

INTERNATIONAL ENVIRONMENTAL LAWS AND STANDARDS: FOUR WAYS THEY CAN BE ESTABLISHED

M. D. Kaplowitz, D. A. Bronstein, and H. Suffron

Department of Resource Development, Michigan State University, USA

Keywords: Environmental laws, standards, United Nations Agencies

Contents

1. Introduction
2. Treaties
 - 2.1. Convention on International Trade in Endangered Species (CITES)
 - 2.1.1. Structure of Treaty
 - 2.1.2. Meetings and Committees
 - 2.1.3. Modifications
 - 2.1.4. Permits
 - 2.1.5. Experience
 - 2.2. Montreal Protocol
 - 2.2.1. Vienna Convention
 - 2.2.2. Montreal Meeting and Protocol
 - 2.2.3. Meetings and Committees
 - 2.2.4. Modifications
 - 2.2.5. Experience
3. Professional Organizations and Best Practices
 - 3.1. International Association for Impact Assessment (IAIA)
 - 3.1.1. Meetings
 - 3.1.2. Code of Ethics
 - 3.1.3. Best Practice Guidelines
 - 3.1.4. Operating Principles
 - 3.1.5. Experience
 - 3.2. International Union of Societies of Foresters (IUSF)
 - 3.2.1. Society of American Foresters (SAF)
 - 3.2.2. Code of Ethics
 - 3.2.3. Certification
 - 3.2.4. Experience
4. Quasi-Official Organizations and Standards
 - 4.1. Codex Alimentarius Commission (CODEX)
 - 4.1.1. Meetings and Committees
 - 4.1.2. Standards
 - 4.1.3. General Agreement on Tariffs and Trade (GATT)
 - 4.1.4. Experience
 - 4.2. International Standards Organization (ISO)
 - 4.2.1. ISO 9000
 - 4.2.2. Technical Committee 207
 - 4.2.3. ISO 14000
 - 4.2.4. Environmental Management Systems (EMS)
 - 4.2.5. Membership

- 4.2.6. Certification
- 4.2.7. Experience
- 5. United Nations Agencies and Guidelines
 - 5.1. International Atomic Energy Agency (IAEA)
 - 5.1.1. Meetings and Committees
 - 5.1.2. Standard Preparation
 - 5.1.3. Experience
 - 5.2. World Health Organization (WHO)
 - 5.2.1. World Health Assembly
 - 5.2.2. Activities
 - 5.2.3. Guidelines
 - 5.2.4. Revisions
 - 5.2.5. Experience
- 6. Conclusion
- Acknowledgements
- Glossary
- Bibliography
- Biographical Sketches

Summary

Standard-setting organizations are here classified into four types: international treaties, professional associations, “quasi-official bodies,” and United Nations agencies. Two representative examples of each are described and examined to illustrate the processes involved. Although none can be considered to be perfect, all of them manage to address some of the issues that need to be solved if we are to preserve the life support system.

1. Introduction

The setting of standards can be approached in many ways. One can deal with how science is turned into regulations; with the limits of science and the use of such things as “the precautionary principle”; or with the non-governmental organizations (NGOs) who attempt to influence the adoption process. In this piece, the types of organizations that set international standards, how they are created, and how they function will be discussed.

For explanatory purposes, the universe of standard-setting organizations has been broken down into four main types: treaties, professional associations, “quasi-official bodies,” and United Nations agencies. Standards can be set in international treaties among nations and such treaties can create permanent bodies (secretariats, commissions, etc.) for revising standards and creating new ones. Respected professional associations can promulgate “best practice” or “ethical and professional standards“. Quasi-official bodies can set standards that are then incorporated into national law or international agreements. And various branches of the United Nations can also adopt standards for issues that fall into their purview.

This article examines two of each of these types of organizations and the processes they use to set standards. International treaties are represented by the Convention on

International Trade in Endangered Species (CITES) and the Montreal Protocol regarding protection of atmospheric ozone. The quasi-official organizations discussed are the Codex Alimentarius (which sets food safety values) and the International Standards Organization (ISO) which has set a series of important environmental awareness standards for business known as ISO 14000. The UN bodies described are the World Health Organization (WHO) and the International Atomic Energy Agency (IAEA). The professional associations discussed are the International Association for Impact Assessment (IAIA) and the International Union of Societies of Foresters (IUSF) and its most active subgroup, the Society of American Foresters (SAF). These particular organizations were selected for illustrative purposes only; there are many others that could have been chosen. However, the organizations selected constitute a reasonably broad sample and convey the variety of ways in which international standards may be set.

2. Treaties

International treaties are agreements between two or more nations. These agreements are (a) formally signed by authorized representatives of the various nations, and (b) subsequently ratified by the several nations or supreme powers of each state. A treaty, also known as a convention, is not only a law made by more than one nation but is also a contract between those nations. Such international agreements derive their legal force from the consent of the parties. Therefore, treaties (conventions) are to be construed, whenever possible, to give full force and effect to all of their parts. Several areas of international environmental law and standards involve international treaties or conventions. Bilateral treaties (i.e. agreements between two nations) have been used to address cross-boundary environmental problems such as the control and management of boundary water areas and the protection of migratory species. Multilateral treaties (i.e. agreements between many nations) have become increasingly accepted as promising means for addressing global environmental problems and standards. Two areas of global environmental concern that have given rise to multilateral treaties and conventions are (i) the trade in endangered species and (ii) the protection of the global atmosphere.

2.1. Convention on International Trade in Endangered Species (CITES)

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES or the Convention) is a multilateral attempt to protect the wildlife of the world from over-exploitation. As expressed in the Convention's Preamble, CITES works to facilitate international cooperation in developing and implementing trade controls for the primary goal of protecting species survival. CITES grew out of an increasing number of international conferences, beginning in the early 1900s, focused on growing global concern for the depletion of wildlife populations. This concern, fueled by the growth and activity of conservation groups, led to the signing of the Convention by 21 nations in Washington, DC on March 3, 1973. The Convention took effect 2 years later, in July 1975, when 10 nations formally ratified the treaty. CITES has gained much experience and has grown in both scope and membership. Today, roughly 140 nations are members of the Convention.

2.1.1. Structure of Treaty

The body of the treaty itself addresses the organizational structure, rules, and the logistics of the Convention and its meetings. However, the core of the Convention appears in its Appendices and the rules that regulate trade of these species. Appendices I, II, and III are distinct lists of species and sub-species of plants and animals that have been identified as needing protection. According to the Convention, Appendices may be amended, and Parties may make a reservation—or assert their non-compliance—to a specific amendment.

Appendix I list all species which are currently threatened by extinction. It identifies over 800 species and sub-species of plants and animals. Species currently listed as threatened include: the bald eagle, the blue whale, the Himalayan black bear, the giant panda, the Asian elephant, the African elephant, and the Christmas Orchid. Appendix II lists species that are not currently threatened with extinction but at risk of extinction if trade is not strictly regulated. This appendix also lists “look-alike” species (species so similar to threatened species that they are protected to assist customs and regulatory authorities). Appendix II species include: the Aldabra giant tortoise, the killer whale, the Malaysian tree shrew, the gray falcon, and American ginseng. There are close to 30 000 species and sub-species of plants and animals listed in Appendix II. Appendix III lists those species identified by any Party as of local concern and in need of the cooperation of other parties to avoid exploitation. This appendix lists more than 200 species and sub-species including: the Central American coral snake, the walrus, the wild water buffalo, and magnolia.

2.1.2. Meetings and Committees

Since the Convention took effect in 1975, there have been 10 Conferences of the Parties to CITES (Conferences). These meetings are usually held every 2 years, unless otherwise decided by the Parties to the Convention (the Parties). A CITES Conference may be called for if at least one-third of the Parties make a written request. Conferences are used to (a) adopt amendments to the Convention’s appendices, (b) review the progress made toward the restoration and conservation of the species in the appendices, and (c) make recommendations via proposed resolutions for improving the effectiveness of the Convention. Various administrative bodies have been created to function between Conference meetings; they include the Standing Committee and numerous technical committees.

The Standing Committee serves as the CITES advisory body and offers policy and operational guidance to the CITES Secretariat between meetings. The CITES Secretariat is the official administrative body appointed by the executive director of the United Nations Environment Programme to manage the day to day affairs of the Convention. The Animals and Plants Committees keep track of the species listed in the various Appendices to the convention. The various committees rely on annual reports from each member state on the trade of CITES-listed species. Inaccurate and incomplete reports make it difficult to have a valid assessment of conservation efforts, illegal trade, and CITE compliance. The recent threat that poor reporting might be viewed as a cause for sanctions resulted in improved annual reports.

2.1.3. Modifications

Any party to the Convention may propose an amendment to Appendices I and II. The amendment proposal must be made at least 150 days before the next meeting of the Secretariat. The Secretariat researches the proposals, seeking information from critical parties, inter-governmental bodies, and other authorities, and a vote is taken on the proposal at the next meeting. Changes in species listed in Appendix I and II require a two-thirds majority vote of parties present and voting (not including abstentions) and take effect 90 days after the meeting. Species in Appendix III are listed by specific nations and do not demand that Parties vote. A party to the Convention may provide the Secretariat with a list of species it identifies as under its jurisdiction at any time. The Secretariat notifies all the Parties of the contents of each Party's list, and the Party's list is added to Appendix III 90 days after notification. Proposals to amend the Convention itself may be submitted by any Party between meetings. According to the timeline established in the Convention, the Secretariat facilitates the communication—and vote, if necessary—on the proposed amendment.

2.1.4. Permits

CITES focuses on regulating commercial trade in threatened and endangered species. Different trade regulations (i.e. import and export permits and certification) apply to each Appendix. Trade in species listed in Appendix I is strictly regulated. Commercial trade of Appendix I species is banned with a few exceptions. International trade of Appendix I species requires both an import and an export permit; both countries must determine that trade “will not be detrimental to the survival of that species.” The export permit is granted after the import permit and requires that national authorities establish that the specimen has been legally obtained and that it will be carefully transported. Certain exemptions may apply including trades before the Convention came into effect, certain specimens bred in captivity, and uses in scientific institutions. Trade with species listed in Appendix II requires an export permit (or re-export certificate) but not an import permit. Again, the exporting state must determine that trade will not threaten survival of the species and that the specimen was legally obtained. If an exporting country has listed a species in Appendix III, the export permit rests on the fact that the specimen was legally obtained. Other Parties exporting Appendix III species must issue valid certificates of origin for the export of Appendix III species.

2.1.5. Experience

The success of CITES relies on each state adopting national procedures that support CITES regulations. This often involves putting in place methods to prohibit trade of listed species, to penalize violators, and to confiscate species illegally traded. CITES requires States to name at least one management authority to be in charge of granting permits and certificates under CITES. Also according to the convention, national scientific bodies must be designated to evaluate and report how proposed trade will affect species and to advise the CITES management authority.

CITES has evolved since its inception, as new issues and concerns developed. The initial Convention and Appendices established strict designations and controls.

However, some flexibility has been incorporated in particular instances. Such options as split-listing, quotas and the ranching of captive-bred species have provided ways to balance appropriate use with protective measures. Split-listing allows member states to “down-list” a species from Appendix I to Appendix II, in cases where it is found that the species is being managed appropriately. National export quotas may be granted for protected species if the Animals Committee makes a recommendation that is approved by the Parties. Voluntary quotas set by national authorities may also be considered. These options allow commercial trade in species normally prohibited.

Along with its successes, the CITES community recognizes the limitations and difficulties in implementing and enforcing the terms of the Convention. CITES relies on individual member states to design, implement, and enforce proper legislation. Such autonomy allows states to interpret CITES as they see fit, and many states have chosen not to adhere to important regulations and amendments. Difficulties in assessment—both determining the effects of trade on species conservation and the effectiveness of CITES trade measures—also create problems for deciding where and how to modify the Convention. As a result, CITES has begun focusing on such issues and is working to improve public education as well as communication and cooperation with national authorities, international NGOs, and other interest groups that help to monitor wildlife trade.

Different interpretations about what CITES should do, and how it should accomplish its goal persists. The debate over the future direction of CITES, protecting the global ecosystem or halting illegal trade, may exacerbate the divide between developed and developing member countries. For example, the CITES signatories recently authorized a one-time sale of warehoused African ivory. This sale resulted in much needed hard currency for some nations while giving rise to vigorous debates concerning the appropriateness, impact, and possible repetition of such a decision. The experience CITES has gained, its apparent ability to recognize its limitations, and its willingness to adapt to changing needs and incorporate some flexibility into the Convention reveals much potential for the agreement.

2.2. Montreal Protocol

The Montreal Protocol is the formal agreement and mechanism by which the world’s nations came together to respond to the depletion of the stratospheric ozone layer and its damaging effects on humans, ecosystems, and life on the planet. Parties to the Protocol hope to prevent further destruction of the essential protective ozone layer by agreeing to a phase-out and ultimately an elimination of the production, use, and trade of a number of dangerous chemical compounds which result in the break down of atmospheric ozone.

Although the ozone layer has been the subject of research for decades, studies intensified in the 1970s because of concern in the United States about the effects of aircraft. In 1974, Rowland and Molina of the University of California theorized that chloroflourocarbons (CFCs) contributed significantly to the depletion of stratospheric ozone. CFCs, invented in 1928, were extensively used in the 1970s in refrigeration, aerosol cans, foams, and air conditioners. Further scientific research validated the

claims of Rowland and Molina, and, in 1977, the United Nations Environment Programme (UNEP) developed the World Plan of Action on the Ozone Layer. At about the same time, national governments began establishing domestic restrictions on the amounts and uses of CFCs. The increasing global concern and scientific evidence that ozone depletion was a real threat led UNEP, with strong leadership from Sweden, to initiate negotiations for an international agreement on CFCs and their use in 1981.

2.2.1. Vienna Convention

Progress on the international CFC agreement was slow, as many nations expressed their skepticism about the extent of the threat and the feasibility of actually decreasing CFC production. However, on March 22, 1985, 20 nations signed the Vienna Convention on the Protection of the Ozone Layer (Vienna Convention). The Vienna Convention signatories determined that their future meetings would focus on the creation of a clearly defined protocol for the global elimination of CFCs. That year also saw the “discovery” of a hole in the ozone layer over the Antarctic by Joe Farmer of the British Antarctica Survey. Further scientific investigation found there to be dangerous depletion of stratospheric ozone in the mid and higher latitudes as well.

2.2.2. Montreal Meeting and Protocol

The combination of continued scientific research, technological advances, and increasing international concern helped to move the concerned international community towards the identification and specification of appropriate CFC controls. On September 16, 1987, 55 concerned countries attended an international meeting held in Montreal, Canada on the ozone layer and CFCs. Out of these countries 24 nations subsequently signed the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol or Protocol). The Montreal Protocol went into effect on January 1, 1989 and has been recognized as responsible for significant decreases in CFC concentrations (and as a good example of international environmental cooperation.) Today, more than 170 countries are parties to the Montreal Protocol.

The 1987 Protocol called for a freeze in the production of several ozone depleting gases (three halons) and substantial cuts in the production and use of others (five CFCs). The Protocol developed clear timetables for the phase-out schedule, with elimination deadlines in 1994, 1996, 2010, and 2030. Lesser-industrialized nations were granted an additional 10 years to eliminate their use of the proscribed substances. Since 1987, regular evaluations of the Protocol have resulted in adjustments and amendments at four different meetings. These changes have accelerated the phase-out process, strengthened the restrictions, and extended the scope of the Protocol to include other ozone depleting agents, and encouraged cooperation between developed and developing countries.

2.2.3. Meetings and Committees

Regular meetings of the Parties to the Protocol are held once a year (unless otherwise decided). In the years when the Parties to the Vienna Convention meet, every two years, the meetings of the Montreal Protocol and Vienna Convention are combined. The 11th meeting of the Parties to the Montreal Protocol was scheduled for November 29–

December 3, 1999 in Beijing, China. Parties participating in the regular meetings are represented by delegations with a head of delegation as well as accredited and alternate representatives and advisors. Officers for the Protocol meetings, including a president, three vice-presidents, and a Rapporteur, are elected at each meeting, preside over the proceedings, and serve in that capacity until new officers are elected at the next regular meeting.

The Ozone Secretariat of the United Nations serves as the Secretariat for both the Montreal Protocol and the Vienna Convention. The Secretariat is based at UNEP headquarters in Nairobi, Kenya. In accordance with Article 12 of the Montreal Protocol and Article 7 of the Vienna Convention, the Secretariat arranges for, and cooperates with, conferences, meetings, working groups, committees, and assessment panels. The Secretariat also aids in implementing decisions of the Parties and monitors such implementation, reporting on progress to the Parties; it represents the Protocol and Convention in international organizations; provides and dispenses information to the Parties; and records, publishes, circulates, and stores official documents. To facilitate and assist with the CFC phase-out process, the Technology and Economic Assessment Panel (TEAP) of the Protocol is charged with investigating and facilitating alternative technologies. This panel, made up of experts designated by member states, works through technological options committees (TOCs) to develop safe and economical alternatives for aerosols foams, halons, methyl bromides, process agents, refrigeration, and solvents.

2.2.4. Modifications

Proposals and proposed adjustments and amendments submitted by the Parties are subject to a vote of the membership. An amendment passes if accepted by two-thirds of the Parties casting an affirmative or negative vote. For example, amendments to the Protocol made at the London meeting (1990) strengthened control measures, added carbon tetrachloride and methyl chloroform to the list, and established the Multilateral Fund, based in Montreal, to provide technical and financial support to developing countries. The Copenhagen meeting (1992) resulted in the tightening of restrictions and the addition of hydrochlorofluorocarbons (HCFCs), hydrobromofluorocarbons (HBFCs), and methyl bromide to the list of restricted substances. Amendments made by the Parties in Vienna (1995) and Montreal (1997) further cut ozone depleting agent production and consumption levels. Interestingly, some countries have developed stricter regulations and have increased investment in research to find economically and environmentally viable alternatives to CFC use.

-
-
-

TO ACCESS ALL THE 26 PAGES OF THIS CHAPTER,
Visit: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>

Bibliography

FAO (Food and Agriculture Organization)/WHO (World Health Organization) Food Standards (2000). *Codex Alimentarius Commission*. <http://www.fao.org/es/esn/codex/Default.htm>. [FAO link to CODEX; multiple links to further information.]

Fischer D. (1997). *History of the International Atomic Energy Agency: The First Forty Years*, 550 pp. Vienna: International Atomic Energy Agency. [Thorough description tracing the development and activities of the agency.]

International Association for Impact Assessment (1999). *Welcome to IAIA*. <http://www.iaia.org>. [IAIA home page; multiple links to further information.]

International Atomic Energy Agency (1999). *WORLDDATOM*. <http://www.iaea.org/worldatom>. [IAEA home page; multiple links to further information.]

ISO (1999). *Welcome to ISO Online!* <http://www.iso.ch>. [ISO home page; multiple links to further information.]

Lee K. (1998). *Historical Dictionary of the World Health Organization*, 333 pp. Maryland: Scarecrow Press. [Thorough description of the development, progress, and programs of the WHO.]

Marcus P. A. and Willig J. T. (1997). *Moving Ahead with ISO 14000: Improving Environmental Management and Advancing Sustainable Development*, 302 pp. New York: Wiley [Explanation of the history, purpose, implementation, and future direction of ISO 14000.]

OECD (Organisation for Economic Co-operation and Development) (1997). *Experience with the Use of Trade Measures in the Convention on International Trade in Endangered Species (CITES)*, OECD Working Papers, Vol. V, No. 47. Paris: OECD. pp. 68. [Explanation of the development, structure, progress, and challenges of CITES and its trade regulations.]

Society of American Foresters. (1999). *SAF home page*. <http://www.safnet.org>. [SAF home page; multiple links to further information.]

UNEP (United Nations Environment Programme) (1993). *Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer*. 3rd edn., 170 pp. Nairobi: Ozone Secretariat. [Description of guidelines and implementation strategies.]

UNEP (United Nations Environment Programme) (2000). *Ozone Secretariat*. <http://www.unep.org/ozone>. [Ozone Secretariat home page; multiple links to further information.]

World Conservation Monitoring Center (2000). *CITES*. <http://www.wcmc.org.uk/CITES>. [CITES home page; multiple links to further information.]

World Health Organization (1999). *WHO/OMS: World Health Organization ~ Organization Mondiale De La Sante*. <http://www.who.org>. [WHO home page; multiple links to further information.]

Biographical Sketches

Michael Kaplowitz holds a BSc degree in Industrial Economics from Union College (NY) and a JD from Duke University School of Law. After practicing law in New York City he returned to school and received an MA degree in Latin American Studies and International Economics from Johns Hopkins University and a Ph.D in Resource Economics from Michigan State University. Since 1997 he has been on the faculty in the Department of Resource Development at Michigan State University where he is presently Assistant Professor in Environmental Law and Policy. Since 1997, he has also been an adjunct professor at the Michigan State University Detroit College of Law.

Daniel A. Bronstein received a BA in biophysics from Johns Hopkins University and an LL.B. from the University of Maryland. After practicing law in Baltimore for 6 years he returned to the University of Michigan, where he received an LL.M. in Environmental Law and an SJD. in Law and Science. He has taught environmental law in the Department of Resource Development at Michigan State University since 1972, and also has taught medical jurisprudence in the medical schools. He has served as chair of a

Committee on Environmental Law of the American Bar Association and as vice-chair of its Committee on Scientific Evidence.

Heather Suffron is currently a master's candidate in the Department of Resource Development at Michigan State University, focusing on environmental education. She received her BA from Bowdoin College and has served as a member of AmeriCorps in Kansas City.

UNESCO – EOLSS
SAMPLE CHAPTERS