-type: none"> • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72 • (if threatening bio-diversity) Convention on Biological Diversity '92 <p>Not in Force:</p> <ul style="list-style-type: none"> • (if causing industrial accidents) Convention on the Transboundary Effects of Industrial Accidents '92
<p>12. Food Security (ex. Famine in Somalia and potentially North Korea)</p>	<p>In Force:</p> <ul style="list-style-type: none"> • (if caused by loss of bio-diversity) Convention on Biological Diversity '92 • (if caused by over fishing) Convention on Fishing and Conservation of the Living Resources of the High Seas '58 • International Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa '94 <p>Not in Force:</p> <ul style="list-style-type: none"> • (if caused by warfare) Protocol 1 to the Geneva Conventions '77
<p>13. Water security: sufficient and secured access to water</p>	<p>In Force:</p> <ul style="list-style-type: none"> • International Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification Particularly in Africa '94 • Convention on the Protection and use of Transboundary Watercourse and International Lakes (European Nations) • (if sea water is the source of drinking water) Protocol to the 1979 convention to the international convention for the preventing pollution from ships'78 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations)
<p>14. Increasing international river usage</p>	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on the Protection and Use of Transboundary Watercourse and International Lakes (European Nations)

15. Soil erosion	<p>In Force:</p> <ul style="list-style-type: none"> • International Tropical Timber Agreement '83 • International Tropical Timber Agreement '94 • Convention on Biological Diversity '92 • International Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa '94 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage
16. Salinization	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • United Nations Convention on the law of the Sea '82
17. Deforestation	<p>In Force:</p> <ul style="list-style-type: none"> • International Tropical Timber Agreement '83 • International Tropical Timber Agreement '94 • Convention on Biological Diversity '92 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72 • United Nations Framework Convention on Climate Change '92 <p>Not in Force:</p> <ul style="list-style-type: none"> • Kyoto Protocol to the United Nations Framework Connection on Climate change '98
18. Desertification	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 (U.S. not ratified) • International Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa '94 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72

<p>19. Human Migration as cause of environmental security such as settlement onto hazardous environments (river basin, coastal flood plains, and earthquake-prone zones) and onto ecologically sensitive zones (certain forest, desert, wetland and marine environments)</p>	<p>In Force:</p> <ul style="list-style-type: none">• Convention on Wetlands of International Importance especially as Waterfowl Habitat '71• International Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa '94• Convention on Biological Diversity '92• (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72
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<p>20. Human Migration as effect of environmental stress</p>	<p>In Force:</p> <p><i>if migration is forced by radioactive contamination</i></p> <ul style="list-style-type: none"> • Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency '86 • Convention on Early Notification of a Nuclear Accident '86 • Convention on Nuclear Safety '94 <p><i>if forced by other kinds of environmental contamination</i></p> <ul style="list-style-type: none"> • Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons, and on their Destruction '72 • Convention on the Prohibition of the Development, Production , Stockpiling and the use of Chemical Weapons and on their Destruction '93 • Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal '89 • Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques • Convention on Long-Range Transboundary Air Pollution '79 • Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes '88 <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on the Transboundary Effects of Industrial Accidents '92
<p>21. Human population growth</p>	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Fishing and Conservation of the Living Resources of the High Seas '58 • (If threatening biodiversity) Convention on Biological Diversity '92

22. Loss of bio-diversity	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • Convention on International Trade in Endangered Species of Wild Fauna and Flora '73 • (if threatening natural and cultural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72 • Convention on Fishing and Conservation of the Living Resources of the High Seas '58 • United Nations Convention on the Law of the Sea '82 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations) • (if caused by oil pollution) Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships '73 ('78) • International Convention of the Prevention of Pollution of the Sea by Oil <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment '93 (European Nations)
23. Industrial development; industrial contamination of air, water, soil	<p>In Force:</p> <ul style="list-style-type: none"> • Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal '89 • Convention on Biological Diversity '92 • Convention on Long-Range Transboundary Air Pollution '79 • United Nations Framework Convention on Climate Change '92 • Kyoto Protocol to the United Nations Framework Connection on Climate Change '98 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment '93 (European nations) • Convention on the Transboundary Effects of

	Industrial Accidents '92
24. Fishery depletion due to over-fishing	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • Convention on Fishing and Conservation of the Living Resources of the High Seas '58 • United Nations Convention on the Law of the Sea '82
25. Forest fires (like those in Indonesia, Australia, Amazonian and Mediterranean countries)	<p>In Force:</p> <ul style="list-style-type: none"> • (If threatening bio-diversity) Convention on Biological Diversity '92 • (If threatening cultural and natural heritage) The Convention on the Protection of World's Cultural and Natural Heritage '72
26. Transplantation of alien species into new ecosystems	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • Convention on International Trade in Endangered Species of Wild Fauna and Flora '73 • (If threatening cultural and natural heritage) The Convention on the Protection of World's Cultural and Natural Heritage '72
27. New re-emergent and drug-resistant diseases	
28. Disposal of hazardous/toxic wastes	<p>In Force:</p> <ul style="list-style-type: none"> • Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal '89 • (If radioactive) Convention on Early Notification of a Nuclear Accident '86 • (If underwater and threatening to the marine environment) United Nations Convention on the Law of the Sea '82 • Convention on Biological Diversity '92 <p>Not in Force:</p> <ul style="list-style-type: none"> • Convention on Civil Liability for Damage Resulting Activities Dangerous to the Environment '93
29. Poverty; growing gap between rich and poor	

<p>30. Increasing intensive use of chemical fertilizer, pesticides and detergents</p>	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • (if threatening lives of natural heritage) Convention for the Protection of the World Cultural and Natural Heritage '72 • (If threatening the marine environment) Convention on Fishing and Conservation of the Living Resources of the High Seas '58 • United Nations Convention on the Law of the Sea '82 • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations)
<p>31. Destruction of coral reefs</p>	<p>In Force:</p> <ul style="list-style-type: none"> • Convention on Biological Diversity '92 • United Nations Convention on the Law of the Sea '82 • The Convention on the Protection of World's Cultural and Natural Heritage '72 • (if caused by oil pollution) International Convention of the Prevention of Pollution of the Sea by Oil • Convention for the Prevention of Marine Pollution from Land-Based Sources '74 (European Nations)
<p>32. Artificial Genetic Pollution</p>	<p>In Force:</p> <ul style="list-style-type: none"> • (Article 15) Convention on Biological Diversity '92

4. Scenario Sketches

Although not called for in the scope of work, the authors felt that it might be useful to add a section depicting some future scenario sketches of potential environmental security threats that examine the possible responses of UN and related international organizations to illustrate the gaps in current UN procedures. These hypothetical future sketches were submitted to several experts for comments on the legal framework and responsibilities to respond.

1. Nuclear waste storage. Nuclear waste will be stored in large quantities in several hundred places in the world. Some of these places will be underground. Since the half-lives of some materials will be on the order of thousands of years, some form of monitoring and site marking will be required. Country X seems to be ignoring the most fundamental requirements for long-term storage. Without some help they will undoubtedly lose track of what they have buried.

Comments:

The UN may find a country that would agree to set up a monitoring system and support all the financial and organizational aspects that this system may imply, but the UN has no legal power to require country X to accept or implement such a system. An example is Chernobyl, where the U.S. offered a monitoring system and assumed the related costs.... This should be a function of the United Nations' International Atomic Energy Agency (IAEA). IAEA should monitor nuclear waste storage and be prepared to send specifically trained people and equipment to defined nuclear waste areas and to make necessary safety provisions.... If radiation was detected in a neighboring country's ground water, and other means were not available to inspect Country X's storage containment, then the neighbor might look for military means to protect itself.... It is likely that there will be a broad and growing trend to ship nuclear and other hazardous waste to less rich countries for processing and/or disposal that would be attracted by the opportunity of getting hard currency, though giving inadequate attention to safety precautions both against technical/engineering/transport facility leaks and international/national terrorists (examples of such voluntary and willing recipient countries are many, including Nigeria, China, and Russia).

2. Solid waste. A poor Country X has made a business of taking in solid wastes from richer countries around the world. Although they have made some money from the practice, the place is becoming a garbage heap. Strong opposition is developing within the country and civil war may erupt that could spill across the border.

Comments:

This is initially a national issue. The concept of national sovereignty is critical in this example. If the affected country wants to have a civil war, there is, under traditional international law, no power that had a right to intervene. However, since a civil war in such a country could lead to increased environmental damage that could spread to neighbor countries, there is a right of self-defense involved. That could be brought to the UN Security Council.

3. Particulate emission from power plants and factories. China is burning indigenous high sulfur coal. The acid rain that is produced is falling on California. Further, the atmospheric conditions promise to exacerbate the situation next fall.

Comments:

There is no international treaty or law that forces China to do anything about it. The U.S., as the most affected country, may put political pressure on China, but it would be a bilateral discussion, outside the UN.... Various treaties on transboundary impacts or airborne transport of pollutants may well apply to this case. Conventions concerning acid rain and sulfur emissions are The Convention on Long-Range Transboundary Air Pollution 1979, and two of its Protocols on Reduction of Sulfur Emissions in 1985 and 1994. They are regional conventions which only apply to the European nations; thus China has no legal obligation in this scenario. China has ratified the UN Framework Convention on Climate Change of 1992 in January 1993; however, this convention as such is too weak to have any impact. China has not ratified the Kyoto Protocol. Also, if Chinese sulfur emissions are damaging the marine environment along the coastal regions, the United Nations Convention on the Law of the Sea, which China has ratified in 1997, can be relevant. If the emissions are harming the local biodiversity in California, the Convention on Biological Diversity ratified by China in 1993 may be relevant. However, neither of the conventions has a penalty article and they have not been ratified by the U.S.

If it is falling on California, then it is falling on Hawaii. Both of these states have had large Chinese-American population since the turn of the century. An alternative response is possible. These Chinese could unite into a powerful political and economic force under the leadership of a strong personality and with diplomatic help from the State Department threaten China with dire economic problems unless they desist particulate emissions. This Chinese-American group could lead a worldwide boycott of Chinese goods. They have relatives all over the world. They can write to their 2nd, 3rd, 4th cousins urging “do not buy Chinese” and they can write to family members inside China to take political actions aimed at getting their government to address this situation.

Currently there is no penalty for not meeting the Kyoto Protocol targets, even if China were to ratify the convention, as have other developing countries.

4. Exploitation of mineral resources without effective management: Country X has a mineral resource, say uranium, which is clearly limited on a global basis and could be useful in the future. Nevertheless, the country has established a policy of land use that makes this resource inaccessible. If the world does nothing, the resource will be inaccessible for the next 200 years.

Comments:

This relates to the local policy of the country in charge. Country X can be asked to the World Court, but it refuses to go. The UN General Assembly can pass a resolution (that is without any legal power), public pressure can be created, but nothing can oblige Country X to change its policy.... Perhaps it would be a good thing to save the resource for the next 200 years. However, country X should be urged to establish a land use policy that will permit exploitation of uranium resources 200 years from now. Such a land use policy could come into being by diplomatic

maneuvers or, if necessary, sanctions.... This could be a future issue for WTO.

5. Disease epidemics. A vaccine or antidote for Ebola has been found in a derivative of a forest plant. The country in which the plant has been found has decided to embargo all uses of the plant because it believes that the Ebola virus may ultimately be a weapon and it wants to reserve the medicine for itself.

Comments:

This is a national sovereignty issue. The UN and any other international organizations have no legal authority to force this country to share its resources.... Scientists have a code of their own and will pass the details about how to use the plant to another scientist – perhaps their roommate while attending MIT.

Article 15 in the 1992 Convention on Biological Diversity subverts the sovereign rights of States over the natural sources and their right to determine access to “genetic resources” for the conservation and sustainable use of biological diversity. This convention appears to be the only one that is relevant to this scenario. Nevertheless, the definitions of “genetic resources” and their “environmentally sound use” are too nebulous and weak to have any impact on forming a legal framework in the international arena.

6. Earthquake prediction. Seismic transducers lead to the ability to predict earthquakes with fair accuracy both as to timing and intensity. An earthquake has been predicted for Albania. Several million people are in peril. Mass exodus has begun. These are refugees from an anticipated event.

Comments:

The United Nations High Commissioner for Refugees (UNHCR) and World Food Program (WFP) could volunteer to help the refugees if they leave the country, but within the country, they can't do anything without the approval of the country or a Security Council Resolution, as in the case of food delivery to Somalia.

7. Spills from stockpiles of biological weapons. In attempting to dispose of disease-based weapons (such as Anthrax), Country X has a major spill that imperils the health of 50,000 people who are in the neighboring countries.

Comments:

In the example of Chernobyl, nobody could do anything, as Russia didn't agree, saying that they can handle the situation.... The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons and on their Destruction very likely would authorize some kind of international intervention in this case, especially if the country was signatory to that treaty.

8. Environment as a weapon. Despite UN provisions to the contrary, Country X is known to be developing weather control as a weapon. The “cover” is that the research will improve the irrigation of local crops.

Comments:

This breaks the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD). The Secretary-General may try to negotiate, or send special representatives to the country, but the host country would have to approve this.

9. Military intervention. Some countries recognize the linkage between environmental degradation and regional stability and integrate environmental protection into their military mission. This orientation leads to military intervention by troops on foreign soil into the forest practices of another sovereign nation.

Comments:

The Security Council can intervene; Chapter 7 comes into play.... The invaded country could appeal to the Security Council for Peacekeeping Forces to provide a buffer between their forces and the allied invasion, and to buy time for a negotiated settlement on forest practices and financial aid.... Still, this is a national sovereignty issue. Nothing was done about the Aral Sea in Central Asia.

10. Seemingly benign use of rainmaking. Country X begins to practice rainmaking by seeding clouds over its territory. There is good statistical evidence that it works. Country Y is downwind and argues that it is being robbed of its rightful share of rainfall.

Comments:

This is a bilateral issue. Country Y may complain and the UN may designate a facilitation team to investigate and/or to help the two countries negotiate a satisfactory conclusion, but, legally, nothing can be done about it.

11. Damming of rivers. Rivers running through Country X are being dammed by that country to facilitate its agricultural irrigation. The rivers feed a large lake on which several other countries border. The lake is drying up and with it fishing and agriculture in the adjacent countries.

Comments:

There are Commissions, totally outside the UN, that exist (e.g. the Danube, the Rhine Commissions) that would be the first forum to use.... The UN has no legal power to do anything related to this kind of conflict. For example, the Tigris River is a long-standing matter of dispute between Turkey, on one side, and Syria and Iraq on the other. The latter two complain that their rights were denied, but the UN can do nothing about it; the two sides have to sit down and negotiate. It is the same situation with the Nile, where there are discussions to have a "Nile Commission" or "Nile Convention" among the relevant countries. In the Mekong River case, Thailand, Vietnam, Laos and Cambodia reached basic agreements after many years of discussion.

12. Diseased People as Weapons. A religious group believes it is time to erase the evils of humanity from the Earth. It infects 50 volunteers with Ebola to make contact with unsuspecting travelers in the ten busiest airports of the world.

Comments:

WHO early warning and monitoring system might detect members of the terrorist group while inspecting villages in Ebola areas and notify local authorities to detain them for questioning.

13. Crop failure. In Country X the wheat crop has failed. It has been attacked by some strange plant disease that has hitherto been undetected. The agronomists in Country X suspect that the crop is a victim of a biological attack from their traditional neighboring enemy state.

Comments:

Country X may think that, but they have to prove it.... They could request an international scientific inspection mission led by UNEP and FAO to investigate and report their findings to the Security Council.

14. Russian-Norwegian Nuclear Issue. During the 1990s, Norway requested a meeting with Russia and the EC to discuss better management of the nuclear wastes from Russian nuclear submarines and onshore storage tanks. This proved to be ineffective. Finally, gases building up during these years inside a nuclear storage ship called Lepsa, in Murmansk, Russia, exploded. Radioactive waste was thrown into the air and the Arctic Ocean by the steam explosion. Some have been evacuated from the area between Murmansk and Norway, and the damage has probably been underreported. Radioactive ice is slowly moving to Alaska and contaminated fish are spreading the impact farther. The estimated costs for this cleanup, ranging over the next ten years, are large. The longer-range cleanup costs and economic losses are incalculable.

Comments:

An alternative to this scenario sketch is possible. After years of no access to the Lepsa, Norway could have brought the issue to the Security Council, claiming that if the ship explodes, it could be a threat to international peace and security. Citing the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, the Convention on Early Notification of a Nuclear Accident, and the Convention on the High Seas (article 25), the Norwegian Ambassador to the UN could have requested UN force protection for IAEA-nominated UN inspectors to board the Lepsa to recommend how to prevent the potential gas explosion. This discussion in the Security Council could persuade Russia to agree to cooperate with the inspectors. Based on such a success and precedent, NATO might collaborate with Russia to secure the nuclear submarines and the nuclear storage tanks onshore at Severodvinsk (North Harbor).... U.S. Senators from Alaska might call for a NATO-Russian team funded by the EU, U.S., NATO, Sweden, Norway, Denmark, and Canada, to intercept the "slow motion Chernobyl" from arriving in Alaska and neighboring areas.

15. North Korea. A Somalia-like case of food security might exist in North Korea. In this scenario, UN Peacekeeping forces are used to protect the delivery of food from the UN's World Food Program. In this case, the Security Council has to determine that a threat to international peace and security exists, and act under Article VII of the UN Charter. This creates the problem of asking Member States to provide troops to go into a hostile environment where casualties would be probable.

Comments:

The US food delivery program was successful in Somalia, but when the mission evolved into peacemaking, the operation turned into a disaster. Every effort should be taken to prevent this mistake in North Korea.

General Comments on Scenario Sketches:

Most of the environmental security scenarios are bilateral. The whole concept of National Sovereignty is critical for all these examples. A problem begins in one country but affects other countries. A major concern for the UN must be national sovereignty, which severely limits actions today by the UN or any other international agency without the approval of the country where the problem begins. The UN can pass resolutions condemning the action and can raise public and international interest, but there is no legal framework under which the country would be obliged to change its behavior. An alternative approach by U.S. Ambassador John McDonald in Appendix H: United Nations Environmental Mediation Program (UNEMP) recommends the creation of a more powerful legal framework for the UN system to address this problem.

Although there is no clear legal framework for almost any of these cases, a rigorous analysis of how the treaties from Section 2 of this report might apply to cover these scenarios would be very interesting. Detailed research into the scope of various treaties is required, including their internal enforcement provisions, which countries are bound by them, etc. A creative international lawyer always tries to find in the detailed treaty language an argument that authorizes enforcement of one or more of the treaties, possibly including UN enforcement.

5. Future Arrangements

Although the interviews of UN officials and other experts found that little attention is being given to threats to environmental security, there was great interest expressed in exploring this possibility in greater detail and an understanding that such threats are increasing and require more attention. As a result, it is likely that greater awareness and acceptance within UN circles will be created for the need to factor environmental security into the planning and implementation of peacekeeping operations.

This awareness might manifest itself in the development of standards and guidelines governing in-theater operations.

Increasing involvement of the UN Environment Program (UNEP) in this process seems logical and inevitable. At its inception in 1972, a primary function envisaged for UNEP was to coordinate environmental activities in the UN system. In the matter of UN peacekeeping – a UN activity of tremendous importance – it has performed this role only minimally. During the tenure of Boutros Boutros-Ghali as Secretary General, a new framework for coordination of peacekeeping operations was developed by the Department of Humanitarian Affairs, Political Affairs, and Peacekeeping Operations. This framework was to be expanded as needed to include other UN departments, programs and specialized agencies, including the planning and implementation of field operations. UNEP has not been involved in this process. Such participation would be a logical step in involving UNEP in such a way that it could play its mandated role as regards peacekeeping. The role given UNEP in the Needs Assessment Mission to Kosovo is an important step in this direction.

What might create such future arrangements?

An inter-agency task force could be established, under the formal co-chairmanship of the Under-Secretary General for Peacekeeping Operations and the Executive Director of UNEP, to examine issues related to peacekeeping and environmental security. This group might evaluate such matters as:

- Environmental concerns, considerations and practices in past UN peacekeeping operations;
- Current practices and policies related to environmental matters and the military of selected states;
- The role of the military in peacekeeping operations in dealing with potential and actual threats to environmental security;
- Methods for ensuring the incorporation of environmental security goals and responsibilities into peacekeeping strategies and instruments (SOFAs & SOMAs)

- Potential costs involved in dealing with conflicts which may arise between a) appropriate environmental security concerns and responsibilities and b) mandates of military operations;
- Thoughts and experiences of those in the UN who have dealt with peacekeeping in the evolving effort to define the concept of environmental security.

In addition to closer cooperation between peacekeeping operations and UNEP, constant attention should be given to improving coordination in all of the above areas among other parts of the UN system such as FAO, World Food Program, WHO, and UNDP. Special attention might also be given to UNHCR's participation in pre-military action planning, since UNHCR is often given post-military management responsibilities.

Another step in the development of United Nations environmental security policies or doctrines would be the creation of a handbook of guidelines and rules for in-theater environmental security. Some interviewees for this study suggested that the Department of Peacekeeping Operations could prepare and issue guidelines for such a handbook. It would provide in-theater, on the ground, instructions and rules for military and support personnel on practices to promote environmental security in UN peacekeeping operations.

Most likely, the work would build upon the environmental security guidelines published by the International Committee of the Red Cross. In addition to a UN task force and the Red Cross, other NGOs might be included in its development such as the International Peace Academy and the proposed Green Cross, originally conceived for environmental rescue from impacts of war as the Red Cross is for human rescue.

Eventually, some kind of UN-authorized mechanism will have to be established to send teams to document environmental security threats within one country that would affect another country. Following the findings of such teams, additional mechanisms will have to be established to act on the findings. One such mechanism was suggested in 1997 by U.S. Ambassador John McDonald, Executive Director of the Institute for Multi-Track Diplomacy. Ambassador McDonald recommended the establishment of a UN Environmental Mediation Program to train environmental mediators, establish national environmental mediation centers, assist national research programs, and create an international panel of environmental mediators to be on call to help resolve transboundary disputes (see Appendix H).

The question: "*When are environmental threats to the global community so serious that international intervention is justified?*" will be answered differently at different times. How it is answered will determine the shape of future arrangements. The debate over the balance between national sovereignty and international values will be carried out in many forums, but answered in the UN Security Council, where all decisions will be subject to the veto of the five permanent members.

CONCLUSIONS AND RECOMMENDATIONS

The roles to be played by the UN and other international organizations in dealing with environmental security are emerging. The UN has several potential roles:

- Addressing environmental “causes”/”components” of crises and wars;
- Helping to prevent environmental pressures that could trigger armed conflict;
- Addressing environmental “effects” of war, however caused;
- Helping to establish rules of engagement vis-a-vis the environment;
- Amending the existing conventions, elaborating new ones to handle emerging environmental security issues, and monitoring environmental security issues in existing conventions;
- Identifying and holding the responsible parties liable;
- International research and study of these roles;
- Forecasting and monitoring environmental emergencies;
- Providing/initiating/coordinating as needed international relief operations in environmental emergencies, especially those of transboundary or regional significance

Although there is currently little UN attention given to the environmental effects and causes of conflict, this will change. All the interviewees expressed interest in this subject and acknowledged the need for further development of the UN, and related international organizations', positions.

Several expressed interest in creating an environmental guide or handbook. The appropriate DOD channel should explore the possibility of having the U.S. Mission to the UN recommend the development of such a guide.

Military forces should remain familiar with the existing international conventions and protocols and the non-military threats they address. This may require a library function built on the results shown in Volume II, by which the military force will have complete, immediate and ready reference to this information.

The scenario development approach has merit not only in forcing attention to potential environmental security situations, but also in analyzing the possible responses and responsibilities that may ensue. Scenarios can be particularly beneficial in anticipating the situations in which vacuums exist since these could escalate before effective action is implemented. The scope of this contract did not permit a more rigorous analysis, but a set of more mature environmental threat scenarios should be written with potential UN interventions.

In addition, military forces should monitor the emerging responsibilities carefully, perhaps by establishing liaison with other organizations that have already been designated as responsible for

certain situations.

Conceptual tools should be developed to facilitate this tracking process. The UN system and the concept of environmental security are complex. To assist communications among a range of relevant personnel, it would be helpful to reach agreement about a common conceptual framework or tool. Two initial conceptual tools are below.

The first tool below is a simple taxonomy for tracking the changing conditions of the UN's role in environmental security:

UN's role in addressing environmental <u>effects</u> of conflict within a country or transborder	UN's role in addressing environmental <u>causes</u> of conflict within a country or transborder
<p>By UN force: How the law binds the UN forces and their action</p> <p>By non-UN force: what UN mandate might prevent or punish other's illegal actions</p>	<p>Through intervention before the conflict</p> <p>Through intervention during the conflict</p> <p>Peacekeeping and/or other UN or related IOs after the conflict</p>

The second tool is offered by NATO. This classification system could also be used to track changing UN environmental security roles.²² This identifies four general types of environmental conflict:

- ethno-political conflicts
- migration conflicts (internal, cross-border and demographically caused migration)
- international resource conflicts
- environmental conflicts due to fundamental global environmental change

A combination of these two should be more robust.

²² NATO. 1999. *Environment & Security in an International Context*, Report No. 232, Bonn, Germany.

SECTION 2

Sample of Environmental Security Threats

Treaties, Conventions, and Protocols that address environment related issues

Selected International Organizations relevant to Environmental Security

Sample of Environmental Security Threats

6. Ozone layer depletion
7. Global climate change due to greenhouse gas emission (rising sea level, changing rain distribution)
8. Radioactive waste management; nuclear waste storage tanks leakage
9. Radioactive spills from leaking nuclear submarines
10. Nuclear bomb tests
11. Accidents in nuclear plants; low radiation from accidents occurring in old nuclear power-plants
12. Environmental impact of war such as the impact of bombing, and use of landmines and chemical and/or biological weapons
13. Environmental modification during war
14. Spills from stockpiles of “old weapons”
15. Oil spill and pollution
16. Natural disasters: earthquakes, floods, storms, volcanic activities, tornado and hurricanes
17. Food security (ex. Famines in Somalia and potentially North Korea may induce migration, disease and war)
18. Water scarcity and pollution including ground water contamination
19. Increasing international river usage
20. Soil erosion
21. Salinization
22. Deforestation
23. Desertification
24. Human migration as cause of environmental security such as settlement onto hazardous environments
25. Human migration as effect of environmental stress
26. Human population growth

27. Loss of biodiversity
28. Industrial development; Industrial contamination of air and oceans
29. Fishery depletion due to over-fishing
30. Forest fires like those in Indonesia, Australia, Amazonian and Mediterranean countries
31. Transplantation of alien species into new ecosystems
32. New, re-emergent and drug-resistant diseases
33. Disposal of hazardous/toxic wastes
34. Poverty; growing gap between rich and poor
35. Increasing intensive use of chemical fertilizer, pesticides and detergents
36. Destruction of coral reefs
37. Artificial genetic pollution

Some of these threats are anticipated by existing treaties, conventions, and protocols.

Treaties, Conventions, and Protocols that address environment related issues

1. [Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts \(Protocol I\) \(1977\)](#)
2. [Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques \(1976\)](#)
3. [Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological \(biological\) and Toxin Weapons, and on their Destruction \(1972\)](#)
4. [Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons and on their Destruction \(1993\)](#)
5. [Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency \(1986\)](#)
6. [Convention on Early Notification of a Nuclear Accident \(1986\)](#)
7. [Convention on Nuclear Safety \(1994\)](#)
8. [Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water \(1963\)](#)
9. [Comprehensive Nuclear-Test-Ban Treaty \(1996\)](#)
10. [Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal \(1989\)](#)
11. [Convention for the Protection of the World Cultural and Natural Heritage \(1972\)](#)
12. [Convention on Biological Diversity \(1992\)](#)
13. [Convention on International Trade in Endangered Species of Wild Fauna and Flora \(1973\)](#)
14. [Convention on the Protection and Use of Transboundary Watercourses and International Lakes \(1992\)](#)
15. [United Nations Convention on the Law of the Sea \(1982\)](#)
16. [Convention on the High Seas \(1958\)](#)
17. [Convention on Fishing and Conservation of the Living Resources of the High Seas \(1958\)](#)
18. [Convention on Long-Range Transboundary Air Pollution \(1979\)](#)
19. [Convention on Wetlands of International Importance especially as Waterfowl Habitat \(1971\)](#)
20. [International Convention for the Prevention of Pollution of the Sea by Oil \(1954 as amended on 1962 and 1969\)](#)
21. [International Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa \(1994\)](#)
22. [International Tropical Timber Agreement \(1983\)](#)

23. [International Tropical Timber Agreement \(1994\)](#)
24. [Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships \(1978\)](#)
25. [Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes \(1988\)](#)
26. [The Antarctic Treaty \(1959\)](#)
27. [Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment \(1993\)](#)
28. [International Convention on Oil Pollution Preparedness, Response and Co-operation \(1990\)](#)
29. [Convention on the Transboundary Effects of Industrial Accidents \(1992\)](#)
30. [Convention for the Prevention of Marine Pollution from Land-Based Sources \(1974\)](#)
31. [Vienna Convention for the Protection of the Ozone Layer \(1985\)](#)
32. [The Montreal Protocol on Substances that Deplete the Ozone Layer \(1987\)](#)
33. [United Nations Framework Convention on Climate Change \(1992\)](#)
34. [Kyoto Protocol to the United Nations Framework Connection on Climate Change \(1997\)](#)

Treaty, Convention, Protocol	CURRENT STATUS mm/dd/yy	<u>Threats to which it applies</u> ²³
<i>PROTOCOL ADDITIONAL TO THE GENEVA CONVENTIONS OR 12 AUGUST 1949, AND RELATING TO THE PROTECTION OF VICTIMS OF INTERNATIONAL ARMED CONFLICTS (PROTOCOL 1) (1977)</i>	In Force: 07.12.1978	Threats: 7, 8
<ul style="list-style-type: none"> • Preamble: Recalling that every State has the duty, in conformity with the Charter of the United Nations, to refrain in its international relations from the threat or use of force against the sovereignty, territorial integrity or political independence of any State, or in any other manner inconsistent with the purpose of the United Nations, Believing in necessary nevertheless to reaffirm and develop the provisions protecting the victims of armed conflicts and to supplement measures intended to reinforce their application, Reaffirming further that the provisions of the Geneva conventions of 12 August and of this Protocol must be fully applied in all circumstances to all persons who are protected by those instruments, without any adverse distinction based on the nature or origin of the armed conflict or on the causes espoused by or attributed to the Parties to the conflict, • PARTI. GENERAL PROVISIONS; Article 1- General Principles and scope of application, 1. The High Contracting Parties undertake to respect and to ensure respect for this Protocol in all circumstances, 2. In cases not covered by this Protocol or by other international agreements, civilians and combatant remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from dictates of public conscience, 3. This Protocol, which supplements the Geneva Conventions of 12 August 1949 under the protection of war victims, shall apply in the situations referred to in Article 2 common to those Conventions... Article 2- Definitions; ... (b) “Rules of international law applicable in armed conflict” means the rules applicable in armed conflict set forth in international agreements to which the Parties to the conflict are Parties and the generally recognized principles and rules of international law which are applicable to armed conflict; (c) “Protecting Power” means a neutral or other State not a Party to the conflict which has been designed by a Party to the conflict and accepted by the adverse Party and has agreed to carry out the functions assigned to a Protecting Power under the Conventions and this Protocol... <p>Chapter II: CIVILIAN OBJECTS</p> <ul style="list-style-type: none"> • Article 52- General Protection of civilian objects: 1. Civilian objects shall not be the object of attack of reprisals. Civilian objects are all objects which are not military objectives are defined in paragraph 2 • Article 54- Protection of objects indispensable to the survival of the civilian population; 1. Starvation of civilians as a method of warfare if prohibited, 2. It is prohibited to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, such as food-stuffs, agricultural areas for the production of food-stuffs, crops, livestock, drinking water installations and supplies and irrigation works, for the specific purpose or to the adverse Party, whatever the motive, whether in order to starve out civilians, to cause them to move away, or for any other motive. 		

²³ The threats' numbers represent the “order number” of the threats listed on the previous page

<ul style="list-style-type: none"> • Article 55 –Protection of the natural environment : 1. “Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods of means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population. “ 2. “Attacks against the natural environment by way of reprisals are prohibited.” 		
<p><i>CONVENTION ON THE PROHIBITION OF MILITARY OR ANY OTHER HOSTILE USE OF ENVIRONMENTAL MODIFICATION TECHNIQUES (1976)</i></p>	<p>In Force: 10.05.1978</p>	<p>Threats: 8,20</p>
<ul style="list-style-type: none"> • Article I: “Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party; • Article II: As used in article 1, the term “environmental modification techniques” refers to any technique for changing-through the deliberate manipulation of natural processes-the dynamics, composition or structure of the Earth including its biota, lithosphere, hydrosphere and atmosphere, or of outer space. • Article III, 2: The States Parties to this Convention...undertakes to facilitate the exchange of scientific and technological information...State Parties in a position to do so shall contribute, alone or together with other States or international organizations, to international economic and scientific co-operation in preservation, improvement and peaceful utilization of the environment, with due consideration for the needs of the developing areas of the world. • Article IV: ...undertakes to take any measures it considers necessary in accordance with its constitutional process to prohibit and prevent any activity in violation of the provisions of the Convention anywhere under its jurisdiction or control • Article V, 3: “Any State Party to this Convention which has reason to believe that another State Party is acting in breach of obligations derived from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all relevant information as well as all possible evidence supporting its validity. • Article V, 4-5: Each State Party...undertakes to cooperate in carrying out any investigation which the Security Council may initiate, in accordance with the provisions of the Charter of the UN, on the basis of the complaint received by the Council. 		
<p><i>CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS, AND ON THEIR DESTRUCTION (1972)</i></p>	<p>In Force: 03.26.1975</p>	<p>Threats: 7,9,20</p>
<ul style="list-style-type: none"> • Recalling that the General Assembly of the United Nations has repeatedly condemned all actions contrary to the principles and objectives of the Geneva Protocol of 17 June 1925, • Article I: Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain: 1) microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purpose; 2) 		

Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purpose or in armed conflict.

- Article II: Each State Party to this Convention undertakes to destroy or to divert to peaceful purposes, as soon as possible but not later than nine months after the entry into force of the Convention all agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention.
- Article III: Each State Party to this Convention undertakes not to transfer to any recipient whatsoever...and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment or means of delivery specified in Article I of the Convention.
- Article IV: Each State Party to this Convention shall...take any necessary measures to prohibit and prevent development production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention, within the territory of such State, under its jurisdiction or under its control anywhere.
- Article V: The States Parties to the Convention undertake to consult one another and to cooperate in solving the problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention...
- Article VI: 1) Any State Party...which finds that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations.... 2) Each State Party...undertakes to cooperate in carrying out any investigation which the Security Council may initiate.
- Article VII: Each State Party...undertakes to provide or support assistance, in accordance with the United Nations Charter, to any Party to the Convention which so requests, if the Security Council decides that such Party has been exposed to danger as a result of violation of this Convention.
- Article VIII: Nothing in this Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any State under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare signed at Geneva on 17 June 1925.
- Article IX: Each State Party...affirms the recognized objective of effective prohibition of chemical weapons and, to this end, undertakes to continue negotiations in good faith with a view to reaching early agreement on effective measures for the prohibition of their development, production and stockpiling and for their destruction, and on appropriate measures concerning equipment and means of delivery specifically designed for the production or use of chemical agents for weapons purposes.
- Article XIII: 1) This Convention shall be of unlimited duration. 2) Each State Party...shall in exercising its national sovereignty have the right to withdraw from the Convention if it decides that extraordinary events...have jeopardized the supreme interests of its country.

<p><i>CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION, STOCKPILING AND USE OF CHEMICAL WEAPONS AND ON THEIR DESTRUCTION (1993)</i></p>	<p>In Force: 04.27.1997</p>	<p>Threats: 7,9,20</p>
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- Recognizing that this Convention reaffirms principles and objectives of and obligations assumed under the Geneva Protocol of 1925, and the Convention on the Prohibition of the

- Article 1: 1) Each State Party to this Convention undertakes never under any circumstances: a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone; b) To use chemical weapons; c) To engage in any military preparations to use chemical weapons; d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention. 2) Each State Party undertakes to destroy chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention. 3) Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention. 4) Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention. 5) Each State Party undertakes not to use riot control agents as a method of warfare.
- Article III: a) With respect to chemical weapons: i) Declare whether it owns or possesses any chemical weapons, or whether there are any chemical weapons located in any place under its jurisdiction or control; ii) Specify the precise location, aggregate quantity and detailed inventory of chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with Part IV (A), paragraphs 1 to 3, of the Verification Annex, except for those chemical weapons referred to in sub-subparagraph (iii); iii) Report any chemical weapons on its territory that are owned and possessed by another State and located in any place under the jurisdiction or control of another State, in accordance with Part IV (A), paragraph 4, of the Verification Annex; iv) Declare whether it has transferred or received, directly or indirectly, any chemical weapons since 1 January 1946 and specify the transfer or receipt of such weapons, in accordance with Part IV (A), paragraph 5, of the Verification Annex; v) Provide its general plan for destruction of chemical weapons that it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with Part IV (A), paragraph 6, of the Verification Annex; b) With respect to old chemical weapons and abandoned chemical weapons: i) Declare whether it has on its territory old chemical weapons and provide all available information in accordance with Part IV (B), paragraph 3, of the Verification Annex; ii) Declare whether there are abandoned chemical weapons on its territory and provide all available information in accordance with Part IV (B), paragraph 8, of the Verification Annex; iii) Declare whether it has abandoned chemical weapons on the territory of other States and provide all available information in accordance with Part IV (B), paragraph 10, of the Verification Annex; c) With respect to chemical weapons production facilities: i) Declare whether it has or has had any chemical weapons production facility under its ownership or possession, or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946; ii) Specify any chemical weapons production facility it has or has had under its ownership or possession or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946, in accordance with Part V, paragraph 1, of the Verification Annex, except for those facilities referred to in sub-paragraph (iii); iii) Report any chemical weapons production facility on its territory

that another State has or has had under its ownership and possession and that is or has been located in any place under the jurisdiction or control of another State at any time since 1 January 1946, in accordance with Part V, paragraph 2. of the Verification Annex; iv) Declare whether it has transferred or received, directly or indirectly, any equipment for the production of chemical weapons since 1 January 1946 and specify the transfer or receipt of such equipment, in accordance with Part V. paragraphs 3 to 5, of the Verification Annex; v) Provide its general plan for destruction of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, in accordance with Part V, paragraph 6. of the Verification Annex; vi) Specify actions to be taken for closure of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, in accordance with Part V, paragraph 1 (i), of the Verification Annex; vii) Provide its general plan for any temporary conversion of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, into a chemical weapons destruction facility, in accordance with Part V, paragraph 7. of the Verification Annex; d) With respect to other facilities: Specify the precise location, name and general scope of activities of any facility or establishment under its ownership or possession, or located in any place under its jurisdiction or control, and that has been designed, constructed or used since 1 January 1946 primarily for development of chemical weapons. Such declaration shall include, inter alia, laboratories and test and evaluation sites; e) With respect to riot control agents: Specify the chemical name, structural formula and Chemical Abstracts Service (CAS) registry number, if assigned, of each chemical it holds for riot control purposes. This declaration shall be updated not later than 30 days after any change becomes effective. 2) The provisions of this Article and the relevant provisions of Part IV of the Verification Annex shall not, at the discretion of a State Party, apply to chemical weapons buried on its territory before 1 January 1977 and which remain buried, or which had been dumped at sea before 1 January 1985.

- Article IV: 3) All locations at which chemical weapons specified in paragraph 1 are stored or destroyed shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments, in accordance with Part IV (A) of the Verification Annex. 4) Each State Party shall, immediately after the declaration under Article III paragraph 1 (a), has been submitted, provide access to chemical weapons specified in paragraph 1 for the purpose of systematic verification of the declaration through on-site inspection. Thereafter, each State Party shall not remove any of these chemical weapons, except to a chemical weapons destruction facility. It shall provide access to such chemical weapons, for the purpose of systematic on-site verification. 5) Each State Party shall provide access to any chemical weapons destruction facilities and their storage areas, that it owns or possesses, or that are located in any place under its jurisdiction or control, for the purpose of systematic verification through on-site inspection and monitoring with on-site instruments. 6) Each State Party shall destroy all chemical weapons specified in paragraph 1 pursuant to the Verification Annex and in accordance with the agreed rate and sequence of destruction (hereinafter referred to as "order of destruction"). Such destruction shall begin not later than two years after this Convention enters into force for it and shall finish not later than 10 years after entry into force of this Convention. A State Party is not precluded from destroying such chemical weapons at a faster rate. 7) Each State Party shall: a) Submit detailed plans for the destruction of chemical weapons specified in

paragraph 1 not later than 60 days before each annual destruction period begins, in accordance with Part IV (A), paragraph 29, of the Verification Annex; the detailed plans shall encompass all stocks to be destroyed during the next annual destruction period, b) Submit declarations annually regarding the implementation of its plans for destruction of chemical weapons specified in paragraph 1, not later than 60 days after the end of each annual destruction period, and c) Certify, not later than 30 days after the destruction process has been completed, that all chemical weapons specified in paragraph 1 have been destroyed. 9) Any chemical weapons discovered by a State Party after the initial declaration of chemical weapons shall be reported, secured and destroyed in accordance with Part IV (A) of the Verification Annex. 10) Each State Party, during transportation, sampling, storage and destruction of chemical weapons, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall transport, sample, store and destroy chemical weapons in accordance with its national standards for safety and emissions. 11) Any State Party which has on its territory chemical weapons that are owned or possessed by another State, or that are located in any place under the jurisdiction or control of another State, shall make the fullest efforts to ensure that these chemical weapons are removed from its territory not later than one year after this Convention enters into force for it. If they are not removed within one year, the State Party may request the Organization and other States Parties to provide assistance in the destruction of these chemical weapons

- Article V: 1) The provisions of this Article and the detailed procedures for its implementation shall apply to any and all chemical weapons production facilities owned or possessed by a State Party, or that are located in any place under its jurisdiction or control. 2) Detailed procedures for the implementation of this Article are set forth in the Verification Annex. 3) All chemical weapons production facilities specified in paragraph 1 shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments in accordance with Part V of the Verification Annex. 4) Each State Party shall cease immediately all activity at chemical. 5) No State Party shall construct any new chemical weapons production facilities or modify any existing facilities for the purpose of chemical weapons production or for any other activity prohibited under this Convention.
- Article VI: 1. Each State Party has the right, subject to the provisions of this Convention, to develop, produce, otherwise acquire, retain, transfer and use toxic chemicals and their precursors for purposes not prohibited under this Convention. 8) Each State Party shall make annual declarations regarding the relevant chemicals and facilities in accordance with the Verification Annex. 9) For the purpose of on-site verification, each State Party shall grant to the inspectors access to facilities as required in the Verification Annex.
- Article VIII: 1) The States Parties to this Convention hereby establish the Organization for the Prohibition of Chemical Weapons to achieve the object and purpose of this Convention, to ensure the implementation of its provisions, including those for international verification of compliance with it and to provide a forum for consultation and co-operation among States Parties. ... 19) The Conference shall be the principal organ of the Organization. It shall consider any questions, matters or issues within the scope of this Convention, including those relating to the powers and functions of the Executive Council and the Technical Secretariat. It may make recommendations and take decisions on any questions, matters or issues related to this Convention raised by a State Party or brought to

its attention by the Executive Council.

- Article IX: ...2) A State Party which receives a request from another State Party for clarification of any matter which the requesting State Party believes causes such a doubt or concern shall provide the requesting State Party as soon as possible, but in any case not later than 10 days after the request, with information sufficient to answer the doubt or concern raised along with an explanation of how the information provided resolves the matter. Nothing in this Convention shall affect the right of any two or more States Parties to arrange by mutual consent for inspections or any other procedures among themselves to clarify and resolve any matter which may cause doubt about compliance or gives rise to a concern about a related matter which may be considered ambiguous. Such arrangements shall not affect the rights and obligations of any State Party under other provisions of this Convention. 3) A State Party shall have the right to request the Executive Council to assist in clarifying any situation which may be considered ambiguous or which gives rise to a concern about the possible non-compliance of another State Party with this Convention. The Executive Council shall provide appropriate information in its possession relevant to such a concern. 4) A State Party shall have the right to request the Executive Council to obtain clarification from another State Party on any situation which may be considered ambiguous or which gives rise to a concern about its possible non-compliance with this Convention ...5) A State Party shall also have the right to request the Executive Council to clarify any situation which has been considered ambiguous or has given rise to a concern about its possible non-compliance with this Convention. The Executive Council shall respond by providing such assistance as appropriate. 6) The Executive Council shall inform the States Parties about any request for clarification provided in this Article. 7) If the doubt or concern of a State Party about a possible non-compliance has not been resolved within 60 days after the submission of the request for clarification to the Executive Council, or it believes its doubts warrant urgent consideration, notwithstanding its right to request a challenge inspection, it may request a special session of the Conference in accordance with Article VIII paragraph 12 c). At such a special session, the Conference shall consider the matter and may recommend any measure it deems appropriate to resolve the situation. Procedures for challenge inspections 8) Each State Party has the right to request an on-site challenge inspection of any facility or location in the territory or in any other place under the jurisdiction or control of any other State Party for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of this Convention, and to have this inspection conducted anywhere without delay by an inspection team designated by the Director-General and in accordance with the Verification Annex. 9) Each State Party is under the obligation to keep the inspection request within the scope of this Convention and to provide in the inspection request all appropriate information on the basis of which a concern has arisen regarding possible non-compliance with this Convention as specified in the Verification Annex. Each State Party shall refrain from unfounded inspection requests, care being taken to avoid abuse. The challenge inspection shall be carried out for the sole purpose of determining facts relating to the possible non-compliance. 10) For the purpose of verifying compliance with the provisions of this Convention, each State Party shall permit the Technical Secretariat to conduct the on-site challenge inspection pursuant to paragraph 8. 11) Pursuant to a request for a challenge inspection of a facility or location, and in accordance with the procedures provided for in the verification Annex, the inspected State

Party shall have: a) The right and the obligation to make every reasonable effort to demonstrate its compliance with this Convention and, to this end, to enable the inspection team to fulfil its mandate; b) The obligation to provide access within the requested site for the sole purpose of establishing facts relevant to the concern regarding possible non-compliance; and c) The right to take measures to protect sensitive installations, and to prevent disclosure of confidential information and data, not related to this Convention. 12) With regard to an observer, the following shall apply: a) The requesting State Party may, subject to the agreement of the inspected State Party, send, a representative who may be a national either of the requesting State Party or of a third State Party, to observe the conduct of the challenge inspection. b) The inspected State Party shall then grant access to the observer in accordance with the Verification Annex. c) The inspected State Party shall, as a rule, accept the proposed observer, but if the inspected State Party exercises a refusal, that fact shall be recorded in the final report, 13) The requesting State Party shall present an inspection request for an on-site challenge inspection to the Executive Council and at the same time to the Director-General for immediate processing.

- Article X: 2) Nothing in this Convention shall be interpreted as impeding the right of any State Party to conduct research into, develop, produce, acquire, transfer or use means of protection against chemical weapons, for purposes not prohibited under this Convention, 8) Each State Party has the right to request and, subject to the Procedures set forth in paragraphs 9, 10 and 11, to receive assistance and protection against the use or threat of use of chemical weapons if it considers that: a) Chemical weapons have been used against it; b) Riot control agents have been used against it as a method of warfare; or c) It is threatened by actions or activities of any State that are prohibited for States Parties by Article 1.
- Article XII: 1...In considering action pursuant to this paragraph, the Conference shall take into account all information and recommendations on the issues submitted by the Executive Council. 2) ...where the State Party fails to fulfil the request within the specified time, the Conference may, inter alia, upon the recommendation of the Executive Council, restrict or suspend the State Party's rights and privileges under this Convention until it undertakes the necessary action to conform with its obligations under this Convention. 3) In cases where serious damage to the object and purpose of this Convention may result from activities prohibited under this Convention, in particular by Article 1, the Conference may recommend collective measures to States Parties in conformity with international law. 4) The Conference shall, in cases of particular gravity, bring the issue, including relevant information and conclusions, to the attention of the United Nations General Assembly and the United Nations Security Council.
- Article XIII: Nothing in this Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any State under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, and under the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, signed at London, Moscow and Washington on 10 April 1972.
- Article XIV: 2) When a dispute arises between two or more States Parties, or between one or more States Parties and the Organization, relating to the interpretation or application of this Convention, the parties concerned shall consult together with a view to the expeditious

settlement of the dispute by negotiation or by other peaceful means of the parties' choice, including recourse to appropriate organs of this Convention and, by mutual consent, referral to the International Court of Justice in conformity with the Statute of the Court. The States Parties involved shall keep the Executive Council informed of actions being taken. 3) 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 recommending a time-limit for any agreed procedure. 5) The Conference and the Executive Council are separately empowered, subject to authorization from the General Assembly of the United Nations, to request the International Court of Justice to give an advisory opinion on any legal question arising within the scope of the activities of the Organization. An agreement between the Organization and the United Nations shall be concluded for this purpose in accordance with Article VIII, paragraph 34 (a).

CONVENTION ON ASSISTANCE IN THE CASE OF A NUCLEAR ACCIDENT OR RADIOLOGICAL EMERGENCY (1986)

In Force:
02.26.1987

Threats: 3, 6, 4, 5

- Article 1, 1: “The States Parties shall cooperate between themselves and with the IAEA...to facilitate prompt assistance in the event of a nuclear accident or radiological emergency to minimize its consequences and to protect life, property and the environment from the effects of radioactive releases.”
- Article 2, 1: “ If a State Party needs assistance...whether or not such accident or emergency originates within its territory, jurisdiction or control, it may call for such assistance from any other State Party, directly or through the IAEA, and from the IAEA or...international intergovernmental organizations.”
- Article 2, 2: “In the event that it is not practicable for the requesting State Party to specify the scope and the type of assistance required, the requesting [and assisting] State Parties shall, in consultation, decide [these things].”
- Article 2, 5: “Any State Party may request assistance relating to medical treatment or temporary relocation into the territory of another State Party of people involved in a nuclear accident or radiological emergency.”
- Article 2, 6: The IAEA “shall respond...by (a) making available appropriate resources allocated for this purpose; (b) transmitting promptly the request to other States and international organizations...; (c) if so requested...coordinating the assistance at the international level.
- Article 3: “Unless otherwise agreed: (a) the overall direction, control, co-ordination and supervision of the assistance shall be the responsibility within its territory of the requesting State. The assisting party should, where the assistance involves personnel, designate in consultation with the requesting State, the person who should be in charge of and retain immediate operational supervision over the personnel and the equipment provided by it. The designated person should exercise such supervision in cooperation with the appropriate authorities of the requesting State; (b) the requesting State shall provide...local facilities and services for the proper and effective administration of the assistance. It shall also ensure the protection of personnel, equipment and materials brought into its territory by or on behalf of the assisting party for such purpose.
- Article 5: Functions of the IAEA: “ to: (a) collect and disseminate to States Parties and

<p>Member States information concerning: (I) experts, equipment and materials...available...(ii) methodologies, techniques and available results of research relating to response...(b) assist a State Party...when requested in any of the following or other appropriate matters: (I) preparing emergency plans and...appropriate legislation; (ii) develop training programs for personnel; (iii) transmit requests for assistance and relevant information; (iv) develop radiation monitoring programs, procedures and standards; (v) conduct investigations into the feasibility of establishing radiation monitoring systems;</p> <ul style="list-style-type: none"> • Article 5, (e): “Establish and maintain liaison with relevant international organizations...to obtain and exchange information and data, and make a list of such organizations available to States Parties...” 		
<p><i>CONVENTION ON EARLY NOTIFICATION OF A NUCLEAR ACCIDENT (1986)</i></p>	<p>In Force: 10.27.1986</p>	<p>Threats: 3,4,6,19,20</p>
<ul style="list-style-type: none"> • Article 1: Scope of Application 1: ...[applies] in the event of any accident involving facilities or activities of a State Party or of persons or legal entities under its jurisdiction or control; 2. (a) any nuclear reactor wherever located; (b) any nuclear fuel cycle facility; (c) any radioactive waste management facility; (d) the transport and storage of nuclear fuels or radioactive wastes; (e) the manufacture, use, storage, disposal and transport of radioisotopes for agricultural, industrial, medical and related scientific and research purposes; and (f) the use of radioisotopes for generation in space objects • In the event of an accident: the State Party shall forthwith notify, directly or through the International Atomic Energy Agency, those States which are or may be physically affected as specified in article 1 and the Agency of the nuclear accident, its nature, the time of its occurrence and its exact location where appropriate; and to promptly provide the States referred to in sub-paragraph (a) directly or through the IAEA, with such available information relevant to minimizing the radiological consequences in those States • The IAEA shall inform State Parties, Member States, other States which are or may be physically affected...and relevant international organizations of a notification...and promptly provide any State Party, Member State or relevant international organization, upon request, with the information received • Article 5: Information to be provided: 1. the time, exact location where appropriate, and the nature of the nuclear accident; 2. the facility or activity involved; 3. The assumed or established cause and the foreseeable development of the nuclear accident relevant to the transboundary release of the radioactive materials; 4. the general characteristics of the radioactive release, including...the nature, probably physical and chemical form and the quantity, composition and effective height of the radioactive release; 5. information on current and forecast meteorological and hydrological conditions, necessary for forecasting the transboundary release of the radioactive materials; 6. the results of environmental monitoring relevant to the transboundary release of the radioactive materials; 7. the off-site protective measures taken or planned; 8. the predicted behavior over time of the radioactive release. • Article 8: Assistance to State Parties: “the agency shall...upon request of a State Party which does not have nuclear activities itself and borders on a State having an active nuclear program but not Party, conduct investigations into the feasibility and establishment of an appropriate radiation monitoring system...” • Article 11: Settlement of disputes: “if a dispute...cannot be settled within one year from 		

the request...it shall...be submitted to arbitration or referred to the International Court of Justice for decision. Where a dispute is submitted to arbitration, if, within six months from the date of the request, the parties ...are unable to agree on the organization of the arbitration, a party may request the President of the International Court of Justice or the Secretary-General of the UN to appoint one or more arbitrators.” The request of the Secretary-General shall have priority.

CONVENTION ON NUCLEAR SAFETY (1994)

In Force: 10.24.1996

Threats: 3,4,20

- Article 7: 1) Each Contracting Party shall establish and maintain a legislative and regulatory framework to govern the safety of nuclear installations; 2) The legislative and regulatory framework shall provide for: i)...national safety requirements and regulations; ii) a system of licensing...; iii) a system of regulatory inspection and assessment of nuclear installations to ascertain compliance...; iv) the enforcement of applicable regulations and of the terms of license...
- Article 8: Each contracting party shall establish or designate a regulatory body entrusted with the implementation of the legislative and regulatory framework referred to in Article 7...
- Article 10: Each contracting party shall take the appropriate steps to ensure all organizations engaged in activities directly related to nuclear installations shall establish policies that give due priority to nuclear safety.
- Article 14: Each contracting parties shall take the appropriate steps to ensure that: i) ...safety assessments are carried out before the construction and commissioning of a nuclear installation and throughout its life.... ii) verification by analysis, surveillance, testing and inspection is carried out to ensure that the physical state and the operation of a nuclear installation continue to be in accordance with its design, applicable national safety requirements, and operational limits and conditions.
- Article 19: each contracting party shall take the appropriate steps to ensure that: vi) incidents significant to safety are reported in a timely manner by the holder of the relevant license to the regulatory body;
- Article 29: In the event of disagreement between two or more contracting parties concerning the interpretation or application of this Convention, the Contracting Parties shall consult within the framework of a meeting of the Contracting Parties with a view of to resolving the disagreement.

<i>TREATY BANNING NUCLEAR WEAPON TESTS IN THE ATMOSPHERE, IN OUTER SPACE AND UNDER WATER (1963)</i>	In Force: 10.10.1963	Threats: 5
<ul style="list-style-type: none"> • put an end to the armaments race and eliminate the incentive to the production and testing of all kinds of weapons, including nuclear weapons (preamble) • Article I: undertake to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control; a) in the atmosphere; beyond its limits, including outer space; or underwater, including territorial waters or high seas; b)...without prejudice to the conclusion of a treaty resulting in the permanent banning of all nuclear test explosions, including all such explosions underground...c)...to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear weapon test explosion, anywhere.... • Article IV: each party shall...have the right to withdraw from the Treaty... 		
<i>COMPREHENSIVE NUCLEAR-TEST-BAN TREATY (1996)</i>	Not in Force: Adopted on 09.24.1996.	Threats: 5
<ul style="list-style-type: none"> • Preamble: Welcoming the international agreements and other positive measures of recent years in the field of nuclear disarmament, including reductions in arsenals of nuclear weapons, as well as in the field of the prevention of nuclear proliferation in all its aspects...Recognizing that the cessation of all nuclear weapon test explosions and all other nuclear explosions, by constraining the development and qualitative improvement of nuclear weapons and ending the development of advanced new types of nuclear weapons, constitutes an effective measure of nuclear disarmament and on-proliferation in all its aspects, Further recognizing that an end to all such nuclear explosions will thus constitute a meaningful step in the realization of a systematic process to achieve nuclear disarmament, ... • Article 1: Basic Obligations, 1. Each State Party undertakes not to carry out any nuclear weapons test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control; 2. Each State Party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion. • The Organization: A. General Provisions; 1. The States Parties hereby establish the Comprehensive Nuclear-Test-Ban Treaty Organization to achieve the object and purpose of this Treaty, to ensure the implementation of its provisions, including those for compliance with it, and to provide a forum for consultation and cooperation among State Parties...4. Each State Party shall cooperate with the Organization in the exercise of its functions in accordance with this Treaty. States Parties shall consult, directly among themselves, or through the Organization or other appropriate international procedures, including procedures within the framework of the United Nations and in accordance with its Charter, on any matter which may be raised relating to the object and purpose, or the implementation of the provisions, or this Treaty...8. The Organization, as an independent body, shall seek to utilize existing expertise and facilities, as appropriate, and to maximize cost efficiencies, through cooperative arrangements with other international organizations such as the International Atomic Agency. Such arrangements, excluding those of a minor and normal commercial and contractual nature, shall be set out in arrangements to be 		

submitted to the Conference of the State Parties for approval...

- C. The Executive Council; *Composition, Procedures and Decision-making* 27. The executive council shall consist of 51 members. Each State Party shall have the right, in accordance with provisions of the Article, to serve on the Executive Council; 28. Taking into account the need for equitable geographical distribution, the Executive Council shall comprise: (a) Ten States Parties from Africa; (b) Seven States Parties from Eastern Europe; (c) Nine States Parties from Latin America and the Caribbean; (d) Seven States Parties from the Middle East and South Asia; (e) Ten States Parties from North America and Western Europe; and (f) Eight States Parties from South-East Asia, the Pacific and the Far-East. *Power and Functions* 37. The Executive Council shall be the executive organ of the Organization. It shall be responsible to the Conference. It shall carry out the powers and functions entrusted to it in accordance with this Treaty. In so doing, it shall act in conformity with the recommendations, decisions and guidelines of the Conference and ensure their continuous and proper implementation.
- D. The Technical Secretariat: 42. The Technical Secretariat shall assist States Parties in the implementation of this Treaty. The Technical Secretariats shall assist the Conference and the Executive Council in the performance of their functions. The Technical Secretariat shall carry out the verification and other function entrusted to it by this Treaty, as well as those functions delegated to it by the Conference of the Executive Council in accordance with this Treaty. The Technical Secretariat shall include, as an integral part, the International Data Centre...44. The Technical Secretariat shall develop and maintain, subject to approval by the Executive Council, operational manuals to guide the operation of the various components of the verification regime, in accordance with Article IV and the Protocol. These manuals shall not constitute integral parts of this Treaty or the Protocol and may be changed by the Technical Secretariat subject to approval by the Executive Council. The technical Secretariat shall promptly inform the State Parties of any changes in the operational manuals...
- Article III. National Implementation Measures: 1. Each State Party shall, in accordance with its constitutional processes, take any necessary measures to implement its obligations under this Treaty. In Particular, it shall take any necessary measures: (a) To prohibit natural and legal persons anywhere in its territory or in any other place under its jurisdiction as recognized by international law from undertaking any activity to a State Party under this Treaty; (b) To prohibit natural and legal persons from undertaking any such activity anywhere under its control; and (c) To prohibit, in conformity with international law; natural possessing its nationality from undertaking any such activity anywhere; 2. Each State Party shall inform the Organization of the measures taken pursuant to this Article...
- Article IV. B. The International Monitoring System; 16. The International Monitoring System shall comprise facilities for seismological monitoring, radionuclide monitoring including certified laboratories, hydroacoustic monitoring, infrasound monitoring, and respective means of communication and shall be supported by the International Data Centre of the Technical Secretariat...C. Consultation and Clarification; 29. Without prejudice to the right of any State Party to request an on-site inspection, State Parties should, whenever possible first make every effort to clarify and resolve, among themselves or with or through the Organization, any matter which may cause concern about possible non-compliance with the basic obligations of this Treaty; 30. A State Party that receives a

request pursuant to paragraph 29 directly from another State Party shall provide the clarification to the requesting State Party as soon as possible, but in any case no later than 48 hours after the request. The requesting and requested State Parties may keep the Executive Council and the Director-General informed of the request and the response; 31. A State Party shall have the right to request the Director-General to assist in clarifying any matter which may cause concern about possible non-compliance with the basic obligations of this Treaty. The Director-General shall provide appropriate information in the possession of the Technical Secretariat relevant to such a concern. The Director-General shall inform the Executive Council of the request and of the information provided in response, if so requested by the requesting State Party ; D. On-Site Inspections; *Request for an On-Site Inspection*; 34. Each State Party has the right to request an on-site inspection in accordance with the provisions of this Article and Part II of the Protocol in the territory of in any other place under the jurisdiction or control of any State Party, or in any area beyond the jurisdiction or control of any State; 35. The sole Purpose of an on-site inspection shall be to clarify whether a nuclear weapon test explosion or any other nuclear explosion has been carried out in violation of Article U and, to the extent possible, to gather any facts which assist in identifying any possible violator...*Follow-up after Executive Council Approval of an On-Site Inspection*; 53. An on-site inspection approved by the Executive Council shall be conducted without delay by an inspection team designed by the Director-General and in accordance with the provisions of the Treaty and the Protocol. The inspection team shall arrive at the point of entry no later than six days following the receipt by the Executive Council of the on-site inspection from the requesting State-Party...*The Conduct of an On-Site Inspection*; 56. Each State Party shall permit the Organization to conduct an on-site inspection on its territory or at places under its jurisdiction or control in accordance with the provisions of this Treaty and the Protocol. However, no State Party shall have to accept simultaneous on-site inspections on its territory or at places under its jurisdiction or control...

- Article V. Measure to Redress a Situation and to Ensure Compliance, Including Sanctions; 1. The Conference, taking into account, *inter alia*, the recommendations of the Executive Council, shall take the necessary measures, as set forth in paragraph 2 and 3, to ensure compliance with this Treaty and to redress and remedy any situation which contravenes the provisions of this Treaty

BASEL CONVENTION ON THE CONTROL OF TRANSBOUNDARY MOVEMENTS OF HAZARDOUS WASTES AND THEIR DISPOSAL (1989)

In Force:
05.05.1992

Threats: 3,9,20,23,28

- Preamble: “Fully recognizing that any State has the sovereign right to ban the entry or disposal of foreign hazardous wastes and other wastes in its territory...Noting that a number of international and regional agreements have addressed the issue of protection and preservation of the environment with regard to the transit of dangerous goods...Affirming that States are responsible for the fulfillment of their international obligations concerning the protection and preservation of the environment, and are liable in accordance with international law...are Determined to protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes.”
- Article 2, Number 8: “ ‘Environmentally sound management of hazardous wastes and

<p>other wastes’ means taking all practical steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.”</p> <ul style="list-style-type: none"> • Article 4: General Obligations 1 a-c, 2 a-h; • Article 5, Number 1: “Designate or establish one or more competent authorities and one focal point. One competent authority shall be designated to receive the notification in case of a State of transit. 2. Inform the Secretariat [of these agencies] and 3. Inform the Secretariat...of changes regarding [this] designation.” • Article 10-International Co-operation: 1. “The Parties shall co-operate with each other in order to improve and achieve environmentally sound management of hazardous wastes and other wastes.” Article 10, Number 2, b) Cooperate in monitoring the effects of the management of hazardous wastes on human health and the environment.” • Article 13: 1) The Parties shall, whenever it comes to their knowledge, ensure that, in the case of an accident occurring during the transboundary movement of hazardous wastes or other wastes or their disposal, which are likely to present risks to human health and the environment in other States, those states are immediately informed. 2)The Parties shall inform each other, through the Secretariat, of: a) Changes regarding the designation of competent authorities and/or focal points... b) Changes in their national definition of hazardous wastes,...c) Decisions made by them not to consent totally or partially to the import of hazardous wastes or other wastes for disposal within the area under their national jurisdiction; d) Decisions taken by them to limit or ban the export of hazardous wastes or other wastes... 		
<p><i>CONVENTION FOR THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE (1972)</i></p>	<p>In force: 12.17.1975</p>	<p>Threats: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 18, 19, 22, 25, 26, 31</p>
<ul style="list-style-type: none"> • Article 1: For the purpose of this convention, the following shall be considered as “cultural heritage” : Monuments, architectural works, works of monumental sculptures and paintings, elements or structures of an archeological nature, inscriptions, cave dwellings and combinations of features, which are or outstanding universal value from the point of view of history ,art groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science; Sites: works of man of the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view. • Article 2: For the purpose of this convention, the following shall be considered as “natural heritage”: Natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;Geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; Natural sites of precisely delineated natural areas of outstanding universal value from the point of view science, conservation or natural beauty. 		

<ul style="list-style-type: none"> • Article 4: Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and cooperation, in particular, financial, artistic, scientific, technical, which it may be able to obtain. • Article 6: 1. Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned in Articles 1 and 2 is situated, and without prejudice to property right provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate. • Article 7: For the purpose of this Convention, international protection of the world cultural and natural heritage shall be understood to mean the establishment of a system of international co-operation and assistance designed to support States Parties to the Convention in their efforts to conserve and identify that heritage. • Article 8: 1. An Intergovernmental Committee for the Protection of the Cultural and Natural Heritage of Outstanding Universal Value, called “ the World Heritage Committee,” is hereby established within the United Nations Education, scientific and Cultural Organization. It shall be composed of 15 States Parties ... • Article 11:...4. The committee shall establish, keep up to date and publish, whenever circumstances shall so require, under the title of “list of World Heritage in Danger,” a list of the property appearing in the World Heritage List for the conservation of which major operations are necessary and for which assistance has been requested under this conservation. This list shall contain an estimate of the cost of such operations. This list may includes only such property forming part of the cultural and natural heritage as is threatened by serious and specific dangers, such as the threat of disappearance caused by accelerated deterioration, large-scale public or private projects or rapid urban or tourist development projects; destruction caused by changes in the use or ownership of the land; major alternations due to unknown causes; abandonment for any reason whatsoever; the outbreak of the threat of an armed conflict; calamities and cataclysms; serious fires, earthquakes, landslides; volcanic eruptions, changes in water level, floods and tidal waves. The Committee may at any time, in case of urgent need, make a new entry in the list of World Heritage in danger and publicize such entry immediately. 		
<p><i>CONVENTION ON BIOLOGICAL DIVERSITY (1992)</i></p>	<p>In Force: 12.29.1993</p>	<p>Threats: 3, 4, 5, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 28, 31, 32</p>
<ul style="list-style-type: none"> • states have sovereign rights over their own biological resources (preamble) • fundamental requirement for the conservation of ... is the in-situ conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species... • Article 4: Jurisdictional Scope.. subject to the rights of other States.. <ul style="list-style-type: none"> * ...in areas within the limits of its national jurisdiction; * in the case of processes and activities, regardless of where their effects occur, carried out under its jurisdictional or control within the area of its national 		

- jurisdiction or beyond the limits of national jurisdiction
- Article 5: Each Contracting Party shall...cooperate with other Contracting Parties....where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable Use of biological diversity.
 - Article 14: 1) Each Contracting Party, as far as possible and as appropriate, shall: a) Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures; b) Introduce appropriate arrangements to ensure that the environmental consequences of its programs and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account; c) Promote, on the basis of reciprocity, notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate; d) In the case of imminent or grave danger or damage, originating under its jurisdiction or control, to biological diversity within the area under jurisdiction of oilier States or in areas beyond the limits of national jurisdiction, notify immediately the potentially affected States of such danger or damage, as well as initiate action to prevent or minimize such danger or damage; and e) Promote national arrangements for emergency responses to activities or events, whether caused naturally or otherwise, which present a grave and imminent danger to biological diversity and encourage international cooperation to supplement such national efforts and, where appropriate and agreed by the States or regional economic integration organizations concerned, to establish joint contingency plans. 2) The Conference of the Parties shall examine, on the basis of studies to be carried out, the issue of liability and redress, including restoration and compensation, for damage to biological diversity, except where such liability is a purely internal
 - Article 15: Access to Genetic Resources 1. Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation. 2. Each Contracting Party shall endeavor to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention. 3. For the purpose of this Convention, the genetic resources being provided by a Contracting Party, as referred to in this Article and Articles 16 and 19, are only those that are provided by Contracting Parties that are countries of origin of such resources or by the Parties that have acquired the genetic resources in accordance with this Convention. 4. Access, where granted, shall be on mutually agreed terms and subject to the provisions of this
 - Article 27: 1) In the event of a dispute between Contracting Parties concerning the interpretation or application of this Convention, the parties concerned shall seek solution by negotiation. 2) If the parties concerned cannot reach agreement by negotiation, they may jointly seek the good offices of, or request mediation by, a third party. 3) When 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

<p>Depositary that for a dispute not resolved in accordance with paragraph 1 or paragraph 2 above, it accepts one or both of the following means of dispute settlement as compulsory: a) Arbitration in accordance with the procedure laid down in Part 1 of Annex II; b) Submission of the dispute to the International Court of Justice. 4) If the parties to the dispute have not, in accordance with paragraph 3 above, accepted the same or any procedure, the dispute shall be submitted to conciliation in accordance with Part 2 of Annex II unless the parties otherwise agree.</p> <ul style="list-style-type: none"> • Annex I Part I • Article 1: ...If the parties do not agree on the subject matter of the dispute before the President of the tribunal is designated, the arbitral tribunal shall determine the subject matter. • Article 4: The arbitral tribunal shall render its decisions in accordance with the provisions of this Convention, any protocols concerned, and international law. • Article 6: The arbitral tribunal may, at the request of one of the parties, recommend essential interim measures of protection. • Article 13: If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to make its award. Absence of a party or a failure of a party to defend its case shall not constitute a bar to the proceedings. Before rendering its final decision, the arbitral tribunal must satisfy itself that the claim is well founded in fact and law. • Article 16: The award shall be binding on the parties to the dispute. It shall be without appeal unless the parties to the dispute have agreed in advance to an appellate procedure. 		
<p><i>CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (1973)</i></p>	<p>In Force: 07.01.1975</p>	<p>Threats: 3, 22</p>
<ul style="list-style-type: none"> • Preamble: ...wild fauna and flora...are irreplaceable part of the natural systems...which must be protected for this and generations to come; international cooperation is essential for the protection • Article II (fundamental principles): 1. Include all species threatened with extinction which are or may be affected by trade. Trade in specimens...must be subject to...strict regulation ...must only be authorized in exceptional circumstances. • Article III (Regulations of Trade in Specimens of Species Included in Appendix H):2. The export of any specimen of a species included in Appendix H shall require the prior grant and presentation of an export permit. Conditions for export permit: a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival; a Management Authority of the State of export (MASE) satisfied that the specimen was not obtained in contravention of the Law of that State; a MASE is satisfied that any living specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment 		

<p><i>CONVENTION ON THE PROTECTION AND USE OF TRANSBOUNDARY WATERCOURSES AND INTERNATIONAL LAKES (1992)</i></p>	<p>In force: 10.06.1996 Open to State members of the ECE.</p>	<p>Threats: 8, 13, 14</p>
<ul style="list-style-type: none"> • Preamble: The Parties of this Convention, Mindful that the protection and use of transboundary watercourses and international lakes are important and urgent tasks, the effective accomplishment of which can only be ensured by enhanced co-operation, Concerned over the existence and threat of adverse effects, in the short or long term, of changes in the conditions of transboundary watercourses and international lakes on the environment, economies and well-being of the member countries of the Economic Commission for Europe (ECE), Emphasizing the need for strengthened national and international measures to prevent, control and reduce the release of hazardous substances into the aquatic environment and to abate eutrophication and acidification, as well as pollution of the marine environment, in particular coastal areas, from land-based sources., Commending the efforts already undertaken by the ECE Governments to strengthen co-operation, on bilateral and multilateral levels, for the prevention, control and reduction of transboundary pollution, sustainable water management, conservation of water resources and environmental protection, ... • Article 1: DEFINITIONS: “Transboundary waters” means any surface or ground waters which mark, cross or are located on boundaries between two or more states; wherever transboundary waters flow directly into the sea, these transboundary waters end at a straight line across their respective mouths between points on the low-water line of their banks; 2. “Transboundary impact” means any significant adverse effect on the environment resulting from a change in the conditions of transboundary waters caused by a human activity, the physical origin of which is situated wholly or in part within an area under the jurisdiction or a Party, within an area under the jurisdiction of another party. Such effects on the environment includes effects on human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures on the cultural heritage or socio-economic conditions resulting from alterations to those factors. • Article 2: GENERAL PROVISIONS: 1. The Parties shall take all appropriate measures to prevent, control and reduce any transboundary impact; 2. Parties shall, in particular, take all appropriate measures; a) To prevent, control and reduce pollution of waters causing or likely to cause transboundary impact; b) To ensure that transboundary waters are used with the aim of ecologically sound and rational water management, conservation of water resources and environmental protection; c) to ensure that transboundary waters are used in a reasonable and equitable way, taking into particular account their transboundary character, in the case of activities which cause or are likely to cause transboundary impact;...5. In taking the measures referred to in paragraphs 1 and 2 of the article, shall be guided by the following principles:...b) The polluter-pays principle, by virtue of which costs of pollution prevention, control and reduction measure shall be borne by the polluter;...6. The Riparian Parties shall co-operate on the basis of equality and reciprocity, in particular through bilateral and multilateral agreements, in order to develop harmonized policies, programmes and strategies covering the relevant catchment areas, or parts thereof, aimed at the prevention, control and reduction of transboundary impact and aimed at the 		

protection of the environment of transboundary waters or the environment influenced by such waters, including the marine environment.

- Article 5: RESEARCH AND DEVELOPMENT: The Parties shall so-operate in the conduct of research into and development of effective techniques for the prevention, control and reduction of transboundary impact. To this effect, the Parties shall, on a bilateral and/or multilateral basis, taking into account research activities pursued in relevant international forums, endeavour to initiate or intensify specific research programmes, where necessary, aimed, inter alia at:...
- Article 7: RESPONSIBILITY AND LIABILITY: The Parties shall support appropriate international efforts to elaborate rules, criteria and procedures in the field of responsibility and liability.
- Article 10: CONSULTATIONS: Consultations shall be held between the Riparian Parties on the basis of reciprocity, good faith and good-neighbourliness, at the request of any such party. Such consultations of this Convention. Any such consultations shall be conducted through a joint body established under Article 9 of this Convention, where one exists.
- Article 23: SETTLEMENTS OF DISPUTES: 1. If a dispute arises between two or more Parties about the interpretation of application of this Convention, they shall seek a solution by negotiation or by any other means of dispute settlement acceptable to the parties to the dispute; 2. When signing, ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a Party may declare in writing to the Depository that, for a dispute not resolved in accordance with paragraph 1 of this article, it accepts one or both of the following means of dispute settlement as compulsory in relations to any Party accepting the same obligation: a) Submission of the dispute to the International Court of Justice.

<i>UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (1982)</i>	In Force: 11.16.1994 160 & EC	Threats: 4, 5, 8, 10, 16, 22, 24, 28, 30, 31
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PART II: TERRITORIAL SEA AND CONTIGUOUS ZONE

- Article 2: 1) The sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea. 2) This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil. 3) The sovereignty over the territorial sea is exercised subject to this Convention and to other rules of international law.
- Article 3: Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention.
- Article 4: The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.
- Article 5: Except where otherwise provided in this Convention, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.
- Article 6: In the case of islands situated on atolls or of islands having fringing reefs, the baseline for measuring the breadth of the territorial sea is the seaward low-water line of the reef, as shown by the appropriate symbol on charts officially recognized by the coastal State.

- Article 8: 1) Except as provided in Part IV, waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State. 2) Where the establishment of a straight baseline in accordance with the method set forth in article 7 has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage as provided in this Convention shall exist in those waters.
- Article 17: Subject to this Convention, ships of all States, whether coastal or land-locked, enjoy the right of innocent passage through the territorial sea.
- Article 21: 1) The coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following: (a) the safety of navigation and the regulation of maritime traffic; (b) the protection of navigational aids and facilities and other facilities or installations; (c) the protection of cables and pipelines; (d) the conservation of the living resources of the sea; (e) the prevention of infringement of the fisheries laws and regulations of the coastal State; (f) the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof; (g) marine scientific research and hydrographic surveys; (h) the prevention of infringement of the customs, fiscal, immigration or sanitary laws and regulations of the coastal State. 2) Such laws and regulations shall not apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards. 3) The coastal State shall give due publicity to all such laws and regulations. 4) Foreign ships exercising the right of innocent passage through the territorial sea shall comply with all such laws and regulations and all generally accepted international regulations relating to the prevention of collisions at sea.
- Article 32: With such exceptions as are contained in subsection A and in articles 30 and 31, nothing in this Convention affects the immunities of warships and other government ships operated for non-commercial purposes.
- Article 33: 1) In a zone contiguous to its territorial sea..., the coastal State may exercise the control necessary to: (a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea; (b) punish infringement of the above laws and regulations committed within its territory or territorial sea. 2) The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.
- Article 56: State has: a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds; b) jurisdiction as provided for in the relevant provisions of this Convention with regard to: i) the establishment and use of artificial islands, installations and structures; ii) marine scientific research; iii) the protection and preservation of the marine environment; c) other rights and duties provided for in this Convention. 2) In exercising its rights and performing its duties under this Convention in the exclusive economic zone, the coastal State shall have due regard to the rights and duties of other States and shall act in a manner compatible with the provisions of this Convention.
- Article 135: Neither this Part nor any rights granted or exercised pursuant thereto shall affect the legal status of the waters superjacent to the Area or that of the air space above

those waters.

PART XII: PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT

- Article 192: States have the obligation to protect and preserve the marine environment.
- Article 193: States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.
- Article 194: 1. States shall take..., all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavor to harmonize their policies in this connection. 2) States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention operation...4) In taking measures to prevent, reduce or control pollution of the marine environment, States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and in pursuance of their duties in conformity with this Convention. 5) The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.
- Article 195: in taking measures to prevent, reduce and control pollution of the marine environment, States shall act so as not to transfer...damage or hazards from one area to another or transform one type of pollution into another.
- Article 196: 1. States shall take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto.

SECTION 2. GLOBAL AND REGIONAL CO-OPERATION

- Article 198: When a State becomes aware of cases in which the marine environment is in imminent danger of being damaged or has been damaged by pollution, it shall immediately notify other States it deems likely to be affected by such damage, as well as the competent international organizations.
- Article 199: In the cases referred to in article 198, States in the area affected, in accordance with their capabilities, and the competent international

PART XV: SETTLEMENT OF DISPUTES

- Article 279: States Parties shall settle any dispute between them concerning the interpretation or application of this Convention by peaceful means in accordance with Article 2, paragraph 3, of the Charter of the United Nations and, to this end, shall seek a solution by the means indicated in Article 33, paragraph 1, of the Charter.
- Article 280: Nothing in this Part impairs the right of any States Parties to agree at any time to settle a dispute between them concerning the interpretation or application of this Convention by any peaceful means of their own choice.
- Article 281: 1. If the States Parties which are parties to a dispute concerning the

interpretation or application of this Convention have agreed to seek settlement of the dispute by a peaceful means of their own choice, the procedures provided for in this Part apply only where no settlement has been reached by recourse to such means and the agreement between the parties does not exclude any further procedure . 2) If the parties have also agreed on a time limit, paragraph 1 applies only upon the expiration of that time limit.

- Article 282: If the States Parties which are parties to a dispute concerning the interpretation or application of this Convention have agreed, through a general, regional or bilateral agreement or otherwise, that such dispute shall, at the request of any party to the dispute, be submitted to a procedure that entails a binding decision, that procedure shall apply in lieu of the procedures provided for in this Part, unless the parties to the dispute otherwise agree.
- Article 283: 1. When a dispute arises between States Parties concerning the interpretation or application of this Convention, the parties to the dispute shall proceed expeditiously to an exchange of views regarding its settlement by negotiation or other peaceful means. 2) The parties shall also proceed expeditiously to an exchange of views where a procedure for the settlement of such a dispute has been terminated without a settlement or where a settlement has been reached and the circumstances require consultation regarding the manner of implementing the settlement.
- Article 284: 1. A State Party which is a party to a dispute concerning the interpretation or application of this Convention may invite the other party or parties to submit the dispute to conciliation in accordance with the procedure under Annex V, section 1, or another conciliation procedure. 2. If the invitation is accepted and if the parties agree upon the conciliation procedure to be applied, any party may submit the dispute to that procedure. 3. If the invitation is not accepted or the parties do not agree upon the procedure, the conciliation proceedings shall be deemed to be terminated. 4. Unless the parties otherwise agree, when a dispute has been submitted to conciliation, the proceedings may be terminated only in accordance with the agreed conciliation procedure.

SECTION 2. COMPULSORY PROCEDURES ENTAILING BINDING DECISIONS

- Article 286: Subject to section 3, any dispute concerning the interpretation or application of this Convention shall, where no settlement has been reached by recourse to section 1, be submitted at the request of any party to the dispute to the court or tribunal having jurisdiction under this section.
- Article 287: 1. When signing, ratifying or acceding to this Convention or at any time thereafter, a State shall be free to choose, by means of a written declaration, one or more of the following means for the settlement of disputes concerning the interpretation or application of this Convention: (a) the International Tribunal for the Law of the Sea established in accordance with Annex VI; (b) the International Court of Justice; (c) an arbitral tribunal constituted in accordance with Annex VII; (d) a special arbitral tribunal constituted in accordance with Annex VIII for one or more of the categories of disputes specified therein. 2. A declaration made under paragraph 1 shall not affect or be affected by the obligation of a State Party to accept the jurisdiction of the Sea-Bed Disputes Chamber of the International Tribunal for the Law of the Sea to the extent and in the manner provided for in Part XI, section 5. 3. A State Party, which is a party to a dispute not covered by a declaration in force, shall be deemed to have accepted arbitration in

accordance with Annex VII. . If the parties to a dispute have accepted the same procedure for the settlement of the dispute, it may be submitted only to that procedure, unless the parties otherwise agree. 5. 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. 6. A declaration made under paragraph 1 shall remain in force until three months after notice of revocation has been deposited with the Secretary-General of the United Nations. 7. A new declaration, a notice of revocation or the expiry of a declaration does not in any way affect proceedings pending before a court or tribunal having jurisdiction under this article, unless the parties otherwise agree. 8. Declarations and notices referred to in this article shall be deposited with the Secretary-General of the United Nations, who shall transmit copies thereof to the States Parties.

- Article 288: . 1) A court or tribunal referred to in article 287 shall have jurisdiction over any dispute concerning the interpretation or application of this... 2. A court or tribunal referred to in article 287 shall also have jurisdiction over any dispute concerning the interpretation or application of an international agreement related to the purposes of this Convention... 3. The Sea-Bed Disputes Chamber of the International Tribunal for the Law of the..., and any other chamber or arbitral tribunal referred to in Part XI, section 5, shall have jurisdiction in any matter... 4. In the event of a dispute as to whether a court or tribunal has jurisdiction, the matter shall be settled by decision of that court or tribunal.
- Article 290: 1. If a dispute has been duly submitted to a court or tribunal which considers that prima facie it has jurisdiction under this Part or Part XI, section 5, the court or tribunal may prescribe any provisional measures which it considers appropriate under the circumstances to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment, pending the final decision. 2. Provisional measures may be modified or revoked as soon as the circumstances justifying them have changed or ceased to exist. 3. Provisional measures may be prescribed, modified or revoked under this article only at the request of a party to the dispute and after the parties have been given an opportunity to be heard. 4. The court or tribunal shall forthwith give notice to the parties to the dispute, and to such other States Parties as it considers appropriate, of the prescription, modification or revocation of provisional measures. 5. Pending the constitution of an arbitral tribunal to which a dispute is being submitted under this section, any court or tribunal agreed upon by the parties or, failing such agreement within two weeks from the date of the request for provisional measures, the International Tribunal for the Law of the Sea or, with respect to activities in the Area, the Sea-Bed Disputes Chamber, may prescribe, modify or revoke provisional measures in accordance with this article if it considers that prima facie the tribunal which is to be constituted would have jurisdiction and that the urgency of the situation so requires. Once constituted, the tribunal to which the dispute has been submitted may modify, revoke or affirm those provisional measures, acting in conformity with paragraphs 1 to 4. 6. The parties to the dispute shall comply promptly with any provisional measures prescribed under this article.
- Article 291: 1. All the dispute settlement procedures specified in this Part shall be open to States Parties. 2. The dispute settlement procedures specified in this Part shall be open to entities other than States Parties only as specifically provided for in this Convention.
- Article 293: 1. A court or tribunal having jurisdiction under this section shall apply this Convention and other rules of international law not incompatible with this Convention. 2. Paragraph 1 does not prejudice the power of the court or tribunal having jurisdiction under

this section to decide a case *ex aequo et bono*, if the parties so agree.

- Article 294: 1. A court or tribunal provided for in article 287 to which an application is made in respect of a dispute referred to in article 297 shall determine at the request of a party, or may determine *proprio motu*, whether the claim constitutes an abuse of legal process or whether *prima facie* it is well founded. If the court or tribunal determines that the claim constitutes an abuse of legal process or is *prima facie* unfounded, it shall take no further action in the case. 3. Nothing in this article affects the right of any party to a dispute to make preliminary objections in accordance with the applicable rules of procedure.
- Article 295: Any dispute between States Parties concerning the interpretation or application of this Convention may be submitted to the procedures provided for in this section only after local remedies have been exhausted where this is required by international law.
- Article 296: 1. Any decision rendered by a court or tribunal having jurisdiction under this section shall be final and shall be complied with by all the parties to the dispute. 2. Any such decision shall have no binding force except between the parties and in respect of that particular dispute.

SECTION 3. LIMITATIONS AND EXCEPTIONS TO APPLICABILITY OF SECTION 2

- Article 297: 1. Disputes concerning the interpretation or application of this Convention with regard to the exercise by a coastal State of its sovereign rights or jurisdiction provided for in this Convention shall be subject to the procedures provided for in section 2 in the following cases: (a) when it is alleged that a coastal State has acted in contravention of the provisions of this Convention in regard to the freedoms and rights of navigation, overflight or the laying of submarine cables and pipelines, or in regard to other internationally lawful uses of the sea specified in article 58; (b) when it is alleged that a State in exercising the aforementioned freedoms, rights or uses has acted in contravention of this Convention or of laws or regulations adopted by the coastal State in conformity with this Convention and other rules of international law not incompatible with this Convention; or (c) when it is alleged that a coastal State has acted in contravention of specified international rules and standards for the protection and preservation of the marine environment which are applicable to the coastal State and which have been established by this Convention or through a competent international organization or diplomatic conference in accordance with this Convention. 2) (a) Disputes concerning the interpretation or application of the provisions of this Convention with regard to marine scientific research shall be settled in accordance with section 2, except that the coastal State shall not be obliged to accept the submission to such settlement of any dispute arising out of: (i) the exercise by the coastal State of a right or discretion in accordance with article 246, or (ii) a decision by the coastal State to order suspension or cessation of a research project in accordance with article 253. (b) A dispute arising from an allegation by the researching State that with respect to a specific project the coastal State is not exercising its rights under articles 246 and 253 in a manner compatible with this Convention shall be submitted, at the request of either party, to conciliation under Annex V, section 2, provided that the conciliation commission shall not call in question the exercise by the coastal State of its discretion to designate specific areas as referred to in article 246, paragraph 6, or of its discretion to withhold consent in accordance with article 246, paragraph 5. 3) (a) Disputes concerning the interpretation or

application of the provisions of this Convention with regard to fisheries shall be settled in accordance with section 2, except that the coastal State shall not be obliged to accept the submission to such settlement of any dispute relating to its sovereign rights with respect to the living resources in the exclusive economic zone or their exercise, including its discretionary powers for determining the allowable act, its harvesting capacity, the allocation of surpluses to other States and the terms and conditions established in its conservation and management laws and regulations. (b) Where no settlement has been reached by recourse to section 1 of this Part, a dispute shall be submitted to conciliation under Annex V, section 2, at the request of any party to the dispute, when it is alleged that: (i) a coastal State has manifestly failed to comply with its obligations to ensure through proper conservation and management measures that the maintenance of the living resources in the exclusive economic zone is not seriously endangered; (ii) a coastal State has arbitrarily refused to determine, at the request of another State, the allowable catch and its capacity to harvest living resources with respect to stocks which that other State is interested in fishing, or (iii) a coastal State has arbitrarily refused to allocate to any State, under articles 62, 69 and 70 and under the terms and conditions established by the coastal State consistent with this Convention, the whole or part of the surplus it has declared to exist. c) In no case shall the conciliation commission substitute its discretion for that of the coastal State. (d) The report of the conciliation commission shall be communicated to the appropriate international organizations. (e) In negotiating agreements pursuant to articles 69 and 70, States Parties, unless they otherwise agree, shall include a clause on measures which they shall take in order to minimize the possibility of a disagreement concerning the interpretation or application of the agreement, and on how they should proceed if a disagreement nevertheless arises.

- Article 298: Optional exceptions to applicability of section 2: 1. When signing, ratifying or acceding to this Convention or at any time thereafter, a State may, without prejudice to the obligations arising under section 1, declare in writing that it does not accept any one or more of the procedures provided for in section 2 with respect to one or more of the following categories of disputes: (a) (i) disputes concerning the interpretation or application of articles 15, 74 and 83 relating to sea boundary delimitations, or those involving historic bays or titles, provided that a State having made such a declaration shall, when such a dispute arises subsequent to the entry into force of this Convention and where no agreement within a reasonable period of time is reached in negotiations between the parties, at the request of any party to the dispute, accept submission of the matter to conciliation under Annex V, section 2; and provided further that any dispute that necessarily involves the concurrent consideration of any unsettled dispute concerning sovereignty or other rights over continental or insular land territory shall be excluded from such submission; (ii) after the conciliation commission has presented its report, which shall state the reasons on which it is based, the parties shall negotiate an agreement on the basis of that report; if these negotiations do not result in an agreement, the parties shall, by mutual consent, submit the question to one of the procedures provided for in section 2, unless the parties otherwise agree; (iii) this subparagraph does not apply to any sea boundary dispute finally settled by an arrangement between the parties, or to any such dispute which is to be settled in accordance with a bilateral or multilateral agreement binding upon those parties; (b) disputes concerning military activities, including military activities by government vessels and aircraft engaged in non-commercial service, and

disputes concerning law enforcement activities in regard to the exercise of sovereign rights or jurisdiction excluded from the jurisdiction of a court or tribunal under article 297, paragraph 2 or 3; (c) disputes in respect of which the Security Council of the United Nations is exercising the functions assigned to it by the Charter of the United Nations, unless the Security Council decides to remove the matter from its agenda or calls upon the parties to settle it by the means provided for in this Convention. 2. A State Party which has made a declaration under paragraph 1 may at any time withdraw it, or agree to submit a dispute excluded by such declaration to any procedure specified in this Convention. 3. A State Party which has made a declaration under paragraph 1 shall not be entitled to submit any dispute falling within the excepted category of disputes to any procedure in this Convention as against another State Party, without the consent of that party. 4. If one of the States Parties has made a declaration under paragraph 1: (a), any other State Party may submit any dispute falling within an excepted category against the declarant party to the procedure specified in such declaration. 5. A new declaration, or the withdrawal of a declaration, does not in any way affect proceedings pending before a court or tribunal in accordance with this article, unless the parties otherwise agree. 6. Declarations and notices of withdrawal of declarations under this article shall be deposited with the Secretary-General of the United Nations, who shall transmit copies thereof to the States Parties.

- Article 299: 1. A dispute excluded under article 297 or excepted by a declaration made under article 298 from the dispute settlement procedures provided for in section 2 may be submitted to such procedures only by agreement of the parties to the dispute. 2. Nothing in this section impairs the right of the parties to the dispute to agree to some other procedure for the settlement of such dispute or to reach an amicable settlement

ANNEX V. CONCILIATION:

SECTION 1. CONCILIATION PROCEDURE PURSUANT TO SECTION 1 OF PART XV

- Article 1: If the parties to a dispute have agreed, in accordance with article 284, to submit it to conciliation under this section, any such party may institute the proceedings by written notification addressed to the other party or parties to the dispute.
- Article 5: The commission may draw the attention of the parties to any measures which might facilitate an amicable settlement of the dispute.
- Article 6: The commission shall hear the parties, examine their claims and objections, and make proposals to the parties with a view to reaching an amicable settlement.
- Article 10: The parties to the dispute may by agreement applicable solely to that dispute modify any provision of this Annex.

SECTION 2. COMPULSORY SUBMISSION TO CONCILIATION PROCEDURE PURSUANT TO SECTION 3 OF PART XV

- Article 11: 1. Any party to a dispute which, in accordance with Part XV, section 3, may be submitted to conciliation under this section, may institute the proceedings by written notification addressed to the other party or parties to the dispute. 2. Any party to the dispute, notified under paragraph 1, shall be obliged to submit to such proceedings.
- Article 12: The 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.

**ANNEX VI. STATUTE OF THE INTERNATIONAL TRIBUNAL FOR THE
LAW OF THE SEA SECTION 1:**

- Article 2: 2. In the Tribunal as a whole the representation of the principal legal systems of the world and equitable geographical distribution shall be assured.
- Article 21: The jurisdiction of the Tribunal comprises all disputes and all applications submitted to it in accordance with this Convention and all matters specifically provided for in any other agreement which confers jurisdiction on the Tribunal.
- Article 22: If all the parties to a treaty or convention already in force and concerning the subject-matter covered by this Convention so agree, any disputes concerning the interpretation or application of such treaty or convention may, in accordance with such agreement, be submitted to the Tribunal.
- Article 28: When one of the parties does not appear before the Tribunal or fails to defend its case, the other party may request the Tribunal to continue the proceedings and make its decision. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings. Before making its decision, the Tribunal must satisfy itself not only that it has jurisdiction over the dispute, but also that the claim is well founded in fact and law.
- Article 31: 1. Should a State Party consider that it has an interest of a legal nature which may be affected by the decision in any dispute, it may submit a request to the Tribunal to be permitted to intervene. 2. It shall be for the Tribunal to decide upon this request. 3. If a request to intervene is granted, the decision of the Tribunal in respect of the dispute shall be binding upon the intervening State Party in so far as it relates to matters in respect of which that State Party intervened.
- Article 33: 1. The decision of the Tribunal is final and shall be complied with by all the parties to the dispute. 2. The decision shall have no binding force except between the parties in respect of that particular dispute. 3. In the event of dispute as to the meaning or scope of the decision, the Tribunal shall construe it upon the request of any party.

ANNEX VII. ARBITRATION

- Article 9: If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to make its award. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings.
- Article 11: The award shall be final and without appeal, unless the parties to the dispute have agreed in advance to an appellate procedure. It shall be complied with by the parties to the dispute.
- Article 12: 1. Any controversy which may arise between the parties to the dispute as regards the interpretation or manner of implementation of the award may be submitted by either party for decision to the arbitral tribunal which made the award. 2. Any such controversy may be submitted to another court or tribunal under article 287 by agreement of all the parties to the dispute.

ANNEX VIII. SPECIAL ARBITRATION:

- Article 1: Subject to Part XV, any party to a dispute concerning the interpretation or application of the articles of this Convention relating to (1) fisheries, (2) protection and preservation of the marine environment, (3) marine scientific research, or (4) navigation, including pollution from vessels and by dumping may submit the dispute to the special arbitral procedure provided for in this Annex ...

- Article 5: 1. The parties to a dispute concerning the interpretation or application of the provisions of this Convention relating to (1) fisheries, (2) protection and preservation of the marine environment, (3) marine scientific research, or (4) navigation, including pollution from vessels and by dumping, may at any time agree to request a special arbitral tribunal constituted in accordance with article 3 of this Annex to carry out an inquiry and establish the facts giving rise to the dispute. 2. Unless the parties otherwise agree, the findings of fact of the special arbitral tribunal acting in accordance with paragraph 1, shall be considered as conclusive as between the parties. 3. If all the parties to the dispute so request, the special arbitral tribunal may formulate recommendations which, without having the force of a decision, shall only constitute the basis for a review by the parties of the questions giving rise to the dispute.

CONVENTION ON THE HIGH SEAS (1958)

In Force:
09.30.1962

Threats: 13, 24

- Article 2: The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by the other rules of international law. It comprises, inter alia, both for coastal and non-coastal States: 1) Freedom of navigation; 2) Freedom of fishing; 3) Freedom to lay submarine cables and pipelines; 4) Freedom to fly over the high seas. These freedom, and others which are recognised by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas.
- Article 3: 1) In order to enjoy the freedom of the seas on equal terms with coastal States, States having no sea-coast should have free access to the sea... a) To the State having no sea-coast, on a basis of reciprocity, free transit through their territory; and b) To ships flying the flag of that State treatment equal to that accorded to their own ships, or to the ships of any other States, as regards access to seaports and the use of such ports.
- Article 4: Every State, whether coastal or not, has the right to sail ships under its flag on the high seas.
- Article 6: 1) Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in these articles, shall be subject to its exclusive jurisdiction on the high seas. A ship may not change its flag during a voyage or while in a port of call, save in the case of a real transfer of ownership or change of registry. 2) A ship which sails under the flags of two or more States,..., may not claim any of the nationalities in question with respect to any other State, and may be assimilated to a ship without nationality.
- Article 7: The provisions of the preceding articles do not prejudice the question of ships employed on the official service of an inter-governmental organization flying the flag of the organization.
- Article 8: 1) Warships on the high seas have complete immunity from the jurisdiction of any State other than the flag State.
- Article 9: Ships owned or operated by a State and used only on government noncommercial service shall, on the high seas, have complete immunity from the jurisdiction of any State other than the flag State.
- Article 11: 1) In the event of a collision or of any other incident of navigation concerning a

ship on the high seas, involving the penal or disciplinary responsibility of the master or of any other person in the service of the ship, no penal or disciplinary proceedings may be instituted against such persons except before the judicial or administrative authorities either of the flag State or of the State of which such person is a national. 2) In disciplinary matters, the State which has issued a master's certificate or a certificate of competence or license shall alone be competent, after due legal process, to pronounce the withdrawal of such certificates, even if the holder is not a national of the State which issued them. 3) No arrest or detention of the ship, even as a measure of investigation, shall be ordered by any authorities other than those of the flag State.

- Article 24: Every State shall draw up regulations to prevent pollution of the sea by the discharge of oil from ships or pipelines are resulting from the exploitation of the seabed and its subsoil,...
- Article 25: Every state shall take measures to prevent pollution of the sea from the dumping of radio-active waste, taking into account any standards and regulations which may be formulated by the competent international organisations. 2) All States shall cooperate with the competent international organisation in taking measures for the prevention of pollution of the seas or air space above, resulting from any activities with radio-active materials or other harmful agents.
- Article 30: The provisions of this Convention shall not affect conventions or other international agreements already in force, as between States Parties to them.

CONVENTION ON FISHING AND CONSERVATION OF THE LIVING RESOURCES OF THE HIGH SEAS (1958)

In Force:
03.20.1966

Threats: 12, 21, 22, 24, 30

- Preamble:...has exposed some of these resources to the danger of being exploited,
- Article 1: all states have the right for their nationals to engage in fishing on the high seas, subject a) to their treaty obligations, b) to the interests and rights of coastal States as provided for in this Convention, and c) to the provisions contained in the following articles...
- Article 2: conservation programs should be formulated...to securing...first place a supply of food for human consumption.
- Article 3: for its own nationals, measures in that area when necessary for the purpose of the conservation of the living resources affected...
- Article 4: If the nationals of the two or more States are engaged in fishing...enter into negotiations with a view to prescribing by agreement for their nationals...
- Article 5: if, subsequent to the adoption of the measures referred to in articles 3 and 4,...the other states shall apply measures, which shall not be discriminatory...to their own nationals no later than seven months after the date on which the measures shall have been notified to the Director-General of the Food and Agricultural Organization of the United Nations.
- Article 6: 2) A coastal state is entitled to take part on an equal footing in any system of research and regulation...even though its nationals do not carry on fishing there. 3) A State whose nationals are engaged in fishing...adjacent to the territorial sea of a State shall, at the request of that coastal State, enter into negotiations with a view to prescribing by agreement the measures necessary for the conservation...

- Article 8: 1) Any state which, even if its nationals are not engaged in fishing in an area of the high seas not adjacent to its coast, has a special interest in the conservation...may request the State or States whose nationals are engaged in fishing there to take the necessary measures of conservation under Article 3 and 4
- Article 9: 1) Any dispute which may arise between States under article 4, 5, 6, 7, and 8 shall, at the request of parties, be submitted for settlement to a special commission of five members, unless the parties agrees to seek a solution by another method of peaceful settlement, as provided for in Article 33 (UN charter); 3) Any state party to proceeding...shall have the right to name one of its nationals to the special commission, with the right to participate fully...,but without the right to vote or take part in writing of the commission's decision; 7) Decisions of the commission shall be by majority vote.
- Article 11: The decisions of the special commission shall be binding on the States concerned and the provisions of paragraph 2 of Article 94 of the Charter of the United Nations shall be applicable to those decisions.
- Article 12: If the factual basis of the award of the special commission is altered by substantial change...any of the States concerned may request the other States to enter into negotiations...
- Article 13: the regulation of fisheries conducted by means of equipment embedded in the floor of the sea...may be undertaken by that State where such fisheries have long been maintained and conducted by its nationals, provided that non-nationals are permitted to participate...on an equal footing...except in areas where such fisheries have by long usage been exclusively enjoyed by such nationals. Such regulations will not, however, affect the general status of the areas as high seas.
- Article 14: ...term "nationals" means fishing boats or craft of any size having the nationality of the State concerned.

CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION (1979)

Force: 03.16.1983

Threats: 8, 20, 23

- Preamble: "Considering the...provisions of the Declaration of the UN Conference on the Human Environment, and in particular principle 21, which expresses the common conviction that States have...the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."
- Article 2: "The Contracting Parties...are determined to protect man and his environment against air pollution and shall endeavor to limit,...gradually reduce and prevent air pollution including long-range transboundary pollution."
- Article 6: "...each Contracting Party undertakes to develop...air quality management systems, and...control measures compatible with balanced development, in particular by using the best available technology which is economically feasible and low-and non-waste technology."

<i>CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE ESPECIALLY AS WATERFOWL HABITAT (1971)</i>	In Force: 04.18.1987	Threats: 8, 19
<ul style="list-style-type: none"> • Preamble: “Recognizing the interdependence of Man and his environment;...Desiring to stem the progressive encroachment on and loss of wetlands now and in the future;...Being Confident that the conservation of wetlands and their flora and fauna can be ensured by combining far-sighted national policies with coordinated international action;” • Article 2, Number 6: “Each Contracting Party shall consider its international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl, both when designating entries for the List and when exercising its right to change entries in the List relating to wetlands within its territory.” • Article 3, Number 2: “Each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed...to the organization or government responsible for the continuing bureau duties specified in Article 8 (International Union for Conservation of Nature and Natural resources shall perform the continued bureau duties).” • Article 4: “Each Contracting Party shall...establish nature reserves on wetlands...and provide adequately for their warning.” • Article 9: “Any member of the United Nations or of one of the Specialized Agencies or of the International Atomic Energy Agency or Party to the Statute of the International Court of Justice may become a Party to this Convention.” 		
<i>INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION OF THE SEA BY OIL (1954 AS AMENDED ON 1962 AND 1969)</i>	In Force: 12.08.1961	Threats: 10, 12, 31
<ul style="list-style-type: none"> • Article II: 1) The present Convention shall apply to ships registered in any of the territories of a Contracting Government and to unregistered ships having the nationality of a Contracting Party, except: a) a tanker of under 150 tons gross tonnage and other ships of under 500 tons gross tonnage...b) ships...engaged in the whaling industry...; c) ships...navigating the Great Lakes of North American and their connecting and tributary waters as far east as the lower exit of St. Lambert Lock at Montreal...; d) naval ships and ships...used as naval auxiliaries. • Article III: a) the discharge from a ship...applies, other than a tanker, of oil or oil mixture shall be prohibited except when the following conditions are all satisfied: I) the ship is proceeding en route; ii) the instantaneous rate of discharge of oil content does not exceed 60 liters per mile; iii) the oil content of the discharge is less than 100 parts per 1,000,000 parts of mixture; iv) the discharge is made as far as practicable from land. b) the discharge from a tanker to which the present Convention applies of oil or oily mixture shall be prohibited except when the following conditions are all satisfied: I) the tanker is proceeding en route; ii) the instantaneous rate of discharge of oil content does not exceed 60 liters per mile; iii) the total quantity of oil discharged on a ballast voyage does not exceed 1/15,000 of the total cargo-carrying capacity; iv) the tanker is more than 50 miles from the nearest land; c) the provisions of sub-paragraph (b) of this Article shall not apply to: i) the discharge of ballast from a cargo tank which, since the cargo was last carried 		

therein, has been so cleaned that any effluent therefrom, if it were discharged from a stationary tanker into clean calm water on a clear day, would produce no visible traces of oil on the surface of the water; or ii) the discharge of oil or oily mixture from machinery space bilges, which shall be governed by the provisions of sub-paragraph (a) of this Article.

- Article IV: Article III shall not apply to: a) the discharge of oil or of oily mixture from a ship for the purpose of securing the safety of a ship, preventing damage to a ship or cargo, or saving life at sea; b) the escape of oil or of oily mixture resulting from damage to a ship or unavoidable leakage, if all reasonable precautions have been taken after the occurrence of the damage or discovery of the leakage for the purpose of preventing or minimizing the escape.
- Article V: Article III shall not apply to the discharge of oily mixture from the bilges of a ship during the period of twelve months following the date on which the present Convention comes into force for the relevant territory in accordance with paragraph (1) of Article II.
- Article VI: 1) Any contravention of Articles III and IX shall be an offense punishable under the law of the relevant territory in respect of the ship in accordance with paragraph (1) of Article II. 2) The penalties which may be imposed under the law of any of the territories of a Contracting Government in respect of the unlawful discharge from a ship of oil or oily mixture outside the territorial sea of that territory shall be adequate in severity to discourage any such unlawful discharge and shall not be less than the penalties which may be imposed under the law of that territory in respect of the same infringements within the territorial sea. 3) Each Contracting Government shall report to the Organization the penalties actually imposed for each infringement.
- Article X: 1) Any Contracting Government may furnish to the Government of the relevant territory in respect of the ship in accordance with paragraph (1) of Article II particulars in writing of evidence that any provision of the present Convention has been contravened in respect of that ship, wheresoever the alleged contravention may have taken place. If it is practicable to do so, the competent authorities of the former Government shall notify the master of the ship of the alleged contravention. 2) Upon receiving such particulars, the Government so informed shall investigate the matter, and may request the other Government to furnish further or better particulars of the alleged contravention. If the Government so informed is satisfied that sufficient evidence is available in the form required by its law to enable proceedings against the owner or master of the ship to be taken in respect of the alleged contravention, it shall cause such proceedings to be taken as soon as possible. The Government shall promptly inform the Government whose official has reported the alleged contravention, as well as the Organization, of the action taken as a consequence of the information communicated.
- Article XI: Nothing in the present Convention shall be construed as derogating from the powers of any Contracting Government to take measures within its jurisdiction in respect of any matter to which the Convention relates or as extending the jurisdiction of any Contracting Government.
- Article XIII: Any dispute between Contracting Governments relating to the interpretation or application of the present Convention which cannot be settled by negotiation shall be referred at the request of either party to the International Court of Justice for decision unless the parties in dispute agree to submit it to arbitration.

<ul style="list-style-type: none"> Article XIX: 1) In case of war or other hostilities, a Contracting Government which considers that it is affected...may suspend the operation of the whole or any part of the present Convention in respect of all or any of its territories. The suspending Government shall immediately give notice of any such suspension to the Bureau. 		
<i>INTERNATIONAL CONVENTION TO COMBAT DESERTIFICATION IN COUNTRIES EXPERIENCING SERIOUS DROUGHT AND/OR DESERTIFICATION, PARTICULARLY IN AFRICA (1994)</i>	In Force: 12.26.1996	Threats: 10, 12, 13, 15, 18, 23
<ul style="list-style-type: none"> Preamble: Recognizing the validity and relevance of decisions adopted at the United Nations Conference on Environment and Development, particularly of Agenda 21 and its chapter 12..., Reaffirming...the commitments of developed countries as contained in paragraph 13 of chapter 33 of Agenda 21, Recalling General Assembly resolution 47/188,... Reaffirming the Rio Declaration on Environment and Development which states, in its Principle 2, that States have...the sovereign right to exploit their own resources pursuant to their environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction. Part II Article 4: 2) In pursuing the objective of this Convention, the Parties shall: a) adopt an integrated approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought; b) give due attention, within the relevant international and regional bodies, to the situation of affected developing country Parties with regard to international trade, marketing arrangements and debt with a view to establishing an enabling international economic environment conducive to the promotion of sustainable development; c) integrate strategies for poverty eradication into efforts to combat desertification and mitigate the effects of drought; d) promote cooperation among affected country Parties...; e) strengthen subregional, regional and international cooperation; f) cooperate within relevant intergovernmental organizations; g) determine institutional mechanisms...; and h) promote the use of existing bilateral and multilateral financial mechanisms and... 3) Affected developing country Parties are eligible for assistance... Article 5:...Parties undertake to: a) give...priority to combating desertification and mitigating the effects of drought,...; b) establish strategies and priorities, within the framework of sustainable development plans and/or policies, to combat desertification and mitigate the effects of drought; c) address the underlying causes of desertification and pay special attention to the socio-economic factors contributing to desertification processes; d) promote awareness and facilitate the participation of local populations...; and e) provide an enabling environment by strengthening, as appropriate, relevant existing legislation and, where they do not exist, enacting new laws and establishing long-term policies and action programs. Article 6: In addition...developed country Parties undertake to: a) actively support,...the efforts of affected developing country Parties...; b) provide substantial financial resources and other forms of support to assist affected developing country Parties...; c) promote the mobilization of new and additional funding pursuant to article 20, paragraph 2 (b); d) encourage the mobilization of funding from the private sector and other non-governmental sources; and e) promote and facilitate access by affected country Parties, particularly 		

<p>affected developing country Parties, to appropriate technology, knowledge and know-how.</p> <ul style="list-style-type: none"> • Article 28: 1) Parties shall settle any dispute between them concerning the interpretation or application of the Convention through negotiation or other peaceful means of their own choice. 2) When ratifying, accepting, approving, or acceding to the Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute concerning the interpretation or application of the Convention, it recognizes one or both of the following means of dispute settlement as compulsory in relation to any Party accepting the same obligation: a) arbitration in accordance with procedures adopted by the Conference of the Parties in an annex as soon as practicable; b) submission of the dispute to the International Court of Justice. 3) A Party which is a regional economic integration organization may make a declaration with like effect in relation to arbitration in accordance with the procedure referred to in paragraph 2 (a). 4) A declaration made pursuant to paragraph 2 shall remain in force until it expires in accordance with its terms or until three months after written notice of its revocation has been deposited with the Depositary. 5) The expiry of a declaration, a notice of revocation or a new declaration shall not in any way affect proceedings pending before an arbitral tribunal or the International Court of Justice unless the Parties to the dispute otherwise agree. 6) If the Parties to a dispute have not accepted the same or any procedure pursuant to paragraph 2 and if they have not been able to settle their dispute within twelve months following notification by one Party to another that a dispute exists between them, the dispute shall be submitted to conciliation at the request of any Party to the dispute, in accordance with procedures adopted by the Conference of the Parties in an annex as soon as practicable. 		
<i>INTERNATIONAL TROPICAL TIMBER AGREEMENT (1983)</i>	In Force: 04.01.1985	Threats: 15, 17
<ul style="list-style-type: none"> • Chapter 1 Article 1 (a) To provide an effective framework for cooperation and consultation between tropical timber producing and consuming members with regard to all relevant aspects of the tropical timber economy: • Article 5: “having responsibilities in respect of the negotiation, conclusion and application of international agreements, in particular commodity agreements.” • Article 14, 1. “The Council shall make whatever arrangements are appropriate for consultation or co-operation with the United Nations and its organs, such as the United Nations Conference on Trade and Development (UNCTAD),” (UNIDO), (UNEP), (UNDP), (FAO), and UNCTAD/GATT (ITC). • Chapter VII Article 23: The Council shall examine all project proposals in the fields of research and development...[these] Research and development projects should relate to at least one of the following five areas: (a) Wood utilization, (b) Natural forest development, (c) Reforestation, (d) development, (e) Harvesting, (f) Institutional framework, national planning • Article 24: Establishment of (b) Committee on Reforestation and Forest Management; • Article 25: Function of the Committee: 2. “The Committee on Reforestation and Forest Management shall: (a) Keep under regular review the support and assistance being provided at a national and international level for reforestation management for the production of industrial;, (b)Encourage the increase of technical assistance to national programs for reforestation and forest management; (c)Assess the requirements and identify 		

all possible sources of financing for reforestation and forest management; (d)Review regular future needs of international trade...; (e)Facilitate transfer of knowledge...; Co-ordinate and harmonize these activities for co-operation in the field of reforestation and forest management with the relevant activities pursued elsewhere, such as those under FAO, UNEP, the World Bank, regional banks and other competent organizations.		
<i>INTERNATIONAL TROPICAL TIMBER AGREEMENT (1994)</i>	In Force: 01.01.1997	Threats: 15, 17
<ul style="list-style-type: none"> • Article 31: 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. • Article 32: 1) Members shall...use their best endeavours and cooperate to promote the attainment of its objectives and to avoid any action contrary thereto. 2) Members undertake to accept and carry out the decisions of the Council under the provisions of this Agreement and shall refrain from implementing measures which would have the effect of limiting or running counter to them. • Article 33: 1) Where it is necessary on account of exceptional circumstances or emergency or force majeure not expressly provided for in this Agreement, the Council may, by special vote, relieve a member of an obligation under this Agreement if it is satisfied by an explanation from that member regarding the reasons why the obligation cannot be met. 2) The Council, in granting relief to a member under paragraph 1 of this article, shall state explicitly the terms and conditions on which, and the period for which, the member is relieved of such obligation, and the reasons for which the relief is granted. • Article 34: 1) Developing importing members whose interests are adversely affected by measures taken under this Agreement may apply to the Council for appropriate differential and remedial measures. The Council shall consider taking appropriate measures in accordance with section III, paragraphs 3 and 4, of resolution 93 (IV) of the United Nations Conference on Trade and Development. 2) Members in the category of least developed countries as defined by the United Nations may apply to the Council for special measures in accordance with section III, paragraph 4, of resolution 93 (IV) and with paragraphs 56 and 57 of the Paris Declaration and Programme of Action for the Least Developed Countries for the 1990s. • Article 36: Nothing in this Agreement authorizes the use of measures to restrict or ban international trade in, and in particular as they concern imports of and utilization of, timber and timber products. 		
<i>PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS 1973 (1978)</i>	In Force: 10.02.1983	Threats: 10, 13, 22
<ul style="list-style-type: none"> • Article VII (Denunciation): 1) The present Protocol may be denounced by any Party to the present Protocol at any time after the expire of five years from the date on which the Protocol enters into force for that Party • International Convention for the Prevention of Pollution from Ships, 1973 • Preamble: recognizing that deliberate, negligent or accidental release of oil and other 		

<p>harmful substances from ships constitutes a serious source of pollution.</p> <ul style="list-style-type: none"> • Article 1 (General Obligation under the convention): constitutes at the same time a reference to its Protocol and to the Annexes. • Article 3 (application): 2) shall be construed as derogating from or extending the sovereign rights of the Parties under international law over the sea-bed and subsoil thereof adjacent to their coasts for the purpose of exploration and exploitation of their natural resources. 3) Shall not apply to any warships, naval auxiliary or other ship owed or operated by a State and used, for the time being only on government non-commercial service... • Article 4 (Violation): 1) ...violations...prohibited and sanctions shall be established therefor under the law of the Administration of the ship concerned wherever the violation occurs. 2) Whenever and violations occurs, the Party shall either: a) cause proceedings to be taken in accordance with its law; or b) furnish to the Administration of the ship such information and evidence as may be in its possessions that a violation has occurred. 4) The penalties specified under the law of a Party pursuant to the present Article shall be adequate in severity to discharge violations of the present Convention and shall be equally severe irrespective of where the violations occur. • Article 5 (certificates and special rules on inspection of ships) 2). ...or if the ship does not carry a valid certificate the Party carrying out the inspection shall take such steps as will ensure that presenting an unreasonable threat of harm to the marine environment. 3) If a party denies a foreign ship entry...the Party shall immediately inform the consul or diplomatic representative of the Party whose flag the ship is entitled to fly, or if this is not possible, the Administration of the ship concerned. • Article 6 (Detection of violation and enforcement of the Convention): 2) ...in any port or off-shore terminal of a Party, be subject to inspection by officers appointed or authorized by that Party for the purpose of verifying whether the discharged any harmful substances... • Article 7 (Undue delay to ships): 2) when a ship is unduly detained or delayed under Article 4, 5, 6 of the present Convention, it shall be entitled to compensation for any loss or damage suffered. • Article 9 (other treaties and interpretation): 1) upon its entry into force, the present Convention supersedes the International Convention for the Prevention of the Sea by Oil, 1954... 3) the term "jurisdiction" ...shall be construed in the light of international law in force at the time of application or interpretation of the present Convention. • Article 10 (settlement of disputes) ...if the settlement by negotiation between the Parties involved has not been possible, and if these Parties do no otherwise agree, be submitted upon request of any of them to arbitration as set out in Protocol II. 		
<p><i>PROTOCOL TO THE 1979 CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION CONCERNING THE CONTROL OF EMISSIONS OF NITROGEN OXIDES OR THEIR TRANSBOUNDARY FLUXES (1988)</i></p>	<p>In Force: 2.14.1991</p>	<p>Threats: 2, 20</p>
<ul style="list-style-type: none"> • Article 2: 1) the Parties shall...take effective measures to control and/or reduce their national annual emissions of nitrogen oxides or their transboundary fluxes so that these, at the latest by 31 December 1994, do not exceed their national annual emissions of nitrogen oxides or transboundary fluxes of such emissions for the calendar year 1987 or any previous year to be specified upon signature of, or accession to, the Protocol, provided that 		

in addition, with respect to any Party specifying such a previous year, its national average annual transboundary fluxes or national average annual emissions of nitrogen oxides for the period from 1 January 1987 to 1 January 1996 do not exceed its transboundary fluxes or national emissions for the calendar year 1987. 2) ...the Parties...no later than two years after the date of entry into force...: a) apply national emissions standards to major new stationary sources and/or source categories, and to substantially modified stationary sources in major source categories, based on the best available technologies which are economically feasible, taking into consideration the Technical Annex; b) apply national emission standards to new mobile sources in all major source categories based on the best available technologies which are economically feasible, taking into consideration the Technical Annex and the relevant decisions taken within the framework of the Inland Transport Committee of the Commission; and c) Introduce pollution control measures for major existing stationary sources, taking into consideration the Technical Annex and the characteristics of the plant, its age and its rate of utilization and the need to avoid undue operational disruption. 3) a) The parties shall...no later than six months after the date of entry into force...reduce national annual emissions of nitrogen oxides or transboundary fluxes of such emissions... b) ...the Parties shall co-operate in order to establish: I) critical loads; ii) reductions in national annual emissions of nitrogen oxides or transboundary fluxes of such emissions as required to achieve agreed objectives based on critical loads;...

- Article 4: The Parties shall...make unleaded fuel sufficiently available...to facilitate the circulation of vehicles equipped with catalytic converters.
- Article 12: If a dispute arises between two or more Parties as to the interpretation or application of the present Protocol, they shall seek a solution by negotiation or by any other method of dispute settlement acceptable to the parties to the dispute.
- Article 13: 2) In matters within their competence, such regional economic integration organization shall...exercise the rights and fulfil the responsibilities which the present Protocol attributes to their member States. In such cases, the member States of these organizations shall not be entitled to exercise such right individually.

<i>THE ANTARCTIC TREATY (1959)</i>	In Force: 06.23.1961	Threats: 5
<ul style="list-style-type: none"> • Preamble: ...it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purpose and shall not become the scene or object of international discord; • Article 1: 1) Antarctica shall be used for peaceful purpose only. There shall be prohibited, inter alia, any measure of a military nature, such as the establishment of military bases and fortifications the carrying out of military maneuvers, as well as testing of any types of weapons. 2) The...treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purpose. • Article IV: 1) Nothing contained in the present Treaty shall be interpreted as: a) a renunciation by an Contracting Party of previously asserted rights of or claims to territorial sovereignty in Antarctica; b) a renunciation or diminution by an Contracting Party of any basis of claim to territorial sovereignty in Antarctica which it may have whether as a result of its activities or those of its nationals in Antarctica...c) prejudicing the position...as regards its recognition or non-recognition of any other State's right of or claim or basis of claim to territorial sovereignty in Antarctica. 		

<ul style="list-style-type: none"> • Article V: Any nuclear explosions in Antarctica and the disposal there of radioactive waste material shall be prohibited. • Article VI: The provisions...shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing...shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area. • Article VII: 1) in order to promote the objectives and ensure the observance of the provisions...each...representatives entitled to participate in the meetings...have the right to designate observers to carry out any inspection...2) each observer...shall have complete freedom to access at any time to any or all areas of Antarctica. 4) Aerial observation may be carried out at any time over any or all areas of Antarctica by any of the Contracting Parties... • Article XI: 1) If any dispute arises between two or more...Parties concerning the interpretation or application of the present Treaty, those...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. 2) Any dispute of this character not resolved ...with the consent,...of all parties to the dispute, be referred to the International Court of Justice for settlement; but failure to reach agreement or reference to the International Court shall not absolve parties to the dispute from the responsibility of continuing to seek to resolve it by any of the various peaceful means referred to in paragraph 1 of this Article. 		
<p><i>CONVENTION ON CIVIL LIABILITY FOR DAMAGE RESULTING FROM ACTIVITIES DANGEROUS TO THE ENVIRONMENT (1993)</i></p>	<p>Not in Force: Signed by nine European countries. (none of them ratified)</p>	<p>Threat: 2, 3, 5, 8, 9, 22, 23, 28</p>
<ul style="list-style-type: none"> • Preamble: “..emissions released in one country may cause damage in another country and that...the problems of adequate compensation...are also of an international nature” • Preamble: “Having noted Principle 13 of the 1992 Rio Declaration on Environment and Development, according to which “States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage; they shall also co-operate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.” • Article 2: Definitions: 10: “Environment includes: natural resources both biotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors; property which forms part of the cultural heritage; and the characteristic aspect of the landscape.” • Article 6 and 7 (all) deals with Liability: : example: “If an incident consists of a continuous occurrence, all operators successively exercising the control of the dangerous activity during the occurrence shall be jointly and severally liable.” • Article 8: Exemptions: “(a) was caused by an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exception, inevitable and irresistible character.” • Article 14: 1: “Any person shall, at his request and without his having to prove an interest, 		

<p>have access to information relating to the environment held by public authorities.”</p> <ul style="list-style-type: none"> • Article 15: “On the same terms...as those set out in Article 14 any person shall have access to information relating to the environment held by bodies with public responsibilities for the environment and under the control of a public authority. Access shall be given via the competent public administration or directly by the bodies themselves.” • Article 18: Requests by Organizations: 1. “Any association or foundation which according to its statutes aims at the protection of the environment and which complies with any further conditions of international law of the Party where the request is submitted may request: a) the prohibition of a dangerous activity which is unlawful and poses a grave threat to the environment; b) that the operator be ordered to take measures to prevent an incident or damage; c) that the operator be ordered to take measures...to prevent damage;” • Article 23: Recognition and Enforcement: 1. “Any decision given by a court with jurisdiction in accordance with Article 19 above where it is no longer subject to ordinary forms of review, shall be recognized in any Party...2. A decision which is enforceable in the Party of origin shall be enforceable in each Party as soon as the formalities required by that Party have been completed. • Chapter VI: Standing Committee, Article 26: The Standing Committee: 1. “For the purposes of this Convention, a Standing Committee is hereby set up...7. The Standing Committee shall be convened by the Secretary General of the Council of Europe. It shall meet whenever one-third of the Parties or the Committee of Ministers of the Council of Europe so request.” Article 27-Functions of the Standing Committee: “The Standing Committee shall keep under review problems relating to this Convention...a) consider any question of a general nature referred to it concerning interpretation or implementation of the Convention. The Standing Committee’s conclusions concerning implementation of the Convention may take the form of a recommendation:” • Article 34: Territories: 1. “Any Signatory may...specify the territory or territories to which this Convention shall apply.” 		
<p><i>INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND CO-OPERATION (1990)</i></p>	<p>In force: 05.13.1995</p>	<p>Threats: 10</p>
<ul style="list-style-type: none"> • Preamble: Taking account of the “polluter pays” principle as a general principle of international environmental law, taking account also of the importance of international instruments or liability and compensation for oil pollution damage, including the 1969 International Convention on Civil Liability for Oil Pollution Damage (CLC); and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND);... • Article 1: 1) Parties undertake,...all appropriate measures...to prepare for and respond to an oil pollution incident. 3) This Convention shall not apply to any warships, naval auxiliary or other ship owned or operated by a State and used,...only on government non-commercial service. However, each party shall ensure by the adoption of appropriate measures not impairing the operations or...capabilities of such ships...so far as is reasonable and practicable, with this Convention. • Article 3: 1) a) Each Party shall require that ships...have on board a shipboard oil pollution emergency plan as required by...the Organization (International Maritime Organization) 2) Each Party shall require that operators of offshore units...have oil pollution emergency 		

<p>plan, which are co-ordinated with the national system... 3) Each Party shall require authorities...in charge of such sea ports and oil handling facilities...have oil pollution emergency plan or similar arrangements which are co-ordinated with the national system...</p> <ul style="list-style-type: none"> • Article 4: 1) a) ...require...to report without delay any event on their ship or offshore unit involving a discharge or probable discharge of oil: I) ...ship, to the nearest coastal state; ii) ...offshore unit, to the coastal State to whose jurisdiction that unit is subject; b) require...to report...any observed event at the sea involving discharge of oil or the presence of oil: I) ...ship, nearest coast State; ii) ...offshore unit, to the coastal State to whose jurisdiction the unit is subject; c) require...to report...any event involving a discharge of oil or probable discharge of oil or the presence of oil to the competent national authority; d) instruct...appropriate services...to report...any observed event at sea or at a sea port or oil handling facility involving discharge of oil or the presence...to the competent authority or,...to the nearest coastal State; e) request the pilots of civil aircraft to report...observed event at sea involving discharge of oil or the presence...to the coastal State. • Article 5: 1) Whenever a Party receives a report...it shall: a) assess the event to determine whether its is an oil pollution incident; b) assess the nature, extent and possible consequences of the oil pollution incident; and c)...inform all States whose interests are affected or likely to be affected... 3) When the severity of such oil pollution incident so justifies, other States affected by it are urged to inform the Organization...or...through regional organizations or arrangements of their assessment of the extent of the threat to their interests any action taken or intended. 4) Parties should use...reporting system developed by the Organization... (annex ...contained in the Manual on Oil Pollution, section II - Contingency Planning, appendix 2...) • Article 6: Each party shall establish a national system for responding promptly and effectively to oil pollution incidents. The system shall include a minimum: a) the designation of: I)...competent national authority...ii) the national operational contact point...iii) an authority which is entitled to act on behalf of the State... b) a national contingency plan...which includes the organizational relationship of the various bodies involved...taking into account guidelines developed by the Organization. 2) In addition, each Party...shall establish: a) a minimum level of pre-positioned oil spill combating equipment; b) a program of exercise for oil pollution...c) detailed plans of exercises for oil pollution...d) a mechanism or arrangement to co-ordinate the response to an oil pollution incident... • Article 11: Nothing in this Convention shall be construed as altering the rights or obligations of any Party under any other convention or international agreement. 		
<p><i>CONVENTION ON THE TRANSBOUNDARY EFFECTS OF INDUSTRIAL ACCIDENTS (1992)</i></p>	<p>Not in force</p>	<p>Threats: 11, 20, 23</p>
<ul style="list-style-type: none"> • Preamble: ...the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction, Taking account of the polluter pays principle as a general principle of international environmental law, Underlining the principle of international law and custom, in particular the principles of good-neighborliness, 		

reciprocity, non-discrimination and good faith,

- Article 2: 1) ...shall apply to the prevention of, preparedness for and response to industrial accidents capable of causing transboundary effects, including the effects of such accidents caused by natural disasters, and to international co-operation concerning mutual assistance, research and development, exchange of information and exchange of technology in the area of prevention of, preparedness for and response to industrial accidents. 2) ...shall not apply to: a) nuclear accidents or emergencies; b) accidents at military installations; c) dam failures, with the exception of the effects of industrial accidents caused by such failures; d) land-based transport accidents with the exception of: I) emergency response to such accidents; ii) transportation on the site of the hazardous activity; e) accidental release of genetically modified organism; f) accidents caused by activities in the marine environment including seabed exploration or exploitation; g) spills of oil or other harmful substances at sea.
- Article 3: 1) The Parties shall...take...measures...to protect human beings and the environment against industrial accidents,...by reducing their frequency and severity and by mitigating their effects. 2) The Parties shall...develop and implement policies and strategies for reducing the risk of industrial accidents and improving preventive preparedness and response measures... 3) The Parties shall ensure that operators is obliged to take all measures necessary for the safe performance of the hazardous activity and for the prevention of industrial accidents. 5) The provisions of this Convention shall not prejudice any obligations of the Parties under international law with regard to industrial accidents and hazardous activities.
- Article 4: 1) For the purpose of undertaking preventive measures and setting up preparedness measures, the Party of origin shall take measures...to identify hazardous activities within its jurisdiction and to ensure that affected Parties are notified of any such proposed or existing activity. 2) Parties concerned shall...enter into discussions on the identification of those hazardous activities...capable of causing transboundary activity. If the Parties concerned do not agree...submit that question to an inquiry commission...
- Article 5: Parties concerned should...enter into discussion on whether to treat an activity no covered by Annex I as a hazardous activity. Upon mutual agreement, they may use an advisory mechanism of their choice, or an inquiry commission in accordance with Annex II, to advise them.
- Article 7:the Party of origin shall...seek the establishment of policies on the siting of new hazardous activities.the affected Parties shall seek the establishment of policies on significant developments in areas which could be affected by transboundary effects on an industrial accident arising out of a hazardous activity so as to minimize the risks involved.
- Article 8: 1) The Parties shall...maintain...emergency preparedness to respond to industrial accidents. In particular, the Parties concerned shall inform each other of their contingency plans. 2) The Parties of origin shall ensure...preparation and implementation of on-site contingency plans, including...measures for response and other measures to prevent and minimize transboundary effects.
- Article 9: 1) The Parties shall ensure that adequate information is given to the public in the areas capable of being affected by an industrial accident... 2) The Party of origin shall...give the public in the areas capable of being affected an opportunity to participate in relevant procedure... 3) The Parties shall, in accordance with their legal systems and, if desired, on a reciprocal basis provide natural and legal persons who are being or are

capable of being adversely affected by the transboundary effects of an industrial accident in the territory of a Party, with access to, and treatment in the relevant administrative and judicial proceedings, including the possibilities of starting a legal action and appealing a decision affecting their rights, equivalent to those available to persons within their own jurisdiction.

- Article 10: 1) The Parties shall...provide for the establishment and operation of compatible and efficient industrial accident notification systems at appropriate levels. 2) In the event of an industrial accident, or imminent threat thereof, which causes or is capable of causing transboundary effects, the Party of origin shall ensure that affected Parties are without delay, notified at appropriate levels through the industrial accident notification systems. ... 3) The Parties concerned shall ensure that...the contingency plans prepared in accordance with Article 8 are activated as soon as possible and to the extent appropriate to the circumstances.
- Article 11: 1) The Parties shall ensure that...adequate response measures are taken,...to contain and minimize effects. 2) In the event of an industrial accident...capable of causing transboundary effects, the parties concerned shall ensure that the effects are assessed...for the purpose of taking adequate response measures. ...
- Article 17: 1) Each Party shall designate or establish one or more competent authorities for the purposes of this Convention. 2) Without prejudice to other arrangements at the bilateral or multilateral level, each Party shall designate or establish one point of contact for the purpose of industrial accident the purpose of mutual assistance pursuant to Article 12. 3) Each Party shall, within the three months of the date of entry into force of this Convention for that Party, inform the other Parties, through the secretariat referred to in Article 20, which body or bodies it has designated as its point(s) of contact and as its competent authority or authorities.
- Article 21: 1) If a dispute arises between two or more Parties about the interpretation or application of this Convention, they shall seek a solution by negotiation or by any other method of dispute settlement acceptable to the parties to the dispute. 2) When signing, ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a Party may declare in writing to the Depositary that, for a dispute not resolved in accordance with paragraph 1 of this Article, it accepts one or both of the following means of dispute settlement as compulsory in relation to any Party accepting the same obligation: a) submission of the dispute to the International Court of Justice; b) arbitration in accordance with the procedure set out in Annex XIII hereto. 3) If the parties to the dispute have accepted both means of dispute settlement referred to in paragraph 2 of this Article, the dispute may be submitted only to the International Court of Justice, unless the parties to the dispute agree otherwise.
- Article 22: 1) The provisions of this Convention shall not affect the rights or the obligations of Parties in accordance with their national laws, regulations, administrative provisions or accepted legal practices and applicable international regulations to protect information related to personal data, industrial and commercial secrecy, including intellectual property, or national security. 2) If a Party nevertheless decides to apply such protected information to another Party, this Party receiving such protected information shall respect the confidentiality of the information received and the conditions under which it is supplied, and shall only use that information for the purpose for which it was supplied.
- Annex XIII: 1) the claimant Party or Parties shall notify the secretariat that the Parties have

agreed to submit the dispute to arbitration pursuant to Article 21, paragraph 2 of this Convention. The notification shall state the subject-matter of arbitration and include, in particular the Articles of this Convention, the interpretation or application of which is at issue. The secretariat shall forward the information received to all Parties to this Convention. 5) The arbitral tribunal shall render its decision in accordance with international law and in accordance with the provision of this Convention. 6) any arbitral tribunal constituted under the provisions set out herein shall draw up its own rules of procedure. 8) The tribunal may take all appropriate measure to establish the facts. 11) The arbitral tribunal may...recommend interim measures of protection. 12) If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal or continue the proceedings and to render its final decision. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings and to render its final decision. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings. 13) The arbitral tribunal may hear and determine counter-claims arising directly out of the subject-matter of the dispute. 14) Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the expenses of the tribunal, including the remuneration of its members, shall be borne equally by the parties to the dispute. The tribunal shall keep a record of all its expenses and shall furnish a final settlement thereof to the parties to the dispute. 15) Any Party to this Convention which has an interest of a legal nature in the subject-matter of the dispute and which may be affected by a decision in the case, may intervene in the proceedings with the consent of the tribunal. 16) The arbitral tribunal shall render its award within five months of the date on which it is established unless it finds it necessary to extend the time-limit for a period which should not exceed five months. 17) The award of the arbitral tribunal shall be accompanied by a statement of reasons. It shall be final and binding upon all parties to the dispute. The award will be transmitted by the arbitral tribunal to the parties to the dispute and to the secretariat. The secretariat will forward the information received to all Parties to this Convention. 18) Any dispute which may arise between the parties concerning the interpretation or execution of the award may be submitted by either party to the arbitral tribunal which made the award or, if the latter cannot be seized thereof, to another tribunal constituted for this purpose in the same manner as the first.

CONVENTION FOR THE PREVENTION OF MARINE POLLUTION FROM LAND-BASED SOURCES (1974)

In Force:
06.05.1978

Threat: 22

- Article 1: 1) The Contracting Parties pledge themselves to take all possible steps to prevent pollution of the sea... 2) The Contracting parties...shall adopt... measures to combat marine pollution from land-based sources...
- Article 2: the present convention shall apply to the maritime area within the following limits: a) those parts of the Atlantic and Arctic Oceans and the dependent seas which lie north of 36 deg. North latitude and between 42 deg. West longitude and 51 deg east longitude, but excluding: i) the Baltic Sea and Belts lying to the south and east of lines drawn from Hasenore Head to Gniben Point, from Korshage to Spodsbjerg and from Gilbjerg Head to Kullen and ii) the Mediterranean Sea and its dependent seas as far as the point of intersection of the parallel of 36 deg. north latitude and the meridian of 5 deg. 36' west longitude; (b) that part of the Atlantic Ocean north of 59 deg. north latitude and

between 44 deg. west longitude and 42 deg. west longitude.

- Article 5: 1) The Contracting Parties undertake to adopt measures to forestall and...eliminate pollution of the maritime area from land-based sources by radioactive substances... 2) Without prejudice to their obligations under other treaties and conventions,... Contracting Parties shall: a) take full account of the recommendations of the appropriate international organisation and agencies; b) take account of the monitoring procedure recommended by international organisations and agencies; c) co-ordinate their monitoring and study of radioactive substances in accordance with Article 10 and 11...
- Article 9: 1)When pollution from land-based sources originating from the territory of a Contracting Party by substances not listed in Part I of Annex A to the present convention is likely to prejudice the interests of one or more of the other parties to the present convention, the Contracting Parties concerned undertake to enter into consultation, at the request of any one of them, with a view to negotiating a cooperation agreement. 2) At the request of any Contracting Party concerned, the Commission referred to in Article 15 of the present convention shall consider the question and may make recommendations with a view to reaching a satisfactory solution. 3) The special agreements specified in paragraph 1 of this Article may, among other things, define the areas to which they shall apply, the quality objectives to be achieved, and the methods for achieving these objectives including methods for the application of appropriate standards and the scientific and technical information to be collected. 4) The Contracting Parties signatory to these special agreements shall, through the medium of the Commission, inform the other Contracting Parties of their purport and of the progress made in putting them into effect.
- Article 12: 1) Each Contracting Party undertakes to ensure compliance with the provisions of this convention and to take in its territory appropriate measures to prevent and punish conduct in contravention of the provisions of the prevent Convention.
- Article 15: A Commission composed of representatives of each of the Contracting Parties is hereby established. The Commission shall meet at regular intervals and at any time when due to special circumstances its is so decided in accordance with its rules of procedure.
- Article 21: Any dispute between Contracting Parties relating to the interpretation or application of the present convention, which cannot be settled otherwise by the parties concerned, for instance by means of inquiry or conciliation within the Commission, shall, at the request of any of those parties, be submitted to arbitration under the conditions laid down in Annex B....
- Annex B Article 5: 1) The arbitral tribunal shall decide according to the rules of international law and, in particular, those of this convention. 2) Any arbitral tribunal constituted under the provisions of the Annex shall draw up its own rules of procedure.
- Annex Article 6: 2) The tribunal may take all appropriate measures in order to establish facts. It may, at the request of one of the parties, recommend essential interim measures of protection. 4) The parties to the dispute shall provide all facilities necessary for the effective conduct of the proceedings. 5) The absence or default of a party to the dispute shall not constitute impediment to the proceedings.
- Annex Article 6: 1) The award of the tribunal shall be accompanied by a statement of reason. It shall be final and binding upon the parties to the dispute.

<p><i>VIENNA CONVENTION FOR THE PROTECTION OF THE OZONE LAYER (1985)</i></p>	<p>In Force: 09.22.1988</p>	<p>Threats: 1, 8</p>
<ul style="list-style-type: none"> • Article 2: 1) The Parties shall take appropriate measures in accordance with the provisions of this Convention and of those protocols in force to which they are party 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. 3) The provisions of this Convention shall in no way affect the right of Parties to adopt, in accordance with international law, domestic measures additional to those referred to in paragraphs 1 and 2 above, nor shall they affect additional domestic measures already taken by a Party, provided that these measures are not incompatible with their obligations under this Convention. • Article 11: 1) In the event of a dispute between Parties concerning the interpretation or application of this Convention, the parties concerned shall seek solution by negotiation. 2) If the parties concerned cannot reach agreement by negotiation, they may jointly seek the good offices of, or request mediation by, a third party. 3) When 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 in accordance with paragraph 1 or paragraph 2 above, it accepts one or both of the following means of dispute settlement as compulsory: a) Arbitration in accordance with procedures to be adopted by the Conference of the Parties at its first ordinary meeting; b) Submission of the dispute to the International Court of Justice. 4) If the parties have not, in accordance with paragraph 3 above, accepted the same or any procedure, the dispute shall be submitted to conciliation in accordance with paragraph 5 below unless the parties otherwise agree. 5) A conciliation commission shall be created upon the request of one of the parties to the dispute. The commission shall be composed of an equal number of members appointed by each party concerned and a chairman chosen jointly by the members appointed by each party. The commission shall render a final and recommendatory award, which the parties shall consider in good faith. 6) The provisions of this article shall apply with respect to any protocol except as otherwise provided in the protocol concerned. 		
<p><i>THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER (1987)</i></p>	<p>In Force: 01.01.1989 Adjustment: 03.07.'91 Amendment: 08.10.'92</p>	<p>Threats: 1, 8</p>
<ul style="list-style-type: none"> • Preamble: ...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...aware that measures taken to protect the ozone layer from depletion should be based on relevant scientific knowledge, taking into account technical and economic consideration • Article 1 (Definition): definitions for 'conventions', 'parties', 'secretariat', 'controlled substance', 'production', 'consumption', 'calculated levels', and 'industrial rationalization'. • Article 2 (Control Measures): 5) any party not operating under paragraph 1 of Article 5 may, for one or more control periods, transfer to another such Party any portion of its 		

calculated level of consumption set out in Article 2F, provided that the calculated level of consumption of controlled substances in Group 1 of Annex A of the Party transferring the portion of its calculated level of consumption did not exceed 0.25 kilograms per capita in 1989 and that the total combined calculated levels of consumption of the Parties concerned do not exceed the consumption limits set out in Article 2F. Such transfer of consumption shall be notified by each of the Parties concerned, stating the terms of such transfer and the period for which it is to apply.

- Article 2A: CFCs: 2) Each party shall ensure that for the period from 1 July 1991 to 31 December 1992 its calculated levels of consumption and production of the controlled substances in Groups 1 of Annex do not exceed over 150 per cent of its calculated levels of production and consumption of those substances in 1986; with effect from 1 January 1993, the twelve-month control period for these controlled substances shall run from 1 January to 31 December each year. 3) Each party shall ensure that for the twelve-month period commencing on 1 January 1994, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substance in Group 1 of Annex A does not exceed, annually, twenty-five per cent of its calculated level of consumption in 1986. Each party producing one or more of these substances, shall, for the same periods, ensure that its calculated level of production of the substances does not exceed, annually, twenty-five per cent of its calculated of its calculated level of production in 1986. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production in 1986.
- Article 2B: Halons: 1) ...commencing on 1 January 1992, ... level of consumption...does not exceed, annually, its calculated level of consumption in 1986. ...for the same periods, production...does not exceed,...level of production in 1986. However,...to satisfy...domestic needs...production may exceed ...up to ten per cent of its calculated level of production in 1986. 2)...and in each twelve-month period thereafter, ...consumption...does not exceed zero. Each Party producing one or more of these substances shall, for the same periods, ...does not exceed zero. However,...to satisfy the basic domestic needs...level of production may exceed...up to fifteen per cent of its calculated level of production in 1986.
- Article 2C: Other fully halogenated CFCs: 1... commencing on 1 January 1993,...does not exceed...eighty per cent...level of...1989. ...for the same period,...production does not exceed, ...eighty per cent of...1989. However,...to satisfy domestic needs...production may exceed...up to ten percent of...1989. 2)...commencing on 1 January 1994,...does not exceed, ...twenty-five per cent of...1989. Each party producing...does not exceed, annually, twenty-five per cent of...1989.
- Article 2D: Carbon tetrachloride: ...Commencing on 1 January 1995,...consumption...does not exceed...fifteen percent of...of 1989....For the same period,...production...does not exceed fifteen per cent of...1989. However,...to satisfy...domestic needs... production may exceed...up to ten per cent...
- Article 2E: Trichlorethane (Methyl chloroform): 1) ...Commencing on 1 January 1993,...consumption does not exceed...calculated level of consumption in 1989. Each party producing...ensure that...production...does not exceed,...level of production in 1989. However,...to satisfy...domestic needs...production may exceed...up to ten per cent...of production in 1989. 2)...commencing on 1 January 1994, ...consumption does

not exceed...fifty per cent of its calculated level consumption in 1989. ...ensure that...production does not exceed...fifty per cent...of production in 1989. However,...to satisfy the basic needs...production may exceed ...up to ten per cent...of production in 1989. 3)...commencing on 1 January 1996...consumption...does not exceed zero. ...ensure...production...does not exceed zero. However,...to satisfy...domestic needs...production may exceed...up to fifteen per cent of its calculated level of production in 1989.

- Article 2F: Hydrochlorofluorocarbons: 1)...commencing on 1 January 1996,...consumption...does not exceed,...the sum of : (a) two point eight per cent of its calculated level of consumption in 1989 of the controlled substances in Group I of Annex A; (b) its calculated level of consumption in 1989 of the controlled substances in Group I of Annex C. 2)...commencing on 1 January 2004,...consumption...does not exceed,...sixty-five per cent of the sum referred to in paragraph 1 of this Article. 3) ...commencing on 1 January 2010,...consumption...does not exceed,...thirty-five per cent of the sum... 4)...commencing on 1 January 2015,...consumption...does not exceed...ten per cent of the sum...5)...commencing on 1 January 2020, ...consumption...does not exceed zero point five per cent of the sum...6)...commencing on 1 January 2030...consumption...does not exceed zero. 7) As of 1 January 1996, each Party shall endeavor to ensure that: (a) the use of controlled substances in Group I of Annex C is limited to those applications where other more environmentally suitable alternative substances or technologies are not available; (b) the use of controlled substances in Group I of Annex C is not outside the areas of application currently met by controlled substances in Annexes A, B and C, except in rare cases for the protection of human life or human health; and © controlled substances in Group I of Annex C are not selected for use in a manner that minimizes ozone depletion, in addition to meeting other environmental, safety and economic considerations.
- Article 2G: Hydrobromofluorocarbons: ...commencing on 1 January 1996,...consumption...does not exceed zero. ...for the same period...production...does not exceed zero.
- Article 2H: 1) Methyl bromide:...commencing on 1 January 1995,...consumption of the controlled substance in annex E does not exceed,...level of consumption in 1991. ...for the same period,...production does not exceed...level of production in 1991. However,...to satisfy...domestic needs...level of production may exceed...up to ten per cent ...2) ...commencing on 1 January 1999,...consumption...does not exceed...seventy-five per cent of its calculated level of consumption in 1991. ...for the same period,...production...does not exceed...seventy-five per cent ...level of production in 1991. However,...to satisfy...domestic needs...production may exceed...up to ten per cent of...1991. 3)...commencing on 1 January 2003,...consumption ...does not exceed...fifty per cent...in 1991. ...for the same period...production...does not exceed...fifty per cent ...in 1991. However,...to satisfy...domestic needs...may exceed...up to ten per cent...1991. 4)...commencing on 1 January 2003,...consumption...does not exceed...thirty per cent...1991. ...for the same period,...production...does not exceed...thirty per cent...level of 1991. However,...to satisfy...domestic needs...production may exceed...up to ten per cent...level of...1991. 5)...commencing on 1 January 2005...consumption...does not exceed zero. ...for the same period...production does not exceed zero. However,...to satisfy...domestic

needs...may exceed...up to fifteen per cent of...1991. This paragraph will apply save to the extent that the Parties decide to permit the level of production or consumption that is necessary to satisfy the uses agreed by them to be critical use.

- Article 4 (Control trade with non-parties): 1)...each party shall ban the import of the controlled substances in Annex A from any State not party to this Protocol. A)...each Party shall ban the import of the controlled substance in Annex B from any State not party to this Protocol. B)...each Party shall ban the import of any import of any controlled substances in Group II of Annex C from any State not party to this Protocol. C)...each party shall ban import of the controlled substance in Annex E from any State not party to this Protocol. 2)...each Party shall ban the export of any controlled substances in Annex A to any State not party to this Protocol. a)...each party shall ban the export of any controlled substances in Annex B. b)...ban the export of any controlled substances in Group II of Annex C...c)...ban the export of the controlled substance in Annex E....
- Article 4A (control of trade with Parties) 1)...ban the export of used, recycled and reclaimed quantities of that substance, other than for the purpose of destruction.
- Article 5 (Special situation of developing countries): 1) any party that is developing country and...level of consumption of the controlled substances in Annex A is less than 0.3 KGs per capita on the date of the entry into force of the Protocol for its, or anytime thereafter until 1 January 1999, shall,...to meet its basic domestic needs, be entitled to delay for ten years its compliance with control measures set out in Article 2A to 2E...2) However...shall exceed neither an annual calculated level of consumption of the controlled substances in Annex A of 0.3 KGs per capita nor an annual calculated level of consumption of controlled substances of Annex B of 0.2 KGs per capita. 3) a) ... under Annex A, either the average of its annual calculated level of consumption for the period 1995 to 1997 inclusive or a calculated level of consumption of 0.3 kg p.c., whichever is lower,...b)...under Annex B,...1998 to 2000 inclusive...0.2kgs p.c., whichever is lower...c)...under Annex A, either the average of its annual calculated level of production...1995 to 1997 inclusive or a calculated level of production of 0.3kgs p.c.,...d) ...under Annex B,...1998 to 2000...production of 0.2kgs p.c., whichever is lower...6) any party operating under paragraph 1 of this Article may...notify the Secretariat in writing that...it is unable to implement any or all of the obligations laid down in Article 2A to 2E....dues to the inadequate implementation of Article 10 and 10A. Secretariat shall...transmit a copy of the notification to the parties, which shall consider the matter at their next Meeting, giving due recognition to paragraph 5 of this Article and shall decide upon appropriate action to be taken.
- Article 6: (Assessment and review of control measures) Beginning in 1990, and at least every four years thereafter, the Parties shall assess the control measures provided for in Article 2 and Articles 2A to 2H on the basis of available scientific, environmental, technical and economic information.

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (1992)

In Force:
03.21.1994

Threats: 2, 8, 17

- Noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs...

- ...in accordance with the Charter of the United Nations and the principle of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction, Reaffirming the principle of sovereignty of States in international cooperation to address climate change, Recognizing that States should enact effective environmental legislation, that environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply, and that standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries...
- recognizing that various actions to address climate change can be justified economically in their own right and can also help in solving other environmental problems,
- recognizing the special difficulties of...developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken on limiting greenhouse gas emissions
- Article 4: Obligations
 - a) develop,...update, publish...national inventories of anthropogenic emissions, b) formulate, implement, publish...update national and...regional programs... ,c) promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emission of greenhouse gases, d) promote sustainable management, and promote and cooperate in the conservation..., e) cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans..., f) minimize effect of climate change, g) promote and cooperate in scientific, technological, technical, socio-economic and other research, h) promote...open exchange, i) promote...education, training and public awareness
- Article 4: 2) ...shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. 3) The developed country Parties and other developed Parties...shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligation... 4) The developed country Parties and other developed Parties...shall assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.
- Article 7: 2) The Conference of the Parties, as the supreme body of this Convention, shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention.
- Article 14: 1) In the event of a dispute between any two or more Parties concerning the interpretation or application of the Convention, the Parties concerned shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice. 2) When ratifying, accepting, approving or acceding to the Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute concerning the interpretation or application of the Convention, it recognizes as compulsory

ipso facto and without special agreement, in relation to any Party accepting the same obligation: a) Submission of the dispute to the International Court of Justice, and/or b) Arbitration in accordance with procedures to be adopted by the Conference of the Parties as soon as practicable, in an annex on arbitration. A Party which is a regional economic integration organization may make a declaration with like effect in relation to arbitration in accordance with the procedures referred to in subparagraph (b) above. 4) A new declaration, a notice of revocation or the expiry of a declaration shall not in any way affect proceedings pending before the International Court of Justice or the arbitral tribunal, unless the parties to the dispute otherwise agree. 5) Subject to the operation of paragraph 2 above, if after twelve months following notification by one Party to another that a dispute exists between them, the Parties concerned have not been able to settle their dispute through the means mentioned in paragraph 1 above, the dispute shall be submitted, at the request of any of the parties to the dispute, to conciliation. 6) A conciliation commission shall be created upon the request of one of the parties to the dispute. The commission shall render a recommendatory award, which the parties shall consider in good faith.

*KYOTO PROTOCOL TO THE UNITED NATIONS
FRAMEWORK CONVENTION ON CLIMATE CHANGE
(1998)*

Not in Force:

Adopted on
12.10.1997

Threats: 2, 8, 17, 23

- Article 2: Each Party included in Annex I, in achieving its qualified emission limitation and reduction commitments under Article 3...shall: a) implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:
 - i) enhancement of energy efficiency
 - ii) protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol...;
 - iii) promotion of sustainable forms of agriculture...;
 - iv) research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovated environmentally sound technologies;
 - v) progressive reduction of phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors...
 - vi) ...promoting policies and measures which limit or reduce emissions of greenhouse gases...
 - vii) measure to limit and/or reduce emissions of greenhouse gases...
 - viii) limitation and/or reduction of methane emissions through recovery and use in waste management.
- 2) ...shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels... 3) ...shall strive to implement policies and measures in such a way as to minimize adverse effects...especially developing country Parties and in particular those identified in Article 4...
- Article 3: ...shall...ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provision of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period of 2008 to 2012. 2) Each Party included in Annex I shall, by

2005, have made demonstrable progress in achieving its commitments under this Protocol. (8% below emission levels for the EU, 7% for the US, 6% for Japan – see Annex B for details)

- ‘Emission targets include all six major greenhouse gases’ - see Annex A for the list
- ‘Activities that absorb carbon will offset against emission targets. Additionally, under an emission trading regime, countries or companies can purchase less expensive emission permits from countries that have more permits than they need’. (rules and guidelines indicated – refer to Article 6)
- Clean Development Mechanism: ‘developed countries will be able to use certified emissions reduction from project activities in developing countries to contribute to their compliance with greenhouse gas reduction targets’. ‘Developing countries may...voluntarily assume binding emission targets...’.
- Excludes following military emission:
 - * ‘emission from ”bunker” fuel
 - * ‘emission from multilateral operation’
 - * ‘countries may decide...how to account for emissions relating to multilateral operations...’
- although it addresses provisions and certain consequences if a country fails to comply, ‘effective procedures and a mechanism to determine and address non-compliance were not decided.

Selected International Organizations relevant to Environmental Security

United Nations Charter (*emphasis on the Security Council)

United Nations Development Program (UNDP)

United Nations Environment Program (UNEP)

United Nations Educational, Scientific And Cultural Organization (UNESCO)

United Nations Population Fund (UNFPA)

United Nations High Commissioner For Refugees (UNHCR)

World Bank

Organization for Security and Cooperation in Europe (CSCE)

World Food Program

World Meteorological Organization (WMO)

World Trade Organization (WTO)

International Finance Corporation

Association of South East Nations (ASEAN)

European Environment Agency (EEA)

Food and Agriculture Organization of the United Nations (FAO)

International Atomic Energy Agency (IAEA)

International Labor Organization (ILO)

North Atlantic Treaty Organization (NATO)

Organization of Economic Cooperation and Development (OECD)

United Nations Charter (*emphasis on the Security Council)	http://www.un.org/aboutun/charter/
<p>Chapter 1</p> <ul style="list-style-type: none"> * Article 1: 1) to maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principle of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of peace; * Article 2: 1) the organization is based on the principle of the sovereign equality of all its Members. 2) All members, in order to ensure to all of them the rights and benefits resulting from membership shall fulfill in good faith the obligations assumed by them in accordance with the present Charter. 3) All members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered. 5) All members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action. 7) Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII. <p>Chapter V</p> <ul style="list-style-type: none"> * Article 24: 1) order to ensure prompt and effective action by the United Nations, its Members confer on the Security Council primary responsibility for the maintenance of international peace and security and agree that in carrying out its duties under the responsibility the Security Council acts on the behalf. * Article 25: the members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter <p>Chapter VI</p> <ul style="list-style-type: none"> * Article 33: 1) 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, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice. 2) the Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means. * Article 34: the Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security. * Article 36: 1) The Security Council may...recommend appropriate procedure or methods of adjustment. * Article 37: 2) If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it 	

<p>may consider appropriate.</p> <p>Chapter VII</p> <ul style="list-style-type: none"> * Article 39: the Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security. * Article 41: the Security Council may decide what measures not involving the use of armed forces are to be employed give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations. * Article 42: Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members... * Article 45: In order to enable the United Nations to take urgent military measures. Members shall hold immediately available national air-force contingents for combined international enforcement action.... 	
<p>United Nations Development Program (UNDP)</p>	<p>http://www.undp.org/</p>
<ul style="list-style-type: none"> * to strength international cooperation for sustainable human development and to serve as a major substantive resource on how to achieve it. <p>2688 (XXV) The Capacity of the United Nations development system</p> <ul style="list-style-type: none"> * Annex: II. 3) Country programming will be used as a means of achieving the most rational and efficient utilization of resources at the disposal of the Program for its activities in order to have the maximum impact on the economic and social development of the developing country concerned. 5) It is recognized that the Government of the country concerned has the exclusive responsibility for formulating its national development plan or priorities and objectives. 7) The country program, based on national development plans, priorities or objectives and on the indicative planning figures, will be formulated by the Government of the recipient country in co-operation, at an appropriate stage, with representatives of the United Nations system... <p>UNSO (Office to Combat Desertification and Drought)</p> <ul style="list-style-type: none"> * ...established in 1973...to address the problem of drought of Sahelian countries. * helps to identify the root causes of desertification and to address the constraints and bottlenecks contributing to the problem. 	
<p>United Nations Environment Program (UNEP)</p>	<p>http://www.unep.org/</p>
<p>Conference on the Human Environment:</p> <ul style="list-style-type: none"> * Principle 21: States have the sovereign right to exploit their own resources pursuant to their environmental policies...and the responsibility to...ensure that their activities within their jurisdiction or control did not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. * Principle 22: States were to co-operate to develop further the international law regarding 	

liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such states to areas beyond their jurisdiction.

- * established by GA Res. 2997 (XXVII) to ‘provide leadership and encourage partnership in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations’.
- * ‘the role...is to be leading global environmental authority that sets the global environment agenda, promotes the coherent implementation of the governmental dimension of sustainable development within the UN system and serves as an authoritative advocate for the global environment’.

GA res. 2995 (XXVII) Co-operation between States in the field of environment

- * Bearing in mind that, in exercising their sovereignty over their natural resources, States must seek, through effective bilateral and multilateral co-operation through regional machinery, to preserve and improve the environment; 1) Emphasizing that, in the exploration, exploitation and development of their natural resources, States must not produce significant harmful effects in zones situations outside their national jurisdiction; 2) recognizing that co-operation between States, in the field of the environment...will be effectively achieved if official and public knowledge is provided of the technical data relating to the work to be carried out by States within their national jurisdiction, with a view to avoiding significant harm that may occur...

GA res. 2997 (XXVII): Institutional and financial arrangements for international environmental co-operation.

- * convinced of the need for prompt and effective implementation by Government and the international community of measures designed to safeguard and enhance the environment for the benefit of present and future generations of man, **recognizing for action to protect and enhance the environment rests primarily with Government and...can be exercised more effective at the national and regional levels, recognizing further that environmental problems of broad international significance fall within the competence of the United Nations system, bearing in the mind that international co-operative programs...must be undertaken with due respect for the sovereign rights of States and in conformity with the Charter of the United Nations and principles of international law,**
- * I: 2) a. to promote international co-operation in the field of the environment and to recommend, as appropriate policies to this end; f) to maintain under continuing review the impact of national and international environmental policies and measures on developing countries, as well as the problem of additional costs that may be incurred by developing countries in the implementation of environmental programs and projects, and to ensure that such programs and projects shall be compatible with the development plans and priorities of those countries;

GA res. 27 and Agenda 21:

- * ‘to analyze the state of the global environment and assess global and regional...trends, provide policy advice, early warning information on environmental threats, and to catalyze and promote international cooperation and action...’
- * ‘to further the development of its international environmental law...’
- * ‘to advance the implementation of agreed international norms and policies, to monitor and foster compliance with environmental principle and international agreements and

<p>stimulate cooperative action to respond to emerging environmental challenges’.</p> <ul style="list-style-type: none"> * ‘to strengthen its role in the coordination of environmental activities in the UN system..., as well as its role as an Implementing Agency of the Global Environment Facility, based on its comparative advantage and scientific and technical expertise’. * ‘to promote...awareness and facilitate...cooperation...involved in the implementation of the international environment agenda, and to serve as an effective link between the scientific community and policy makers...’ * ‘to provide policy and advisory services in key areas of institution-building to governments and other relevant institutions’. <p>⇒ Secretariat of the UN Framework Convention on Climate Change (UNFCCC)</p> <ul style="list-style-type: none"> * ‘to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system...to allow ecosystems to adapt...to climate change, to ensure that food production is not threatened, and to enable economic development...’. <p>⇒ Intergovernmental Panel on Climate Change (IPCC)</p> <ul style="list-style-type: none"> * jointly established by the UNEP and World Meteorological Organization ‘assess the science, impacts and economics of climate change, and response options available to address it <p>⇒ Ozone Secretariat to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer</p> <p>⇒ Secretariat of the Convention on Biological Diversity</p> <p>⇒ Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)</p> <ul style="list-style-type: none"> * ‘provides for international as well as national regulatory framework’ for trade in endangered species. <p>⇒ Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal</p> <ul style="list-style-type: none"> * ‘aims to reduce generation of hazardous wastes and to ensure that their movement and disposal are managed safely’. <p>⇒ Interim Secretariat of the UN Convention to Combat Desertification (CCD) in Countries Experiencing Serious Drought and/or Desertification, Especially in Africa</p> <ul style="list-style-type: none"> * ‘calls for integrated participate action programs supported by international action...’ <p>⇒ Global Environment Facility (GEF)</p> <ul style="list-style-type: none"> * provides grants and concessional funding to countries, which promotes sustainable development and protects environment in the following four areas: climate change; biological diversity; international waters; and stratospheric ozone. (includes desertification and deforestation) * GEF designated at the funding mechanism for the Convention on the Climate Change & Convention on Biological Diversity * 156 countries are currently participant of GEF (as of 12.1997) 	
<p>United Nations Educational, Scientific and Cultural Organization (UNESCO)</p>	<p>http://www.unesco.org/</p>
<ul style="list-style-type: none"> * Article XI: 1) This Organization may co-operate with other specialized inter-governmental organizations and agencies whose interests and activities are related to its purposes. 	

<p>* Article XIV: 2) Any question or dispute concerning the interpretation of this Constitution shall be referred for determination to the International Court of Justice or to an arbitral tribunal, as the General Conference may determine under its Rules of Procedure.(1)</p>	
<p>United Nations Population Fund (UNFPA)</p>	<p>www.unfpa.org/about/facts.htm www.unfpa.org/modules/popbkit97/sustainable.htm</p>
<p>Mandate</p> <ol style="list-style-type: none"> 1. To build the knowledge and the capacity to respond to needs in population and family planning; 2. To promote awareness in both developed and developing countries of population problems and possible strategies to deal with these problems; 3. To assist developing countries...with their problems in the forms and means best suited to the individual countries' need <p>Briefing Kit 97: Population and Sustainable Development</p> <ul style="list-style-type: none"> * In order to achieve economic and environmental goals, social goals-such as universal access to education, health care and economic opportunity-must be achieved. * ...human impact on the environment is a function of population size, per capita consumption and the environment damage caused by the technology used to produce what is consumed. * Removing the constraints on women's effectiveness as resource managers-through education, access to credit and land, and the enforcement of legal right-would, therefore, not only benefit women as individuals, but also contribute to the environmental and economic well-being of their families and communities. 	
<p>United Nations High Commissioner for Refugees (UNHCR)</p>	<p>http://www.unhcr.org/</p>
<p>Statute of the Office of the United Nations High Commissioner for Refugees</p> <ul style="list-style-type: none"> * Chapter II: 8) b. promoting through special agreements with governments the execution of any measures calculated to improve the situation of refugees and to reduce the number requiring protection; 9) The High Commissioner shall engage in such additional activities...within the limits of the resources placed at his disposal. 	
<p>World Bank</p>	<p>http://www.worldbank.org/html/extdr/mission.htm http://wbIn0018.worldbank.org/essd/geo.nsf/About+Us+View/What?OpenDocument http://wbIn0018.worldbank.org/Institutional/Manuals/OpManual.nsf/tocall/9367A2A9D9DAEED38525672C007D0972?OpenDocument http://wbIn0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/AF08A86290D2C3EF8525672C007D096B?OpenDocument</p>
<ul style="list-style-type: none"> * Primary role is to assist countries alleviate poverty and attain their development goals in a sustainable manner. However, sustainable economic development is being threatened by a wide range of global environmental issues... * To help people help themselves and their environment by providing resources, sharing knowledge, building capacity, and forging partnerships in the public and private sectors. * Strategy for the environment: 	

- * Ensuring that its non-environmental projects “do no harm” to the environment by harnessing the environmental assessment process;
- * Providing targeted assistance to build in-country capacity for environmental management;
- * Developing new policy instruments and methodologies; and
- * Address global concern through GEF and Montreal Protocol.
 - * GEF funds defray the added costs of making planned projects environmentally friendly & finance regional approaches to multinational problems.

Operational Manual (Environmental Assessment)

- * The Bank requires environmental assessment(EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making.
- * EA evaluates a project’s potential environmental risks and impacts in its area of influence; examines projects alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts through project implementation.
- * EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and cultural property); and transboundary and global environmental aspects. EA considers natural and social aspects in an integrated way. It also takes into account the variations in project and country conditions; the findings of country environmental studies; national environmental actions plans; the country’s overall policy framework; national legislation; and institutional capabilities related to the environment and social aspects; and obligations of the country, pertaining to project activities, under relevant international environmental treaties and agreements. **The Bank does not finance project activities that would contravene such country obligations, as identified during the EA.**
- * **The borrower is responsible for carrying out the EA.**
- * **The Bank advises the borrower on the Bank's EA requirements. The Bank reviews the findings and recommendations of the EA to determine whether they provide an adequate basis for processing the project for Bank financing. When the borrower has completed or partially completed EA work prior to the Bank's involvement in a project, the Bank reviews the EA to ensure its consistency with this policy.**
- * **The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of EA. The Bank classifies the proposed project into one of four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts.**
- * **13. The policy set out in OP 4.01 normally applies to emergency recovery projects processed under OP 8.50, Emergency Recovery Assistance. However, when compliance with any requirement of this policy would prevent the effective and timely achievement of the objectives of an emergency recovery project, the Bank may exempt the project from such a requirement. The justification for any such exemption is recorded in the loan documents. In all cases, however, the Bank requires at a minimum that (a) the extent to which the emergency was precipitated**

<p>or exacerbated by inappropriate environmental practices be determined as part of the preparation of such projects, and (b) any necessary corrective measures be built into either the emergency project or a future lending operation.</p> <p>* For all Category A and B projects proposed for IBRD or IDA financing, during the EA process, the borrower consults project-affected groups and local nongovernmental organizations (NGOs) about the project's environmental aspects and takes their views into account.¹⁹ The borrower initiates such consultations as early as possible. For Category A projects, the borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them.</p>	
<p>Organization for Security and Cooperation in Europe (OSCE)</p>	<p>www.osce.org/e/dimecon.htm www.osce.org/e/docs/summits/helfa75e.htm</p>
<p>The Economic and Environmental Dimension</p> <p>* Although the OSCE is not an economic organization, it operates on the premise that economic and environmental solidarity and co-operation can contribute to peace, prosperity and stability.</p> <p>Helsinki Final Act (1975)</p> <p>* Recognizing the close link between peace and security in Europe and in the world as a whole and conscious of the need for each of them to make its contribution to the strengthening of world peace and security and to the promotion of fundamental rights, economic and social progress and well-being for all peoples;</p> <p>* A) Declaration on Principles Guiding Relations between Participating States: the participating states, reaffirming their commitment to peace, security and justice and the continuing development of friendly relations and co-operation;</p> <p>* I. Sovereign equality, respect for the rights inherent in sovereignty: the participating States will respect each other's sovereign equality and individuality as well as all the rights inherent in and encompassed by its sovereignty, including in particular the right of every State to juridical equality, to territorial integrity and to freedom and political independence. They will also respect each other's right freely to choose and develop its political, social, economic and cultural systems as well as its right to determine its law and regulations. ...all the participating States have equal rights and duties. They will respect each other's right to define and conduct as it wishes its relations with other States in accordance with international law and in the spirit of the present Declaration. They consider that their frontiers can be changed, in accordance with international law, by peaceful means and by agreement. They also have the right to belong or not to belong to international organizations, to be or not to be a party to bilateral or multilateral treaties including the right to be or not to be a party to treaties of alliance; they also have the right to neutrality.</p> <p>* II. Refraining from the threat or use of force: The participating States will refrain in their mutual relations, as well as in their international relations in general, from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the purposes of the United Nations and with the present Declaration. No consideration may be invoked to serve to</p>	

warrant resort to the threat or use of force in contravention of this principle. Accordingly, the participating States will refrain from any acts constituting a threat of force or direct or indirect use of force against another participating State. Likewise they will refrain from any manifestation of force for the purpose of inducing another participating State to renounce the full exercise of its sovereign rights. Likewise they will also refrain in their mutual relations from any act of reprisal by force. No such threat or use of force will be employed as a means of settling disputes, or questions likely to give rise to disputes, between them.

- * III. Inviolability of frontiers: **The participating States regard as inviolable all one another's frontiers as well as the frontiers of all States in Europe and therefore they will refrain now and in the future from assaulting these frontiers. Accordingly, they will also refrain from any demand for, or act of, seizure and usurpation of part or all of the territory of any participating State.**
- * IV. Territorial integrity of States: **The participating States will respect the territorial integrity of each of the participating States. Accordingly, they will refrain from any action inconsistent with the purposes and principles of the Charter of the United Nations against the territorial integrity, political independence or the unity of any participating State, and in particular from any such action constituting a threat or use of force. The participating States will likewise refrain from making each other's territory the object of military occupation or other direct or indirect measures of force in contravention of international law, or the object of acquisition by means of such measures or the threat of them. No such occupation or acquisition will be recognized as legal.**
- * V. Peaceful settlement of disputes: The participating States will settle disputes among them by peaceful means in such a manner as not to endanger international peace and security, and justice. They will endeavour in good faith and a spirit of cooperation to reach a rapid and equitable solution on the basis of international law. For this purpose they will use such means as negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement or other peaceful means of their own choice including any settlement procedure agreed to in advance of disputes to which they are parties. In the event of failure to reach a solution by any of the above peaceful means, the parties to a dispute will continue to seek a mutually agreed way to settle the dispute peacefully. Participating States, parties to a dispute among them, as well as other participating States, will refrain from any action which might aggravate the situation to such a degree as to endanger the maintenance of international peace and security and thereby make a peaceful settlement of the dispute more difficult.
- * VI. Non-intervention in internal affairs: **The participating States will refrain from any intervention, direct or indirect, individual or collective, in the internal or external affairs falling within the domestic jurisdiction of another participating State, regardless of their mutual relations. They will accordingly refrain from any form of armed intervention or threat of such intervention against another participating State. They will likewise in all circumstances refrain from any other act of military, or of political, economic or other coercion designed to subordinate to their own interest the exercise by another participating State of the rights inherent in its sovereignty and thus to secure advantages of any kind. Accordingly, they will, inter alia, refrain from direct or indirect assistance to terrorist activities, or to subversive**

or other activities directed towards the violent overthrow of the regime of another participating State.

- * VII. Respect for human rights and fundamental freedoms, including the freedom of thought, conscience, religion or belief: They will promote and encourage the effective exercise of civil, political, economic, social, cultural and other rights and freedoms all of which derive from the inherent dignity of the human person and are essential for his free and full development. **The participating States on whose territory national minorities exist will respect the right of persons belonging to such minorities to equality before the law, will afford them the full opportunity for the actual enjoyment of human rights and fundamental freedoms and will, in this manner, protect their legitimate interests in this sphere. They confirm the right of the individual to know and act upon his rights and duties in this field.**
- * VIII. Equal rights and self-determination of peoples: **The participating States will respect the equal rights of peoples and their right to self-determination, acting at all times in conformity with the purposes and principles of the Charter of the United Nations and with the relevant norms of international law, including those relating to territorial integrity of States.** The participating States reaffirm the universal significance of respect for and effective exercise of equal rights and self-determination of peoples for the development of friendly relations among themselves as among all States; they also recall the importance of the elimination of any form of violation of this principle.
- * X. Fulfilment in good faith of obligations under international law: The participating States will fulfil in good faith their obligations under international law, both those obligations arising from the generally recognized principles and rules of international law and those obligations arising from treaties or other agreements, in conformity with international law, to which they are parties. **In exercising their sovereign rights, including the right to determine their laws and regulations, they will conform with their legal obligations under international law; they will furthermore pay due regard to and implement the provisions in the Final Act of the Conference on Security and Cooperation in Europe.** To give effect and expression, by all the ways and forms which they consider appropriate, to the duty to refrain from the threat or use of force in their relations with one another. **To refrain from any use of armed forces inconsistent with the purposes and principles of the Charter of the United Nations and the provisions of the Declaration on Principles Guiding Relations between Participating States, against another participating State, in particular from invasion of or attack on its territory.** To refrain from any manifestation of force for the purpose of inducing another participating State to renounce the full exercise of its sovereign rights. To refrain from any act of economic coercion designed to subordinate to their own interest the exercise by another participating State of the rights inherent in its sovereignty and thus to secure advantages of any kind. To take effective measures which by their scope and by their nature constitute steps towards the ultimate achievement of general and complete disarmament under strict and effective international control. To promote, by all means which each of them considers appropriate, a climate of confidence and respect among peoples consonant with their duty to refrain from propaganda for wars of aggression or for any threat or use of force inconsistent with the purposes of the United Nations and with the Declaration on Principles Guiding Relations between Participating States, against another participating State. To make every effort to settle exclusively by peaceful means any dispute between

them, the continuance of which is likely to endanger the maintenance of international peace and security in Europe, and to seek, first of all, a solution through the peaceful means set forth in Article 33 of the United Nations Charter. To refrain from any action which could hinder the peaceful settlement of disputes between the participating States. Convinced that the peaceful settlement of disputes is a complement to refraining from the threat or use of force, both being essential though not exclusive factors for the maintenance and consolidation of peace and security...

- * Co-operation in the Field of Economics, of Science and Technology and of the Environment: Convinced that their efforts to develop cooperation in the fields of trade, industry, science and technology, the environment and other areas of economic activity contribute to the reinforcement of peace and security in Europe and in the world as a whole, Convinced that their efforts to develop cooperation in the fields of trade, industry, science and technology, the environment and other areas of economic activity contribute to the reinforcement of peace and security in Europe and in the world as a whole,
- * Environment: Affirming that the protection and improvement of the environment, as well as the protection of nature and the rational utilization of its resources in the interests of present and future generations, is one of the tasks of major importance to the well-being of peoples and the economic development of all countries and that many environmental problems, particularly in Europe, can be solved effectively only through close international co-operation, Acknowledging that each of the participating States, in accordance with the principles of international law, ought to ensure, in a spirit of co-operation, that activities carried out on its territory do not cause degradation of the environment in another State or in areas lying beyond the limits of national jurisdiction, Considering that the success of any environmental policy presupposes that all population groups and social forces, aware of their responsibilities, help to protect and improve the environment, which necessitates continued and thorough educative action, particularly with regard to youth. Affirming that experience has shown that economic development and technological progress must be compatible with the protection of the environment and the preservation of historical and cultural values; that damage to the environment is best avoided by preventive measures; and that the ecological balance must be preserved in the exploitation and management of natural resources, to take the necessary measures to bring environmental policies closer together and, where appropriate and possible, to harmonize them; to encourage, where possible and appropriate, national and international efforts by their interested organizations, enterprises and firms in the development, production and improvement of equipment designed for monitoring, protecting and enhancing the environment.
- * Field of co-operation:
 - * Control of air pollution
 - * Water pollution control and fresh water utilization
 - * Protection of the marine environment
 - * Land utilization and soils
 - * Nature conservation and natures reserves
 - * Improvement of environmental conditions in areas of human settlement
 - * Fundamental research, monitoring, forecasting and assessment of environmental changes
 - * Legal and administrative measures

<ul style="list-style-type: none"> * Forms and methods of co-operation * The participating States will further develop such co-operation by: - promoting the progressive development, codification and implementation of international law as one means of preserving and enhancing the human environment, including principles and practices, as accepted by them, relating to pollution and other environmental damage caused by activities within the jurisdiction or control of their States affecting other countries and regions; - supporting and promoting the implementation of relevant international Conventions to which they are parties, in particular those designed to prevent and combat marine and fresh water pollution, recommending States to ratify Conventions which have already been signed, as well as considering possibilities of accepting other appropriate Conventions to which they are not parties at present; - making wider use, in all types of co-operation, of information already available from national and international sources, including internationally agreed criteria, and utilizing the possibilities and capabilities of various competent international organizations. The participating States agree on the following recommendations on specific measures: to develop through international co-operation an extensive program for the monitoring and evaluation of the long-range transport of air pollutants, starting with sulfur dioxide and with possible extension to other pollutants... * Question relating to Security and Co-operation in the Mediterranean: to intensify their efforts and their co-operation on a bilateral and multilateral basis with the non-participating Mediterranean States directed towards the improvement of the environment of the Mediterranean....to this end...cooperate through international organizations and in particular within the United Nations Environment Program (UNEP) 	
World Food Program	http://www.wfp.org/
<ul style="list-style-type: none"> * food aid of the United Nations system * The policies governing the use of World Food Program food aid must be oriented towards the objective of eradicating hunger and poverty. The ultimate objective of food aid should be the elimination of the need for food aid. * ...WFP will continue to: <ul style="list-style-type: none"> * use food aid to support economic and social development * meet refugee and other emergency food needs, and the associated logistic support; and * promote world food security in accordance with the recommendations of the United Nations and FAO * The core policies and strategies that govern WFP activities are to provide food aid: <ul style="list-style-type: none"> * to save lives in refugee and other emergency situations; * to improve the nutrition and quality of life of the most vulnerable people at critical times in their lives; and * to help build assets and promote the self-reliance of poor people and communities, particularly through labor-intensive works programs. * WFP will give priority to supporting disaster prevention, preparedness and mitigation and post-disaster rehabilitation activities as part of development programs. 	

World Meteorological Organization (WMO)	http://www.wmo.ch United Nations Handbook 1997
<ul style="list-style-type: none"> * contributes to the safety of life and property, the socio-economic development of nations and the protection of the environment. * provides...voice on...Earth's atmosphere and climate * further the application of meteorology to aviation, shipping, water problems, agricultural and other human activities * primary purpose is to make available meteorological and related geophysical and environmental information enabling countries to maintain efficient meteorological services. * Under the World Weather Watch are satellite and emergency procedures and response mechanisms for the provision and exchange of observational data and specialized products in case of nuclear accidents, as well as the Instruments and Methods of Observation Program and the Tropical Cyclone Program (TCP). * Some of the objective of the World Climate Program are: to use existing climate information to improve economic and social planning;...to determine the predictability of climate and the extent of man's influence on it (climate); and to detect and warn governments of impending climate variations or changes,...which may significantly affect critical human activities. * Facilitates cooperation within water basin... 	
World Trade Organization (WTO)	http://www.wto.org
<ul style="list-style-type: none"> * Preamble: reference to the objectives of sustainable development – to protect and preserve the environment. * Agreements on Technical Barrier to Trade and on Sanitary and Phytosanitary Measures: clearly states ‘the use by governments of measures to protect human, animal and plant life and health, and the environment’. * Agreement on Agriculture: ‘exempts direct payments under environmental programs...to reduce domestic support for agriculture production’.. * Agreement on Subsidies and Countervailing Measures: allows government to subsidize industry up to 20% of cost of ‘adapting existing facilities to new environmental legislation. * Role: ‘trade liberation is an essential, even if not sufficient, element of policies to achieve better environment protection and sustainable development. * Article XX of GATT: allow a WTO member legitimately, to place its public health and safety and national environmental goals ahead of its general obligation not to raise trade restrictions or to apply discriminatory trade measures. 	
International Finance Corporation	www.ifc.org http://www.ifc.org/enviro/OP_401/op_401.html
<ul style="list-style-type: none"> * IFC requires environmental assessment (EA) of projects proposed for IFC financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. * EA evaluates a project's potential environmental risks and impacts in its area of 	

<p>influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation.</p> <ul style="list-style-type: none"> * EA takes into account the natural environment; human health and safety; social aspects; and transboundary and global environmental aspects. ... IFC does not finance project activities that would contravene such country obligations, as identified during the EA. EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analysis of a proposed project. * IFC advise the project sponsor on IFC's EA requirements. IFC reviews the finding and recommendations of the EA to determine whether they provide an adequate basis for processing the project for IFC financing. When the project sponsor has completed or partially completed EA work prior to IFC's involvement in a project, IFC review the EA to ensure its consistency with this policy. * ...range of instruments can be used to satisfy IFC's EA requirement: environmental impact assessment (EIA), environmental audit, hazard or risk assessment, and environmental action plan (EAP). * For financial intermediary (FI) operation targeting specific subprojects, IFC requires that each FI screen proposed subproject, the FI verifies that the subproject meets the environmental requirements of appropriate national and local authorities and is consistent with this OP. ... In addition, IFC requires that investments under the relevant operation comply with host country environmental, health and safety requirements; no further environmental requirements would normally be applied to these operations. 	
Association of South East Nations (ASEAN)	http://www.ciesin.org/docs/008-586/008-586.html
<p>Jakarta Resolution on Sustainable Development</p> <ul style="list-style-type: none"> * I. That ASEAN member countries adopt the principle of sustainable development to guide and to serve as an integrating factor in their common efforts. * II. That ASEAN cooperative efforts be focused upon those common resources and issues that affect the common well-being of the peoples of ASEAN, including, but not be limited to: <ul style="list-style-type: none"> * The common seas; * Land-resources and land-based pollution; * Tropical rain forests; * Air quality; and * Urban and rural pollution * IV. ... the ASEAN Environment Ministers are aware that the pursuit of sustainable development would be best served by the establishment of a regional body on the environment... <p>b) facilitating the incorporation of environmental considerations into the programs and activities of ASEAN committees;</p> <p>c) monitoring the quality of the environment and natural resources to enable the periodic compilation of ASEAN state of the environment reports; and</p>	

d) enhancing the cooperation on environment matters.	
European Environment Agency (EEA)	http://www.eea.eu.int/frabout.htm
<p>Council Regulation (EEC) No. 1210/90 of 7 May 1990</p> <ul style="list-style-type: none"> * Whereas the Treaty provides for the development and implementation of a Community policy on the environment, and lays down the objectives and principles which should govern such policy; * Whereas collection, processing and analysis of environmental data at European level are necessary in order to provide objective, reliable and comparable information which will enable the Community and the Member State to take the requisite measures to protect the environment, to assess the results of such measures and to ensure that the public policy informed about the state of the environment; * Article 2: ii) to provide the Community and the Member States with the objective information necessary for framing and implementing sound and effective environmental policies; to that end, in particular to provide the Commission with the information that it needs to be able to carry out successfully its tasks of identifying, preparing and evaluating measures and legislation in the field of environment. v) to promote the incorporation of European environmental information into international environmental monitoring programs... vii) to stimulate the development and application of environmental forecasting techniques so that adequate preventive measures can be taken in good time; viii) to stimulate the development of methods of assessing the cost of damage to the environment and the costs of environmental preventive, protection and restoration policies; * Article 3: 1) The principle areas of activity of the Agency shall...include all elements enabling it to gather the information making it possible to describe the present and foreseeable state of the environment from the following points of view: <ul style="list-style-type: none"> i) the quality of the environment; ii) the pressure on the environment; iii) the sensitivity * Article 4: 3) Member states may...establish in their territory a “national focal point” for co-ordinating and/or transmitting the information to be supplied at national level to the Agency and to the institutions or bodies... 	
Food and Agriculture Organization of the United Nations (FAO)	www.fao.org/UNFAO/devel-e.htm www.fao.org?UNFAO/govern-e.htm www.fao.org/Leggal/BASICTXT/h1f.htm
<ul style="list-style-type: none"> * ...encourages and integrated approach, with environmental, social and economic considerations included in the formulation of development projects. * ...works with governments to promote agricultural and rural development and to foster international cooperation on issues such as food standards, fair trade, environmental management and the conservation of genetic resources. <p>Constitution</p> <ul style="list-style-type: none"> * Preamble: The Nations accepting this Constitution, being determined to promote the common welfare by furthering separate and collective action on their part for the purpose of: raising levels of nutrition and standards of living of the peoples...; securing 	

<p>improvements in...the production and distribution of all food and agricultural products; bettering the condition of rural poluations; and thus contributing towards an expanding world economy and ensuring humanty's freedom from hunger...</p> <p>* Article I: 2) The Organization shall promote and...shall recommend national and international aspect with respect to: c) the conservation of natural resources and the adoption of improved methods of agricultural production;</p>	
<p>International Atomic Energy Agency (IAEA)</p>	<p>www.iaea.org</p>
<p>* Article III: 6) To establish or adopt, in consultation and, where appropriate, in collaboration with the competent organs of the United Nations and with the specialized agencies concerned, standards of safety for protection of health and minimization of danger to life and property (including such standards for labor conditions), and to provide for the application of these standards to its own operation as well as to the operations making use of materials, services, equipment, facilities, and information available by the Agency or at its request or under its control or supervision; and to provide for the application of these standards, at the request of parties, to operations under any bilateral or multilateral arrangements, or, at the request of a State, to any of that State's activities in the field of atomic energy; 5), D Subject to the provisions of this Statute and to the terms of agreements concluded between a State or a group of States and the Agency which shall be in accordance with the provisions of the Statute, the activities of the Agency shall be carried out with due observance of the sovereign rights of States.</p> <p>* Article IX: H The Agency shall be responsible for storing and protecting materials in its possession, The Agency shall ensure that these materials shall be safeguarded against</p> <ol style="list-style-type: none"> 1. hazards of weather, 2. unauthorized removal or diversion 3. damage or destruction, including sabotage, and 4. forcible seizure. In storing special fissionable materials in its possession, the Agency shall ensure the geographical distribution of these materials... <p>* Article IX: I The Agency shall as soon as practicable establish or acquire such of the following as may be necessary:</p> <ol style="list-style-type: none"> 1. Plant, equipment, and facilities for the receipt, storage, and issue of materials; 2. Physical safeguards; 3. Adequate health and safety measures; 4. Control laboratories for the analysis and verification of materials received; 5. Housing and administrative facilities for any staff required for the foregoing <p>* Article XII: A, ...the Agency shall have the following rights and responsibilities... 1) to examine the design of specialized equipment and facilities, including nuclear reactors, and to approve it only...not further any military purpose, that it complies with applicable health and safety standards, and that it will permit effective application of the safeguards...; 2) to require the observance of any health and safety measures prescribed by the Agency; 3) to require the maintenance and production of operating records to assist in ensuring accountability for source and special fissionable materials used or produced in the project or arrangement; 4) to call for and receive progress reports; 5) to approve the means to be used for the chemical</p>	

<p>processing of irradiated materials solely to ensure that this chemical processing will not lend itself to diversion of materials for military purpose and will comply with applicable health and safety standards;...6) to send into the territory of the recipient State or States inspectors, designated by the Agency after consultation with the State or States concerned, who shall have access at all times to all places and data and to any person...7) In the event of non-compliance and failure by the recipient State or States to take requested corrective steps within a reasonable time, to suspend or terminate assistance and withdraw any materials and equipment made available by the Agency or a member in furtherance of the project.</p>	
<p>* Article XVII: A, Any question or dispute concerning the interpretation or application of this Statute which is not settled by negotiation shall be referred to the International Court of Justice in conformity with the Statute of the Court, unless the parties concerned agree on another mode of settlement. B, The General Conference and the Board of Governors are separately empowered, subject to authorization from the General Assembly of the United nations, to request the International Court of Justice to give an advisory opinion on any legal question arising within the scope of the Agency’s activities.</p>	
International Labor Organization (ILO)	http://ilo.org
<p>C148 Working Environment (Air pollution, Noise and Vibration) Convention 1977</p> <p>* National laws or regulations shall prescribe that measures be taken for the...control of...occupational hazards in the working environment due to air pollution noise and vibration</p>	
North Atlantic Treaty Organization (NATO)	www.nato.int/docu/basicxt/treaty.htm#Art02
<p>The North Atlantic Treaty</p> <p>* Article 1: The Parties undertake, as set forth in the Charter of the United Nations, to settle any international dispute in which they may be involved by peaceful means in such a manner that international peace and security and justice are not endangered, and to refrain in their international relations from the threat or use of force in any manner inconsistent with the purpose of the United Nations.</p> <p>* Article 2: The Parties will contribute toward the further development of peaceful and friendly international relations by strengthening their free institutions, by bringing about a better understanding of the principles upon which these institutions are founded, and by promoting conditions of stability and well-being....</p> <p>* Article 4: The Parties will consult together wherever...the territorial integrity, political independence or security of any of the Parties is threatened.</p> <p>* Article 5: the Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs,...in exeries of the right of individual and collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Part or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restor and maintain the security of the North Atlantic area. Any such attack and all measures taken as a result thereof shall</p>	

<p>immediately be reported to the Security Council. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.</p> <p>* Article 7: This treaty does not affect, and shall not be interpreted as affecting, in any way the rights and obligation under the Charter of the Parties which are members of the United Nations, or the primary responsibility of the Security Council for the maintenance of international peace and security.</p> <p>* Article 8: Each party declares that none of the international engagement now in force between it and any other of the Parties or any third State is in conflict with the provisions of this Treaty, and undertakes not to enter into any international engagement in conflict with this Treaty.</p>	
<p>Organization of Economic Cooperation and Development (OECD)</p>	<p>http://www.oecd.org/about/origins/convention/index.htm</p> <p>http://www.oecd.org/env/</p>
<p>* Article 1: The aims.. shall be to promote policies designed: a) to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial ability, and thus to contribute to the development of the world economy; b) to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and c) to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.</p> <p>* Article 2: In the pursuit of these aims, the Members agree that they will, both individually and jointly: a) promote the efficient use of their economic resources; b) in the scientific and technological field, promote the development of their resources, encourage research and promote vocational training; c) pursue policies designed to achieve economic growth and internal and external financial stability and to avoid developments which might endanger their economies or those of other countries; d) pursue their efforts to reduce or abolish obstacles to the exchange of goods and services and current payments and maintain and extend the liberalization of capital movements; and e) contribute to the economic development of both Member and non-member countries in the process of economic development by appropriate means and, in particular, by the flow of capital to those countries, having regard to the importance to their economies of receiving technical assistance and of securing expanding export markets.</p> <p>* Article 5:a) take decisions which, except as otherwise provided, shall be binding on all the Members; b) make recommendations to Members; and c) enter into agreements with Members, non-member States and international organizations.</p> <p>* Article 6: 1)Unless the Organization otherwise agrees unanimously for special cases, decisions shall be taken and recommendations shall be made by mutual agreement of all the Members. 2) Each Member shall have one vote. If a Member abstains from voting on a decision or recommendation, such abstention shall not invalidate the decision or recommendation, which shall be applicable to the other Members but not to the abstaining Member. 3) No decision shall be binding on any Member until it has complied with the requirements of its own constitutional procedures. The other Members may agree that such a decision shall apply provisionally to them.</p>	

Other organizations which does not indicate in their mandate but can be related to environmental security:

World Health Organization (WHO)

International Marine Organization (WMO)

United Nations Industrial Development Organization (UNIDO)

International Court of Justice

Pan-American Health Organization (PAHO)

United Nations Commission for Trade and Development (UNCTAD)

International Monetary Fund (IMF)

Appendices

1: A Current Example of the UN's Role Evolved in Environmental Security: NATO's bombing campaign in Yugoslavia

2: United Nations Environmental Mediation Program (UNEMP)

3. Web sites that have useful information related to Environmental Security and International Treaties, Conventions, and Protocols

1. A Current Example of the UN's Role Evolved in Environmental Security: NATO's bombing campaign in Yugoslavia

May 10, 1999 (Environmental News Service (ENS)) - Although not on the agenda as **European Union environment ministers** gathered in Weimar for their informal meeting this weekend, the Kosovo conflict topped the bill in German environment minister Joergen Trittin's post-meeting press conference. Several delegations, and especially **Greece**, had expressed concern over the environmental implications of NATO's bombing campaign. The ministers "felt that we should take precautions so that all damage can be put right again as soon as possible," said Trittin. "We are sure that environmental damage will not be limited to the territory of Yugoslavia," he went on, but would also affect the Danube and the Black Sea. The minister stressed that making any statement about the environmental implications of the war was hampered by **a severe lack of hard information**. Scientists and environmental groups across the Balkans and the Swiss-based Worldwide Fund for Nature have expressed deep concern over the ecological effects of the NATO bombing.

June 4, 1999 (ENS) - The **Romanian government** is trying to calm public apprehension over the spread of *toxic substances* due to NATO bombing strikes on bordering Yugoslavia. There is growing public concern over **possible pollution** due to NATO strikes on industrial Yugoslav manufacturing plants, such as the April 15 destruction of the Pancevo petrochemical plant near Belgrade, and the Prahovo oil terminal which was hit on May 15. The Ministry of Waters, Forests and Environmental Protection (MWFEP) report says the main environmental problems caused by the Yugoslav war are heavy metal concentrations in the Danube River water, and acid rains in Romania's southwestern counties Timis and Caras-Severin.

Routine and special **water analyses** have indicated concentrations over the maximum permitted levels of **heavy metals** such as copper, chrome, cadmium, lead and zinc in several Danube River areas, such as the Portile de Fier Romanian-Yugoslav dam. A peak level of 55 times the maximum admitted level of zinc was determined on April 23. Phenol concentrations over the maximum admitted level have also been determined. While **no fish mortality has yet been reported**, environmental damage due to the persistence of heavy metals and other pollutants may occur in the future, says the report. **No radioactive pollution** has been reported, **despite** a series

of dramatic alarm signals received from Yugoslav and international sources regarding the use of depleted uranium missiles by NATO. According to Petrica Sandru, vice-president of the Romanian Society for Radioprotection, the "only serious danger of radioactive pollution could come from an accidental bombing of the **Bulgarian nuclear power plant** of Kozloduy," south of the Romanian border. The Bulgarian capital, Sofia, has been already hit accidentally by NATO missiles. The Romanian MWFEP has made consistent efforts from the beginning of the NATO strikes on Yugoslavia **to monitor the environment**. According to Romica Tomescu, minister of MWFEP, "this effort already cost the Romanian authorities over **US\$500,000**." Monitoring equipment from several Environmental Protection Agencies, laboratories, and petrochemical plants has been displaced to areas bordering Yugoslavia. **The MWFEP has decided to stop paying its dues to several international conventions**, hoping to save money in this way, and use it for the monitoring program.

Philip Weller, Director of the Danube-Carpathian Program of WWF International says stopping payment of dues is a "bad signal about Romania's commitment to support international conventions." The request could be interpreted as an attempt on Romania's part to "use the situation to obtain advantages," he warns.

While agreeing that some pollutants, such as mercury, cannot be monitored with existing equipment, Weller thinks that a more realistic figure for the most urgent equipment needs would be **US\$200,000**. WWF has already identified ways to finance the Romanian monitoring program, through grants from the United Nations Environment Program and the Austrian government.

The **WWF** called last month for **an international environmental protection and recovery plan for the Balkans**. The plan could be implemented under the Danube River Protection Convention, and would "support existing civil defense preparations for spill detection and clean-up capacities in Bulgaria and Romania."

June 9, 1999 (ENS) Anxiety has been widespread amongst scientists, environmentalists and the general public over **the possibility** of a major radioactive release **if a bomb strikes** the Vinca Institute. The Vinca reactor has not been in operation for more than 15 years, but a significant amount of enriched 235-uranium and unused fuel is still in a spent fuel pool in the reactor's interior. Highly radioactive material for "everyday activities" is also located in several research laboratories, according to P.R. Adzic at the Vinca Institute.

Now it appears that an agreement is concluded for Serb troop withdrawal from Kosovo that could suspend the bombing. If so, the threat of a Vinca hit would be lifted. Everyone in Belgrade and the entire Balkan region is relieved that so far, NATO bombs have not struck Vinca.

Two major problems have been identified during the **IAEA** fact-finding missions. The **first** problem involves a large fraction of the spent fuel sealed in drums that may be over-pressurized by the evolution of corrosion gases. This problem requires "immediate attention" the IAEA said in a February 1997 publication. The **second** problem involves the remainder of the fuel, some of it already leaking, in corroding stainless steel tubes. This problem "should be mitigated as soon as possible," the IAEA said.

July 13, 1999 (ENS) - **Environmental devastation in the Balkans** in the wake of the 77 day NATO bombing of Yugoslavia that ended June 10 is now being addressed in a practical manner by **a newly formed task force made up of United Nations agency personnel**. The new task force will leave for Belgrade on July 18. **The Balkans Task Force on Environment and**

Human Settlements is made up of staff members from the UN Environment Program (UNEP) and the UN Center for Human Settlements, commonly known as **Habitat**. The Joint UNEP/OCHA Environment Unit, UNEP's Chemicals Program and the Regional Office for Europe are also involved. OCHA is the UN's Office for the Coordination of Humanitarian Affairs.

The Balkans Task Force was established on May 5 by Dr. Klaus Toepfer, UNEP's executive director, in order to monitor the environmental and human settlements impacts of the ongoing Balkans conflict.

It was agreed that **UNEP** be involved in the areas of the establishment of an "environmental administration" in the framework of general civil administration and environmental education and training, said Haavisto.

An earlier United Nations inter-agency mission to the region recommended that UNEP, together with Habitat and **UN Development Program** carry out a detailed assessment of the environmental situation with the aim of identifying specific needs for targeted assistance.

This recommendation was echoed by **European Union Environment Ministers** at the Council meeting on the Environment in Luxembourg June 23 and 24. Welcoming the efforts of UNEP/Habitat, the ministers said it is now necessary to immediately start obtaining reliable and verifiable information for assessing the type and extent of environmental consequences of the conflict. Addressing the environmental damage and preventing further damage is an integral part of the reconstruction efforts, the EU Council stressed.

July 23, 1999 (ENS) - It could take ten years and billions of dollars worth of aid to restore the war-torn Balkan region, international leaders estimate. James Wolfensohn [President of the World Bank] said, "We have a responsibility to help them, especially the children, to mend their broken lives." In Tirana, Albania July 19, Wolfensohn and Prime Minister Pandeli Majko signed legal agreements for the financing of three projects including a US\$24 million irrigation and drainage project.

UN Secretary-General Kofi Annan said in a speech to the Organisation for Security and Cooperation in Europe July 20, that **failure by the international community to help restore water supplies and other essential services in the Federal Republic of Yugoslavia now could result in an exodus of Serbs**. He predicted that it will take at least 10 years to complete reconstruction under the so-called new Marshall Plan, or stability pact, for the Balkans.

A mission of the **Austrian Federal Environment Agency** led by **UNEP/INFOTERRA National Focal Point** representative Johannes Mayer was in Sofia from July 12 to 20 to check at a more informal expert level data on the environmental impact of the conflict. **Their preliminary conclusions** on air pollution reflected data from the air pollution modeling working group of National Institute of Meteorology and Hydrology of the Bulgarian Academy of Sciences. The measurements of **polluting substances in the air** such as hydrogen sulfide, ammonia, methane and phenol in the border area and around Sofia and from Romania along the Danube River during this period "**remain within the usual variations** of industrial air pollution with domestic and transboundary origin," the Bulgarian scientists report.

On land, the **Austrian mission** reported in their preliminary conclusions that during the period of military activities, **no acute damages to the living environment on the Danube river** were established, but in some cases heavy metals were detected in vegetation and fish. "Systematic monitoring should continue, especially since it can be supposed that considerable and mainly

unknown chemical pollution is being held back still for some time by the barrages of the Iron Gate area," the Austrians reported.

On the Danube River, the Austrian mission reported that starting from unusual large oil spills on the Danube in January 1999, the Bulgarian authorities had begun well before the start of the military activities to build up a national emergency system for fast detection, analysis and data transmission in case of emergency pollution situations. "During the period of the military activities, the increased activities for monitoring the water quality along the Bulgarian stretch of the Danube river have not shown unusual increases or exceedances of current norms for the measured basic parameters," the Austrian report stated.

British and French forces continue to ensure the collection of solid waste in Pristina and Mitrovica respectively, but there continue to be a number of other towns whose needs are not being addressed.

July 23, 1999 BBC News - Published at 16:53 GMT 17:53 UK. The experts are working for the **Balkans Task Force (BTF)**, a joint initiative of the UN Environment Programme (UNEP) and the UN Center for Human Settlements (Habitat). The task force is chaired by a former environment minister of Finland, Pekka Haavisto, who has said the aim is to produce "a neutral and scientifically credible report on the situation". International experts invited by the United Nations to assess the environmental damage caused by the Balkan war have arrived in the northern Serbian city of Novi Sad. The team has already visited the Pancevo industrial complex, 15 km from Belgrade, which was heavily bombed. The town contains an oil refinery, a fertilizer factory and a chemical plant. A raid in April hit storage tanks which released **large amounts of vinyl chloride monomers (VCMs) into the air**.

July 29, 1999 (ENS) - A United Nations Environment Program (UNEP) task force has **failed to find major environmental damage from NATO's bombing of Yugoslavia** after a 10-day preliminary analysis of industrial sites. Balkans Task Force leader Pekka Haavisto, a former Finnish environment minister, said on Tuesday that there is "**no major eco-catastrophe,**" **though local problems are severe in some areas**.

Haavisto gave a similar assessment of the war's environmental impacts when he briefed European Union environment ministers on the issue at last week's informal meeting hosted by the Finnish presidency. One of the biggest obstacles faced by the task force is the poor knowledge of pre-existing pollution around sites such as the Pancevo industrial complex near Belgrade, Haavisto said. Trying to determine between old and new pollution was a "highly political issue," he concluded, although he stressed that the group had received full cooperation from all parties involved.

The Balkans Task Force assessment is considerably less pessimistic than one released June 28 by the Hungary based NGO the **Regional Environmental Center for Central and Eastern Europe (REC)**. The REC report concludes **the war in Yugoslavia "may have far-reaching impacts** on the ability of the Balkan countries to protect the valuable environment of the South Eastern European region, and **only a long-term approach to reclamation, monitoring and institutional rebuilding** will help prevent a potentially disastrous situation."

Among **the more pressing environmental problems**, the REC report listed:

- Extensive damage to the waters in Yugoslavia, affecting agriculture and fishing
- An interrupted planting season in Yugoslavia and border regions, which means a poor harvest
- Damage to the electrical power infrastructure of Yugoslavia leading to heating shortages this winter
- Damage to the water and waste-water systems in Albania and Macedonia
- Air and water pollution, including potentially hazardous pollution from depleted uranium weapons, which will have as-yet-unknown impacts on the water table and the food chain of the region.

The REC report pointed to some of the **lesser known problems such as severe strains on fresh-water and sewage facilities** in Macedonia and Albania, **due to the need to construct large refugee camps with little time for prior planning**. **"Some refugee camps in those countries did harm to protected areas, and several endangered species in Yugoslavia and the surrounding countries had their fragile environments threatened - either by bombing or refugee movements,"** REC reported.

August 18 - (c) *Earth Times News Service* A UN task force has found traces of mercury, asbestos and other toxic and hazardous substances in the soil and water of sections of Yugoslavia that were targeted by NATO bombers. Haavisto, former Environment Minister of Finland, said the findings of the task force are still being analyzed, with a complete report to be issued in September. Haavisto said the task force completed extensive sampling of the soil, air and ground water at the Pancevo industrial complex (fertilizer plant, petrochemical factory, and oil refinery), Novi-Sad oil refinery, the Zastava car factory in Kragujevac, Nis (transformer factory) and Bor (copper factory) in Serbia and fuel depots in Krajevo and Prahava—all in Serbia—and Pristina, Kosovo.

When asked how it will take to clean up the pollutants, Haavisto said **the cleanup would take a long time**, especially with the on-site polluted soil and protection of the ground water. As for concerns about radiation from depleted-uranium shells fired by the NATO warplanes, Haavisto said the task force had not detected high levels of radioactivity, but that the World Health Organization (WHO) and International Atomic Energy Agency (IAEA) had been contacted. An earlier survey, sponsored by the **European Commission** and carried out by the Regional Environmental Center for Central and Eastern Europe (REC), **found that pollution is "very severe"** in the vicinity of some industrial complexes bombed by NATO and that many valuable ecosystems have been disturbed. The REC report, released at the end of June, said that water in the area has been contaminated with PCBs, spilled oil, ammonia and heavy metals, and the air shows signs of radioactive pollution. It also notes that lack of sewage treatment in Albanian refugee camps has led to discharges of sewage into water channels.

August 27 © (ENS) This, **the third Balkans Task Force mission** to the region, is one part of an independent scientific and technical assessment of the environmental and human settlement impact of the Balkans conflict. The current mission is organized in cooperation with the Vienna-

based International Commission on the Protection of the Danube River (ICPDR). Balkans Task Force scientists from the Czech Republic, Hungary, France, Germany, Romania, Russia, Slovakia and Sweden visited potential pollution "hot-spots" up and down stream of the Novi-Sad oil refinery, Pancevo industrial complex and a tributary near the Zastava car factory in Kragujevac. From July 18 to 27, a Balkans Task Force team of international experts visited the Former Republic of Yugoslavia to assess the environmental damage caused by the conflict at selected industrial sites.

A second Balkans Task Force team, based in the Kosovo capital of Pristina, is currently working in close cooperation with the UN Mission in Kosovo (UNMIK) on issues of urban management and rehabilitation, housing law, property registration and environmental management. **A fourth Balkans Task Force mission** will begin work next month on an assessment of impacts on the region's biological diversity.

Finally, an **inter-agency group involving UNEP, WHO, IAEA (the International Atomic Energy Agency) and the Swedish Radiation Institute** began work on August 3 to look into the issue of depleted uranium. Depleted uranium anti-tank shells were used in the Kosovo conflict. This group, working from Geneva under the Balkans Task Force umbrella, is collecting and collating information on depleted uranium from a variety of sources and a decision will be taken in earlier September on future Balkans Task Force activity in this area.

The Balkans Task Force was established by the head of UNEP and Habitat, UN Under-Secretary-General, Klaus Toepfer, in May 1999 to assess the environmental and human settlements impacts of the Balkans conflict.

Sept. 13 - © 1999 Associated Press. U.N.: No Yugoslav eco-catastrophe. Instead, action urged for several 'hotspots' left by NATO. The 78-day NATO bombing of Yugoslavia left the country with **environmental "hotspots" but no ecological catastrophes**, a United Nations team of experts concluded Monday. Urgent action is needed to deal with pollution at certain locations, said the team's chief, Pekka Haavisto. The team announced some of its findings after completing its third and final investigative mission on the effects of the alliance's air strikes here. "The towns of Pancevo and Kragujevac are two hotspots of particular concern," Haavisto told reporters. Both towns were repeatedly pounded by NATO. Pancevo's petrochemical plant and oil refinery were leveled in the process, as were the industrial complex and factories in Kragujevac, in central Serbia. Also **urgently in need of cleaning is a one-mile stretch of a heavily polluted canal that feeds into the Danube River**, Haavisto said. Water and sediment there have become heavily polluted with mercury, dioxin and petrochemical waste. "If the Danube level significantly rises in the fall, the waters will flow with all these pollutants into the river," Haavisto said.

The experts also looked into rumors that NATO had used bombs containing uranium, a radioactive agent. Samples from the targeted locations are now undergoing laboratory analysis. **The team did not disclose estimates on the environmental damage's economic impact.** But Haavisto said any cleanup actions would be extremely costly. The team's preliminary findings will be submitted to U.N. Secretary General Kofi Annan in early October.

Sept. 14, 1999 *BBC News* Published on the Internet at 15:24 GMT 16:24 UK

Danube pollution warning. The World Wide Fund for Nature says drinking water supplies in parts of Yugoslavia and neighboring countries are at risk in the aftermath of the Balkan war. WWF sent a six-strong team to Yugoslavia for three days at the end of July. It concentrated on the Pancevo chemical complex near Belgrade, and on the Novi Sad oil refinery. Installations at Pancevo include a fertilizer plant, a vinyl chloride manufacturing plant, and an oil refinery. WWF said its team found "an enormous deficiency in the monitoring of toxic chemicals in the countries of central and Eastern Europe. The pollution monitoring program for the Danube has been particularly weak". It said this made it difficult to distinguish contamination caused by the war from previous or continuing pollution. **Pollution spreading.** "However, it's clear that the immediate clean-up and stopping of the current pollution coming from Pancevo and Novi Sad are vital." The WWF team found evidence that toxic pollutants released close to places hit by the NATO bombing were now spreading into surrounding areas. **Pancevo burns after a raid.** It concluded that there was considerable atmospheric pollution, probably affecting the environment and public health. Soil and water samples it took "showed the presence of notable quantities of mercury, polycyclic aromatic hydrocarbons (PAHs), ethylene dichloride (EDC), and other highly toxic substances, including dioxins". WWF says the contaminants are now "threatening groundwater drinking supplies and natural resources in several countries of the area". Mercury accumulates in the food chain, and can be carried long distances in air and water. WWF says the mercury in soil samples taken at Pancevo was 2.5 times above the level that would trigger action if found in a country like the Netherlands. **Exceeding safety levels.** The US Environmental Protection Agency says PAHs are highly carcinogenic. WWF found water in a canal at Pancevo containing PAHs 15 times above the EPA limit for drinking water. Soil samples from Pancevo contained PAHs 10 to 11 times higher than Dutch action levels, while at Novi Sad they were twice as high. EDC is a highly persistent and toxic pollutant which can affect the human reproductive, nervous and immune systems. **Still too early to find all the answers.** WWF says hydrocarbons, which it found in soil at Pancevo to amount to more than 25% of soil content, are also a problem. "One drop of oil is sufficient to contaminate one cubic meter of drinking water, making it undrinkable." Pekka Haavisto, the chairman of the United Nations Balkan Task Force, said UN experts had found environmental "hot-spots" at Pancevo and Kragujevac, an industrial town in central Serbia. **Disaster not likely.** He said both needed urgent action, and there was a possibility that rising water levels could push mercury, dioxins and petrochemical waste in the canal there into the Danube. But he played down talk of an ecological catastrophe. "We didn't find any alarming things in regards to the water-taking issues." Mr Haavisto said the war's long-term impact on the region's biodiversity was likely to be "minimal", adding that he was more concerned about the presence in national parks of unexploded weapons. The UN is still investigating the possible consequences of the use of depleted uranium weapons in the war, testing "soil and material samples" it had taken. But there was no word of its possible effects on people. "We have not been able to do that kind of work at all."

October 14, 1999 *BBC* Balkans environment 'seriously damaged'

A United Nations task force which has been investigating the aftermath of the Balkan war says it found four environmental hot spots in Serbia. But the task force, a joint operation by the UN's Environment Programme and its Centre for Human Settlements (Habitat), says the conflict did not cause an environmental catastrophe for the whole Balkan region.

The report of the Balkan Task Force (BTF) says the pollution found at the four hot spots is serious enough to pose "a threat to human health". However, it says much of the pollution dates from before the war, and it found "widespread evidence of long-term deficiencies in the treatment of hazardous waste".

The task force concentrated its work on five areas:

- industrial sites

- the river Danube

- biodiversity in protected areas

- human settlements

- the use in the war of depleted uranium (DU) weapons.

The report says there is no evidence of an ecological disaster for the Danube, though the task force did find "significant chronic pollution".

2. United Nations Environmental Mediation Program (UNEMP)

US Ambassador John McDonald has recommended the following change to the UN Charter in order to enforce the UN legal framework and rights concerning the environmental issues and its implication for human and national security.

“1. A United Nations environmental Mediation Program (UNEMP) will be established and will become a part of and be managed by the United Nations Development Program.

2. UNEMP will be responsive to Member States’ requests for technical assistance in the areas of training, institution building and research.

Training – UNEMP will provide skilled environmental mediators and trainers to teach environmental mediation skills to interested individuals and groups, in an effort to reduce conflict and misunderstanding in this field and to help implement the programs contained in Agenda 21.

Institution Building – UNEMP will assist interested governments in establishing National Environmental Mediation Centers, staffed by their own citizens, who will be responsible for future training and the non-violent resolution of environmental disputes within national borders.

Research – UNEMP will provide assistance in starting national research programs designed to identify existing conflict resolution or mediation practices currently being followed in the Member State, and helping to adapt those procedures to handle environmental problems that may require different approaches for the non-violent resolution of the conflict.

3. UNEMP will establish a panel of international experts who are highly skilled and widely respected environmental mediators, to be known as the, “ International Panel of Environmental Mediators”, who will be on call to assist Member States in helping to resolve major internal environmental disputes or cross-border environmental disagreements, when both Member states have requested assistance.”

Ambassador John W. McDonald

3. Web sites that have useful information related to Environmental Security and International Treaties, Conventions, and Protocols

<http://www.un.org/Depts/Treaty>

United Nations gives an overall view of international law and provides access to mostly U.S. depository conventions and treaties. You can also do search.

<http://www.unep.org/unep/connection/sec.htm>

United Nations Environmental Program gives a framework of Environmental Legal Instruments in the international arena. It is also possible to search for a particular convention relating to UNEP.

<http://www.ciesin.org/>

Center for International Earth Science Information Network, specialized in global and regional network development, science data management, decision support, and training, provides information that would help decision makers, scientists and the public better understand their changing world.

<http://sedac.ciesin.org/pidb/>

Environmental Treaties and Resource Indicators (ENTRI); data access service provided by the Consortium for International Earth Science Information Network (CIESIN), which operates the Socioeconomic Data and Applications Center (SEDAC) for the U.S. National Aeronautics and Space Administration (NASA)

<http://www.unfoundation.org>

UN WIRE, sponsored by the United Nations Foundation and its sister organization, the Better World Fund, which are dedicated to supporting United Nations efforts on behalf of the environment, population stabilization and children's health; gives daily updates on these issues

<http://www.ECOLAX.org/index.htm>

ECOLAX – a joint project of the UNEP and the World Conservation Union- provides access to information on more than 480 international environmental treaties and conventions. The user has easy access to information from the IUCN Environmental Law Information System (ELIS), together with links to the corresponding full text of selected treaties held by UNEP within their Computerized Environmental Law Information Base (CELIB) It is possible to locate Multilateral Treaties in a number of ways such as date or place of adoption, keywords and subject.

<http://ecsp.si.edu>

Environmental Change and Security Project, a project of the Woodrow Wilson International Center for Scholars, dealing with the implications of the environmental issues on the national and human security.

<http://www.gechs.org>

GECHS is a core project of the International Human Dimensions Program on Global Environmental Change (IHDP). Its main goal is to advance interdisciplinary, international research and policy efforts in the area of human security and environmental change.

<http://www.ctct.rnd.doe.gov/ctbt>

U.S. Department of Energy - site on Comprehensive Nuclear-Test-Ban Treaty Research and

development.

<http://www.imo.org/imo/convent/index.htm>

International Marine Organizations offers access to full texts of international conventions concerning the marine environment.

<http://www.biodiv.org>

The Secretariat to the Convention's "Clearinghouse Mechanism" offers links to background documents, national and thematic focal points, and current initiatives related to biodiversity.

<http://www.eli.org>

Environmental Law Institute –a not-for-profit organization in Washington DC- offers links to various NGOs, IOs, and law libraries that are concerning both domestic and international environmental issues and laws. It also gives up-dates on publications relating to environment and law.

<http://www.lawschool.cornell.edu/lawlibrary/default.html>

Cornell University Law Library allows you to have access to full documents of international law.

<http://www.asil.org/resource/env1.htm>

ASIL (American Society of International Law) – Guide to Electronic Resources for International Law- also has use-friendly searchable Web page on international law.

<http://www.acda.gov/initial.html>

ACDA (U.S. Army controls and Disarmament Agency) offers a list of major military related international conventions and their full texts.

<http://www.tufts.edu/fletcher/multilateral.html>

Multilaterals Project by Fletcher School of Law and Diplomacy at Tufts University provides access to the texts of multilateral conventions and other instruments.

<http://environment.harvard.edu>

International Environmental Policy Reference Guide, by Harvard University's environmental education, research, and outreach enterprise.

<http://207.107.99.12:8080/phantom.acgi>

Biodiversity Related Conventions.

<http://www.cnle.org/nle/crsnew.html>

The online **National Library for the Environment** includes objective reports produced as briefing documents for the Congress on contemporary issues.

<http://www.nato.int/docu/facts/env.html>

NATO's activity, Committees, documents and events related to environmental issues and their implications in national and human security.